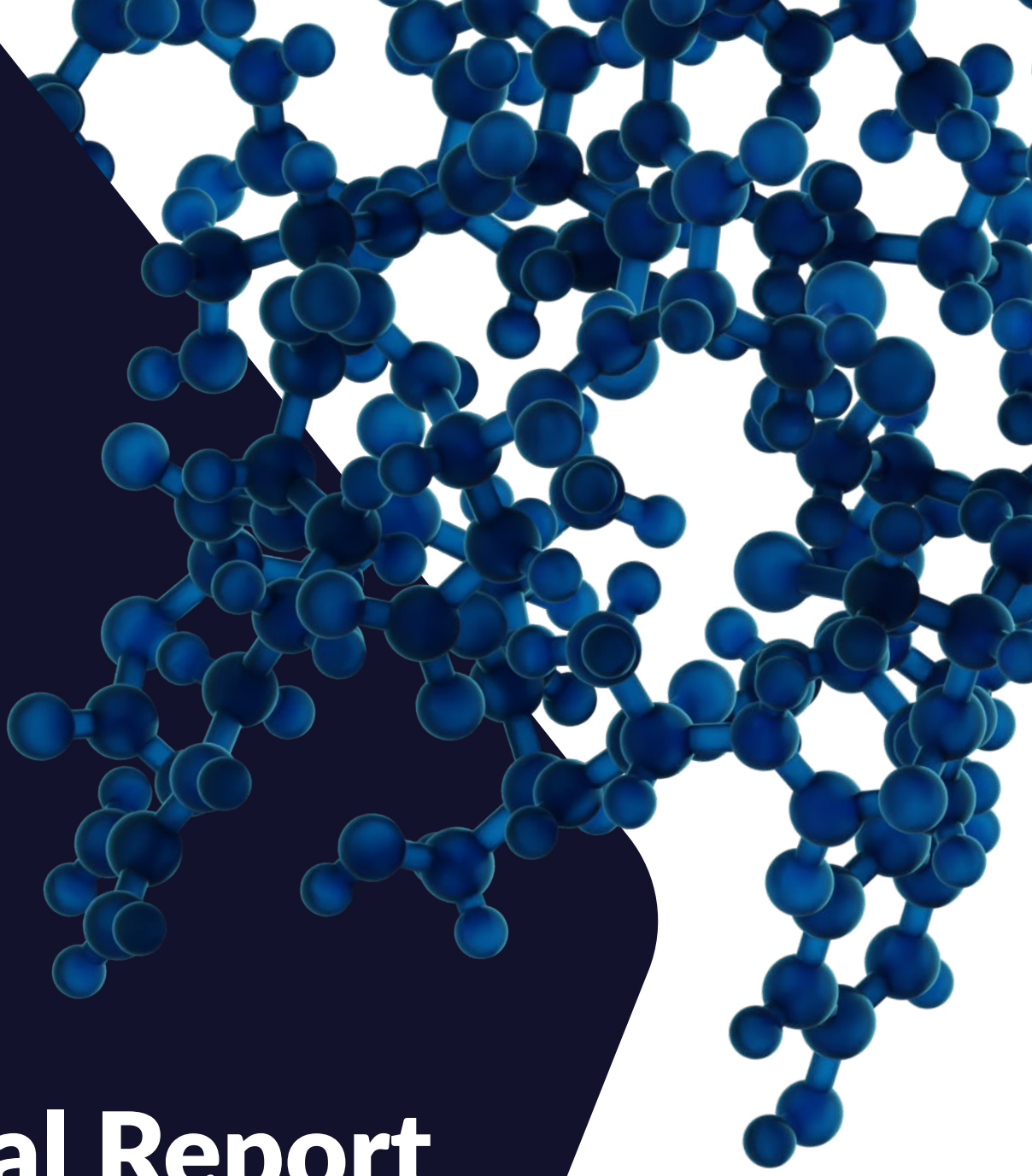


2024 Annual Report

Schrödinger

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number: 001-39206

Schrodinger, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware	**95-4284541**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
1540 Broadway, 24th Floor New York, NY	**10036**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (212) 295-5800

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.01 per share	SDGR	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 28, 2024, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was $790,263,620 based upon the closing sale price of the registrant's common stock on that date.

As of February 19, 2025, the registrant had 63,874,200 shares of common stock and 9,164,193 shares of limited common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A relating to the 2025 Annual Meeting of Stockholders within 120 days of the end of the registrant's fiscal year ended December 31, 2024. Portions of such definitive proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent stated herein.

Auditor Firm Id:	185	Auditor Name:	KPMG LLP	Auditor Location:	Portland, OR

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This Annual Report on Form 10-K, or this Annual Report, contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act and Section 21E of the Securities Exchange Act of 1934, as amended, that involve substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this Annual Report, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "aim," "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "goal," "intend," "may," "might," "plan," "potential," "predict," "project," "should," "target," "will," "would" or the negative of these words or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this Annual Report include, among other things, statements about:

- the potential advantages of our physics-based computational platform;
- our strategic plans to accelerate the growth of our software business and acquire new customers;
- our research and development efforts for our proprietary drug discovery programs and our computational platform, including the initiative to expand our computational platform to predict toxicology risk in early drug discovery;
- our drug discovery collaborations, including the initiation, timing, progress and results of such collaborations;
- our estimates or expectations regarding any milestone or other payments we may receive from drug discovery collaborations, including pursuant to our collaboration agreement with Novartis Pharma AG;
- our proprietary drug discovery programs, including the initiation, timing, progress, and results of our preclinical studies and clinical trials;
- our plans to submit investigational new drug applications to the U.S. Food and Drug Administration for our proprietary drug discovery programs;
- our plans to discover and develop product candidates and to maximize their commercial potential by advancing such product candidates ourselves or in collaboration with others;
- our plans to leverage the synergies between our businesses;
- the timing of, the ability to submit applications for and the ability to obtain and maintain regulatory approvals for any product candidates we or one of our collaborators may develop;
- the potential advantages of our drug discovery collaborations and our proprietary drug discovery programs;
- the rate and degree of market acceptance of our software solutions;
- the rate and degree of market acceptance and clinical utility of any product we or any of our collaborators may develop;
- our estimates regarding the potential market opportunity for our software solutions and any product candidate we or any of our collaborators may develop;
- our sales and marketing capabilities and strategy;
- our intellectual property position;
- our ability to identify technologies with significant commercial potential that are consistent with our commercial objectives;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash, cash equivalents, and marketable securities;
- our expectations related to the use of our cash, cash equivalents, and marketable securities;
- our expectations related to the key drivers of our performance;
- the impact of government laws and regulations;

- our competitive position and expectations regarding developments and projections relating to our competitors and any competing products, technologies, or therapies that are or become available;
- our ability to maintain and establish collaborations or obtain additional funding;
- our reliance on key personnel and our ability to identify, recruit, and retain skilled personnel; and
- the potential impact of geopolitical and global economic developments and public health epidemics or pandemics.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Annual Report, particularly in "Risk Factor Summary" and "Risk Factors" below, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Moreover, we operate in a competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Annual Report. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, in-licensing arrangements, joint ventures, or investments we may make or enter into.

You should read this Annual Report and the documents that we file with the Securities and Exchange Commission, or the SEC, with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this Annual Report are made as of the date of this Annual Report, and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This Annual Report includes statistical and other industry and market data that we obtained from industry publications and research, surveys, and studies conducted by third parties as well as our own estimates of potential market opportunities. All of the market data used in this Annual Report involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research, surveys and studies, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

Unless the context otherwise requires, we use the terms "company," "we," "us," and "our" in this Annual Report to refer to Schrödinger, Inc. and its consolidated subsidiaries.

RISK FACTOR SUMMARY

Our business is subject to a number of risks of which you should be aware before making an investment decision. Below we summarize what we believe are the principal risk factors but these risks are not the only ones we face, and you should carefully review and consider the full discussion of our risk factors in the section titled "Risk Factors", together with the other information in this Annual Report.

- We have a history of significant operating losses, and we expect to incur losses over the next several years.
- If we are unable to increase sales of our software, increase revenue from our drug discovery collaborations, or if we and our current and future collaborators are unable to successfully develop and commercialize drug products, our revenues may be insufficient for us to achieve or maintain profitability.
- Our quarterly and annual results may fluctuate significantly, which could adversely impact the value of our common stock.
- If our existing customers do not renew their licenses, do not buy additional solutions from us, or renew at lower prices, our business and operating results will suffer.
- A significant portion of our revenues are generated by sales to life sciences industry customers, and factors that adversely affect this industry could adversely affect our software sales.
- The markets in which we participate are highly competitive, and if we do not compete effectively, our business and operating results could be adversely affected.
- We may never realize a return on our investment of resources and cash in our drug discovery collaborations.
- Although we believe that our computational platform has the potential to identify more promising molecules than traditional methods and to accelerate drug discovery, our focus on using our platform technology to discover and design molecules with therapeutic potential may not result in the discovery and development of commercially viable products for us or our collaborators.
- We may not be successful in our efforts to identify, discover or develop product candidates and may fail to capitalize on programs, collaborations, or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.
- As a company, we have very limited experience in clinical development, which may adversely impact the likelihood that we will be successful in advancing our programs.
- We will likely require additional capital to fund our operations. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations, we may not be able to compete successfully, which would harm our business, operations, and financial condition.
- Conducting successful clinical trials requires the enrollment of a sufficient number of patients, and suitable patients may be difficult to identify and recruit.
- We rely on, and plan to continue to rely on, third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, which may prevent or delay our ability to seek or obtain marketing approval for or commercialize our product candidates or otherwise harm our business.
- The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and the results of our clinical trials may not satisfy the requirements of the U.S. Food and Drug Administration or other comparable foreign regulatory authorities.
- If we fail to comply with our obligations under our existing license agreements with Columbia University, under any of our other intellectual property licenses, or under any future intellectual property licenses, or otherwise experience disruptions to our business relationships with our current or any future licensors, we could lose intellectual property rights that are important to our business.
- If we are unable to obtain, maintain, enforce, and protect patent protection for our technology and product candidates or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully develop and commercialize our technology and product candidates may be adversely affected.

- Our internal information technology systems, or those of our third-party vendors, contractors, or consultants, may fail or suffer security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our services, compromise sensitive information related to our business, or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.
- Our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.
- We are pursuing multiple business strategies and expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in managing our multiple business units and our growth, which could disrupt our operations.
- Our executive officers, directors, and principal stockholders, if they choose to act together, have the ability to influence all matters submitted to stockholders for approval.
- Our actual operating results may differ significantly from our guidance.

PART I

Item 1. Business.

Overview

We are transforming the way therapeutics and materials are discovered.

Our differentiated, physics-based computational platform enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly and at a lower cost, compared to traditional methods. Our software platform is licensed by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. We are applying our computational platform to advance a broad pipeline of drug discovery programs in collaboration with leading biopharmaceutical companies. In addition, we use our computational platform to discover novel molecules for our pipeline of proprietary drug discovery programs, which we are advancing through preclinical and clinical development.

Traditional drug discovery and development efforts are complex, lengthy and capital-intensive, and are prone to high failure rates. Traditional drug discovery relies upon many iterations of costly and time-consuming manual molecule design, chemical synthesis, and experimental testing. One of the primary reasons for long timelines, high costs, and high failure rates in drug discovery is that predicting properties of molecules in advance of chemical synthesis is extremely complex and not amenable to traditional approaches.

Over the past several decades and with the concerted efforts of our scientists and software engineers, we have developed a physics-based computational platform that is capable of predicting critical properties of molecules with a high degree of accuracy. This key capability enables drug discovery teams to design and selectively synthesize molecules with more optimal properties, reducing the average time and costs required to identify a development candidate and increasing the probability that a drug discovery program will enter clinical development. Furthermore, we believe that development candidates with more optimized property profiles will have a higher probability of success in clinical development. Additionally, since the physics underlying the properties of drug molecules and materials is the same, we have been able to extend our computational platform to materials science applications in fields such as aerospace, energy, semiconductors, electronic displays, and chemicals.

We offer our customers a variety of software solutions that accelerate all stages of molecule discovery, design, and optimization. In 2024, 19 of the top 20 pharmaceutical companies, measured by 2023 revenue, licensed our solutions, accounting for $74.7 million, or 41%, of our software revenue in 2024. We had 235, 222, and 227 customers with an annual contract value, or ACV, of at least $100,000, which represented 87%, 83%, and 82% of our total ACV, for the years ended December 31, 2024, 2023, and 2022, respectively. The widespread adoption of our software, supported by our global team of sales, technical, and scientific personnel, has driven steady growth in our software revenue. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate this scaling-up will drive future revenue growth. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an ACV at higher thresholds. For the year ended December 31, 2024, we had 61 customers with an ACV of at least $500,000 compared to 54 for the year ended December 31, 2023. Furthermore, the number of customers with an ACV of at least $1.0 million increased to 31 for the year ended December 31, 2024, compared to 27 and 18 for the years ended December 31, 2023 and 2022, respectively. We also had eight customers with an ACV of at least $5.0 million for the year ended December 31, 2024, compared to four customers for each of the years ended December 31, 2023 and 2022. In addition, our customer retention rate for our customers with an ACV of at least $100,000 for the year ended December 31, 2024 was 95% and was 92% or higher for each of the previous 10 fiscal years. Our customer retention rate for our customers with an ACV of at least $500,000 was 100% for the year ended December 31, 2024 and 98% for the year ended December 31, 2023. We believe the growth in the number of our larger customers demonstrates that companies are increasingly recognizing the power and appreciating the scientific and financial benefits of using our platform at scale while the retention in our customer base is indicative of the continued value of our platform. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Performance" for additional information regarding ACV and customer retention rate.

We also leverage our platform and capabilities across a portfolio of collaborative and proprietary drug discovery programs spanning a wide range of disease targets and indications. Our drug discovery group, which we refer to as the Schrödinger therapeutics group, is comprised of a multidisciplinary team of approximately 180 experts in protein science, biochemistry, biophysics, medicinal and computational chemistry, and discovery scientists with expertise in preclinical and early clinical development. We have entered into drug discovery collaborations with biopharmaceutical companies under

which our collaborators are pursuing research in a number of therapeutic areas, including programs in oncology, antifungal diseases, fibrosis, inflammatory bowel disease, metabolic disease, autoimmune disease, immuno-oncology, cardiopulmonary disease and tuberculosis. When we engage in drug discovery with these collaborators, we typically provide access to our platform and platform experts who assist the drug discovery collaborator in identifying molecules that have activity against one or more specified protein targets. Our collaboration agreements typically include upfront consideration, discovery, development, commercial and regulatory milestones, and royalties from future sales of commercialized products. We generate drug discovery revenue through the performance of specified research and development activities under our collaboration agreements and upon the achievement of discovery and development milestones, and we have the potential to generate drug discovery revenue from commercial and regulatory milestones, option fees, and royalties under our collaboration agreements. We also rely on collaborators for the development and potential commercialization of product candidates we discover internally when we believe it will help maximize clinical and commercial opportunities for the product candidate.

For example, in November 2024, we entered into a research collaboration and license agreement with Novartis Pharma AG, or Novartis, pursuant to which we and Novartis agreed to collaborate on the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas. The agreement is intended to advance multiple development candidates for development and commercialization by Novartis. We are eligible to receive up to $2.272 billion in total milestones across the initial programs, of which no milestone revenue has been recognized as revenue as of December 31, 2024, as well as a tiered percentage royalty on net sales of each product commercialized by Novartis ranging from mid-single-digits to low double-digits, subject to certain specified reductions. See "—Collaboration Agreement with Novartis Pharma AG" for additional information relating to this agreement. We also entered into a three-year software agreement with Novartis that substantially increased Novartis' access to our computational predictive modeling technology and enterprise informatics platform.

In 2018, we began to develop a pipeline of proprietary drug discovery programs with the goal of using our platform to produce a portfolio of novel, high value therapeutics. In June 2022, the U.S. Food and Drug Administration, or FDA, cleared our first investigational new drug application, or IND, for our MALT1 inhibitor, which we refer to as SGR-1505. We have initiated dosing in a Phase 1 clinical trial of SGR-1505, which is designed as an open-label, multi-center dose escalation trial in patients with relapsed or refractory B-cell malignancies. The trial is designed to evaluate the safety, pharmacokinetics, pharmacodynamics, maximum tolerated dose and/or recommended dose of SGR-1505. Exploratory cohorts will evaluate additional pharmacokinetics, pharmacodynamics, preliminary anti-tumor activity and safety to establish the recommended dose. We anticipate reporting initial data from the trial in the second quarter of 2025.

We also completed a Phase 1 clinical trial of SGR-1505 in 73 healthy volunteers to gather additional data, including data relating to the safety, tolerability, and pharmacokinetics of SGR-1505, as well as the effect of food and drug-drug interactions. In the healthy volunteer trial, SGR-1505 was generally well tolerated with no drug-related serious adverse events or dose limiting toxicities observed. In the trial, we observed that SGR-1505 achieved greater than 90 percent inhibition of IL-2 secretion in an activated T cell whole blood assay at 100 mg twice a day (n=4), confirming target engagement and meeting the pharmacodynamic goals for the trial. Inhibition of IL-2 secretion is a marker for target engagement and pathway modulation as it is tightly linked to MALT1 and the downstream NF-κB signaling. The data supported continued evaluation of SGR-1505 in the ongoing Phase 1 clinical trial in patients with relapsed or refractory B-cell malignancies. In addition, in August 2023, the FDA granted orphan drug designation to SGR-1505 for the potential treatment of mantle cell lymphoma.

In July 2023, the FDA cleared our IND for our CDC7 inhibitor, which we refer to as SGR-2921. In July 2024, the FDA granted Fast Track designation to SGR-2921 in patients with relapsed or refractory acute myeloid leukemia, or AML. In addition, in January 2025, the FDA granted orphan drug designation to SGR-2921 in patients with relapsed or refractory AML. We have initiated dosing in a Phase 1 clinical trial of SGR-2921, which is designed as an open-label, multi-center dose-escalation clinical trial in patients with relapsed or refractory AML or high-risk myelodysplastic syndrome. The trial is designed to evaluate the safety and tolerability of SGR-2921 as a monotherapy and to identify the recommended Phase 2 dose, including the maximum tolerated dose. Secondary and exploratory objectives of the trial include evaluating the pharmacokinetics and pharmacodynamics of SGR-2921 and investigating preliminary anti-tumor activity. We anticipate reporting initial data from the trial in the second half of 2025.

In March 2024, we also submitted an IND to the FDA for our novel Wee1/Myt1 inhibitor, which we refer to as SGR-3515, and the FDA cleared the IND in April 2024. We recently initiated dosing in a Phase 1 clinical trial of SGR-3515 in patients with advanced solid tumors. The trial is a dose-escalation trial designed to evaluate the safety, tolerability, and recommended Phase 2 dose of SGR-3515. Secondary and exploratory objectives of the trial include

evaluating the pharmacokinetics and preliminary anti-tumor activity of SGR-3515. We anticipate reporting initial data from the trial in the second half of 2025.

For the year ended December 31, 2024, we generated total revenue of $207.5 million and had a net loss of $187.1 million.

Strategy

Our mission is to improve human health and quality of life by transforming the way therapeutics and materials are discovered. We aim to do this by:

- ***Advancing the science that underlies our computational platform:*** We are the leader in the field of physics-based computational drug discovery, and we believe our computational platform is far ahead of that of our nearest competitors. We intend to maintain our industry-leading position by introducing new capabilities and refining our software to further strengthen our technology and advance the science underlying our platform. For example, in 2024, we launched an initiative to expand our computational platform to predict toxicology risk early in drug discovery, which is being funded by $19.5 million in grants from the Bill & Melinda Gates Foundation. The goal of this initiative is to develop a computational solution designed to improve the properties of novel drug development candidates and reduce the risk of development failure associated with binding to off-target proteins, which can be associated with serious side effects.
- ***Growing and expanding our software business:*** We have experienced steady growth in our software revenues, achieving $180.4 million in revenue in 2024, an increase of 13% compared to 2023, primarily driven by broad adoption of our software solutions by the biopharmaceutical industry. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate that this scaling-up will drive future revenue growth.
- ***Advancing our collaborative programs:*** We intend to continue to work with our collaborators on advancing our collaborative programs through discovery research stages. Our collaboration agreements typically include upfront consideration, discovery, development, commercial and regulatory milestones, and royalties from future sales of commercialized products. We generate drug discovery revenue through the performance of specified research and development activities under our collaboration agreements and upon the achievement of discovery and development milestones, and we have the potential to generate drug discovery revenue from commercial and regulatory milestones, option fees, and royalties under our collaboration agreements. We achieved drug discovery revenue of $27.2 million in 2024. We also benefit from our equity positions in certain of our collaborators. For example, in 2024, we received $47.6 million for the equity stake that we owned in Morphic Holding, Inc., or Morphic, one of our drug discovery collaborators and co-founded companies, in connection with Morphic's acquisition by Eli Lilly and Company, or Lilly, for approximately $3.2 billion.
- ***Progressing our proprietary drug discovery programs***: We plan to progress the development of our proprietary drug discovery programs, including SGR-1505, SGR-2921 and SGR-3515, and continue to advance new programs where we can leverage our computational platform to identify novel molecules. As we progress these programs, we plan to strategically evaluate on a program-by-program basis advancing them into preclinical and clinical development ourselves, entering into collaborations to co-develop them with leading industry partners, or out-licensing them to maximize clinical and commercial opportunity.
- ***Leveraging the synergies between our businesses:*** We believe that there are significant synergies within our business. We leverage the feedback that we receive from our software customers, collaborators, and internal drug discovery experts to improve the functionality of our platform, which we believe supports increased customer adoption of our solutions and more rapid advancement of our collaborative and proprietary drug discovery programs. In addition, the success of our collaborators in advancing drug discovery programs provides significant validation of our platform and approach, which we believe increases the attractiveness of our platform to customers, helps us establish new collaborations, and validates the potential of our own proprietary drug discovery programs. Central to our ability to pursue these distinct lines of business is a firewall policy consisting of a set of well-established protocols and technology measures designed to ensure that the intellectual property of our software customers and drug discovery collaborators remains confidential and segregated.

Industry Overview

Traditional drug discovery and development efforts are complex, lengthy and capital-intensive, and are prone to high failure rates. Traditional drug discovery involves experimental screening of existing libraries of molecules to find molecules with detectable activity, or "hit molecules," followed by many iterations of chemical synthesis to optimize those hit molecules to a development candidate that can be advanced into human clinical trials. Efforts to optimize initial hit molecules for a drug discovery project involve costly and iterative synthesis and testing of molecules seeking to identify a molecule with the required property profile. The optimal profile has an acceptable balance of properties such as potency, selectivity, solubility, bioavailability, half-life, permeability, drug-drug interaction profile, synthesizability, and toxicity. These properties are often inversely correlated, meaning that optimizing one property often de-optimizes others. The challenge of optimizing hit molecules is amplified by the limited number of molecules that can be feasibly tested across these properties with traditional methods. As a result, this optimization process often fails to yield a molecule with a satisfactory property profile to be a development candidate, which is why many drug discovery programs fail to advance into clinical development.

Being able to predict molecular properties before initiating costly and time-consuming experimental synthesis would accelerate drug discovery, reduce costs, and increase the probability of success. If it were possible to accurately predict critical properties of molecules, fewer molecules would have to be experimentally synthesized and tested. As a result, larger pools of molecules could be analyzed allowing for more selective synthesis of molecules, leading to higher-quality molecules. In addition, with predictive computational methods, better selections of molecules would be synthesized through exploration of larger portions of chemical space, leading to higher-quality molecules that would in turn have a higher probability of progressing through clinical development and obtaining regulatory approval for commercial sale.

There have been many attempts to improve the efficiency of the drug discovery process by using computational methods to predict properties of molecules. One of the primary computational methods that many companies have attempted to deploy is machine learning, often referred to as artificial intelligence, or AI. One of the main benefits of machine learning is its ability to rapidly process data at scale. However, machine learning on its own has significant limitations and has therefore had a limited impact on improving the efficiency of the drug discovery process. Machine learning requires input data, referred to as a training set, to build a predictive model. This model is expected to accurately predict properties of molecules similar to the training set, but cannot extrapolate to molecules that are not similar to the training set. Accordingly, since the number of possible molecules that could be synthesized is effectively infinite, machine learning can only cover a minuscule fraction of the total number of molecules that could potentially be synthesized.

The other primary computational method that has been explored to improve drug discovery involves using fundamental, "first-principles" physics-based methods, which require a deep and thorough understanding of the specific property to be computed. However, physics-based methods are difficult to develop and can be slow compared to machine learning. Further, to apply such methods to design molecules that will bind with high affinity to a particular protein target, the three-dimensional structure of that protein must be generated with sufficient atomic detail to enable application of these physics-based approaches, which is referred to as being "structurally enabled," and such structures have been historically difficult to obtain and are only available today for a relatively small subset of the universe of human proteins. Another factor preventing computational chemistry from realizing its promise has been limited compute speed. However, despite all of these challenges, physics-based methods have a significant advantage over machine learning in that they do not require a training set and can, in principle, compute properties of molecules that are well beyond existing industry experience and data.

Our Platform

Over the past several decades and with the concerted effort of hundreds of our scientists and software engineers, we have developed a computational platform that is capable of predicting critical properties of molecules with a high degree of accuracy. We have built our platform on a foundation of rigorous, physics-based methods, combined with the rapid data processing and scaling advantages of machine learning, that together provide a significant advantage over traditional methods. We believe that physics-based simulation has reached an inflection point as a result of the increased availability of massive computing power, combined with a more sophisticated understanding of models and algorithms and the growing availability of high-resolution protein structures.

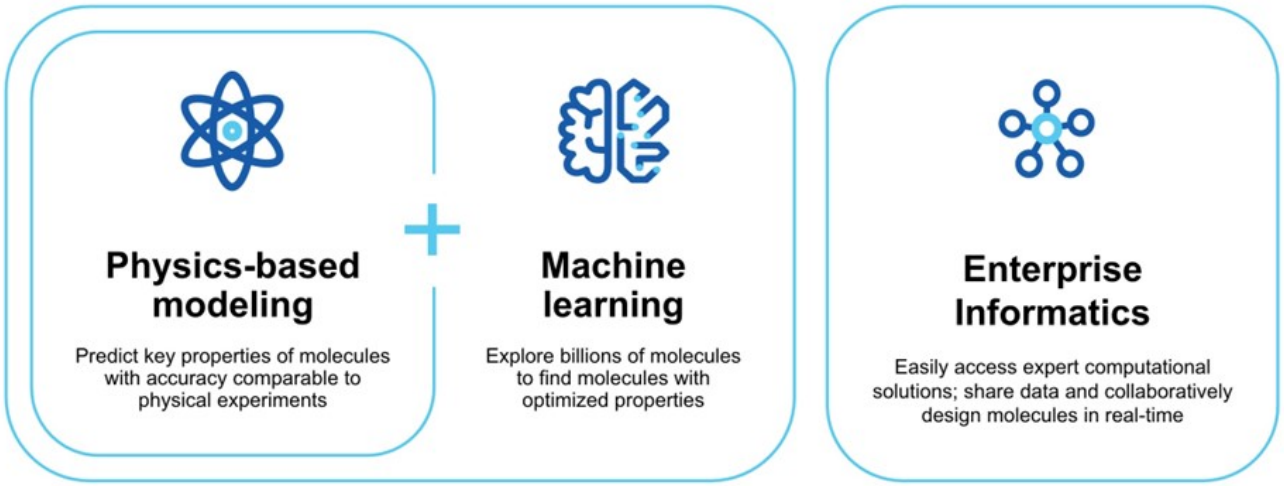
We have demonstrated that our software platform can have a transformative impact on the drug discovery process by:

- reducing the average time and cost required to identify a development candidate; and

- increasing the probability of drug discovery programs entering clinical development.

Based on our drug discovery efforts to date, including in our collaborative programs, we believe that the development candidates discovered using our platform have a higher probability of successfully progressing through clinical development than the industry average.

As shown below, we achieve these outcomes by tightly integrating our predictive physics-based methods, which have a high degree of accuracy, with machine learning, which is highly scalable. In addition, our platform enables real-time collaboration on drug discovery projects to inform decision-making and maximize the impact of the predictive capabilities of our computational platform.



Our computational platform provides the following significant technological advantages over traditional approaches to drug discovery, which we believe enable shorter timelines, lower costs, and higher probability of success of drug discovery efforts:

- **Speed.** Our platform is able to evaluate molecules in hours rather than the weeks it typically takes to screen, synthesize and test molecules in the laboratory.
- **Scale.** Our platform can explicitly evaluate billions of molecules per day, whereas traditional drug discovery methods only synthesize and evaluate approximately one thousand molecules per year, thereby increasing the probability that we find a novel molecule with the desired property profile.
- **Quality.** In a peer-reviewed study, our platform was tested against traditional methods for selecting tight-binding molecules and resulted in an eight-fold increase in the number of molecules with the desired affinity.

Our computational platform includes a broad array of capabilities:

- **Faster Lead Discovery**: the ability to rapidly identify potent molecules suitable for hit-to-lead and lead optimization efforts by virtually screening extremely large libraries of molecules, as well as physics-based replacement of the central core of a molecule, known as scaffold hopping, to identify novel, highly potent molecules unavailable in library collections;
- **Accurate Property Prediction**: the ability to assess key properties of drug-like molecules using physics-based calculations with accuracy comparable to that of experimental laboratory assays, to facilitate optimization of drug properties, including drug potency, selectivity, and bioavailability;
- **Optimizing Protein Structures**: the ability to refine and optimize protein structure models to increase the number of targets amenable to structure-based drug design;
- **Large-Scale Molecule Exploration**: the ability to computationally ideate and explore novel, high-quality drug-like molecules for consideration by discovery project teams utilizing computational enumeration and generative machine learning techniques that are trained and constructed to yield molecules that are synthetically feasible;

- **Large-Scale Molecule Evaluation**: the ability to scale our calculations of key drug properties to ultra-large idea sets of billions of molecules to enable more rapid and successful identification of high-quality drug candidate molecules; and
- **Integrated Data Management and Visualization**: the ability to generate, access, and analyze the data derived from complex calculations integrated with assay data through a powerful and user-friendly graphical interface.

Recognition of our scientific advances has come through customer adoption, in citations of publications in peer reviewed journals and in the progress of our collaborative and proprietary drug discovery programs. For example, the initial paper describing our ligand-protein docking program, Glide, published in 2004 is one of the most cited papers in the history of the *Journal of Medicinal Chemistry*, a premier journal in its field. Glide continues to be broadly used as a hit-finding technology throughout the biopharmaceutical industry by our customers. We have made many similar scientific advances in fields including druggability assessment, affinity calculation, protein structure refinement, and molecule ideation and design. These advances were achieved by our team of hundreds of Ph.D.-level scientists and software engineers with extensive input from our Scientific Advisory Board, which includes thought leaders in computational chemistry, physics-based simulations, statistical mechanics, and machine learning.

Our computational platform is also applicable to new problems of interest and new fields of study. Since the underlying physics that drives a biologic to bind to its target is no different than the physics that drives a small drug molecule to bind to a protein, we have been able to apply our technologies to the discovery of biologics and we continually work to increase our platform's capabilities in biologics. Similarly, the physics underlying the properties of materials is no different than the physics underlying the properties of drug molecules. Therefore, we have applied our computational platform to materials science applications, including in the fields of aerospace, energy, semiconductors, electronic displays, and chemicals.

Software Business

Overview

We are the leading provider of computational software solutions for drug discovery to the biopharmaceutical industry. In 2024, 19 of the top 20 pharmaceutical companies, measured by 2023 revenue, licensed our solutions, accounting for $74.7 million, or 41%, of our software revenue in 2024. Additionally, in 2024, our software was used by researchers around the world at more than 1,818 academic institutions. The widespread adoption of our software is supported by an approximately 240-person global team of sales, technical, and scientific personnel. Our direct sales operations span across the United States, the European Union, United Kingdom, Japan, India, and South Korea, and we have sales distributors in other important markets, including China.

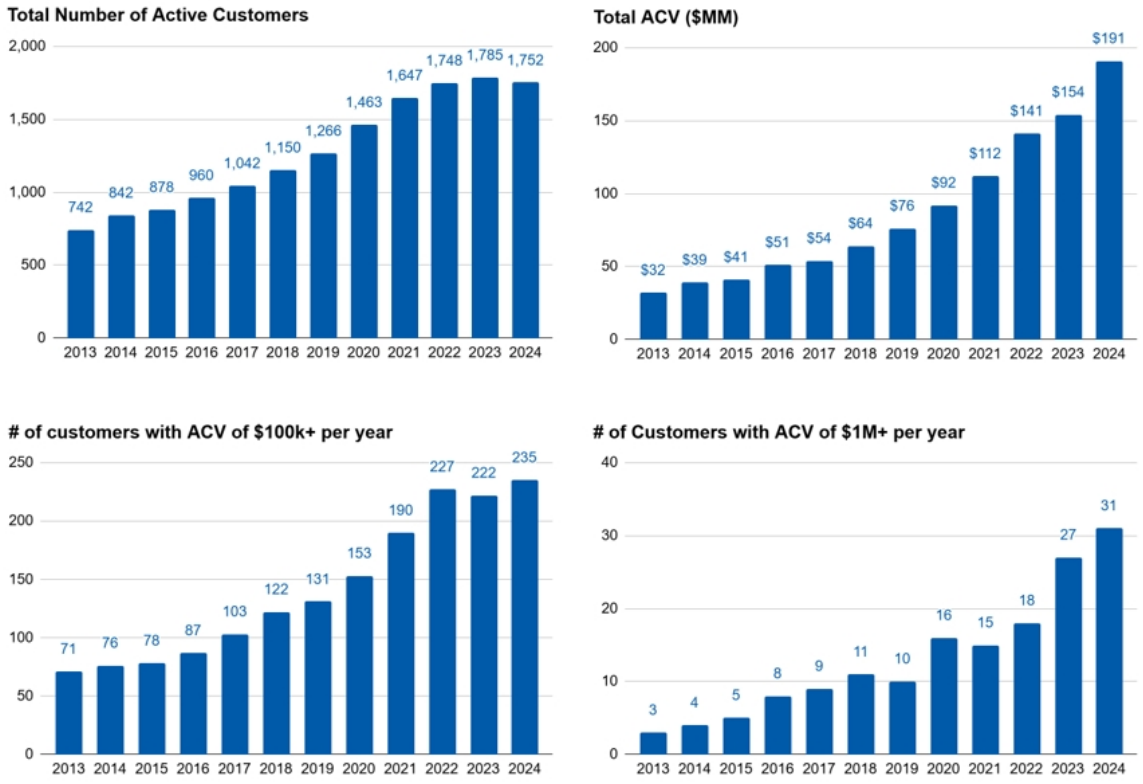
We have a diverse and large existing customer base, ranging from startup biotechnology companies to the largest global pharmaceutical companies as well as an increasing number of materials science customers. Our ten largest software customers represented approximately 39% of our software revenue in 2024, including one customer that makes up 11% of total software revenue. We continue to expand our customer base as we provide education and information to increase the awareness of the potential of our computational platform across different industries. As of December 31, 2024, we had 1,752 active customers, which we define as the number of customers who had an ACV of at least $1,000 in a given fiscal year. Included in the number of customers are entities we derive software contribution revenue from, which for the year ended December 31, 2024, consisted of Gates Ventures, LLC and the Bill & Melinda Gates Foundation.

We had 235, 222, and 227 customers with an ACV of at least $100,000 for the years ended December 31, 2024, 2023, and 2022, respectively. We believe there is a significant opportunity to expand the adoption of our platform within our customer base. For example, in November 2024, we entered into an expanded, three-year, software agreement with Novartis, which is more fully described in "—*Collaboration Agreements*." The three-year agreement substantially increases Novartis' access to our computational predictive modeling technology and enterprise informatics platform to industry-leading scale.

Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate that this scaling-up will drive future revenue growth. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an ACV at higher thresholds. For the year ended December 31, 2024, we had 61 customers with an ACV of at least $500,000 compared to 54 for the year ended December 31, 2023. In addition, we had 31, 27, and 18 customers for the years ended December 31, 2024, 2023, and 2022, respectively, with an ACV of at least

$1.0 million. Furthermore, we also had eight customers with an ACV of at least $5.0 million for the year ended December 31, 2024, compared to four customers for each of the years ended December 31, 2023 and 2022. For the year ended December 31, 2024, our top 10 customers, measured by ACV, accounted for $73.1 million of our total ACV compared to $51.0 million for the year ended December 31, 2023. Our ACV was $190.8 million and $154.2 million for the years ended December 31, 2024 and 2023, respectively. We believe biopharmaceutical companies are increasingly recognizing and appreciating the scientific and financial benefits of using our platform at scale.

Furthermore, we believe our sales and marketing approach and the quality of our software solutions result in long-term relationships and high retention with our largest customers. This is demonstrated by the length of our key relationships, with the average tenure of our 10 largest software customers in 2024 being nearly 21 years. Furthermore, our ability to expand our customer relationships over time is exemplified by our ability to retain our customers with an ACV of at least $100,000. For the year ended December 31, 2024, our year-over-year customer retention rate for our customers with an ACV of at least $100,000 was 95% and was 92% or higher for each of the previous 10 fiscal years. Our customer retention rate for our customers with an ACV of at least $500,000 was 100%, 98%, 100% for the years ended December 31, 2024, 2023, and 2022, respectively. We believe our high retention rate for our customer base coupled with our ability to expand our customers' use of our software will continue to drive revenue growth. The figures below show the different ways in which we are accelerating our growth.



See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Performance" for additional information regarding ACV and customer retention rate.

Our Software Solutions for Drug Discovery

We offer our customers a variety of software solutions that accelerate all stages of molecule discovery, design, and optimization pursuant to agreements with terms typically for one year. Our licenses give our customers the ability to

execute a certain number of calculations across specified software solutions. Certain of our key software solutions are highlighted below, along with the particular stage of drug discovery in which they are employed.

- **Target Identification and Validation:** the identification and evaluation of a protein target that might be worthwhile to pursue as the subject of a drug discovery campaign.
  - **WaterMap** characterizes the locations and energetics of water molecules occupying the binding site of, or solvating, a target protein. From this analysis, one can infer the druggability of a protein, as well as uncover opportunities to significantly increase binding affinity by exploiting the water structure in the binding site.
  - **SiteMap** allows binding site identification and evaluation to help locate potential protein binding sites, including allosteric sites, and predict the approximate druggability of those sites.
  - **GlideEM, PrimeX and Phenix/OPLS4** enable optimization of intermediate quality experimental protein structures to a quality sufficient to drive structure-based drug discovery.
- **Hit Discovery**: the identification of hit molecules.
  - **FEP+** is our free energy calculation software. In hit discovery, this software can be used to replace the central core of earlier known tight binding molecules to identify novel, highly potent molecules unavailable in library collections. Often these molecules have much higher binding affinity and have a better property profile than typical hit molecules. FEP+ can also be used to calculate absolute binding affinities, which enables the software to evaluate and triage diverse molecules sharing no common peripheral features in a hit discovery context.
  - **Glide** is our virtual screening program that is used to screen libraries of molecules to find hit molecules likely to bind a particular protein target in a specific conformation.
  - **GlideWS** is our next-generation virtual screening program that utilizes a more accurate and robust description of protein-ligand interaction solvation effects. This and other novel features enable GlideWS to more reliably find hit molecules for challenging protein targets when screening libraries of molecules.
  - **Shape** uses the three-dimensional structure and shape of earlier known hit molecules to find new hits when screening libraries of molecules.
  - **DeepAutoQSAR** uses modern machine-learning methods trained to earlier known hit molecules to find novel hits when screening libraries of molecules.
  - **IFD-MD** can computationally predict the binding mode of molecules to a binding site of a protein, including predicting how the conformation of the protein binding site may reorganize upon binding the molecule.
- **Hit to Lead and Lead Optimization:** Hit to lead is the stage at which small molecule hits are evaluated and undergo limited optimization to identify promising lead molecules. Lead optimization improves on the property profile of lead molecules by designing new analogs with improved potency, reduced off-target activities, and favorable physicochemical/metabolic properties.
  - **FEP+** is our free energy calculation software. In the hit to lead and lead optimization phases of drug discovery, FEP+ is used to predict the binding affinity of ligands to proteins with accuracy approaching that of physical experiments. It allows precise rank-ordering of large libraries of virtual molecules so that only the most potent molecules are synthesized in a program, which can save time and reduce cost. FEP+ can also be used to calculate the binding selectivity, solubility, and mutational resistance profiles of molecules, which are key properties for the optimization of bioavailability, toxicology, and efficacy.
  - **DeepAutoQSAR** uses modern machine-learning methods to produce predictive quantitative structure-activity relationship, or QSAR, models. This allows more accurate methods, such as FEP+, to be applied at a much greater scale but with less accuracy to much larger sets of molecules than would otherwise be possible and enables predictive QSAR models of other properties to be developed and deployed on drug discovery projects.
  - **AutoDesigner** is an enumeration tool that enables the rapid exploration of synthetically tractable ligands. When AutoDesigner is deployed in conjunction with multiparameter optimization, machine learning, and FEP+ simulations, it provides a streamlined approach to create and evaluate large sets of synthetically tractable, lead-like, potent ligands.
- **Software Solutions Used Throughout the Drug Discovery Process:**
  - **LiveDesign** is our user-friendly enterprise informatics solution that enables interactive and collaborative molecule design, aggregation and sharing of data, and end-to-end discovery project

coordination between chemists, modelers, and biologists. LiveDesign Biologics is our informatics solution for drug discovery teams designing biologics, which builds upon our LiveDesign offering.

- **Maestro** is our user-friendly modeling environment, which allows expert modelers to utilize our advanced modeling solutions.

Our Software Solutions for Materials Science

We also sell software licenses to customers engaged in molecule design for industrial purposes. The software solutions for our materials science customers leverage much of the same technology as our software for biopharmaceutical companies. In addition, similar to traditional drug discovery efforts, traditional approaches to discovering new molecules in these fields also suffer from long timelines, and it can take as long as 10 to 20 years to bring new materials to the market. We are focused on leveraging our technology to transform the way new materials are discovered, and we believe that materials science industries are only beginning to recognize the potential of computational methods. We are continuing to build a team of subject matter experts to further drive adoption of our computational platform in each of the following areas in which we currently operate:

- **mobile electronics and displays**—organic electronics (OLED);
- **aerospace and defense**—polymers, composites;
- **microelectronics**—semiconductors, thin film processing;
- **oil and gas**—catalysis, reactivity;
- **energy**—alternative energy, batteries; and
- **consumer packaged goods**—soft matter, formulations.

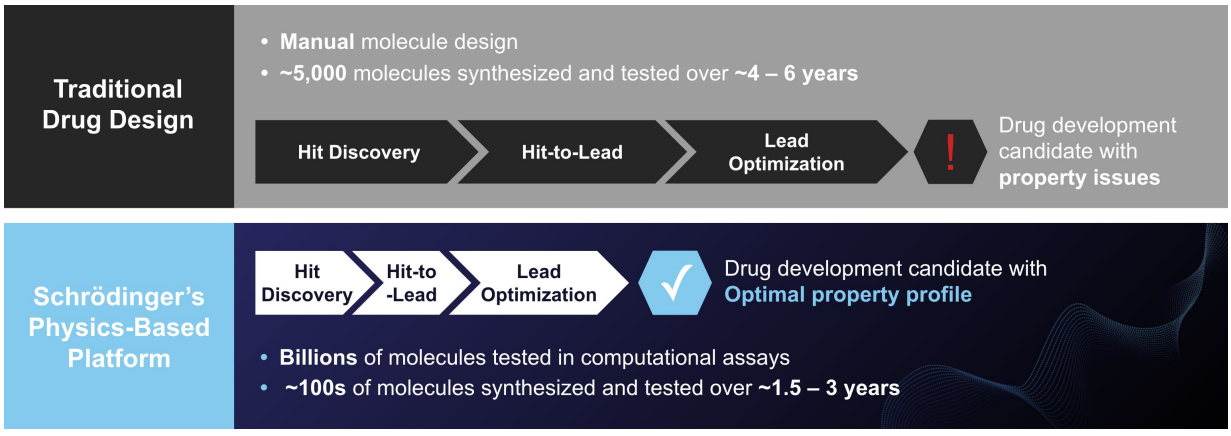
As part of our ongoing efforts to further advance our software solutions for materials science applications, in June 2020, we entered into a three-year agreement with Gates Ventures, LLC, or Gates Ventures, to develop and apply atomistic simulations methods to improve battery performance. In August 2023, we extended the agreement with Gates Ventures for an additional three-year term at an increased scale.

We also collaborate with a number of materials science companies to help accelerate the discovery and development of new materials. For example, in 2022, we entered into a collaboration with Eonix LLC, or Eonix, to accelerate the discovery and design of materials for safer, energy dense lithium ion batteries. Under the terms of this collaboration, we received an equity stake in Eonix, and will be eligible to receive additional equity upon the successful completion of certain technical milestones. In 2023, we also entered into a research collaboration with Copernic Catalysts, Inc. to help accelerate the discovery and development of sustainable catalysts for applications in e-fuels and bulk chemicals.

Drug Discovery Business

Overview

We are using our computational platform in both our collaborative and proprietary drug discovery programs. The figure below illustrates the advantages in time, cost, and molecule quality of our computational drug design approach over traditional drug discovery approaches.



Our collaboration agreements typically include upfront consideration, discovery, development, commercial and regulatory milestones, and royalties from future sales of commercialized products. We generate drug discovery revenue through the performance of specified research and development activities under our collaboration agreements and upon the achievement of discovery and development milestones, and we have the potential to generate drug discovery revenue from commercial and regulatory milestones, option fees, and royalties under our collaboration agreements. As of December 31, 2024, we had 18 active collaborative drug discovery programs. We define an active collaborative drug discovery program as a program that we are actively progressing for, or together with, a collaborator of ours, or a program that our collaborator is progressing and which we are eligible to receive milestone payments, option fees, and/or future royalties. Furthermore, as of December 31, 2024, we had an aggregate of 13 collaborative programs for which we were eligible to receive future royalties on commercial sales, if any, of collaborative programs that receive marketing approval compared to 12 programs as of December 31, 2023.

We track the aggregate number of collaborators which we have collaborated with, or partnered with, for drug discovery and development since 2018, and as of December 31, 2024, we have had 19 collaborators. The number of collaborators is a cumulative number and we only include those collaborations from which we have derived revenue since the fiscal year ended December 31, 2018.

While our drug discovery revenue-generating collaborations are an important component of our business, our strategy is also to invest in our proprietary drug discovery programs including SGR-1505, SGR-2921 and SGR-3515, which we describe in more detail below under "—Our Proprietary Drug Discovery Business." We evaluate our proprietary drug discovery programs individually to determine the advisability of entering into preclinical and clinical development ourselves to co-develop them with leading industry partners, entering into collaborations, or out-licensing programs to optimize their development and clinical and commercial potential.

We intend to pursue additional proprietary drug discovery programs as our existing programs advance through discovery and development stages, internally or with partners, and we will continue to evaluate new collaborative programs that fit our selection criteria and where the collaborator’s particular expertise, resources or intellectual property has the potential to create substantial value.

Our Drug Discovery Collaborations

Over the last decade, leveraging our platform and expertise, we have steadily developed a portfolio of drug discovery collaborative programs. We have entered into a number of collaborations with leading biopharmaceutical companies under which our collaborators are pursuing research in a number of therapeutics areas, including without limitation, various programs in oncology, antifungal diseases, fibrosis, inflammatory bowel disease, metabolic disease, autoimmune disease, immuno-oncology, cardiopulmonary disease and tuberculosis. Many of these programs are pursuing novel molecules for targets where a low-dose small molecule inhibitor or activator with optimal drug-like properties has been difficult to achieve or where selectivity for the target of interest has been difficult to achieve relative to other proteins. We have developed our pipeline of collaborative programs by selectively entering into drug discovery collaborations with leading biopharmaceutical companies. Among the factors that we use to embark on collaborations are whether the targets are well-validated, have high therapeutic potential, and are amenable to the strengths of our computational platform, and whether or not the collaborator brings complementary capabilities, all of which we believe contribute to an increased probability of success. Certain of these programs have provided us with significant income and have the potential to produce additional milestone payments, option fees, and royalties in the future.

Through access to the maximum potential scale of our computational platform and our drug discovery and software development teams, our collaborators receive the following key benefits:

- **Immediate utilization of our platform:** Ability to immediately and efficiently leverage the full benefits of our computational platform, without the need for training or ramp-up time, thereby enabling accelerated drug discovery.
- **Access to massive compute power**: Ability to run our computational software at scale, thereby avoiding the time and cost needed to build such computational infrastructure on their own.
- **Early access to cutting-edge functionality**: Real-time access to emerging solutions as they are being developed.
- **Target exclusivity**: Under our collaboration agreements, we agree to design drugs for a particular protein target or targets using our computational platform and know-how exclusively for the collaborator.

Collaboration Agreements

Our current collaborators include, but are not limited to, Ajax Therapeutics, Inc., BMS, Bright Angel Therapeutics Inc., Eli Lilly and Company, or Lilly, Novartis, Otsuka Pharmaceutical Co., Ltd., or Otsuka, Sanofi S.A., and Structure Therapeutics Inc. (formerly ShouTi, Inc.). Our opportunity to receive further potential revenues from any of the programs under these collaborations is generally limited to research funding payments, development, regulatory, and commercial milestones, option fees, and royalties on commercial sales, if any.

With the exception of our collaboration agreements with BMS, Otsuka, Novartis, and Lilly, which are described below, our collaborative agreements typically have the following characteristics:

Control/Ownership. All of the programs being pursued under these collaborations are fully owned and controlled by each respective collaborator. We are not responsible for advancing their preclinical or clinical development or their commercialization, if approved.

Equity Stakes. We have received equity consideration in certain of our collaborators, and from time to time, we have also made additional equity investments in certain of these collaborators. Unless otherwise noted, the following table presents our equity stakes in collaborators on an issued and outstanding basis as of December 31, 2024:

Company	Ownership %
Ajax Therapeutics, Inc.	5.8%
Apollo, LLC [(1)]	7.9%
Bright Angel Therapeutics Inc.	31.5%
Lakshmi, LLC [(2)]	5.3%
Nimbus Therapeutics, LLC [(3)]	1.2%
Structure Therapeutics Inc. [(4)]	2.3%

(1) Represents our equity in the entity, which holds the rights to any future payments received in connection with Gilead Sciences, Inc.'s acquisition of Nimbus' ACC inhibitor program, on a fully diluted basis.

(2) Represents our equity in the entity, which holds the rights to any future payments received in connection with Takeda's acquisition of Nimbus' TYK-2 inhibitor program, on a fully diluted basis.

(3) On a fully diluted basis

(4) Based on the number of ordinary shares outstanding as of October 31, 2024, as reported on Structure Therapeutics Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2024, as filed with the Securities and Exchange Commission, or SEC, on November 13, 2024.

From time to time, we may also receive distributions on account of our equity stakes in our collaborators. For example, in February 2023, Nimbus announced the closing of the acquisition by Takeda of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its TYK2 program, which includes the TYK2 inhibitor, NDI-034858, which is being evaluated for the treatment of multiple immune-mediated diseases following positive results from the Phase 2b clinical trial in psoriasis. We received an aggregate of $147.2 million in cash distributions related to the Takeda acquisition in 2023. Furthermore, in 2024, we received $47.6 million for the equity stake that we owned in Morphic, one of our drug discovery collaborators and co-founded companies, in connection with Morphic's acquisition by Lilly for approximately $3.2 billion.

Financial Rights. In addition to our equity stakes in certain of our collaborators, we also have rights to various payments on a collaborator-by-collaborator agreement basis including research funding payments, discovery, development, and commercial milestones, option fees, and potential royalties in the single-digit range. Under certain of our collaboration agreements, we are also eligible to receive a percentage of our collaborators' sublicense revenue. Many of our collaborative programs are currently still in the discovery and preclinical development stages. Generally, the size of the payments we are eligible to receive from a collaborative program increases as the program advances.

Importantly, our current collaboration agreements typically also contemplate additional program targets being added, allowing our collaborators to potentially increase the number of programs under our current collaboration agreements, subject to our pre-existing exclusivity obligations and interests.

However, because these collaborations are not under our control, we cannot predict whether or when we might achieve any event-based increases in research funding payments, milestone payments, royalty or other payments under these collaborations or estimate the full amount of such payments, and we may never receive any such payments. For a

further discussion of the risks we face with respect to receipt of any of these payments, please refer to "Risk Factors—Risks Related to Drug Discovery—We may never realize a return on our investment of resources and cash in our drug discovery collaborations".

How We Work with Our Collaborators. Generally, our existing collaboration agreements provide that we agree to design drugs for a particular target or targets using our computational platform and know-how exclusively for the collaborator. The collaborator retains the intellectual property related to any molecules developed under the collaboration. Generally, our collaborators are not contractually required to provide us with, nor do we expect generally to receive, access to nonpublic information regarding key developments related to the advancement of these collaboration programs, such as clinical trial results, including safety and efficacy data, regulatory communications, or commercialization plans and strategies. To the extent we do receive such information, our collaboration agreements generally require us to maintain the confidentiality of information we receive under the collaboration.

In addition to the collaborations described above, we also have collaboration agreements with BMS, Otsuka, Novartis, and Lilly which are described below:

BMS. In November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. Under the agreement, we were initially responsible, at our own cost and expense, for the discovery of small molecule compounds directed to five specified biological targets pursuant to a mutually agreed research plan for each such target. In December 2022, we and BMS entered into an amendment to the agreement to include an additional target in neurology on terms similar to the original agreement. As a result of BMS electing not to proceed with further development of certain targets, there is one remaining neurology target under the agreement. Under the terms of the agreement, we received a $55.0 million upfront payment from BMS in November 2020, an additional upfront payment in December 2022, and a program fee in December 2024. As of December 31, 2024, we are eligible to receive up to $482.0 million from BMS in total milestone payments for the one remaining neurology target currently subject to the collaboration. As of December 31, 2024, we have recognized $32.0 million in revenue related to milestones under this agreement. We are also entitled to a tiered percentage royalty on annual net sales of any product commercialized by BMS under the agreement ranging from mid-single digits to low-double digits, subject to certain specified reductions.

Lilly. In September 2022, we entered into a collaboration with Lilly, under which we are responsible for the discovery and optimization of small molecule compounds addressing an immunology target. Lilly will be responsible for the completion of preclinical development, clinical development and commercialization. Under the terms of the agreement, we received an upfront payment, and we are eligible to receive up to $420.0 million in discovery, development and commercial milestone payments. We are also eligible to receive low single- to low double-digit royalties on net sales of any products emerging from the collaboration in all markets. In February 2025, we expanded our research collaboration with Lilly to add an undisclosed target to the collaboration. The terms of the expanded collaboration with respect to the additional target are similar to the terms for the existing target.

Otsuka. In December 2022, we entered into a multi-part agreement with Otsuka, together with Otsuka's subsidiary Astex Pharmaceuticals, which includes a collaboration for the discovery and development of a program focused on an emerging central nervous system, or CNS, disease target. In January 2025, we announced that we have expanded the collaboration with Otsuka to add an undisclosed target to the collaboration. Under the collaboration, we are responsible for drug design through lead optimization and Otsuka will be responsible for all other drug discovery and clinical development activities. We received an upfront payment and will be eligible to receive discovery, development and regulatory milestone payments, as well as tiered royalties on net sales of any products emerging from the drug discovery collaboration in all markets.

Novartis. In November 2024, we entered into a research collaboration and license agreement with Novartis, pursuant to which we and Novartis agreed to collaborate on the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas. The agreement is intended to advance multiple development candidates for development and commercialization by Novartis. Under the terms of the agreement, we received a $150.0 million upfront payment from Novartis in January 2025. As of December 31, 2024, we are eligible to receive up to $2.272 billion from Novartis in total milestone payments across the initial programs. Such milestones consist of up to $892.0 million in discovery and development milestones and up to $1.38 billion in commercial milestones. No revenue had been recognized related to milestones under this agreement as of December 31, 2024. We are also entitled to a tiered percentage royalty on annual net sales of each product commercialized by Novartis under the agreement ranging

from mid single-digits to low double-digits, subject to certain specified reductions. See "—Collaboration Agreement with Novartis Pharma AG" for additional information relating to this agreement.

Our Proprietary Drug Discovery Programs

In 2018, we began to develop a pipeline of proprietary drug discovery programs with the goal of using our platform to produce a portfolio of novel, high value therapeutics. Our initial programs were focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Since then, we have expanded into other therapeutic areas, including immunology and neurology. Our strategy is to pursue a number of proprietary programs and strategically evaluate on a program-by-program basis advancing them into preclinical and clinical development ourselves, entering into collaborations to co-develop them with leading industry partners, or out-licensing them to maximize their clinical and commercial opportunities.

The following is a summary of our proprietary drug discovery programs:



R/R: Relapsed/Refractory; AML: Acute Myeloid Leukemia; HR: High-Risk

Our Approach to Target Selection

Our selection of targets is based on an extensive analysis of human targets and drug discovery programs. We analyze targets using automated methods at scale. The key steps we take in prioritizing programs involve:

- **Structural and modeling enablement**. We use our computational platform to analyze protein structure quality as well as druggability of binding sites across thousands of target proteins in parallel. For a subset of high-quality structures of interest, we confirm amenability to our computational platform.
- **Evaluation of therapeutic potential**. Our selection of targets is strongly influenced by the level of validation of the target, including analysis of human genetics and prior clinical data.
- **Identification of unsolved design challenges**. We determine whether there are property profile challenges that could be solved by the application of our computational platform and provide a clinically meaningful differentiated, novel, high value product opportunity.
- **Assessment of potential value of pathways and mechanisms.** We evaluate industry and commercial interest as well as the clinical utility with the aim of prioritizing programs with high commercial and therapeutic potential.

Using this comprehensive analysis, we have identified a large number of protein targets that we believe are amenable to our technology. We continue to evaluate a number of additional targets using this analysis.

SGR-1505: Our MALT1 Inhibitor

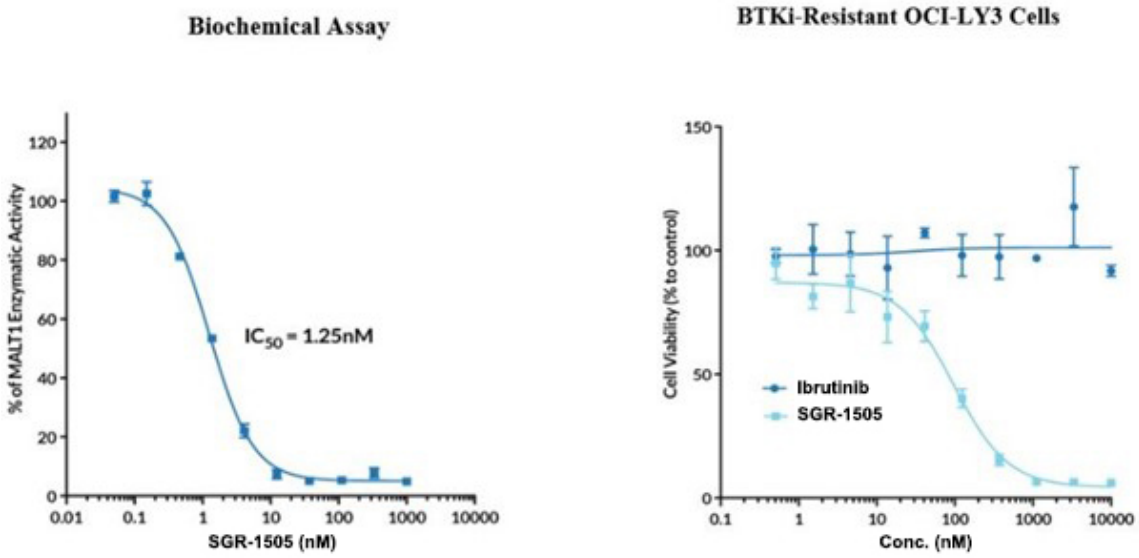
We are advancing SGR-1505, our novel MALT1 inhibitor, for the treatment of patients with relapsed or refractory B-cell malignancies. Constant activation of nuclear factor-kappa B, or NF-κB, a key signaling molecule in B cells, is a hallmark of several subtypes of lymphoma. MALT1 is a key mediator of the NF-κB signaling pathway, the main driver of a subset of B-cell lymphomas, and functions by forming a complex with CARMA1 (Caspase recruitment domain-containing protein 11 also known as CARD-containing MAGUK protein 1) and BCL10 (B-cell lymphoma/leukemia 10) to mediate antigen receptor-induced lymphocyte activation. MALT1 is considered a potential therapeutic target for several subtypes of lymphomas and leukemias.

Activated B-cell, or ABC, a subtype of diffuse large B-cell lymphoma, or ABC-DLBCL, is the most common type of aggressive non-Hodgkin's B-cell lymphoma. ABC-DLBCL is associated with a number of mutations that trigger a constitutively active NF-κB signaling pathway, which often is mediated by increased MALT1 protease activity. Among these mutations is a gain of function mutation or amplification of MALT1, which has also been identified in ABC-DLBCL patients.

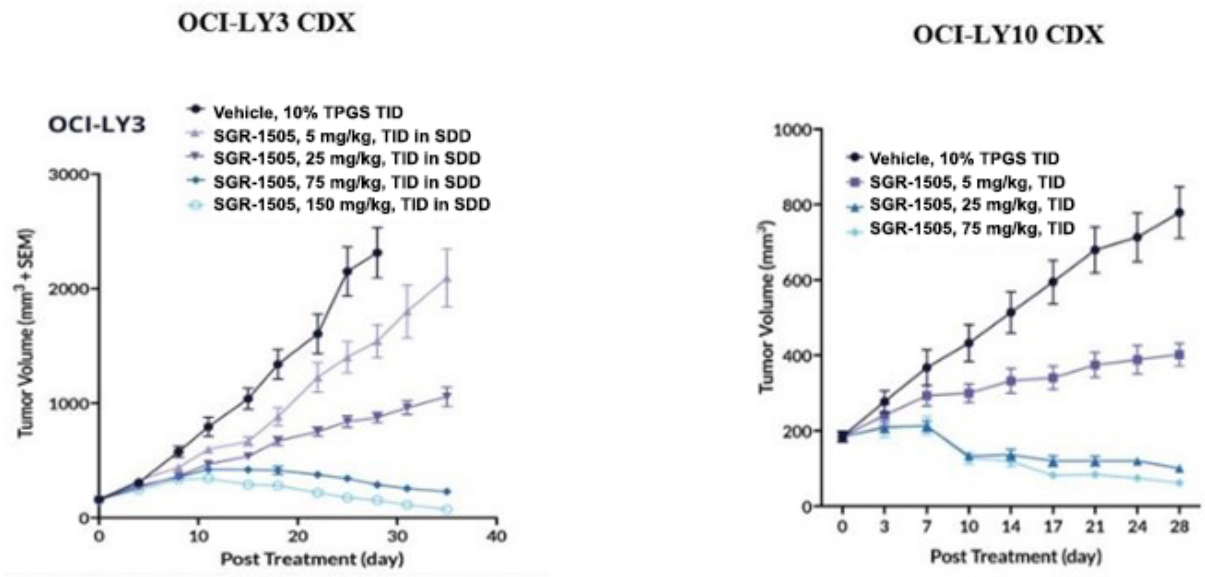
We utilized our physics-based computational platform to enable the identification and advancement of multiple novel series of MALT1 inhibitors from hit finding to lead optimization. Combining multi-parameter optimization, FEP+, and machine learning, we were able to prioritize tight-binding compounds with drug-like properties, and identified multiple novel and distinct chemical series which showed strong anti-tumor activity, ultimately enabling us to select SGR-1505 as our development candidate in under two years.

Preclinical Development of SGR-1505

As shown in the figures below, in preclinical studies, SGR-1505 showed anti-tumor activity in a MALT1 enzymatic assay and strong anti-proliferative effect on cell viability in a Bruton's tyrosine kinase, or BTK, inhibitor resistant OCI-LY3 B-cell non-Hodgkin's lymphoma cell line, when compared to ibrutinib, a covalent BTK inhibitor.

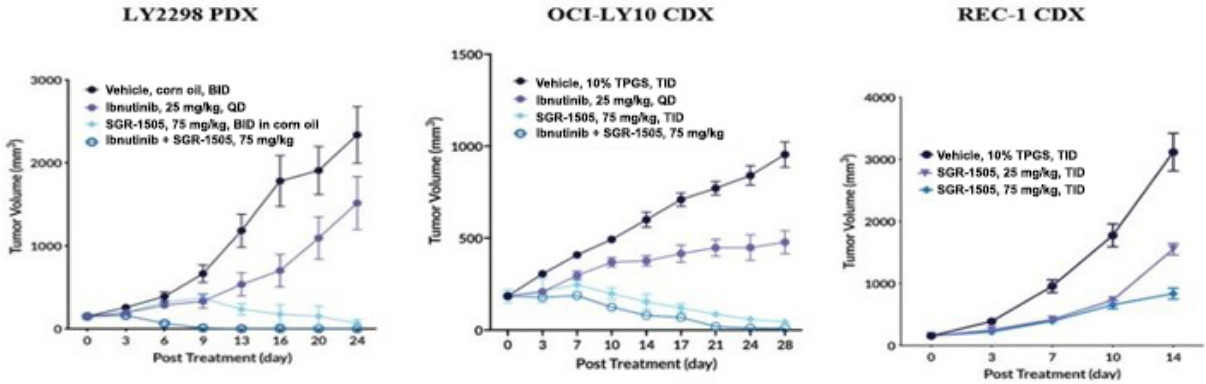


As shown in the figures below, in preclinical studies, SGR-1505 also demonstrated strong anti-tumor activities as a single agent in BTK inhibitor resistant OCI-LY3 cells and in BTK sensitive OCI-LY10 B-cell non-Hodgkin's lymphoma *in vivo* cell-line derived xenograft (CDX) models.



TPGS = D-alpha-tocopheryl polyethylene glycol succinate, a solvent used in co-administration for drug dosing in animals; TID = three times a day dosing; SDD = spray dried dispersion; SEM = scanning electron microscopy, a method used to measure cell volume

In addition, as shown in the figures below, SGR-1505 demonstrated strong anti-tumor activity in combination with ibrutinib in BTK inhibitor sensitive *in viv*o models, such as the ABC-DLBCL patient-derived xenograft (PDX) model LY2298 and the OCI-LY10 CDX model. Beyond ABC-DLBCL disease models, as shown in the figures below, SGR-1505 also demonstrated single agent anti-tumor activity in an *in vivo* mantle cell lymphoma REC-1 CDX model. SGR-1505 also showed strong combination effects with venetoclax (an inhibitor of the anti-apoptotic protein B-cell lymphoma 2 (BCL2)) on inhibition of cancer cell viability in the OCI-LY10 CDX model.



QD = once per day dosing; BID = twice a day dosing

These data suggest that targeting MALT1 with SGR-1505 may expand therapeutic options for patients with selected B-cell lymphomas, such as ABC-DLBCL, with the possibility of expanding into other B-cell lymphomas such as mantle cell lymphoma. In addition, SGR-1505, in combination with BTK inhibitors, demonstrated potential to overcome drug-induced resistance to BTK inhibitors in samples derived from patients with relapsed/refractory B-cell lymphomas.

In addition, in a series of biochemical and cell-based assays, we compared the potency of SGR-1505 against JNJ-6633, a MALT1 inhibitor advanced into Phase 1 clinical development by Johnson & Johnson, as measured by IC_{50} and

IC_{90} values, which are measures of the potency of a compound in inhibiting specific biological functions. As shown in the graphic below, SGR-1505 demonstrated better potency in all assays tested.

Assay	SGR-1505		JNJ-6633	
	IC_{50} nM	IC_{90} nM	IC_{50} nM	IC_{90} nM
MALT1 Biochemical Assay	1.3	7	73	485
BCL10 Cleavage Assay — OCI-LY10 Cells	22	63	98	334
IL10 Secretion Assay — OCI-LY10 Cells	36	211	267	2,816
Antiproliferative Assay — OCI-LY10 Cells	71	181	430	5,670
Antiproliferative Assay — REC-1 Cells (MCL)	57	227	884	5,876
NF-kB Reporter Assay in Jurkat T-cell Leukaemia Cells	37	113	242	4,122

All competitor data is internally generated by contract research organizations, using commercially available tools or synthesized by third-party research chemists using publicly available structure information.

Clinical Development of SGR-1505

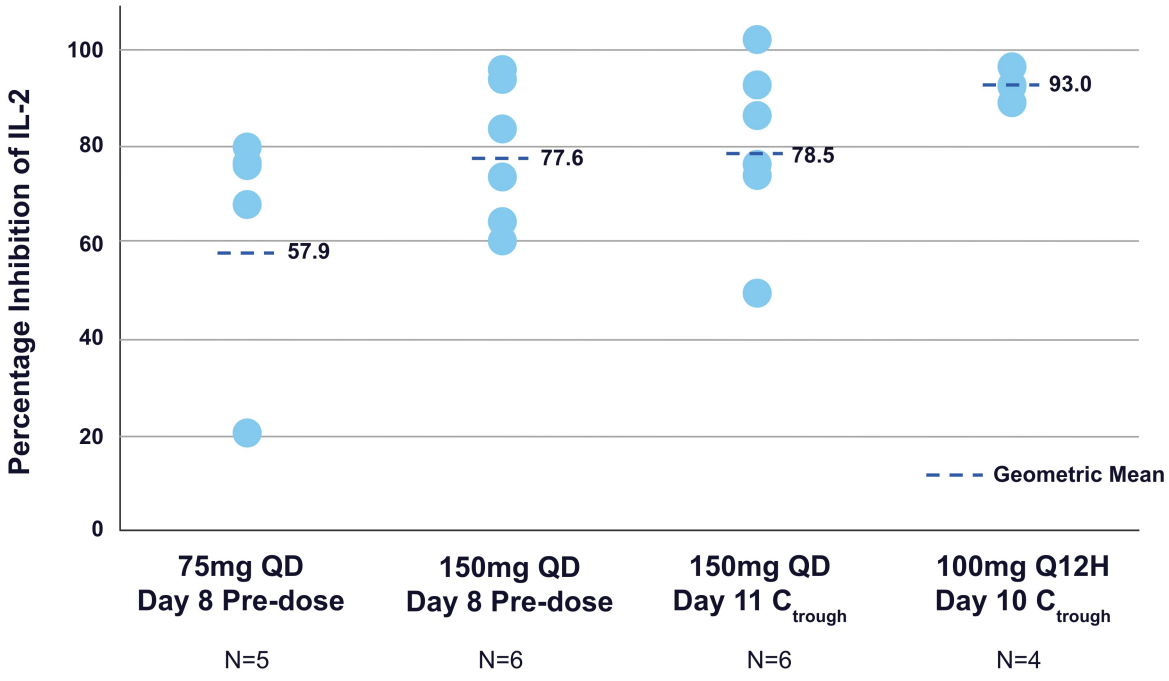
Phase 1 Clinical Trial of SGR-1505 in Patients with Relapsed or Refractory B-cell Malignancies

The FDA cleared our IND for SGR-1505 in June 2022. We have initiated dosing in a Phase 1 clinical trial of SGR-1505, which is designed as an open-label, multi-center dose escalation clinical trial in patients with relapsed or refractory B-cell malignancies. We anticipate enrolling up to 52 patients in the United States and Europe with confirmed mature B-cell malignancies who are 18 years or older and have a life expectancy of equal to or greater than 12 weeks. SGR-1505 will be administered orally. The trial is designed to evaluate the safety, pharmacokinetics, pharmacodynamics, maximum tolerated dose and/or recommended dose of SGR-1505. Exploratory cohorts will evaluate additional pharmacokinetics, pharmacodynamics, preliminary anti-tumor activity and safety to establish the recommended dose. We anticipate reporting initial data from the trial in the second quarter of 2025. In August 2023, the FDA granted orphan drug designation to SGR-1505 for the potential treatment of mantle cell lymphoma.

Phase 1 Clinical Trial of SGR-1505 in Healthy Volunteers

We also completed a Phase 1 clinical trial of SGR-1505 in 73 healthy volunteers to gather additional data, including data relating to the safety, tolerability, pharmacokinetics of SGR-1505, as well as the effect of food and drug-drug interactions. SGR-1505 was generally well tolerated with no drug-related serious adverse events or dose limiting toxicities observed. Adverse events were primarily Grade 1 and not treatment related. Bilirubin elevations occurred in 16% of healthy volunteers but were not deemed to be clinically relevant. These elevations were primarily Grade 1 and none were Grade 3 or 4. All bilirubin elevations reversed upon discontinuation of SGR-1505.

As shown in the figure below, we observed greater than 90 percent inhibition of IL-2 secretion in an activated T cell whole blood assay in the cohort of healthy volunteers who received doses of SGR-1505 at 100 mg twice a day for 10 days (n=4), confirming target engagement and meeting the pharmacodynamic goals for the study. Inhibition of IL-2 secretion is a marker for target engagement and pathway modulation as it is tightly linked to MALT1 and the downstream NF-κB signaling.



QD = once a day dosing, Q12H = twice a day dosing

The data from the healthy volunteer trial support continued evaluation of SGR-1505 in our ongoing Phase 1 clinical trial in patients with relapsed or refractory B-cell malignancies.

SGR-2921: Our CDC7 Inhibitor

We are advancing SGR-2921, our novel CDC7 inhibitor, for the treatment of relapsed or refractory acute myeloid leukemia or high risk myelodysplastic syndrome. CDC7 is a serine/threonine protein kinase that has been shown to play important roles in DNA replication initiation and in response to replication stress and DNA damage. CDC7 levels are high in certain tumors, including acute myeloid leukemia, or AML, and are thought to be linked to these cancer cells' proliferative capacity and ability to bypass normal DNA damage responses.

CDC7 phosphorylates and activates the enzymes responsible for DNA replication initiation and proteins involved in replication stress response. Disruption of CDC7 activity in cancer cells leads to delayed DNA replication, increased replication stress, cell cycle abnormalities, and cell death.

The antiproliferative potential of CDC7 inhibition was validated by a third party in Phase 1 clinical trials of a CDC7 inhibitor in which responses were observed in patients, including those with duodenal, esophageal and cervical cancer. Prior to this positive result, existing CDC7 inhibitors were not sufficiently tight-binding (as measured by their affinity for the target), lacked selectivity, and demonstrated poor pharmacokinetic properties.

In order to maximize the anti-cancer activities of CDC7 inhibitors, very tight-binding inhibitors are required to achieve durable clinical impact as monotherapy or in the context of clinical combinations. Using our computational platform, we identified multiple tight-binding, selective, and novel CDC7 inhibitor series, and selected SGR-2921 as our development candidate.

Preclinical Development of SGR-2921

As shown in Tables 1 and 2 below, SGR-2921 demonstrated inhibition of recombinant human CDC7 in a biochemical kinase assay and in a biophysical assay, as measured by the average IC_{50} value, which is a measure of the potency of a compound in inhibiting specific biological functions. Table 1 also shows that SGR-2921 demonstrated strong binding affinity to CDC7 with an average equilibrium dissociation constant, or KD, which is a measure of binding affinity between a protein and a binding partner, in the picomolar range. Further, SGR-2921 showed inhibition of the phosphorylation of the serine in position 53, or S53, of the protein MCM2, or pMCM2, a downstream substrate of CDC7, in COLO205, a colorectal cancer cell line, and in two acute myeloid leukemia cell lines, MV-4-11 and MOLM-16.

Table 1 Average IC_{50} of CDC7 Kinase Activity and Binding Affinity to CDC7 for SGR-2921

Compound	Average IC_{50} [nM]	KD [pM]
SGR-2921	0.0277±0.0054	10

Table 2 *In Vitro* Cell Based IC_{50} Values of pMCM2 (S53) by SGR-2921

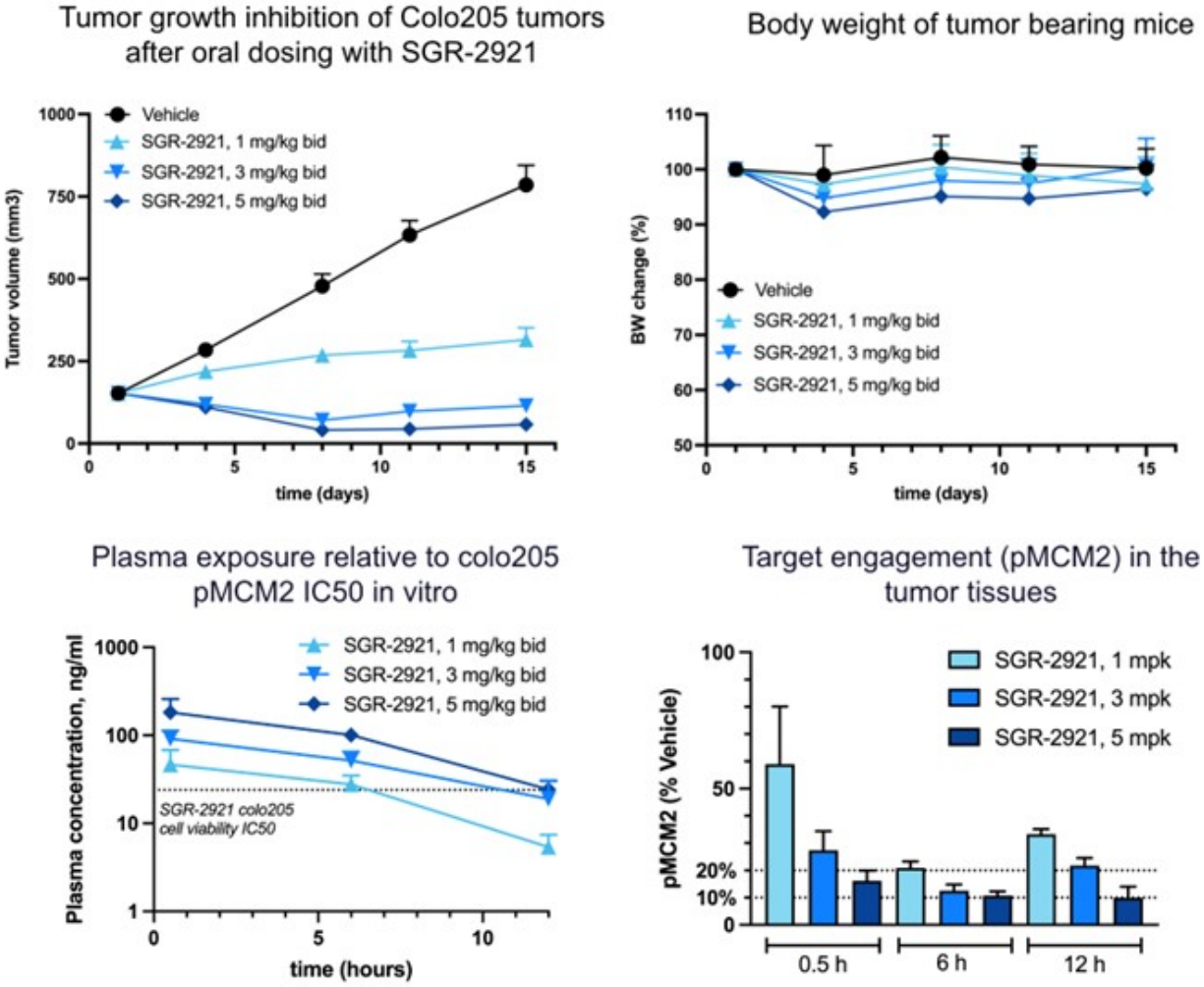
Cell line	COLO205 [IC_{50} (nM)]	MV-4-11 [IC_{50} (nM)]	MOLM-16 [IC_{50} (nM)]
pMCM2 (S53)	1.19±0.41	0.92±0.40	1.62±0.52

SGR-2921 also showed anti proliferative activity *in vitro* in COLO205, MV-4-11 and MOLM-16 cell lines. Table 3 summarizes the average IC_{50} value from the individual assays.

Table 3 *In Vitro* Cell Based Viability IC_{50} Values of SGR-2921

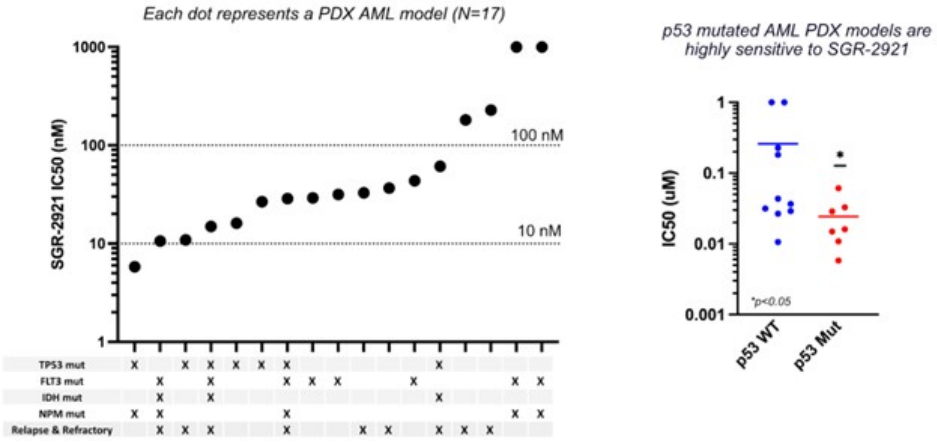
Cell line	COLO205 [IC_{50} (nM)]	MV-4-11 [IC_{50} (nM)]	MOLM-16 [IC_{50} (nM)]
Cell viability	9.90±3.72	107.55±12.42	20.81±7.29

As shown in the figures below, SGR-2921 showed tumor growth inhibition resulting in tumor regression in the COLO205 colorectal cancer CDX model, which is a colorectal cancer cell line derived xenograft model, at doses that did not result in significant body weight loss. SGR-2921 also showed a dose-dependent increase in plasma drug concentration and a dose-dependent decrease in intratumoral pMCM2 in the COLO205 CDX model. In mouse models of AML, SGR-2921 also showed strong anti-tumor activity at doses that were tolerated.



SGR-2921 also showed strong anti-proliferative activity in leukemia cell samples derived from AML patients that varied with respect to mutational status of driver mutations in key genes that are hallmarks of clinical AML, including TP53, FLT3, IDH, or NPM, as well as whether the patient samples were derived from a patient naive to treatment or were relapsed or refractory following previous AML treatments. We observed that the cell samples were generally sensitive to SGR-2921, as measured by their IC_{50} values, and we observed that patient samples which contained TP53, or p53, mutations demonstrated particular sensitivity to SGR-2921.

SGR-2921 showed potent anti-proliferative activity in AML patient-derived samples ex vivo independently of driver mutations, including in p53 mutated AML



Furthermore, as shown in the figures below, in preclinical models SGR-2921 showed single-agent activity and activity in combination with decitabine, which is a type of chemotherapy medication used for the treatment of myelodysplastic syndromes, in standard-of-care resistant models representing difficult-to-treat disease.

SGR-2921 combination treatment with decitabine in patient derived AML samples resulted in synergistic activity ex vivo, particularly in p53 mutant models

Model	CTG-2457	CTG-3661	CTG-2240	CTG-2453	CTG-3674	CTG-2702	CTG-2233	CTG-3438
TP53	Mut (Insertion)	Mut (Ser241Phe, Arg175His)	Mut (P72R)	Mut (P72R)	WT	WT	Mut (P72R)	WT
SGR-2921 IC50 (nM)	100	61	41	43	35	351	16	28
Decitabine IC50 (nM)	4780	470	1070	193	146	10000	106	632
SGR-2921 Decitabine (ZIP Synergy score)	28	23	17.5	13.3	12	NA	-15	-24

Synergy Score
30
20
10
0
-10
-20
-30

ZIP, or zero interaction potency, synergy score is a model used to capture the drug interaction relationships by comparing the change in the potency of the dose-response curves between individual drugs and their combinations

Clinical Development of SGR-2921

The FDA cleared our IND for SGR-2921 in July 2023. We have initiated dosing in our Phase 1 clinical trial of SGR-2921, which is designed as an open-label, multi-center dose escalation clinical trial in patients with relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome. We anticipate enrolling up to 144 patients in the United States and Europe with a confirmed diagnosis of refractory acute myeloid leukemia or high-risk myelodysplastic syndrome who are 18 years or older and have a life expectancy equal to or greater than 8 weeks. SGR-2921 will be administered orally. To evaluate the effect of CYP3A4 inhibition on SGR-2921 exposure, patients will be enrolled into one of two staggered, parallel study treatment arms. Treatment Arm A will evaluate increasing dose levels of SGR-2921. Treatment Arm B will evaluate increasing dose levels of SGR-2921 with the concomitant administration of azole antifungals that are strong CYP3A4 inhibitors. Safety and tolerability must be demonstrated in treatment Arm A, at the first two dose levels before initiating treatment Arm B.

Patients will be treated at increasing doses of SGR-2921 until all dose levels have been investigated or any dose level is found to exceed the maximum tolerated dose. A recommended Phase 2 dose will be selected from one of the tolerable dose levels which will not exceed the maximum tolerated dose. The trial is designed to evaluate the safety and tolerability of SGR-2921 as a monotherapy and to identify the recommended Phase 2 dose, including the maximum

tolerated dose. Secondary and exploratory objectives of the trial include evaluating the pharmacokinetics and pharmacodynamics of SGR-2921 and investigating preliminary anti-tumor activity. We anticipate reporting initial data from the Phase 1 clinical trial of SGR-2921 in the second half of 2025.

In July 2024, the FDA granted Fast Track designation to SGR-2921 in patients with relapsed or refractory acute myeloid leukemia. In addition, in January 2025, the FDA granted orphan drug designation to SGR-2921 in patients with relapsed or refractory acute myeloid leukemia.

SGR-3515: Our Wee1/Myt1 Inhibitor

We are advancing SGR-3515, our novel Wee1/Myt1 inhibitor for the treatment of solid tumors. Wee1 is a gatekeeper checkpoint kinase that prevents cellular progression through the cell cycle allowing time for DNA repair before cell division takes place. Inhibition of Wee1 allows for accumulation of DNA damage, triggering DNA breakage and apoptosis in tumor cells. Third party Wee1 inhibitors have shown clinically meaningful tumor regression with partial responses and stable disease in ovarian and uterine cancer in clinical trials. A third party Wee1 inhibitor is currently being studied in combination with chemotherapy. Myt1 inhibition is a potential cancer therapy as inhibition of Myt1 forces cells into premature unchecked mitosis resulting in cell death.

The biological functions of Wee1 and Myt1 are independent, yet partially overlapping. Emerging data suggests that Myt1 has a synthetic lethal relationship with Wee1 and high Myt1 protein levels are associated with resistance to Wee1 inhibitors. Concurrent loss of function of Wee1 and Myt1 confers selective vulnerability in cancer cells and could offer increased anti-tumor activity.

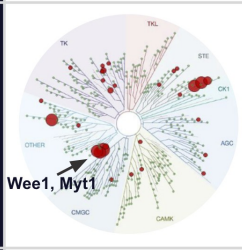
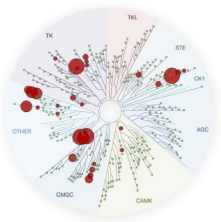
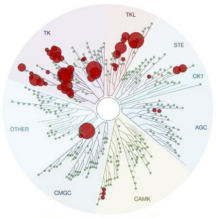
We identified a number of tight-binding, selective Wee1/Myt1 inhibitor series using our computational platform and ultimately selected SGR-3515 as our development candidate. We believe SGR-3515's physicochemical properties make it well suited for combinations with DNA damage response inhibitors such as poly (ADP-ribose) polymerase, or PARP and other targeted therapies for the treatment of ovarian, colorectal, breast, and other solid tumors.

Existing third party Wee1 inhibitors may have off-target effects resulting from inhibition of other kinases and proteins, some of which are liver enzymes responsible for elimination of drug and drug metabolites from the body, potentially making dosing and combinations more challenging.

Preclinical Development of SGR-3515

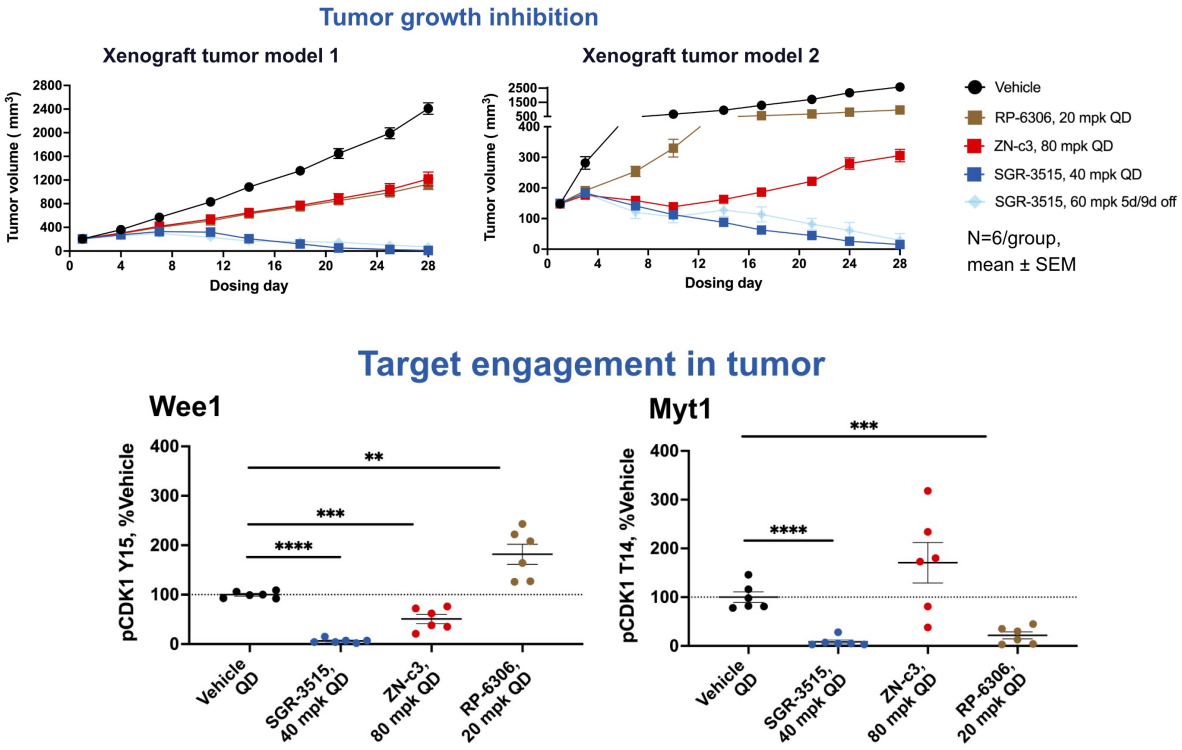
As shown in the table below, in preclinical studies, we have benchmarked SGR-3515 against ZN-c3, a Wee1 inhibitor being advanced by Zentalis Pharmaceuticals, Inc., or Zentalis, and RP-6306, a PKMyt1 inhibitor being advanced by Repare Therapeutics, or Repare.

SGR-3515 demonstrated an improved selectivity profile against broad kinomes compared to ZN-c3 and RP-6306. SGR-3515 also showed better target engagement activity against Wee1 and Myt1 in cells and better potency, as demonstrated by lower IC_{50} values in a cell viability assay in the A427 non-small cell lung cancer cells, in each case, as compared to ZN-c3 and RP-6306. We also believe SGR-3515 has lower potential for drug-drug interaction liabilities associated with CYP3A4 liver enzyme inactivation.

		SGR-3515	Azenosertib (ZN-c3)	Lunresertib (RP-6306)
Binding affinity K_D (nM)	Wee1	0.06	1.2	ND (K_i*=105 nM)
	Myt1	15	300	0.02
Cell target engagement IC_{50} (nM), A427 cell	Wee1 (pCDK1 Y15)	65	280	4200
	Myt1 (pCDK1 T14)	230	4600	54
Cell viability IC_{50} (nM), A427 cell		80	200	280
Kinome Selectivity scanMAX at 1 µM (468 kinases tested)				
Selectivity against PLK1 (PLK1 K_i/Wee1 K_D)		>83,000	250	ND
Drug-Drug Interaction Liability		Low potential for CYP3A4 TDI	Medium potential for CYP3A4 TDI	ND

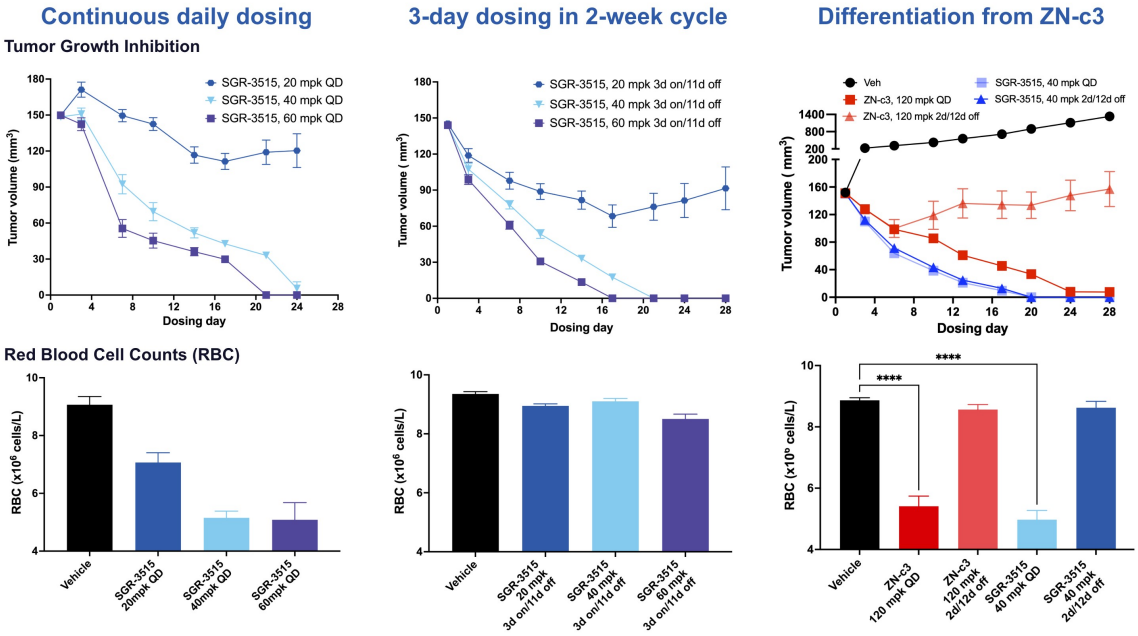
All competitor data is internally generated by contract research organizations, using commercially available tools or synthesized by third-party research chemists using publicly available structure information. ND = not determined; K_i was measured in kinase activity assay.

As shown in the first figure below, in cell line derived xenograft models, SGR-3515 demonstrated superior *in vivo* anti-tumor activity related to single inhibition of Wee1 or My1 as compared to ZN-c3 and RP-6306. As shown in the second figure below, SGR-3515 also showed stronger target engagement of both Wee1 and Myt1 in the tumor as compared to ZN-c3 and RP-6306.



*n=6 per group, mean +/- SEM. Tumor PD samples were taken 8 hours post-last dose on day 28 except SGR-3515 treated tumor samples taken on day 18 with minimal amount of tumor volume. Tumor PD samples are tissue samples that are collected for measuring target engagement in vivo by determining percent inhibition of CDK1-Y15 and CDK1-T14 phosphorylation by Wee1 and Myt1 respectively. ****P<0.001, ***P<0.005, **P<0.01*

As shown in the figures below, we observed that SGR-3515 sustained strong anti-tumor activity *in vivo* leading to full tumor regression at the 40 mpk and 60 mpk dose levels with an intermittent dosing schedule. SGR-3515 dosed intermittently was also shown to allow recovery from mechanism-based hematological toxicity compared to continuous dosing as measured by red blood cell counts.



*A427 (NSCLC) xenograft model. N=6 per group, mean +/- SEM. Red blood cell counts were measured on the last day of the study. ****P<0.001*

Clinical Development of SGR-3515

The FDA cleared our IND for SGR-3515 in April 2024. We have initiated dosing in our Phase 1 clinical trial of SGR-3515 in patients with advanced solid tumors. The trial is a dose-escalation trial designed to evaluate the safety, tolerability, and recommended Phase 2 dose of SGR-3515. Secondary and exploratory objectives of the trial include evaluating the pharmacokinetics and preliminary anti-tumor activity of SGR-3515. We anticipate reporting initial data from the trial in the second half of 2025.

Other Proprietary Programs

We are also progressing a number of other programs in the areas of oncology, immunology, and neurology and a number of undisclosed programs in multiple therapeutic areas. All of these programs are currently in the discovery stage, and we have not yet identified a development candidate for any of these programs, except for SGR-4174, our SOS1 inhibitor, as well as a development candidate for our $EGFR^{C797S}$ program, both of which are in preclinical development. A number of these programs are discussed below.

SOS1 (SGR-4174). SOS1 plays a critical role in cell signaling pathways and is involved in the activation and regulation of the KRAS gene. Oncogenic mutant KRAS stimulates the growth of several cancers, such as lung, pancreatic, and colon cancer. Inhibition of SOS1 is considered a potential therapeutic strategy for the treatment of KRAS-driven cancers. Previously, SGR-4174, a SOS1 inhibitor, was being advanced in collaboration with BMS, after which it was returned to us based on BMS' portfolio prioritization decisions. Our current plan is to seek to advance this program through a collaboration.

$EGFR^{C797S}$. EGFR inhibitors are first-line standard of care agents for advanced non-small cell lung cancer patients with activating EGFR mutations. We have identified multiple $EGFR^{C797S}$ inhibitors with potential to treat patients whose disease progressed following first-line treatment, potentially achieving deeper, more durable responses through new combination regimens. In February 2025, we announced that we have identified a development candidate for our $EGFR^{C797S}$ program.

PRMT5-MTA. PRMT5-MTA inhibition has demonstrated clinical responses in both hematologic and solid tumors with improved safety versus PRMT5 inhibitors due to a synthetic lethal targeting of cancer cells with MTAP-deletions. We have identified selective, potent PRMT5-MTA inhibitors with potential applications in solid tumors, brain metastases and primary CNS tumors.

NLRP3. NLRP3 is a validated target, and mutations in the NLRP3 gene are associated with a broad spectrum of inflammatory and auto-immune diseases. We have identified structurally distinct, selective, NLRP3 inhibitors with anti-inflammatory activity in preclinical models, and we are continuing to optimize brain-penetrant lead molecules.

LRRK2. LRRK2, a genetically validated target, is a large multifunctional kinase enzyme and mutations in the LRRK2 gene have been shown to be associated with the development of Parkinson's disease. In 2022, we generated cryo-electron microscopy structures of LRRK2, which have helped us to accelerate the identification of novel LRRK2 inhibitors. We received a $2.8 million research grant in 2024 from The Michael J. Fox Foundation for Parkinson's Research to investigate modes of safely inhibiting the LRRK2 protein for the treatment of Parkinson's Disease.

We have identified a large number of protein targets that we believe are amenable to our computational platform, and now have a significant inventory of targets that we can potentially advance into discovery programs. We intend to pursue targets with strong biological validation and therapeutic potential that currently lack protein structures of sufficient quality to permit the use of our computational platform for drug discovery. We are actively pursuing strategic alliances with collaborators, as well as progressing internal initiatives, that enable us to generate high-quality protein structures for these targets, which will enable us to initiate additional discovery efforts.

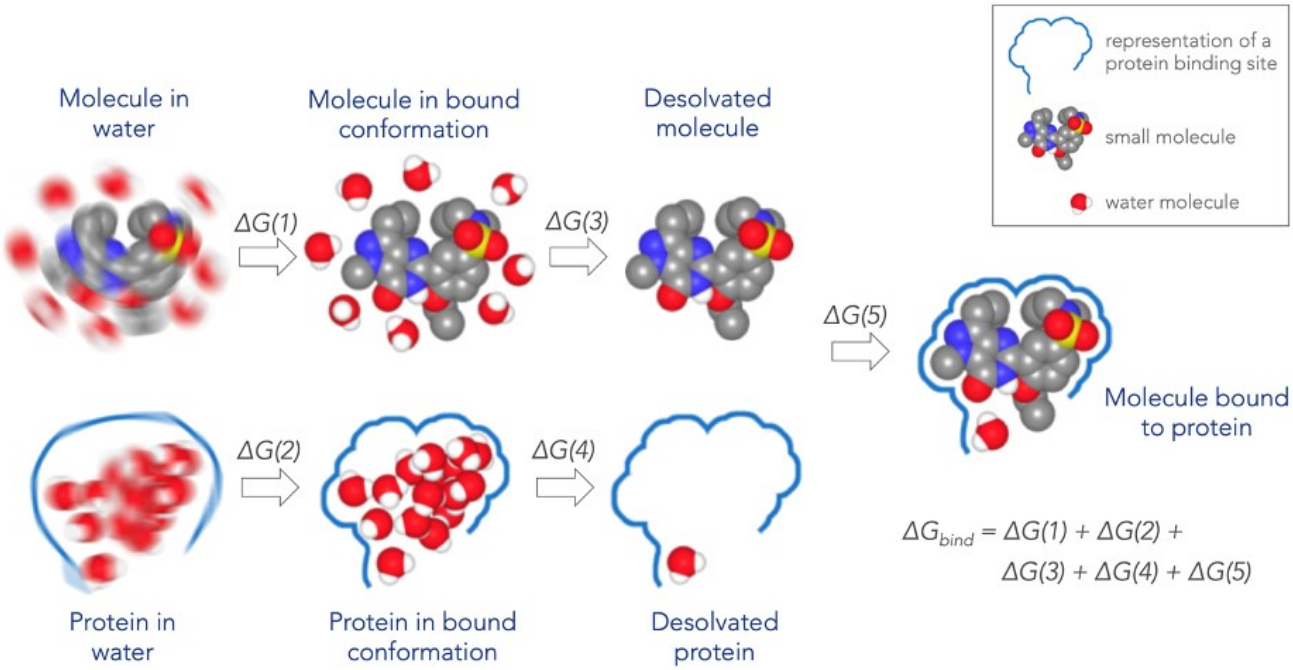
Our initial programs were focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Genomic instability of malignant cells leads to genetic mutations that can drive resistance to kinase inhibitors, creating the need for second and third generation drugs targeting the same disease. Our computational platform has been shown to be capable of predicting the impact that mutations in the kinase domain have on drug binding, potency, and drug sensitivity. Use of our platform to assess and evaluate the impact of clinical mutations on drug potency can be a powerful tool for drug discovery. We believe that deploying our platform at scale with access to genomic profiling data for patients puts us in a strong position to predict the impact of active-site resistance mutations with clinically relevant accuracy to optimize the design of molecules that are robust against common resistant mutations.

Technical Details of Our Key Technologies

Calculation of key drug properties using physics-based methods

Over the past several decades and with the concerted effort of hundreds of our scientists and software engineers, we have developed a physics-based computational platform that is capable of predicting the binding affinity of a drug molecule with a high degree of accuracy. The binding affinity of a drug molecule to a target protein is the key driving force of its in vivo efficacy. Specifically, when a drug binds to a target protein, the affinity with which it binds directly affects the extent to which it will modulate the function of the protein. Therefore, the ability to predict the binding affinity of a drug molecule to a target protein with a high degree of accuracy can significantly accelerate discovery of new efficacious medicines.

Accurately calculating the binding affinity of a drug molecule to a protein is enormously complex and requires a full characterization of all the physical contributions to the binding. These contributions include the deformation and/or rigidification of the small molecule into the bound conformation (ΔG(1) in the figure below) and the rigidification of the protein in the bound conformation (ΔG(2)), the removal of waters surrounding the molecule (ΔG(3)) and the removal of waters within the protein binding site (ΔG(4)), and finally the interactions achieved between the molecule and protein when binding to form the protein-molecule complex (ΔG(5)).



We have developed a solution to consistently assess all of these contributions to binding with a high degree of accuracy, building on a method called "free energy perturbation." Free energy perturbation perturbs, or transforms, an initial molecule into another molecule of interest and evaluates how that transformation changes binding affinity to a particular protein target. Our solution for conducting these calculations is called FEP+. FEP+ is enabled by the following differentiated constituent technologies:

- classical molecular mechanics force field with broad coverage of drug-like molecules with a high degree of accuracy;
- an automated workflow allowing for force field coverage to be extended on the fly utilizing our accurate quantum mechanics software;
- computationally efficient molecular dynamics engine that runs on graphic processing units;
- efficient, enhanced sampling methods that allow the calculation to be converged with reduced simulation times;
- automated atom-mapping and interaction-mapping assignment; and
- ability to scale these calculations to leverage large cloud computing environments.

All of these constituent technologies are necessary to achieve the accuracy, scalability and applicability of our free energy perturbation implementation.

In a notable peer-reviewed study including approximately 3,000 molecules across approximately 90 distinct projects, FEP+ exhibited an error profile that indicates its affinity predictions approach the accuracy of running a laboratory experiment. FEP+ is also able to perform these computations more rapidly than experimental assays. Computational assessment of a molecule utilizing FEP+ requires only a few hours. In comparison, it often takes weeks to synthesize a drug-like molecule and assay its binding affinity for the target of interest in a laboratory. As a result, our FEP+ solution can be used to explore very large numbers of molecules to identify drug candidates much more rapidly than would be possible solely using experimental approaches.

In a peer-reviewed article published in collaboration with a large biopharmaceutical company, the ability of FEP+ to prioritize molecules for synthesis expected to bind more tightly than an initial hit was compared with several other industry-standard approaches. We found that FEP+ succeeded in prioritizing the synthesis of molecules with improved binding affinity with eight times greater success than any other technique tested. This evidence supports the essential role that FEP+ can play in advancing drug discovery programs.

Enumeration of extremely large libraries of molecules

We have developed methods to enumerate extremely large libraries of molecules of interest with our AutoDesigner software solution, thereby allowing our software customers, our drug discovery collaborators, and the Schrödinger therapeutics group to explore a much larger portion of project-relevant chemical space than is possible through manual design. The chemical enumeration technology we have developed incorporates the most commonly used chemical reactions and can, in a fully automated fashion, computationally explore billions of variations of a molecule of interest.

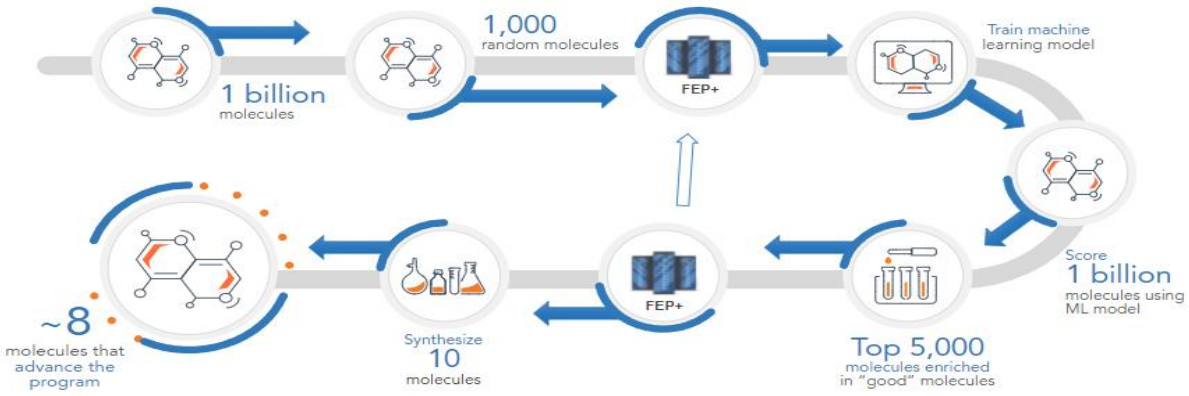
Scaling accurate physics-based calculations to extremely large libraries of molecules

Although FEP+ calculations have been shown to be accurate, it is not possible to apply these calculations to billions of molecules given the current availability of computing resources. To address this problem, we developed an approach that leverages the accuracy of FEP+, but allows for exploration of billions of molecules rapidly by leveraging machine learning. We have succeeded in integrating our physics-based molecule scoring with highly computationally efficient modern machine-learning methods. This combined approach allows us to apply our physics-based calculations to much larger sets of molecules than would otherwise be computationally tractable. This allows us to both increase the speed and likelihood of identifying clinically viable molecules.

Advances in deep learning, a type of machine learning, in the past several years have required very large data sets as input to train the model. In a drug discovery program, the experimental data is typically sparse and expensive to procure, which is particularly problematic given that relevant drug-like chemical space is effectively infinitely large, estimated to be 10^60 molecules. For this reason, we believe that it would be extremely difficult to realize competitive advantage in a drug discovery program by using a platform exclusively based on machine learning or deep learning. Instead, we have developed an approach to integrate physics-based and machine-learning based scoring methodologies that allows the machine learning model to interactively prioritize additional molecules for physics-based analyses, known as active learning. Active learning retains the computational efficiency of machine learning while also taking advantage of the accuracy of the physics-based method. One can evaluate the utility of any particular prediction method with regard to both its accuracy and its computational efficiency. Modern machine learning methods, such as deep learning, do provide a small improvement over conventional machine learning methods. However, for much of its history, conventional molecular simulations were much less computationally efficient than machine learning but not that much more accurate.

In developing FEP+, we were able to resolve deficiencies in early attempts to develop physics-based methods. FEP+ calculations are much more accurate than either conventional machine learning or modern machine learning when scoring molecules structurally distinct from the training set data. In addition, by integrating FEP+ with our machine learning implementation, which we refer to as DeepAutoQSAR, we developed a solution that we refer to as Active Learning FEP+. Active Learning FEP+ combines the accuracy of free energy calculations with the speed of machine learning calculations and can be used to explore up to billions of molecules within a day. By further combining this functionality with our ability to enumerate large sets of molecules provided by PathFinder and our ability to build and manage complex workflows utilizing cloud resources, we are able to deploy these capabilities at scale to advance projects.

Active Learning FEP+ is depicted in the figure below.



FEP+ is used to build a local model for a large library of molecules instead of relying on experimental data to provide the training set for the machine learning model. That machine learning model is then used to filter the large library of molecules down to a number that is small enough to be able to prioritize with FEP+. The result is that we can prioritize one billion molecules in as little as a day, rather than one million days.

Rapid identification of novel active hit molecules suitable to initiate hit-to-lead and lead optimization efforts

Several hit-finding technologies we have developed are routinely used to identify active hit molecules to initiate small molecule drug discovery programs. In our hit-finding campaigns, we and our software customers typically utilize:

- modern machine learning models trained to the two-dimensional structures of known active molecules using our software solution, DeepAutoQSAR;
- shape-based methods trained to the known or computationally deduced three-dimensional bioactive conformations of known active molecules using our software solution, Shape;
- structure-based docking methods that evaluate the number and kind of interactions possible utilizing a static atomistic representation of the experimentally determined three-dimensional structure of the target protein receptor using our software solutions, Glide and WScore; and
- free energy calculations using our software solution FEP+, which provides a fully dynamic atomistic representation of the target protein receptor.

Computational analysis of the energetic properties of water molecules occupying molecule binding sites in proteins

Subtle structural variations in molecules can have a profound impact on binding affinity to the protein target. The effects of these structural variations can be explained by a detailed examination of the thermodynamics of binding, including the free energy changes resulting from displacing water molecules in the binding site. Our computational software solution WaterMap maps the locations and energetic properties of water molecules that occupy protein binding sites, provides insight into the properties of the binding site, and quantitatively describes the water-mediated forces driving the binding of small molecules. Further, such an analysis can be used to assess the propensity of drug-like molecules to bind to the protein target with high affinity. WaterMap presents the computed results graphically for easy visualization of the water molecules occupying a binding site and their energetic properties. This makes interpretation of binding affinity data more intuitive and provides insights to possible design routes to improve potency and selectivity.

Competition

Software Business

The overall market for molecular discovery and design software is global, rapidly evolving, competitive, and subject to changing technology and shifting customer interests and priorities. The solutions and applications offered by our competitors vary in size, breadth, and scope.

We believe the principal competitive factors in our market include, among other things, accuracy of computations, level of customer satisfaction and functionality, ease of use, breadth and depth of solution and application functionality,

brand awareness and reputation, modern and adaptive technology platform, integration, security, scalability and reliability of applications, total cost, ability to innovate and respond to customer needs rapidly, and ability to integrate with legacy enterprise infrastructures and third-party applications.

We believe that we compete favorably on the basis of these factors and that the effort and investment required to develop a computational, physics-based platform similar to ours will hinder new entrants that are unable to invest the necessary capital and time, and lack the breadth and depth of technical expertise required to develop competing technology. Our ability to remain competitive will largely depend on our ability to continue to improve our computational platform and demonstrate success in our drug discovery efforts.

Our software solutions face competition from competitors in the business of selling or providing simulation and modeling software to biopharmaceutical companies. These competitors include BIOVIA, a brand of Dassault Systèmes SE, or BIOVIA, Chemical Computing Group (US) Inc., Cresset Biomolecular Discovery Limited, Cadence Design Systems, Inc., Optibrium Limited, Cyrus Biotechnology, Inc., Molsoft LLC, Insilico Medicine, Inc., Iktos, XtalPi Inc., AbCellera, Inductive Bio, Inc., Chemaxon, PerkinElmer, Inc., and Simulations Plus, Inc.

We also have competitors in materials science, such as BIOVIA and Materials Design, Inc., and in enterprise software for the life sciences, such as BIOVIA, Certara USA, Inc., Chemaxon, Revvity, Inc. and Dotmatics, Inc. In some cases, these competitors are well-established providers of these solutions and have long-standing relationships with many of our current and potential customers, including large biopharmaceutical companies. In addition, there are academic consortia that develop physics-based simulation programs for life sciences and materials applications. In the life sciences industry, the most prominent academic simulation packages include AMBER, CHARMm, GROMACS, GROMOS, OpenMM, and OpenFF. These packages are primarily maintained and developed by graduate students and post-doctoral researchers, often without the intent of commercialization.

We also face competition from solutions that biopharmaceutical companies develop internally, smaller companies that offer products and services directed at more specific markets than we target, enabling these competitors to focus a greater proportion of their efforts and resources on these markets. In addition, we are facing increasing competition from companies utilizing AI and other computational approaches for drug discovery. Some of these competitors are involved in drug discovery themselves and/or with partners, and others develop software or other tools utilizing AI which can be used, directly or indirectly, in drug discovery.

Drug Discovery Business

The biopharmaceutical industry is characterized by rapidly advancing technologies, intense competition, and strong emphasis on proprietary and novel products and product candidates. While we believe that our computational platform, technology, knowledge, experience, and scientific resources provide us with competitive advantages, our drug discovery business faces potential competition from many sources, including major pharmaceutical companies, specialty biopharmaceutical companies, technology companies, academic institutions and government agencies, and public and private research institutions. Any product candidates that we or one of our collaborators successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

The key competitive factors affecting the success of the product candidates we develop, if approved, are likely to be their efficacy, safety, tolerability, convenience and price, the level of branded and generic competition and the availability of adequate reimbursement from third-party payors. If any of our product candidates are approved and successfully commercialized, it is likely that we will face increased competition as a result of other companies pursuing development of similar products or products that address similar diseases.

In particular, there is intense competition in the field of oncology, which is a focus of our drug discovery efforts. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, emerging and start-up companies, universities and other research institutions. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We also face competition in finding and establishing clinical trial sites, enrolling subjects for clinical trials, accessing combination studies and recruiting credible principal investigators and advisors from key clinical disciplines and academic centers.

For example, with respect to our MALT1 inhibitor, SGR-1505, which we are advancing for the treatment of patients with relapsed or refractory B-cell malignancies, we are aware of several MALT1 inhibitors in clinical development, including by AbbVie Inc., Ono Pharmaceutical Co., Ltd., HotSpot Therapeutics, and Recursion Pharmaceuticals, Inc. In addition, we are also aware of other therapeutics, such as bi-specifics and CAR-Ts, both approved and in clinical development, for the treatment of B-cell lymphomas.

With respect to our CDC7 inhibitor, SGR-2921, which we are advancing for the treatment of relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome, we are aware of several CDC7 inhibitors in Phase 1 clinical development, including by Chia Tai Tianqing Pharmaceutical Group Co., Ltd., Lin BioScience, Inc., and Cancer Research UK.

With respect to our Wee1/Myt1 inhibitor, SGR-3515, which we are advancing for the treatment of solid tumors, we are aware of several Wee1 inhibitors in clinical development, including by Zentalis, Debiopharm International SA, IMPACT Therapeutics, Inc., Shouyao Holdings Co. Ltd., BioCity Biopharma, and Aprea Therapeutics, Inc., as well as a Myt1 inhibitor in clinical development being advanced by Repare. Furthermore, we are also aware of a Wee1/Myt1 inhibitor in preclinical development being advanced by Acrivon Therapeutics, Inc.

Large pharmaceutical and biotechnology companies, in particular, have extensive experience in building and accessing networks of expert investigators, designing and conducting clinical trials, obtaining regulatory approvals, and manufacturing and commercializing biotechnology products. These companies also have significantly greater research and development and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical and biotechnology companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than our products. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies, as well as in acquiring technologies complementary to, or necessary for, our programs. As a result of all of these factors, our competitors may succeed in obtaining approval from the FDA or other comparable foreign regulatory authorities or in discovering, developing and commercializing products in our field before we do.

Collaboration Agreement with Novartis Pharma AG

In November 2024, we entered into a research collaboration and license agreement with Novartis, pursuant to which, we and Novartis agreed to collaborate on the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas. The agreement is intended to advance multiple development candidates for development and commercialization by Novartis.

Under the agreement, during the research term, we are responsible, together with Novartis, for the discovery of small molecule compounds directed against specified targets pursuant to mutually agreed research plans, which we refer to as project plans. Under the agreement, we and Novartis have agreed to pursue multiple initial project plans. The agreement also includes mechanisms pursuant to which Novartis may, subject to specified conditions, add additional project plans.

The research term for each project plan will generally extend for four years or such earlier time as a development candidate is designated for such project plan or the project plan is terminated. We and Novartis may mutually agree to extend the research term for any project plan.

After the identification of a development candidate in any project plan, Novartis will be solely responsible for the further preclinical and clinical development, manufacturing and commercialization of products containing all compounds resulting from such project plan.

Under the terms of the research collaboration and license agreement, Novartis paid us an initial upfront fee of $150.0 million in January 2025, and we are eligible to receive up to $2.272 billion in total milestone payments across the initial project plans. Such milestones consist of up to $892.0 million in discovery and development milestones and up to $1.38 billion in commercial milestones. We are also entitled to receive additional milestones in the event that additional project plans are added to the agreement. We are also entitled to a tiered percentage royalty ranging from mid-single-digits

to low double-digits on products commercialized by Novartis under the agreement, subject to certain specified reductions. To date we have not received any milestone payments under our agreement with Novartis.

On a collaboration target-by-collaboration target basis, during a specified period and subject to specified exceptions, we are prohibited from researching, developing, manufacturing, modifying, improving or commercializing, ourselves or with a third party, any small molecule directed against such collaboration target.

Unless earlier terminated, the agreement will expire (1) on a collaboration product-by-collaboration product and country-by-country basis on the expiration of the applicable royalty term for such collaboration product in such country, (2) on a collaboration target-by-collaboration target basis upon the expiration of all royalty terms for all collaboration products directed against such collaboration target and (3) in its entirety upon expiration of all payment obligations under the agreement with respect to all collaboration products.

The agreement contains customary termination provisions, including by either party upon an uncured material breach or upon the occurrence of certain events of insolvency. Additionally, Novartis may terminate the agreement, in its entirety or on a collaboration target-by-collaboration target basis, for convenience or for safety reasons; provided that certain customary rights and obligations will survive termination.

License Agreements with Columbia University

Master License Agreement

In September 2024, our wholly-owned subsidiary, Schrödinger, LLC, entered into a master license agreement, or the Master License Agreement, with The Trustees of Columbia University in the City of New York, or Columbia University, that amended and restated our existing license agreements with Columbia University, which we refer to as the Prior Columbia License Agreements and which are more fully described below. The Prior Columbia License Agreements provided for our rights and obligations with respect to certain patents, software code, technology and improvements that it licenses from Columbia University and that are used in, and integrated into, our software solutions and computational platform. The Prior Columbia License Agreements are described in more detail below.

The Master License Agreement was adopted to modify and streamline the royalties payable pursuant to the Prior Columbia License Agreement, to modify certain other terms of the Prior Columbia License Agreements and to create a single Master License Agreement that, from and after the effective date of the Master License Agreement, governs all of the intellectual property licensed from Columbia University to us and our affiliates. Each Prior Columbia License Agreement will remain in full force and effect with respect to any services agreement entered into by us or our affiliates under such Prior Columbia License Agreement prior to the effective date, but the Prior Columbia License Agreements will otherwise be of no further force or effect from and after the effective date.

Under the Master License Agreement, Columbia University granted us and our affiliates an exclusive license (subject to specified non-commercial rights retained by Columbia University, on behalf of itself and other institutions, and any rights of the United States government), under Columbia University's rights in specified software, or the Licensed Software, and patents, or the Licensed Patents, to develop, make, use, market, license, sell, distribute and otherwise commercially exploit products that incorporate any of the Licensed Software or are covered by any of the Licensed Patents, including the following Company software solutions: the electronic structure software program PS-GVB v1.0, the IMPACT software program used in the Glide ligand-protein docking program, the PrimeX protein modelling program, the QSite QM/MM program, the Combiglide automated library generation program, the Prime and PrimeX protein modelling programs, the Membrane Permeability model and the products that implement the water site analysis method, or collectively, the Licensed Products. We are restricted from distributing the Licensed Software source code without the prior written consent of Columbia University, which is not to be unreasonably withheld or delayed.

We are obligated to pay Columbia University a low single-digit percentage royalty on consideration, subject to certain exclusions and deductions, received by us or our affiliates for sales, licenses, leasing or rentals of Licensed Products or services provided using Licensed Products. We are obligated to pay royalties on a Licensed Product-by-Licensed Product basis until: (1) with respect to each Licensed Product that incorporates any Licensed Software identified in the Master License Agreement as of the Effective Date, twenty years after the Effective Date or (2) with respect to each Licensed Product that incorporates any Licensed Software added to the Master License Agreement after the Effective Date, twenty years after such addition, each, a Royalty Term. In addition, if we incorporate specified Licensed Software improvements into a Licensed Product, then the Royalty Term for such Licensed Product will be extended for an additional

ten years per incorporated improvement. If we or our affiliates receive consideration for specified services provided using Licensed Products in the form of equity securities, or Services Project Securities, then (1) if and when such securities may be transferred to Columbia University under applicable state and federal securities laws, we have agreed to transfer, assign or otherwise cause to be delivered to Columbia University a number of such Services Project Securities equal to the applicable royalty rate multiplied by the total number of Services Project Securities, or the Columbia Securities, and (2) until such time as the Columbia Securities are transferred, assigned or delivered to Columbia University, at the time we receive cash consideration as a result of owning Services Project Securities, whether on account of a dividend, distribution, sale or otherwise, we have agreed to pay Columbia University a portion of such proceeds that is equal to the applicable royalty rate multiplied by such amount received in cash.

Under the Master License Agreement, we have agreed to indemnify Columbia University for losses incurred in any third-party action arising out of the exercise of any rights granted to us under the Master License Agreement or as a result of any breach of the Master License Agreement by us.

Unless earlier terminated, the Master License Agreement will expire on the expiration of the last to expire Royalty Term. We may terminate any license granted under the Master License Agreement for any reason upon 180 days written notice to Columbia University. In addition, either party may terminate the Master License Agreement, or one or more licenses granted under the Master License Agreement, for the other party's material breach, following a customary notice and cure period, and Columbia University may terminate the Master License Agreement upon the occurrence of certain events of insolvency for us. Upon termination of the Master License Agreement, (1) we will have the right, for 18 months or such longer period as the parties may reasonably agree, to sell Licensed Products, continue the development and maintenance of Licensed Products and use Licensed Products to the extent needed to perform any services required to be performed as of the date of termination and (2) any third party that has licensed any Licensed Product from us will retain the right to use such Licensed Product, and we will have the right to continue to provide support to such third parties in connection with their use of such Licensed Products.

Prior Columbia License Agreements

Prior to entering into the Master License Agreement described above, we entered into several license agreements with Columbia University, or the Prior Columbia License Agreements. The Prior Columbia License Agreements establish our rights and obligations with respect to certain patents, software code, technology, and improvements thereto that we license from Columbia University and that are used in, and integrated into, our software solutions, and our physics-based computational platform. The terms of the Prior Columbia License Agreements remain in effect for arrangements that were entered prior to the effective date of the Master License Agreement. The terms of the Master License Agreement supersede the terms of the Prior Columbia License Agreements for arrangements entered into starting from the effective date of the Master License Agreement. Our rights and obligations under, and the terms and conditions of, the Prior Columbia License Agreements that we consider material to the operation of our business are described more fully below.

On November 1, 2008, we entered into an amendment, or the Royalty Amendment, to certain Prior Columbia License Agreements, including each of the agreements described below. The Royalty Amendment simplified the royalties payable under each agreement on gross revenues generated from the use of any product which contains any code or software, or is covered by any patent, that we license from Columbia University, or a Licensed Product, in connection with a services agreement. We also pay royalties under the Prior Columbia License Agreements on gross revenues generated from the sale, licensing or renting of our Licensed Products, which we calculate on a product-by-product basis. In the event that one or more Licensed Products are sold together with other products for a single aggregate license fee, we have agreed to pay to Columbia University the applicable royalty on the gross revenues attributable to each Licensed Product based on the relative list prices of each product covered by such license fee.

For a description of the royalties payable by us to Columbia University in connection with our services agreements, see "—Services Royalty Amendment" below.

PS-GVB License Agreement

On May 5, 1994, we entered into a license agreement, or the 1994 Columbia Agreement, with Columbia University, which was amended on September 9, 2004 and November 1, 2008. The technology licensed under the 1994 Columbia Agreement is incorporated into our Jaguar quantum mechanical program, which we market and distribute as part of our physics-based computational platform. The 1994 Columbia Agreement grants us a worldwide, exclusive, license to the software code developed by Columbia University and incorporated into the electronic structure software program PS-

GVB v1.0, or the PS-GVB Code, and all improvement to the PS-GVB v1.0 software program and PS-GVB Code developed by Columbia University, or the PS-GVB Improvements, including all PS-GVB Code and PS-GVB Improvements that are incorporated into any new products, new releases, and new versions related to the software, or the New PS-GVB Module Code, in each case, to reproduce, use, execute, copy, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may only sublicense the PS-GVB Code, the PS-GVB Improvements, and the New PS-GVB Module Code, or the Licensed PS-GVB Software, to the extent they are incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 1994 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct research using the Licensed PS-GVB Software.

As consideration for entering into the 1994 Columbia Agreement, we have agreed to pay royalties to Columbia University in the low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable PS-GVB v1.0 software program on our, and our affiliates', gross revenues from the sale, licensing, or renting of the PS-GVB v1.0 software program, including any improvements and modifications thereto, regardless of whether such improvement or modification is marketed as a new version, new release, or new product, excluding any sales to Columbia University and any revenue generated under services agreements.

The 1994 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed the Licensed PS-GVB Software from us will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Fast Multipole RESPA License Agreement

On July 15, 1998, we entered into a license agreement, or the 1998 Columbia Agreement, with Columbia University, which was amended on September 4, 2004, and November 1, 2008. The 1998 Columbia Agreement grants us a worldwide, non-exclusive, license to the Fast Multipole RESPA code developed at Columbia University, or the RESPA Code, which was incorporated into the IMPACT software program used in our Glide ligand-protein docking program, PrimeX protein modelling program, QSite QM/MM program, and Combglide automated library generation program, and all improvements to the IMPACT software program, including any new versions and new releases thereof, that are developed by Columbia University, or the IMPACT Improvements, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may sublicense the RESPA Code and the IMPACT Improvements, or the Licensed IMPACT Software, to the extent it is incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 1998 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct, research using the Licensed IMPACT Software.

As consideration for entering into the 1998 Columbia Agreement, we have agreed to pay royalties to Columbia University in the low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable IMPACT software program on our, and our affiliates', gross revenues from the sale, licensing, or renting of the IMPACT software program, including any improvements and modifications thereto and any new versions and new releases thereof, excluding any sales to Columbia University and revenue generated under services agreements.

The 1998 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 1998 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Protein Folding License Agreement

In September 2001, we entered into a license agreement, or the 2001 Columbia Agreement, with Columbia University, which was amended on September 9, 2004 and November 1, 2008. The technology licensed under the 2001 Columbia Agreement is incorporated into our Prime protein modelling program, which we market and distribute as part of

our physics-based computational platform. The 2001 Columbia Agreement grants us a worldwide, exclusive license to the protein folding code developed by Columbia University, or the Folding Code; all improvements to the Folding Code and to any of our products, software, or code that incorporates any part of the Folding Code, including any improvements thereto and new versions or new releases thereof, that are developed by Columbia University, or the Folding Code Improvements; and the issued patent covering the Folding Code, or the Folding Code Patent, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may sublicense the Folding Code, the Folding Code Improvements and the Folding Code Patent, or the Licensed Folding Code Software, to the extent it is incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 2001 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct, research using the Licensed Folding Code Software.

As consideration for entering into the 2001 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have paid royalties to Columbia University in low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable product, software program, or code on our, and our affiliates', gross revenues from the sale, licensing, or renting of any commercial product, software program, or code incorporating the Licensed Folding Code Software, excluding any sales to Columbia University and revenues generated under services agreements. Our obligation to pay any royalty under the 2001 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, terminated with the expiration of the last to expire patent licensed under the 2001 Columbia Agreement in January 2014.

The 2001 Columbia Agreement and the licenses granted thereunder may be terminated by Columbia University only upon our material breach of the agreement and our failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 2001 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

PLOP License Agreement

On June 19, 2003, we entered into a license agreement, or the 2003 Columbia Agreement, with Columbia University, which was amended on November 1, 2008. The technology licensed under the 2003 Columbia Agreement is incorporated into our Prime and PrimeX protein modelling programs and our Membrane Permeability model, which we market and distribute as part of our physics-based computational platform. The 2003 Columbia Agreement grants us a worldwide, exclusive license to the protein local optimization program software code, or the PLOP Code, developed at Columbia University and the University of California and all software code comprising improvements to the PLOP Code that are developed by Columbia University or the University of California, or the PLOP Improvements, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. Pursuant to an interinstitutional agreement between Columbia University and the University of California, the University of California granted Columbia University the sole right to license the PLOP Code and PLOP Improvements and has agreed not to license the PLOP Code or PLOP Improvements to any third party for as long as the interinstitutional agreement remains in effect. We may sublicense the PLOP Code and PLOP Improvements to the extent they are incorporated into a product that is sold directly by us or that is distributed on our behalf. We are restricted from distributing the PLOP Code and PLOP Improvements source code without the prior written consent of Columbia University.

Columbia University and the University of California retain the right to use, and to permit other academic and non-profit research institutions to use, the PLOP Code and PLOP Improvements for teaching and academic research purposes.

As consideration for entering into the 2003 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have agreed to pay royalties to Columbia University in low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable product, software program, or code on our, and our affiliates', gross revenues from the sale, licensing, leasing, or renting any commercial product, software program, or code incorporating the PLOP Code or any PLOP Improvements, excluding any sales to Columbia University or the University of California and revenues generated under services agreements. Our obligation to pay any royalty under the 2003 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, expired pursuant to its terms on June 19, 2023.

Columbia University is responsible for the copyright registration of the PLOP Code and PLOP Improvements. We are responsible for paying all reasonable copyright registration and attorney fees in connection with such copyright registrations.

The 2003 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 2003 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Water Site Analysis License

On May 27, 2008, we entered into a software and patent license agreement, or the 2008 Columbia Agreement, with Columbia University, which was amended on November 1, 2008. The 2008 Columbia Agreement grants us a worldwide license, exclusive in the field of computational chemistry software and related services, to (a) certain software that implements the water site analysis method, or the Water Site Software; (b) all patent rights covering the Water Site Software, or the Water Site Patents; and (c) any products that incorporate or include the Water Site Software, or that is covered by the Water Site Patents, or the Water Site Products, in each case, to reproduce, modify, distribute, and perform and display in connection with the development, marketing, and sale of our products and services, to conduct research using the Water Site Software, and to conduct backup disaster recovery. Our Water Site Products include our WaterMap Core program, which we market and distribute as part of our physics-based computational platform. We are restricted from distributing the Water Site Software source code without the prior written consent of Columbia University. Under the 2008 Columbia Agreement, Columbia University retains the right to use, and to permit other entities and individuals to use, the Water Site Software and Water Site Patents for academic and non-commercial educational purposes in the field of computational chemistry software and related services.

As consideration for entering into the 2008 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have agreed to pay royalties to Columbia University in low-double digit percentages on our, and our affiliates', gross revenues from the sale, licensing, leasing, or renting of any Water Site Product, excluding any sales to Columbia University and revenues generated under services agreement. The royalties under the 2008 Columbia Agreement are paid on a product-by-product basis and vary based on whether or not the gross revenues are generated in countries of manufacture or sale in which the Water Site Product is covered by a Water Site Patent. In the event that there are multiple royalties payable on a single product, we are required to (i) pay the higher of the two royalties, if there are no more than two royalties payable on the particular Water Site Product or (ii) negotiate in good faith with Columbia University on a single royalty, if there are more than two royalties payable on the particular Water Site Product. In the event that we take action against Columbia University with respect to the validity or enforceability of any Water Site Patents, excluding any defensive actions or claims, the royalties paid under the 2008 Columbia Agreement will increase by a specified amount. Our obligation to pay any royalty under the 2008 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, will terminate on May 27, 2028.

Columbia University is responsible for the prosecution and maintenance of the Water Site Patents in the jurisdictions that we specify. If we decide to discontinue the prosecution or maintenance of any Water Site Patent in any jurisdiction, but Columbia University objects to such discontinuation, our license to use such Water Site Patent will terminate in that jurisdiction; provided that, if we are using the Water Site Patent or Water Site Software in the jurisdiction at issue, Columbia University is obligated to discuss in good faith whether the licenses should instead be non-exclusive. Columbia University is also responsible for the enforcement of the Water Site Patent at its own expense and in its sole judgment; provided that, if we provide Columbia University with evidence of infringement of a Water Site Patent by a third party, and Columbia University fails to take appropriate enforcement action, we may initiate legal proceedings against the alleged infringer. We are responsible for reimbursing Columbia University for their reasonable expenses in connection with prosecuting and maintaining the Water Site Patents.

Unless terminated earlier, the 2008 Columbia Agreement will expire on a product by product and country by country basis upon the later of (i) the expiration of the last issued Water Site Patent, (ii) fifteen years from the date of the first commercial sale of a Water Site Product in a given country, and (iii) the expiration of the Water Site Software copyright. Columbia University may terminate the 2008 Columbia Agreement if we fail to cure a material breach, become subject to a voluntary or involuntary petition for bankruptcy or any other proceeding relating to insolvency, receivership or liquidation, or initiate any proceeding or assert any claim challenging the validity or enforceability of the Water Site Patents. Upon termination, any third party that has licensed a Water Site Product from us will retain the right to use such

product, subject to the terms of their existing license agreement with us, and we will have the right to continue to provide support to any such third parties for the duration of their license agreement.

Services Royalty Amendment

On November 1, 2008, we entered into the Royalty Amendment with Columbia University, which amended and simplified our royalty obligations under each of the Columbia License Agreements described in each of the foregoing sections. Pursuant to the Royalty Amendment, we have agreed to pay royalties to Columbia University in mid-single digit percentages on the service fees generated from services (excluding certain gross revenue, including revenue generated under agreements with Columbia University) that we, or our affiliates, perform using one or more Licensed Products under an agreement with a third party. Upon termination of any of the Columbia License Agreements for any reason other than our material breach, we will have the right to continue to use the Licensed Products to provide services under existing third-party service agreements, until the expiration or termination of such agreements.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to the development of our business, including by seeking, maintaining, and defending patent rights, whether developed internally or jointly, or licensed from third parties. We also rely on trade secrets, know-how, continuing technological innovation, collaboration opportunities, and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in our field.

It is important to our future commercial success to obtain and maintain patent and other proprietary protection for commercially important technology, inventions, and know-how related to our business; defend and enforce our intellectual property rights, in particular our patent, trademark, and copyright rights; preserve the confidentiality of our trade secrets; and operate without infringing, misappropriating, or violating the valid and enforceable patents and proprietary rights of third parties. Our ability to stop third parties from making, using, selling, offering to sell, or importing any products we develop may depend on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The patent positions of companies like ours are generally uncertain and can involve complex legal, scientific, and factual issues. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. We also cannot ensure that patents will issue with respect to any patent applications that we or our licensors may file in the future, nor can we ensure that any of our owned or licensed patents or future patents will be commercially useful in protecting our software, technology, computational platform, and any product candidates we develop. In addition, the coverage claimed in a patent application may be significantly reduced before a patent is issued, and its scope can be reinterpreted and even challenged after issuance. As a result, we cannot guarantee that any products we develop will be protected or remain protectable by enforceable patents. Moreover, any patents that we hold or may hold may be challenged, circumvented or invalidated by third parties. See "Risk Factors—Risks Related to Our Intellectual Property" for a more comprehensive description of risks related to our intellectual property.

Our strategy is to file patent applications directed to our key software and our key programs in an effort to secure our intellectual property positions vis-a-vis this software and these programs. The patent portfolio for our software business includes at least 12 published patent families. As of January 24, 2025, we owned or held exclusive license rights to approximately 40 patents and patent applications, including approximately 14 issued or allowed U.S. cases, five pending U.S. non-provisional patent applications, 18 issued or allowed non-U.S. cases, including nine granted European patents which have been validated among multiple individual European Patent Convention nations, eight non-European patents, and two pending foreign patent applications relating to our computational platform. While we believe that the specific and generic claims contained in our wholly-owned and licensed pending U.S. and non-U.S. applications provide protection for various aspects of our computational platform, third parties may nevertheless challenge such claims. Any patents that are issued or that may issue from these families are expected to expire between 2026 and 2038, absent any adjustments or extensions.

As of January 24, 2025, there were approximately 10 published patent families related to our proprietary drug discovery business, and several of our drug discovery collaborators have filed patent applications related to our collaborations that include employees of ours as inventors, including over 100 compound patents and patent applications since 2010. We do not own any intellectual property rights related to these inventions. As of January 24, 2025, we wholly-

owned approximately 12 pending U.S. patent applications, including U.S. provisional and U.S. non-provisional patent applications, and approximately 100 pending non-U.S. patent applications, including international patent applications filed under the Patent Cooperation Treaty, related to our proprietary drug discovery business.

Patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the U.S. Patent and Trademark Office may be significantly narrowed before issuance, if issued at all. We expect this may be the case with respect to some of our pending patent applications.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application, absent any adjustments or extensions.

In addition, in the United States, the term of a patent covering an FDA-approved drug may, in certain cases, be eligible for a patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984 as compensation for the loss of patent term during the FDA regulatory review process. The period of extension may be up to five years, but cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. Only one patent among those eligible for an extension and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. Similar provisions are available in Europe and in certain other jurisdictions to extend the term of a patent that covers an approved drug. It is possible that issued U.S. patents we may obtain in the future may be entitled to patent term extensions. If our use of product candidates or the product candidate itself receive FDA approval, we intend to apply for patent term extensions, if available, to extend the term of patents that cover the approved use or product candidate. We also intend to seek patent term extensions in any jurisdictions where available, however, there is no guarantee that the applicable authorities, including the FDA, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

In addition to patent protection, as of January 24, 2025, we had approximately 64 copyright registrations covering our proprietary software code, and we rely upon unpatented trade secrets and confidential know-how and continuing technological innovation to develop and maintain our competitive position. However, trade secrets and confidential know-how are difficult to protect. We seek to protect our proprietary information, in part, using confidentiality agreements with any collaborators, scientific advisors, service providers, employees, and consultants and invention assignment agreements with our employees. We also have agreements requiring assignment of inventions with selected consultants, scientific advisors, and collaborators. These agreements may not provide meaningful protection. These agreements may also be breached, and we may not have an adequate remedy for any such breach. In addition, our trade secrets and/or confidential know-how may become known or be independently developed by a third party, or misused by any collaborator to whom we disclose such information. Despite any measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our products or to obtain or use information that we regard as proprietary. Although we take steps to protect our proprietary information, third parties may independently develop the same or similar proprietary information or may otherwise gain access to our proprietary information. As a result, we may be unable to meaningfully protect our trade secrets and proprietary information. See "Risk Factors—Risks Related to Our Intellectual Property" for a more comprehensive description of risks related to our intellectual property.

We also own numerous trademarks registered in the United States and foreign jurisdictions, including "Schrödinger" and "LiveDesign". We pursue additional trademark registrations to the extent we believe doing so would be beneficial to our competitive position.

Sales and Marketing

Software Business

We commercialize our software solutions in various jurisdictions around the world through our software sales organization. We have sales operations in the United States, Europe, Japan, India, and South Korea and we also have established distribution channels in other important markets, including China. These efforts are led by our approximately 240-person global team of sales, technical, and scientific personnel. Our marketing strategy leverages our strong base of scientific publications to support the continued growth of our computational platform into computational chemistry markets across industries and academia worldwide.

Drug Discovery Business

We have not established a commercial organization or developed distribution capabilities given the current stage of development of our proprietary drug discovery programs. We plan to enter into agreements with biopharmaceutical companies that contribute to our ability to efficiently advance development candidates that we discover internally using our computational platform through to commercialization. We expect to utilize a variety of types of collaboration, distribution, and other arrangements with one or more of these third parties to develop and ultimately commercialize our development candidates. Over time, we may also create a commercial organization for drug product sales if and as we advance the development of any product candidates that we determine to commercialize ourselves.

Manufacturing

We do not own or operate manufacturing facilities for the production of any product candidates, nor do we have plans to develop our own manufacturing operations. We rely and expect to continue to rely on third-party contract manufacturers for all of our required raw materials, drug substance, and finished drug product for the preclinical and clinical development of any development candidates we develop ourselves. We do not currently have any agreements with third-party manufacturers for the long-term supply of any of our product candidates.

Government Regulation and Product Approvals

Government authorities in the United States at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, pricing, reimbursement, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of biopharmaceutical products. The processes for obtaining marketing approvals in the United States and in foreign countries and jurisdictions, along with compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources and may have a significant impact on our business.

Approval and Regulation of Drugs in the United States

In the United States, drug products are approved and regulated under the Federal Food, Drug and Cosmetic Act, or FDCA, and applicable implementing regulations and guidance. A company, institution, or organization which takes responsibility for the initiation and management of a clinical development program for such products, and for their regulatory approval, is typically referred to as a sponsor. The failure of a sponsor to comply with the applicable regulatory requirements at any time during the product development process, including non-clinical testing, clinical testing, the approval process or post-approval process, may result in delays to the conduct of a study, regulatory review and approval, and/or administrative or judicial sanctions.

A sponsor seeking approval to market and distribute a new drug in the United States generally must satisfactorily complete each of the following steps before the product candidate will be approved by the FDA:

- preclinical testing including laboratory tests, animal studies, and formulation studies, which must be performed in accordance with the FDA's good laboratory practice, or GLP, regulations and standards;
- design of a clinical protocol and submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication, in accordance with current good clinical practices, or GCP;
- preparation and submission to the FDA of a new drug application, or NDA, for a drug product which includes not only the results of the clinical trials, but also detailed information on the chemistry, manufacture and quality controls for the product candidate and proposed labeling for one or more proposed indication(s);
- review of the product candidate by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities, including those of third parties, at which the product candidate or components thereof are manufactured to assess compliance

with current good manufacturing practices, or cGMP, requirements and to assure that the facilities, methods, and controls are adequate to preserve the product's identity, strength, quality, and purity;

- satisfactory completion of any FDA audits of the non-clinical and clinical trial sites to assure compliance with GCP and the integrity of clinical data in support of the NDA;
- payment of user application and program fees pursuant to the Prescription Drug User Fee Act, or PDUFA;
- approval of an NDA for the new drug product authorizing marketing of the new drug product for particular indications in the United States; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct any post- approval studies required by the FDA.

Preclinical Studies

Before a sponsor begins testing a product candidate with potential therapeutic value in humans, the product candidate enters the preclinical testing stage, including in vitro and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. Preclinical tests include laboratory evaluations of product chemistry, formulation, and stability, as well as other studies to evaluate, among other things, the toxicity of the product candidate. These studies are generally referred to as IND-enabling studies.

The conduct of the preclinical tests and formulation of the compounds for testing must comply with federal regulations and requirements, including GLP regulations and standards and the United States Department of Agriculture's Animal Welfare Act, if applicable. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity and long-term toxicity studies may continue after the IND is submitted. With passage of the FDA's Modernization Act 2.0 in December 2022, Congress eliminated provisions in both the FDCA and the Public Health Service Act, or PHSA, that required animal testing in support of an NDA. While animal testing may still be conducted, the FDA was authorized to rely on alternative non-clinical tests, including cell-based assays, microphysiological systems or bioprinted or computer models.

The IND and IRB Processes

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their voluntary informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND.

An IND is an exemption from the FDCA that allows an unapproved product candidate to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational product to humans. Such authorization must be secured prior to interstate shipment and administration of any product candidate that is not the subject of an approved NDA. In addition to reviewing an IND to assure the safety and rights of patients, the FDA also focuses on the quality of the investigation and whether it will be adequate to permit an evaluation of the drug's safety and efficacy. In support of a request for an IND, sponsors must submit a protocol for each clinical trial, and any subsequent protocol amendments must be submitted to the FDA as part of the IND. The FDA requires a 30-day waiting period after the filing of each IND before clinical trials may begin. This waiting period is designed to allow the FDA to review the IND to determine whether human research subjects will be exposed to unreasonable health risks. At any time during this 30-day period, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold or partial clinical hold. In these cases, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials, or parts of the trial, can begin.

Following commencement of a clinical trial under an IND, the FDA may also place a clinical hold or partial clinical hold on that trial. Clinical holds are imposed by the FDA whenever there is concern for patient safety and may be a result of new data, findings, or developments in clinical, nonclinical, and/or chemistry, manufacturing, and controls. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical trial or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. For example, a specific protocol or part of a protocol may not be allowed to proceed, while other protocols may be allowed. No

more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold. Following issuance of a clinical hold or partial clinical hold, a clinical trial may only resume after the FDA has so notified the sponsor of its decision to lift the hold. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the clinical trial can proceed.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data monitoring committee, or DMC. The DMC provides authorization as to whether or not a trial may move forward at designated check points based on access that only the DMC maintains to available data from the study. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the participants or patients are being exposed to an unacceptable health risk. Other reasons for suspension or termination may be made by us based on evolving business objectives and/or the competitive environment.

Expanded Access

Expanded access, sometimes called "compassionate use," is the use of investigational new products outside of clinical trials to treat patients with serious or immediately life-threatening diseases or conditions when there are no comparable or satisfactory alternative treatment options. The rules and regulations related to expanded access are intended to improve access to investigational products for patients who may benefit from investigational therapies. FDA regulations allow access to investigational products under an IND by the company or the treating physician for treatment purposes on a case-by-case basis for: individual patients (single-patient INDs for treatment in emergency settings and non-emergency settings); intermediate-size patient populations; and larger populations for use of the investigational product under a treatment protocol or Treatment IND Application.

When considering an IND for expanded access to an investigational product with the purpose of treating a patient or a group of patients, the sponsor and treating physicians or investigators will determine suitability when all of the following criteria apply: patient(s) have a serious or immediately life-threatening disease or condition, and there is no comparable or satisfactory alternative therapy to diagnose, monitor, or treat the disease or condition; the potential patient benefit justifies the potential risks of the treatment and the potential risks are not unreasonable in the context or condition to be treated; and the expanded use of the investigational product for the requested treatment will not interfere with the initiation, conduct or completion of clinical investigations that could support marketing approval of the product or otherwise compromise the potential development of the product.

There is no obligation for a sponsor to make its investigational products available for expanded access; however, as required by amendments to the FDCA included in the 21st Century Cures Act passed in 2016, if a sponsor has a policy regarding how it responds to expanded access requests with respect to product candidates in development to treat serious diseases or conditions, it must make that policy publicly available. Sponsors are required to make such policies publicly available upon the earlier of initiation of a Phase 2 or Phase 3 trial for a covered investigational product; or 15 days after the investigational product receives designation from the FDA as a breakthrough therapy, fast track product, or regenerative medicine advanced therapy.

In addition, the Right to Try Act, among other things, provides a federal framework for certain patients to access certain investigational products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a manufacturer to make its investigational products available to eligible patients as a result of the Right to Try Act.

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product candidate to human subjects under the supervision of a qualified investigator in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written clinical trial protocols detailing, among other things, the objectives of the trial, inclusion and exclusion criteria, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND.

Human clinical trials are typically conducted in three sequential phases, but the phases may overlap or be combined. Additional studies may also be required after approval.

Phase 1 clinical trials are initially conducted in a limited population to test the product candidate for safety, including adverse effects, dose tolerance, absorption, metabolism, distribution, excretion, and pharmacodynamics in healthy humans or in patients. During Phase 1 clinical trials, information about the investigational drug product's pharmacokinetics and pharmacological effects may be obtained to permit the design of well-controlled and scientifically valid Phase 2 clinical trials.

Phase 2 clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, evaluate the efficacy of the product candidate for specific targeted indications and determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more costly Phase 3 clinical trials. Phase 2 clinical trials are well controlled, closely monitored and conducted in a limited patient population. A Phase 2 trial may be further subdivided to Phase 2a and Phase 2b trials. A Phase 2a trial is typically an exploratory (non-pivotal) study that has clinical efficacy, pharmacodynamics, or biological activity as the primary endpoint. A Phase 2b trial is a definite dose range finding study with efficacy as the primary endpoint.

Phase 3 clinical trials proceed if the Phase 2 clinical trials demonstrate that a dose range of the product candidate is potentially effective and has an acceptable safety profile. Phase 3 clinical trials are undertaken within an expanded patient population to further evaluate dosage, provide substantial evidence of clinical efficacy, and further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites. A well-controlled, statistically robust Phase 3 clinical trial may be designed to deliver the data that regulatory authorities will use to decide whether or not to approve, and, if approved, how to appropriately label a drug. Such Phase 3 studies are referred to as "pivotal."

A clinical trial may combine the elements of more than one phase and the FDA often requires more than one Phase 3 trial to support marketing approval of a product candidate. A company's designation of a clinical trial as being of a particular phase is not necessarily indicative that the study will be sufficient to satisfy the FDA requirements of that phase because this determination cannot be made until the protocol and data have been submitted to and reviewed by the FDA. Generally, pivotal trials are Phase 3 trials, but they may be Phase 2 trials if the design provides a well-controlled and reliable assessment of clinical benefit, particularly in an area of unmet medical need.

In December 2022, with the passage of Food and Drug Omnibus Reform Act, or FDORA, Congress required sponsors to develop and submit a diversity action plan for each phase 3 clinical trial or any other "pivotal study" of a new drug or biological product. These plans are meant to encourage the enrollment of more diverse patient populations in late-stage clinical trials of FDA-regulated products. Specifically, action plans must include the sponsor's goals for enrollment, the underlying rationale for those goals, and an explanation of how the sponsor intends to meet them. In addition to these requirements, the legislation directs the FDA to issue new guidance on diversity action plans. In June 2024, the FDA issued draft guidance outlining the general requirements for diversity action plans. Unlike most guidance documents issued by the FDA, the diversity action plan guidance, when finalized, will have the force of the law because FDORA specifically dictates that the form and manner for submission of diversity action plans are specified in FDA guidance. In January 2025, in response to an executive order issued by President Trump on Diversity, Equity and Inclusion programs, the FDA removed this draft guidance from its website. The implications of this action are not yet known.

In June 2023, the FDA issued draft guidance with updated recommendations for GCPs aimed at modernizing the design and conduct of clinical trials. The updates are intended to help pave the way for more efficient clinical trials to facilitate the development of medical products. The draft guidance is adopted from the International Council for Harmonisation's recently updated E6(R3) draft guideline that was developed to enable the incorporation of rapidly

developing technological and methodological innovations into the clinical trial enterprise. In addition, the FDA issued draft guidance outlining recommendations for the implementation of decentralized clinical trials.

In some cases, the FDA may approve an NDA for a product candidate but require the sponsor to conduct additional clinical trials to further assess the product candidate's safety and effectiveness after approval. Such post-approval trials are typically referred to as post-marketing clinical trials. These studies are used to gain additional experience from the treatment of a larger number of patients in the intended treatment group and to further document a clinical benefit in the case of drugs approved under accelerated approval regulations. If the FDA approves a product while a company has ongoing clinical trials that were not necessary for approval, a company may be able to use the data from these clinical trials to meet all or part of any post-marketing clinical trial requirement or to request a change in the product labeling. Failure to exhibit due diligence with regard to conducting post-marketing clinical trials could result in withdrawal of approval for products.

In March 2022, the FDA released a final guidance entitled "Expansion Cohorts: Use in First-In-Human Clinical Trials to Expedite Development of Oncology Drugs and Biologics," which outlines how sponsors can utilize an adaptive trial design in the early stages of oncology product development (*i.e.*, the first-in-human clinical trial) to compress the traditional three phases of trials into one continuous trial called an expansion cohort trial. Information to support the design of individual expansion cohorts are included in INDs and assessed by FDA. Expansion cohort trials can potentially bring efficiency to product development and reduce developmental costs and time.

Clinical Trials Outside the United States in Support of FDA Approval

In connection with our clinical development program, we are and may in the future conduct trials at sites outside the United States. When a foreign clinical trial is conducted under an IND, all IND requirements must be met unless waived. When a foreign clinical trial is not conducted under an IND, the sponsor must ensure that the study complies with certain regulatory requirements of the FDA in order to use the trial as support for an IND or application for marketing approval. Specifically, the studies must be conducted in accordance with GCP, including undergoing review and receiving approval by an independent ethics committee, and seeking and receiving informed consent from subjects. GCP requirements encompass both ethical and data integrity standards for clinical studies. The FDA's regulations are intended to help ensure the protection of human subjects enrolled in non-IND foreign clinical studies, as well as the quality and integrity of the resulting data. They further help ensure that non-IND foreign studies are conducted in a manner comparable to that required for IND studies.

The acceptance by the FDA of trial data from clinical trials conducted outside the United States in support of US approval may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the U.S., the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to cGCP regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means.

In addition, even where the foreign trial data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the trial is well-designed and well-conducted in accordance with GCP requirements and the FDA is able to validate the data from the trial through an onsite inspection if deemed necessary. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials are subject to the applicable local laws of the foreign jurisdictions where the trials are conducted.

Interactions with FDA during the Clinical Development Program

Following the clearance of an IND and the commencement of clinical trials, the sponsor will continue to have interactions with the FDA. A development and safety update report, or DSUR, detailing the results of the clinical trials must be submitted annually to the FDA within 60 days of the anniversary date that the IND was filed. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the product; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified

period, or at all. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

In addition, sponsors are given opportunities to meet with the FDA at certain points in the clinical development program. Specifically, sponsors may meet with the FDA prior to the submission of an IND, or pre-IND application meeting, at the end of a Phase 2 clinical trial, or EOP2 meeting, and before an NDA is submitted, or pre-NDA meeting. Meetings at other times may also be requested. There are five types of meetings that occur between sponsors and the FDA. Type A meetings are those that are necessary for an otherwise stalled product development program to proceed or to address an important safety issue. Type B meetings include pre-IND application and pre-NDA meetings, as well as Type B end of phase meetings, such as EOP2 meetings. A Type C meeting is any meeting other than a Type A or Type B meeting regarding the development and review of a product. Finally, a type D meeting is focused on a narrow set of issues (should be limited to no more than two focused topics) and should not require input from more than three disciplines or divisions. Finally, Initial Targeted Engagement for Regulatory Advice on CBER products, or INTERACT, meetings are intended for novel products and development programs that present unique challenges in the early development of an investigational product.

These meetings provide an opportunity for the sponsor to share information about the data gathered to date with the FDA and for the FDA to provide advice on the next phase of development. For example, at an EOP2 meeting, a sponsor may discuss its Phase 2 clinical results and present its plans for the pivotal Phase 3 clinical trial(s) that it believes will support the approval of the new product. Such meetings may be conducted in person, via teleconference/ videoconference or written response only with minutes reflecting the questions that the sponsor posed to the FDA and the FDA's responses. The FDA has indicated that its responses, as conveyed in meeting minutes and advice letters, only constitute mere recommendations and/or advice made to a sponsor and, as such, sponsors are not bound by such recommendations and/or advice. Nonetheless, from a practical perspective, a sponsor's failure to follow the FDA's recommendations for design of a clinical program may put the program at significant risk of failure. In September 2023, the FDA issued draft guidance outlining the terms of such meetings in more detail.

Reporting Clinical Trial Results

Sponsors of clinical trials are required to register and disclose certain clinical trial information on a public registry (clinicaltrials.gov) maintained by the U.S. National Institutes of Health, or NIH. In particular, information related to the product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. The PHSA grants the Secretary of Health and Human Services the authority to issue a notice of noncompliance to a responsible party to failure to submit clinical trial information as required. The responsible party is allowed 30 days to correct the noncompliance and submit the required information. As of December 19, 2024, the FDA has issued six notices of non-compliance, signaling its willingness to enforce the reporting requirements. While these notices of non-compliance did not result in civil monetary penalties, the failure to submit clinical trial information to clinicaltrials.gov, as required, is a prohibited act under the FDCA with violations subject to potential civil monetary penalties of up to $10,000 for each day the violation continues. In addition to civil monetary penalties, violations may also result in other regulatory action, such as injunction and/or criminal prosecution or disqualification from federal grants.

Manufacturing and Compliance with cGMP Requirements

Concurrent with clinical trials, companies often complete additional preclinical studies. They must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the identity, strength, quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

The FDA's regulations require that pharmaceutical products be manufactured in approved facilities and in accordance with cGMPs. The cGMP regulations include requirements relating to organization of personnel, buildings and facilities, equipment, control of components and product containers and closures, production and process controls, packaging and labeling controls, holding and distribution, laboratory controls, records and reports and returned or salvaged products. Manufacturers and other entities involved in the manufacture and distribution of approved pharmaceuticals are subject to periodic unannounced inspections by the FDA for compliance with cGMPs and other requirements. The

PREVENT Pandemics Act, which was enacted in December 2022, clarifies that foreign drug manufacturing establishments are subject to registration and listing requirements even if a drug or biologic undergoes further manufacture, preparation, propagation, compounding, or processing at a separate establishment outside the United States prior to being imported or offered for import into the United States.

Manufacturers and others involved in the manufacture and distribution of products must also register their establishments with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP regulations. Both domestic and foreign manufacturing establishments must register and provide additional information to the FDA upon their initial participation in the manufacturing process. Any product manufactured by or imported from a facility that has not registered, whether foreign or domestic, is deemed misbranded under the FDCA. Changes to the manufacturing process, specifications or container closure system for an approved product are strictly regulated and often require prior FDA approval before being implemented. The FDA's regulations also require, among other things, the investigation and correction of any deviations from cGMP and the imposition of reporting and documentation requirements upon the sponsor and any third-party manufacturers involved in producing the approved product.

A product may also be subject to official lot release, meaning that the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release, the manufacturer must submit samples of each lot, together with a release protocol showing a summary of the history of manufacture of the lot and the results of all the manufacturer's tests performed on the lot, to the FDA. The FDA may in addition perform certain confirmatory tests on lots of some products before releasing the lots for distribution. Finally, the FDA will conduct laboratory research related to the safety, purity, potency and effectiveness of pharmaceutical products.

Pediatric Studies

Under the Pediatric Research Equity Act, or PREA, applications and certain types of supplements to applications must contain data that are adequate to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor must submit an initial pediatric study plan within 60 days of an EOP2 meeting or as may be agreed between the sponsor and the FDA. Sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The sponsor, the FDA, and the FDA's internal review committee must then review the information submitted, consult with each other, and agree upon a final plan. The FDA or the sponsor may request an amendment to the plan at any time.

For investigational products intended to treat a serious or life-threatening disease or condition, the FDA must, upon the request of a sponsor, meet to discuss preparation of the initial pediatric study plan or to discuss deferral or waiver of pediatric assessments. In addition, the FDA will meet early in the development process to discuss pediatric study plans with sponsors and the FDA must meet with sponsors by no later than the end-of-phase 1 meeting for serious or life-threatening diseases and by no later than 90 days after the FDA's receipt of the study plan.

The FDA may, on its own initiative or at the request of the sponsor, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. A deferral may be granted for several reasons, including a finding that the product or therapeutic candidate is ready for approval for use in adults before pediatric trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric trials begin. Pursuant to the Food and Drug Administration Safety and Innovation Act of 2012, or FDASIA, the FDA must send a PREA Non-Compliance letter to sponsors who have failed to submit their pediatric assessments required under PREA, have failed to seek or obtain a deferral or deferral extension or have failed to request approval for a required pediatric formulation. FDASIA further requires the FDA to publicly post the PREA Non-Compliance letter and sponsor's response.

Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation, although the FDA has recently taken steps to limit what it considers abuse of this statutory exemption in the PREA by announcing that it does not intend to grant any additional orphan drug designations for rare pediatric subpopulations of what is otherwise a common disease. The FDA also maintains a list of diseases that are exempt from PREA requirements due to low prevalence of disease in the pediatric population. In May 2023, the FDA issued new draft guidance that further describes the pediatric study requirements under the PREA.

Expedited Review Programs

The FDA is authorized to expedite the review of applications in several ways. None of these expedited programs changes the standards for approval but they may help expedite the development or approval process of product candidates.

- *Fast Track designation.* The sponsor of a product candidate may request the FDA to designate the product for a specific indication as a Fast Track product concurrent with or after the filing of the IND. Candidate products are eligible for Fast Track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to the combination of the product candidate and the specific indication for which it is being studied. In addition to other benefits, such as the ability to have greater interactions with the FDA, the FDA may initiate review of sections of a Fast Track application before the application is complete, a process known as rolling review.

- *Breakthrough therapy designation.* To qualify for the breakthrough therapy program, product candidates must be intended to treat a serious or life-threatening disease or condition and preliminary clinical evidence must indicate that such product candidates may demonstrate substantial improvement on one or more clinically significant endpoints over existing therapies. The FDA will seek to ensure the sponsor of a breakthrough therapy product candidate receives intensive guidance on an efficient development program, intensive involvement of senior managers and experienced staff on a proactive, collaborative and cross-disciplinary review and rolling review.

- *Priority review.* A product candidate is eligible for priority review if it treats a serious condition and, if approved, it would be a significant improvement in the safety or effectiveness of the treatment, diagnosis or prevention compared to marketed products. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. The FDA aims to complete its review of priority review applications within six months as opposed to 10 months for standard review.

- *Accelerated approval.* Drug products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval. Accelerated approval means that a product candidate may be approved on the basis of adequate and well controlled clinical trials establishing that the product candidate has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity and prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug product candidate receiving accelerated approval perform adequate and well controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials.

  With passage of FDORA in December 2022, Congress modified certain provisions governing accelerated approval of drug and biologic products. Specifically, the new legislation authorized the FDA to: require a sponsor to have its confirmatory clinical trial underway before accelerated approval is awarded, require a sponsor of a product granted accelerated approval to submit progress reports on its post-approval studies to FDA every six months until the study is completed; and use expedited procedures to withdraw accelerated approval of an NDA or BLA if certain conditions are not met, including where a confirmatory trial fails to verify the product's clinical benefit or where evidence demonstrates the product is not shown to be safe or effective under the conditions of use. The FDA may also use such procedures to withdraw an accelerated approval if a sponsor fails to conduct any required post-approval trial of the product with due diligence, including with respect to "conditions specified by the Secretary." The new procedures include the provision of due notice and an explanation for a proposed withdrawal, and opportunities for a meeting with the FDA Commissioner or the Commissioner's designee and a written appeal, among other things. In March 2023, the FDA issued draft guidance that outlines its views and approach to accelerated approval. The FDA indicated that the accelerated approval pathway is commonly used for approval of oncology drugs due to the serious and life-threatening nature of cancer. Although single-arm trials have been commonly used to support accelerated approval, a randomized controlled trial is the preferred approach as it provides a more robust efficacy and safety assessment and allows for direct comparisons to an available therapy. To that end, the FDA outlined considerations for designing, conducting, and analyzing data for trials intended to

support accelerated approvals of oncology therapeutics. Subsequently, in December 2024 and January 2025, the FDA issued additional draft guidance relating to accelerated approval. This guidance describes the FDA's views on what it means to conduct a confirmatory trial with due diligence and how the agency plans to interpret whether such a study needs to be underway at the time of approval. While this guidance is currently only in draft form and will ultimately not be legally binding even when finalized, sponsors typically observe the FDA's guidance closely to ensure that their investigational products qualify for accelerated approval.

- *Regenerative advanced therapy.* With passage of the 21st Century Cures Act, or the Cures Act, in December 2016, Congress authorized the FDA to accelerate review and approval of products designated as regenerative advanced therapies. A product is eligible for this designation if it is a regenerative medicine therapy that is intended to treat, modify, reverse or cure a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product candidate has the potential to address unmet medical needs for such disease or condition. The benefits of a regenerative advanced therapy designation include early interactions with the FDA to expedite development and review, benefits available to breakthrough therapies, potential eligibility for priority review and accelerated approval based on surrogate or intermediate endpoints.

Filing and Review of an NDA

In order to obtain approval to market a drug product in the United States, a NDA must be submitted to the FDA that provides sufficient data establishing the safety and efficacy of the proposed drug product for its intended indication. The application includes all relevant data available from pertinent preclinical and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by independent investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the drug product to the satisfaction of the FDA.

The NDA is a vehicle through which sponsors formally propose that the FDA approve a new product for marketing and sale in the United States for one or more indications. Every new drug product candidate must be the subject of an approved NDA before it may be commercialized in the United States. Biologic License Applications, or BLAs, are submitted for licensure of biologic products under the PHSA. Under federal law, the fee required for the submission and review of an application under the Prescription Drug User Fee Act, or the PDUFA, is substantial (for example, for federal fiscal year 2025 this application fee is approximately $4.3 million), and the sponsor of an approved application is also subject to an annual program fee, currently more than $403,889 per eligible prescription product for federal fiscal year 2025. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for products with orphan designation, an exception from the program fee when the program does not engage in manufacturing the drug during a particular fiscal year and a waiver for certain small businesses.

The FDA conducts a preliminary review of the application within 60 calendar days of its receipt, and must inform the sponsor within that period of time whether the application is sufficiently complete to permit substantive review. In the event that the FDA determines that an application does not satisfy this standard, it will issue a Refusal to File determination to the sponsor. The FDA may request additional information rather than accept the application for filing and, the application may be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing.

Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of NDAs. Under that agreement, 90% of applications seeking approval of New Molecular Entities, or NMEs, are meant to be reviewed within ten months from the date on which the FDA accepts the application for filing, and 90% of applications for NMEs that have been designated for priority review are meant to be reviewed within six months of the filing date. For applications seeking approval of products that are not NMEs, the ten-month and six-month review periods run from the date that the FDA receives the application. The review process and the PDUFA goal date may be extended by the FDA for three additional months to consider new information or clarification provided by the sponsor to address an outstanding deficiency identified by the FDA following the original submission. Despite these review goals, it is not uncommon for FDA review of an application to extend beyond the PDUFA goal date. The FDA seeks to meet these timelines for review of an application but its ability to do so may be affected by a variety of factors, including government budget and funding levels, the ability to hire and retain key personnel and statutory, regulatory and policy changes. Average review times at the FDA have fluctuated in recent years as

a result. For example, during the past decade, the U.S. government has shut down several times and certain regulatory agencies, including the FDA, have had to furlough critical employees and stop critical activities, including the review of both NDAs and BLAs.

In connection with its review of an application, the FDA typically will inspect the facility or facilities where the product is being or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA submission, including component manufacturing, finished product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Under the FDA Reauthorization Act of 2017, the FDA must implement a protocol to expedite review of responses to inspection reports pertaining to certain applications, including applications for products in shortage or those for which approval is dependent on remediation of conditions identified in the inspection report.

Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the data in the application. With passage of FDORA, Congress clarified FDA's authority to conduct inspections by expressly permitting inspection of facilities involved in the preparation, conduct, or analysis of clinical and non-clinical studies submitted to FDA as well as other persons holding study records or involved in the study process. To ensure cGMP and GCP compliance by its employees and third-party contractors, a sponsor may incur significant expenditure of time, money and effort in the areas of training, record keeping, production and quality control.

Moreover, the FDA will review a sponsor's financial relationship with the principal investigators who conducted the clinical trials in support of the application. That is because, under certain circumstances, principal investigators at a clinical trial site may also serve as scientific advisors or consultants to a sponsor and receive compensation in connection with such services. Depending on the level of that compensation and any other financial interest a principal investigator may have in a sponsor, the sponsor may be required to report these relationships to the FDA. The FDA will then evaluate that financial relationship and determine whether it creates a conflict of interest or otherwise affects the interpretation of the trial or the integrity of the data generated at the principal investigator's clinical trial site. If so, the FDA may exclude data from the clinical trial site in connection with its determination of the approvability of the product candidate.

In addition, as a condition of approval, the FDA may require a sponsor to develop a REMS. A REMS uses risk-minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, the seriousness of the disease, the expected benefit of the product, the expected duration of treatment, the seriousness of known or potential adverse events, and whether the product is a NME. The FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS is needed, the sponsor of the application must submit a proposed REMS and the FDA will not approve the application without a REMS.

The FDA may also refer an application for a novel product to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that review, evaluate and provide a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but the FDA considers such recommendations carefully when making decisions.

The FDA's Decision on an NDA

The FDA reviews an application to determine, among other things, whether the product is safe and whether it is effective for its intended use(s), with the latter determination being made on the basis of substantial evidence. The FDA has interpreted this evidentiary standard to require at least two adequate and well-controlled clinical investigations to establish effectiveness of a new product. Under certain circumstances, however, the FDA has indicated that a single trial with certain characteristics and additional information may satisfy this standard. Ultimately, the FDA will determine whether the expected benefits of the drug product outweigh its potential risks to patients, and the agency will issue either a complete response letter, or CRL, or an approval letter.

A CRL indicates that the review cycle of the application is complete, and the application will not be approved in its present form. A CRL generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. The CRL may require additional clinical or other data, additional pivotal Phase 3 clinical trials and/or other significant and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. If a CRL is issued, the sponsor will have one year to respond to the deficiencies

identified by the FDA, at which time the FDA can deem the application withdrawn or, in its discretion, grant the sponsor an additional six-month extension to respond. For those seeking to challenge FDA's CRL decision, the FDA has indicated that sponsors may request a formal hearing on the CRL or they may file a request for reconsideration or a request for a formal dispute resolution.

If the FDA approves a new product, it may limit the approved indications for use of the product, require that contraindications, warnings, or precautions be included in the product labeling, or require that post-approval studies, including post-marketing clinical trials, be conducted to further assess the drug's safety after approval. The agency may also require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including a REMS, to help ensure that the benefits of the product outweigh the potential risks. REMS programs can include medication guides, communication plans for health care professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patent registries. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. The FDA may require a REMS before or after approval if it becomes aware of a serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product. After approval, many types of changes to the approved product, such as adding new indications, changing manufacturing processes, and adding labeling claims, are subject to further testing requirements and FDA review and approval.

Post-Approval Requirements

Following approval of a new prescription product, the manufacturer, the approved product and the product's manufacturing locations are subject to pervasive and continuing regulation by the FDA, governing, among other things, monitoring and record-keeping activities, reporting of adverse experiences with the product and product problems to the FDA, product sampling and distribution, manufacturing and promotion and advertising.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, with manufacturing processes, or failure to comply with regulatory requirements, may result in: revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates the marketing, labeling, advertising and promotion of prescription drug products placed on the market. This regulation includes, among other things, standards and regulations for direct-to-consumer advertising, communications regarding unapproved uses, industry-sponsored scientific and educational activities, and promotional activities involving the Internet and social media. Promotional claims about a drug's safety or effectiveness are prohibited before the drug is approved. After approval, a drug product generally may not be promoted for uses that are not approved by the FDA, as reflected in the product's prescribing information, although it may be permissible, under very specific, narrow conditions, for a manufacturer to engage in nonpromotional, non-misleading communication regarding off-label information, such as distributing scientific or medical journal information. In the United States, health care professionals are generally permitted to prescribe drugs for such uses not described in the drug's labeling, known as off-label uses, because the FDA does not regulate the practice of medicine. However, FDA regulations impose rigorous restrictions on manufacturers' communications, prohibiting the promotion of off-label uses.

In September 2021, the FDA published final regulations which describe the types of evidence that the FDA will consider in determining the intended use of a drug product. Moreover, with passage of the Pre-Approval Information Exchange Act in December 2022, sponsors of products that have not been approved may proactively communicate to

payors certain information about products in development to help expedite patient access upon product approval. In addition, in January 2025, the FDA published final guidance outlining its policies governing the distribution of scientific information to healthcare providers about unapproved uses of approved products. The final guidance calls for such communications to be truthful, non-misleading and scientifically sound and to include all information necessary for healthcare providers to interpret the strengths and weaknesses and validity and utility of the information about the unapproved use of the approved product. If a company engages in such communications consistent with the guidance's recommendations, the FDA indicated that it will not treat such communications as evidence of unlawful promotion of a new intended use for the approved product. While this guidance only applies to communications about unapproved uses of approved products, it may be helpful in understanding the FDA's approach to communications about unapproved products.

If a company is found to have promoted off-label uses, it may become subject to administrative and judicial enforcement by the FDA, the Department of Justice, or the Office of the Inspector General of the Department of Health and Human Services, as well as state authorities. This could subject a company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes products, as well as adverse public relations and reputational harm. The federal government has levied large civil and criminal fines against companies for alleged improper promotion, and has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, and its implementing regulations, as well as the Drug Supply Chain Security Act, or DSCSA, which regulate the distribution and tracing of prescription drug samples at the federal level, and set minimum standards for the regulation of drug distributors by the states. The PDMA, its implementing regulations and state laws limit the distribution of prescription pharmaceutical product samples, and the DSCSA imposes requirements to ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market. Manufacturers were required by November 2023 to have such systems and processes in place to comply with the DSCSA, but, so as not to disrupt supply chains, the FDA has granted certain exemptions from enhanced drug distribution security requirements for eligible trading partners for particular periods of time.

Orphan Drug Designation and Exclusivity

Orphan drug designation in the United States is designed to encourage sponsors to develop products intended for treatment of rare diseases or conditions. In the United States, a rare disease or condition is statutorily defined as a condition that affects fewer than 200,000 individuals in the United States or that affects more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making available the biologic for the disease or condition will be recovered from sales of the product in the United States.

Orphan drug designation qualifies a company for tax credits and market exclusivity for seven years following the date of the product's marketing approval if granted by the FDA. An application for designation as an orphan product can be made any time prior to the filing of an application for approval to market the product. A product becomes an orphan when it receives orphan drug designation from the Office of Orphan Products Development at the FDA based on acceptable confidential requests made under the regulatory provisions. The product must then go through the review and approval process like any other product.

A sponsor may request orphan drug designation of a previously unapproved product or new orphan indication for an already marketed product. In addition, a sponsor of a product that is otherwise the same product as an already approved orphan drug may seek and obtain orphan drug designation for the subsequent product for the same rare disease or condition if it can present a plausible hypothesis that its product may be clinically superior to the first drug. More than one sponsor may receive orphan drug designation for the same product for the same rare disease or condition, but each sponsor seeking orphan drug designation must file a complete request for designation.

If a product with orphan designation receives the first FDA approval for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product generally will receive orphan drug exclusivity. Orphan drug exclusivity means that the FDA may not approve another sponsor's marketing application for the same product for the same indication for seven years, except in certain limited circumstances. If a product designated as an orphan drug ultimately receives marketing approval for an indication broader than what was designated in its orphan drug application, it may not be entitled to exclusivity.

The period of exclusivity begins on the date that the marketing application is approved by the FDA and applies only to the indication for which the product has been designated. The FDA may approve a second application for the same product for a different use or a second application for a clinically superior version of the product for the same use. Orphan drug exclusivity will not bar approval of another product under certain circumstances, including if the company with orphan drug exclusivity is not able to meet market demand or the subsequent product with the same drug for the same condition is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care. This is the case despite an earlier court opinion holding that the Orphan Drug Act unambiguously required the FDA to recognize orphan drug exclusivity regardless of a showing of clinical superiority. Under Omnibus legislation signed by President Trump on December 27, 2020, the requirement for a product to show clinical superiority applies to drugs and biologics that received orphan drug designation before enactment of the FDA Reauthorization Act of 2017, but have not yet been approved or licensed by the FDA.

In September 2021, the Court of Appeals for the 11th Circuit held that, for the purpose of determining the scope of exclusivity, the term "same disease or condition" in the statute means the designated "rare disease or condition" and could not be interpreted by the FDA to mean the "indication or use." Thus, the court concluded, orphan drug exclusivity applies to the entire designated disease or condition rather than the "indication or use." Although there have been legislative proposals to overrule this decision, they have not been enacted into law. In January 2023, the FDA announced that, in matters beyond the scope of that court order, the FDA will continue to apply its existing regulations tying orphan-drug exclusivity to the uses or indications for which the orphan drug was approved.

Section 505(b)(2) NDAs

NDAs for most new drug products are based on two full clinical studies which must contain substantial evidence of the safety and efficacy of the proposed new product. These applications are submitted under Section 505(b)(1) of the FDCA. The FDA is, however, authorized to approve an alternative type of NDA under Section 505(b)(2) of the FDCA. This type of application allows the sponsor to rely, in part, on the FDA's previous findings of safety and effectiveness for a similar product, or published literature. Specifically, Section 505(b)(2) applies to NDAs for a drug for which the investigations made to show whether or not the drug is safe for use and effective in use and relied upon by the sponsor for approval of the application "were not conducted by or for the sponsor and for which the sponsor has not obtained a right of reference or use from the person by or for whom the investigations were conducted."

Section 505(b)(2) authorizes the FDA to approve an NDA based on safety and efficacy data that were not developed by the sponsor. NDAs filed under Section 505(b)(2) may provide an alternate and potentially more expeditious pathway to FDA approval for new or improved formulations or new uses of previously approved products. If the Section 505(b)(2) sponsor can establish that reliance on the FDA's previous approval is scientifically appropriate, the sponsor may eliminate the need to conduct certain preclinical or clinical studies of the new product. The FDA may also require companies to perform additional studies or measurements to support the change from the approved product. The FDA may then approve the new drug candidate for all or some of the label indications for which the referenced product has been approved, as well as for any new indication sought by the Section 505(b)(2) sponsor.

Generic Drugs and Regulatory Exclusivity

In 1984, with passage of the Hatch-Waxman Amendments to the FDCA, Congress established an abbreviated regulatory scheme authorizing the FDA to approve generic drugs that are shown to contain the same active ingredients as, and to be bioequivalent to, drugs previously approved by the FDA pursuant to NDAs. To obtain approval of a generic drug, a sponsor must submit an abbreviated new drug application, or ANDA, to the FDA. An ANDA is a comprehensive submission that contains, among other things, data and information pertaining to the active pharmaceutical ingredient, bioequivalence, drug product formulation, specifications and stability of the generic drug, as well as analytical methods, manufacturing process validation data and quality control procedures. ANDAs are "abbreviated" because they generally do not include preclinical and clinical data to demonstrate safety and effectiveness. Instead, in support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the reference-listed drug, or RLD.

Under the Hatch-Waxman Amendments, the FDA may not approve an ANDA or 505(b)(2) application until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of regulatory exclusivity for a new drug containing a new chemical entity, or NCE. For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. This interpretation of the FDCA by the FDA was confirmed with enactment of the Ensuring Innovation Act in April 2021. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In

cases where such NCE exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, in which case the sponsor may submit its application four years following the original product approval. The FDCA also provides for a period of three years of exclusivity if the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the sponsor and are essential to the approval of the application.

Pediatric Exclusivity

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of regulatory exclusivity. For drug products, the six-month period of exclusivity may be attached to the term of any existing patent or regulatory exclusivity. This six-month exclusivity may be granted if an NDA or BLA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of non-patent exclusivity for drugs and biologics, or patent protection that covers a drug product, are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch-Waxman Act, which permits a patent restoration of up to five years for patent term lost during the FDA regulatory review. The restoration period granted on a patent covering a product is typically one-half the time between the effective date of the IND and the submission date of an application, plus the time between the submission date of an application and the ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved product is eligible for the extension, and only those claims covering the approved product, a method for using it, or a method for manufacturing it, may be extended. Additionally, the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. The United States Patent and Trademark Office reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Healthcare Compliance

In the United States, biopharmaceutical manufacturers and their products are subject to extensive regulation at the federal and state level, such as laws intended to prevent fraud and abuse in the healthcare industry. Healthcare providers and third-party payors play a primary role in the recommendation and prescription of pharmaceutical products that are granted marketing approval. Arrangements with providers, consultants, third-party payors, and customers are subject to broadly applicable fraud and abuse, anti-kickback, false claims laws, reporting of payments to healthcare providers and patient privacy laws and regulations and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Restrictions under applicable federal and state healthcare laws and regulations, including certain laws and regulations applicable only if we have marketed products, include the following:

- federal false claims, false statements and civil monetary penalties laws prohibiting, among other things, any person from knowingly presenting, or causing to be presented, a false claim for payment of government funds or knowingly making, or causing to be made, a false statement to get a false claim paid;
- federal healthcare program anti-kickback law, which prohibits, among other things, persons from offering, soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual for, or the purchasing or ordering of, a good or service for which payment may be made under federal healthcare programs such as Medicare and Medicaid;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which, in addition to privacy protections applicable to healthcare providers and other entities, prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- federal laws that require pharmaceutical manufacturers to report certain calculated product prices to the government or provide certain discounts or rebates to government authorities or private entities, often as a condition of reimbursement under government healthcare programs;

- federal Open Payments (or federal "sunshine" law), which requires pharmaceutical and medical device companies to monitor and report certain financial interactions with certain healthcare providers to the Center for Medicare & Medicaid Services, or CMS, within the U.S. Department of Health and Human Services for re-disclosure to the public, as well as ownership and investment interests held by certain healthcare providers and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- analogous state laws and regulations, including: state anti-kickback and false claims laws; state laws requiring pharmaceutical companies to comply with specific compliance standards, restrict financial interactions between pharmaceutical companies and healthcare providers or require pharmaceutical companies to report information related to payments to health care providers or marketing expenditures; and state laws governing privacy, security and breaches of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts; and
- laws and regulations prohibiting bribery and corruption such as the U.S. Foreign Corrupt Practices Act, which, among other things, prohibits U.S. companies and their employees and agents from authorizing, promising, offering, or providing, directly or indirectly, corrupt or improper payments or anything else of value to foreign government officials, employees of public international organizations or foreign government-owned or affiliated entities, candidates for foreign public office, and foreign political parties or officials thereof.

Violations of these laws are punishable by criminal and/or civil sanctions, including, in some instances, exclusion from participation in federal and state health care programs, such as Medicare and Medicaid. Ensuring compliance is time consuming and costly. Similar healthcare laws and regulations exist in the EU and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of personal information.

Privacy Requirements

Privacy and data security requirements are either in place or underway in the United States. There are a broad variety of data protection laws that may be applicable to our activities, and a range of enforcement agencies at both the state and federal levels that can review companies for privacy and data security concerns based on general consumer protection laws. The Federal Trade Commission and state Attorneys General are aggressive in reviewing privacy and data security protections for consumers.

New laws also are being considered at both the state and federal levels. For example, the California Consumer Privacy Act of 2018, or the CCPA, which became effective on January 1, 2020, requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices, allow consumers to opt out of certain data sharing with third parties and provide a new cause of action for data breaches. Additionally, effective as of January 1, 2023, the California Privacy Rights Act, or CPRA, will significantly modify the CCPA, including by expanding consumers' rights with respect to certain sensitive personal information. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA. The CCPA and CPRA could impact our business activities depending on how it is interpreted and exemplifies the vulnerability of our business to not only cyber threats but also the evolving regulatory environment related to personal data and individually identifiable health information. These provisions may apply to some of our business activities.

In addition to California, a number of other states have passed comprehensive privacy laws similar to the CCPA and CPRA. These laws are either in effect or will go into effect sometime before the end of 2026. Like the CCPA and CPRA, these laws create obligations related to the processing of personal information, as well as special obligations for the processing of "sensitive" data, which includes health data in some cases. Some of the provisions of these laws may apply to our business activities. There are also states that are strongly considering or have already passed comprehensive privacy laws that will go into effect in the near future. Other states will be considering similar laws in the future, and Congress has also been debating passing a federal privacy law. There are also states that are specifically regulating health information that may affect our business. For example, the State of Washington passed the My Health My Data Act in 2023 which specifically regulated health information that is not otherwise regulated by the HIPAA rules, and the law also has a private right of action, which further increases the relevant compliance risk. Connecticut and Nevada have also passed similar laws regulating consumer health data, and more states are considering such legislation in 2025. These laws may impact our

business activities, including our identification of research subjects, relationships with business partners and ultimately the marketing and distribution of our product candidates, if approved.

Plaintiffs' lawyers are also increasingly using privacy-related statutes at both the state and federal level to bring lawsuits against companies for their data-related practices. In particular, there have been a significant number of cases filed against companies for their use of pixels and other web trackers. These cases often allege violations of the California Invasion of Privacy Act and other state laws regulating wiretapping, as well as the federal Video Privacy Protection Act.

Pharmaceutical Insurance Coverage and Health Care Reform

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payers to reimburse all or part of the associated health care costs. Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. Thus, even if a product candidate of ours or one of our collaborators is approved, sales of the product will depend, in part, on the extent to which third-party payers, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations provide coverage and establish adequate reimbursement levels for the product. The process for determining whether a payer will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payer will pay for the product once coverage is approved. Third-party payers are increasingly challenging the prices charged, examining the medical necessity and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs.

Third-party payers may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable marketing approvals. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payer not to cover a product could reduce market acceptance once the product is approved and have a material adverse effect on sales, results of operations and financial condition. Additionally, a payer's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payer's determination to provide coverage for a product does not assure that other payers will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payer to payer.

In international markets, reimbursement and health care payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In some countries, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain coverage and adequate reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product to other available therapies.

The containment of health care costs also has become a priority of federal, state, and foreign governments and the prices of products have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on coverage, reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products including those that we or our collaborators may develop. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

If we obtain approval in the future to market in the United States any product candidates we may develop, we may be required to provide discounts or rebates under government healthcare programs or to certain government and private purchasers in order to obtain coverage under federal healthcare programs such as Medicaid. Participation in such programs may require us to track and report certain drug prices. We may be subject to fines and other penalties if we fail to report such prices accurately.

Outside the United States, ensuring adequate coverage and payment for any product candidates we may develop will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of any product candidates we may develop to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts.

Healthcare Reform

In March 2010, Congress enacted the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or the PPACA, which, among other things, includes changes to the coverage and payment for drug products under government health care programs. Other legislative changes have been proposed and adopted since the PPACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. These changes included aggregate reductions to Medicare payments to providers of up to two percent per fiscal year, which went into effect in April 2013. Under current legislation, the actual reductions in Medicare payments may vary up to four percent.

The Consolidated Appropriations Act, which was signed into law by President Biden in December 2022, made several changes to sequestration of the Medicare program. Section 1001 of the Consolidated Appropriations Act delays the four percent Statutory Pay-As-You-Go Act of 2010, or PAYGO, sequester for two years, through the end of 2024. Triggered by enactment of the American Rescue Plan Act of 2021, the four percent cut to the Medicare program would have taken effect in January 2023. The Consolidated Appropriations Act's health care offset title includes Section 4163, which extends the two percent Budget Control Act of 2011 Medicare sequester for six months into 2032 and lowers the payment reduction percentages in years 2030 and 2031.

The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

Since enactment of the PPACA, there have been, and continue to be, numerous legal challenges and Congressional actions to repeal and replace provisions of the law. For example, the Tax Act repealed the "individual mandate." The repeal of this provision, which requires most Americans to carry a minimal level of health insurance, became effective in 2019. On June 17, 2021, the U.S. Supreme Court dismissed the most recent judicial challenge to the PPACA after finding that the plaintiffs do not have standing to challenge the constitutionality of the PPACA.

During the first Trump Administration, the Congress and administration sought to overturn the PPACA and related measures. Shortly after taking office in January 2025, President Trump revoked a number of executive orders issued by President Biden, including at least two executive orders that were designed to further implement the PPACA. We anticipate similar efforts to undermine the PPACA, and litigation and legislation over the ACA are likely to continue, with unpredictable and uncertain results.

Pharmaceutical Prices

The prices of prescription pharmaceuticals have also been the subject of considerable discussion in the United States. There have been several recent U.S. congressional inquiries, as well as proposed and enacted state and federal legislation designed to, among other things, bring more transparency to pharmaceutical pricing, review the relationship between pricing and manufacturer patient programs, and reduce the costs of pharmaceuticals under Medicare and Medicaid. In 2020, the Trump administration issued several executive orders intended to lower the costs of prescription products and certain provisions in these orders have been incorporated into regulations. These regulations include an interim final rule implementing a most favored nation model for prices that would tie Medicare Part B payments for certain physician-administered pharmaceuticals to the lowest price paid in other economically advanced countries, effective January 1, 2021. That rule, however, has been subject to a nationwide preliminary injunction and, on December 29, 2021, CMS issued a final rule to rescind it. With issuance of this rule, CMS stated that it will explore all options to incorporate value into payments for Medicare Part B pharmaceuticals and improve beneficiaries' access to evidence-based care.

In addition, in October 2020, HHS and the FDA published a final rule allowing states and other entities to develop a Section 804 Importation Program to import certain prescription drugs from Canada into the United States. That regulation was challenged in a lawsuit by the Pharmaceutical Research and Manufacturers of America, or PhRMA, but the case was dismissed by a federal district court in February 2023 after the court found that PhRMA did not have standing to sue HHS. Several states have passed legislation establishing workgroups to examine the impact of a state importation program. Several other states have passed laws allowing for the importation of drugs from Canada. Certain of these states have submitted Section 804 Importation Program proposals and are awaiting FDA approval. In January 2024, the FDA approved Florida's plan for Canadian drug importation. Florida now has authority to import certain products from Canada for a period of two years once certain conditions are met. Florida will first need to submit a pre-import request for each product selected for importation, which must be approved by the FDA. Florida will also need to relabel the products and perform quality testing of the products to meet FDA standards.

Further, on November 20, 2020, HHS finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The final rule would eliminate the current safe harbor for Medicare drug rebates and create new safe harbors for beneficiary point-of-sale discounts and pharmacy benefit manager service fees. It originally was set to go into effect on January 1, 2022, but with passage of the Inflation Reduction Act of 2022, or IRA, has been delayed by Congress to January 1, 2032.

The IRA has implications for Medicare Part D, which is a program available to individuals who are entitled to Medicare Part A or enrolled in Medicare Part B to give them the option of paying a monthly premium for outpatient prescription drug coverage. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), with prices that can be negotiated subject to a cap; imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years.

Specifically, with respect to price negotiations, Congress authorized Medicare to negotiate lower prices for certain costly single-source drug and biologic products that do not have competing generics or biosimilars and are reimbursed under Medicare Part B and Part D. CMS may negotiate prices for ten high-cost drugs paid for by Medicare Part D starting in 2026, followed by 15 Part D drugs in 2027, 15 Part B or Part D drugs in 2028, and 20 Part B or Part D drugs in 2029 and beyond. This provision applies to drug products that have been approved for at least 9 years and biologics that have been licensed for 13 years, but it does not apply to drugs and biologics that have been approved for a single rare disease or condition. In August 2024, the HHS published the results of the first Medicare drug price negotiations for ten selected drugs that treat a range of conditions, including diabetes, chronic kidney disease, and rheumatoid arthritis. The prices of these ten drugs will become effective January 1, 2026. On January 17, 2025, CMS announced its selection of 15 additional drugs covered by Part D for the second cycle of negotiations. Following the change in administrations, CMS issued a public statement on January 29, 2025, declaring that lowering the cost of prescription drugs is a top priority of the new administration and CMS is committed to considering opportunities to bring greater transparency in the negotiation program. The second cycle of negotiations with participating drug companies will occur during 2025, and any negotiated prices for this second set of drugs will be effective starting January 1, 2027.

Further, the legislation subjects drug manufacturers to civil monetary penalties and a potential excise tax for failing to comply with the legislation by offering a price that is not equal to or less than the negotiated "maximum fair price" under the law or for taking price increases that exceed inflation. In addition to the drug price negotiation program, the IRA established inflation rebate programs under Medicare Part B and Part D. These programs require manufacturers to pay rebates to Medicare if they raise their prices for certain Part B and Part D drugs faster than the rate of inflation. On December 9, 2024, with issuance of its 2025 Physician Fee Schedule final regulation, CMS finalized its rules governing the IRA inflation rebate programs. The new law also caps Medicare out-of-pocket drug costs at an estimated $2,000 beginning in 2025.

The IRA includes a provision exempting orphan drugs from Medicare price negotiation but this exclusion has been interpreted by CMS in final guidance issued in July 2023 to apply only to those orphan drugs with an approved indication (or indications) for a single rare disease or condition. The final guidance clarifies that CMS will consider only active designations/approvals when evaluating a drug for the exclusion, such that designations/indications withdrawn before the selected drug publication date will not be considered. CMS also clarified that, if a drug loses its orphan drug exclusion status, the agency will use the earliest date of approval/licensure to determine whether the product is a qualifying single source drug subject to price negotiations.

In June 2023, Merck filed a lawsuit against HHS and CMS asserting that, among other things, the IRA's Drug Price Negotiation Program for Medicare constitutes an uncompensated taking in violation of the Fifth Amendment of the Constitution. Subsequently, a number of other parties, including the U.S. Chamber of Commerce and pharmaceutical companies, also filed lawsuits in various courts with similar constitutional claims against HHS and CMS. HHS has generally won the substantive disputes in these cases, and various federal district court judges have expressed skepticism regarding the merits of the legal arguments being pursued by the pharmaceutical industry. Certain of these cases are now on appeal, and, on October 30, 2024, the Court of Appeals for the Third Circuit heard oral argument in these cases. Litigation involving these and other provisions of the IRA will continue with unpredictable and uncertain results.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. A number of states, for example, require drug manufacturers and other entities in the drug supply chain, including health carriers, pharmacy benefit managers, wholesale distributors, to disclose information about pricing of pharmaceuticals. In addition, regional healthcare organizations and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription pharmaceutical and other healthcare programs. Additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures. This is increasingly true with respect to products approved pursuant to the accelerated approval pathway. State Medicaid programs and other payers are developing strategies and implementing significant coverage barriers, or refusing to cover these products outright, arguing that accelerated approval drugs have insufficient or limited evidence despite meeting the FDA's standards for accelerated approval.

Review and Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a sponsor must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety, and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales, and distribution of products. Whether or not it obtains FDA approval for a product, a sponsor will need to obtain the necessary approvals by the comparable non-U.S. regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval.

Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others. The process governing approval of medicinal products in the European Union generally follows the same lines as in the United States. It entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication. It also requires the submission to the relevant competent authorities of a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the European Union.

Preclinical Studies

Non-clinical studies are performed to demonstrate the health or environmental safety of new chemical or biological substances. Non-clinical (pharmaco-toxicological) studies must be conducted in compliance with GLP principles as set forth in EU Directive 2004/10/EC (unless otherwise justified for certain particular medicinal products – e.g., radio-pharmaceutical precursors for radio-labeling purposes). In particular, non-clinical studies, both *in vitro* and *in vivo*, must be planned, performed, monitored, recorded, reported and archived in accordance with the GLP principles, which define a set of rules and criteria for a quality system for the organizational process and the conditions for non-clinical studies. These GLP standards reflect the Organization for Economic Co-operation and Development requirements.

Clinical Trial Approval

On January 31, 2022, the new Clinical Trials Regulation (EU) No 536/2014, or the Clinical Trials Regulation, became effective in the European Union and replaced the prior Clinical Trials Directive 2001/20/EC, or the Clinical Trials Directive. The Clinical Trials Regulation aims at simplifying and streamlining the authorization, conduct and transparency

of clinical trials in the European Union. Under the new coordinated procedure for the approval of clinical trials, the sponsor of a clinical trial to be conducted in more than one member state of the European Union, or EU Member State, will only be required to submit a single application for approval. The submission will be made through the Clinical Trials Information System, a new clinical trials portal overseen by the European Medicines Agency, or the EMA, and available to clinical trial sponsors, competent authorities of the EU Member States and the public.

All ongoing clinical trials in the European Union approved under the prior Clinical Trials Directive, or CTD, must be transitioned to the Clinical Trials Information System by January 31, 2025. This date marks the end of a three-year transition period that began when the Clinical Trials Regulation became applicable in the European Union on January 31, 2022. Clinical trials that were started under the Clinical Trials Directive and subject to transition to the Clinical Trials Regulation will, by January 31, 2025, have to comply with the obligations of the Clinical Trials Regulation even if these are not included in the previous study protocol, such as (i) obligations of notification via Clinical Trials Information System; (ii) safety reporting rules; (iii) archiving requirement; and (iv) transparency requirements. The failure to transition ongoing clinical trials to the Clinical Trials Regulation by January 31, 2025 can result in corrective measures under Article 77 Clinical Trials Regulation, including revocation of the authorization of the clinical trial or suspension of the clinical trial as well as criminal sanctions and fines under national law of EU Member States.

Beyond streamlining the process, the Clinical Trials Regulation includes a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors, and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by the competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (EU Member States concerned). Part II is assessed separately by each EU Member State concerned. Strict deadlines have been established for the assessment of clinical trial applications. The role of the relevant ethics committees in the assessment procedure will continue to be governed by the national law of the concerned EU Member State. However, overall related timelines will be defined by the Clinical Trials Regulation.

The Clinical Trials Regulation did not change the preexisting requirement that a sponsor must obtain prior approval from the competent national authority of the EU Member State in which the clinical trial is to be conducted. If the clinical trial is conducted in different EU Member States, the competent authorities in each of these EU Member States must provide their approval for the conduct of the clinical trial. Furthermore, the sponsor may only start a clinical trial at a specific study site after the applicable ethics committee has issued a favorable opinion.

Parties conducting certain clinical trials must, as in the United States, post clinical trial information in the EU at the EU Clinical Trials Register.

PRIME Designation in the European Union

In March 2016, the EMA launched an initiative to facilitate development of product candidates in indications, often rare, for which few or no therapies currently exist. The PRIority MEdicines, or PRIME, scheme is intended to encourage drug development in areas of unmet medical need and provides accelerated assessment of products representing substantial innovation reviewed under the centralized procedure. Products from small- and medium-sized enterprises may qualify for earlier entry into the PRIME scheme than larger companies. Many benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and accelerated marketing authorization application assessment once a dossier has been submitted. Importantly, a dedicated agency contact and rapporteur from the Committee for Human Medicinal Products, or CHMP, or Committee for Advanced Therapies are appointed early in PRIME scheme facilitating increased understanding of the product at EMA's committee level. A kick-off meeting initiates these relationships and includes a team of multidisciplinary experts at the EMA to provide guidance on the overall development and regulatory strategies.

Marketing Authorization

To obtain a marketing authorization for a product under European Union regulatory systems, a sponsor must submit a marketing authorization application, or MAA, either under a centralized procedure administered by the EMA, or one of the procedures administered by competent authorities in the EU Member States (decentralized procedure, national procedure or mutual recognition procedure). A marketing authorization may be granted only to a sponsor established in the European Union. Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the European Union, sponsors have to demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation

Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver, or (3) a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid across the European Economic Area (i.e. the European Union as well as Iceland, Liechtenstein and Norway), or the EEA. Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products, and products with a new active substance indicated for the treatment of certain diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional. The centralized procedure may at the request of the sponsor also be used in certain other cases.

Under the centralized procedure, the CHMP is responsible for conducting the initial assessment of a product and for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the sponsor in response to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Within 15 calendar days of receipt of a final opinion from the CHMP, the European Commission must prepare a draft decision concerning an application for marketing authorization. This draft decision must take the opinion and any relevant provisions of European Union law into account. Before arriving at a final decision on an application for centralized authorization of a medicinal product the European Commission must consult the Standing Committee on Medicinal Products for Human Use, or the Standing Committee. The Standing Committee is composed of representatives of the EU Member States and chaired by a non-voting European Commission representative. The European Parliament also has a related "droit de regard". The European Parliament’s role is to ensure that the European Commission has not exceeded its powers in deciding to grant or refuse to grant a marketing authorization.

Exceptional Circumstances

The European Commission may grant a so-called "marketing authorization under exceptional circumstances". Such authorization is intended for products for which the sponsor can demonstrate that it is unable to provide comprehensive data on the efficacy and safety under normal conditions of use, because the indications for which the product in question is intended are encountered so rarely that the sponsor cannot reasonably be expected to provide comprehensive evidence, or in the present state of scientific knowledge, comprehensive information cannot be provided, or it would be contrary to generally accepted principles of medical ethics to collect such information. Consequently, marketing authorization under exceptional circumstances may be granted subject to certain specific obligations, which may include the following:

- the sponsor must complete an identified program of studies within a time period specified by the competent authority, the results of which form the basis of a reassessment of the benefit/risk profile;
- the medicinal product in question may be supplied on medical prescription only and may in certain cases be administered only under strict medical supervision, possibly in a hospital and in the case of a radiopharmaceutical, by an authorized person; and
- the package leaflet and any medical information must draw the attention of the medical practitioner to the fact that the particulars available concerning the medicinal product in question are as yet inadequate in certain specified respects.

A marketing authorization under exceptional circumstances is subject to annual review to reassess the risk- benefit balance in an annual reassessment procedure. Continuation of the authorization is linked to the annual reassessment and a negative assessment could potentially result in the marketing authorization being suspended or revoked. The renewal of a marketing authorization of a medicinal product under exceptional circumstances, however, follows the same rules as a "normal" marketing authorization. Thus, a marketing authorization under exceptional circumstances is granted for an initial five years, after which the authorization will become valid indefinitely, unless the EMA decides that safety grounds merit one additional five-year renewal.

Conditional Marketing Authorization

The European Commission may also grant a so-called "conditional marketing authorization" prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional marketing authorizations may be granted for product candidates (including medicines designated as orphan medicinal products), if (i) the risk-benefit balance of the product candidate is positive, (ii) it is likely that the sponsor will be in a position to provide the required comprehensive clinical trial data, (iii) the product fulfills an unmet medical need, and (iv) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization.

The European Union medicines rules expressly permit the EU Member States to adopt national legislation prohibiting or restricting the sale, supply or use of any medicinal product containing, consisting of or derived from a specific type of human or animal cell, such as embryonic stem cells. While the products we have in development do not make use of embryonic stem cells, it is possible that the national laws in certain EU Member States may prohibit or restrict us from commercializing our products, even if they have been granted a European Union marketing authorization.

Unlike the centralized authorization procedure, the decentralized marketing authorization procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all EU Member States.

The mutual recognition procedure similarly is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of other EU Member States. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

As in the United States, information about clinical trials in support of a marketing application must be submitted within specific timeframes to the European Union (EudraCT) website: https://eudract.ema.europa.eu/ and other countries.

Regulatory Data Protection in the European Union

In the European Union, innovative medicinal products approved on the basis of a complete independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity pursuant to Directive 2001/83/EC. Regulation (EC) No 726/2004 repeats this entitlement for medicinal products authorized in accordance with the centralized authorization procedure. Data exclusivity prevents sponsors for authorization of generics of these innovative products from referencing the innovator’s data to assess a generic (abridged) application for a period of eight years. During an additional two-year period of market exclusivity, a generic marketing authorization application can be submitted and authorized, and the innovator’s data may be referenced, but no generic medicinal product can be placed on the European Union market until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical tests, preclinical tests, and clinical trials.

The European Union pharmaceutical legislation is currently undergoing a complete review process, in the context of the Pharmaceutical Strategy for Europe initiative, launched by the European Commission in November 2020. The European Commission's proposal for revision of several legislative instruments related to medicinal products was published in April 2023 and includes, among other things, provisions that would potentially reduce the duration of regulatory data protection. The European Parliament requested several amendments in April 2024. At this time, the proposed revisions remain to be agreed and adopted by the European Parliament and European Council and the proposals may therefore be substantially revised before adoption, which is not anticipated before early 2026. The revisions may, however, have a significant impact on the pharmaceutical industry in the long term, if and when adopted.

Periods of Authorization and Renewals

A marketing authorization has an initial validity for five years in principle. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the EU Member State. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety, and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide, on justified grounds relating to pharmacovigilance, to proceed with one further five-year period of marketing authorization. Once subsequently definitively renewed, the marketing authorization shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the European Union market (in case of centralized procedure) or on the market of the authorizing EU Member State within three years after authorization ceases to be valid.

Regulatory Requirements after Marketing Authorization

Following approval, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of the medicinal product. These include compliance with the European Union's stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. In addition, the manufacturing of authorized products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the EMA's GMP requirements and comparable requirements of other regulatory bodies in the European Union, which mandate the methods, facilities and controls used in manufacturing, processing and packing of drugs to assure their safety and identity. Finally, the marketing and promotion of authorized products, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the European Union under Directive 2001/83EC, as amended.

Pricing Decisions for Approved Products

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, EU Member States have the option to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the European Union have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage health care expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the European Union. The downward pressure on health care costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic, and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU Member States, and parallel trade, i.e., arbitrage between low-priced and high-priced EU Member States, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

General Data Protection Regulation

Many countries outside of the United States maintain rigorous laws governing the privacy and security of personal information. The General Data Protection Regulation, or GDPR, is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including heightened requirements on companies that process health and other sensitive data, such as requiring in many situations that a company obtain the consent of the individuals to whom the sensitive personal data relate before processing such data. Examples of obligations imposed by the GDPR on companies processing personal data that fall within the scope of the GDPR include providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, appointing a data protection officer, providing notification of data breaches and taking certain measures when engaging third-party processors.

The GDPR also imposes strict rules on the transfer of personal data to countries outside the EEA, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Compliance with the GDPR is a rigorous and time-intensive process that may increase the cost of doing business or require companies to change their business practices to ensure full compliance. In July 2020, the Court of Justice of the European Union, or the CJEU, invalidated the EU-U.S. Privacy Shield framework, one of the mechanisms used to legitimize the transfer of personal data from the EEA to the United States. The CJEU decision also drew into question the long-term viability of an alternative means of data transfer, the standard contractual clauses, for transfers of personal data from the EEA to the United States.

Additionally, in October 2022, President Biden signed an executive order to implement the EU-U.S. Data Privacy Framework, which would serve as a replacement to the EU-US Privacy Shield. The European Commission adopted the adequacy decision in July 2023. The adequacy decision permits U.S. companies who self-certify to the EU-U.S. Data Privacy Framework to rely on it as a valid data transfer mechanism for data transfers from the European Union to the United States. However, some privacy advocacy groups have already suggested that they will be challenging the EU-U.S. Data Privacy Framework. If these challenges are successful, they may not only impact the EU-U.S. Data Privacy Framework, but also further limit the viability of the standard contractual clauses and other data transfer mechanisms.

Brexit and the Regulatory Framework in the United Kingdom

The United Kingdom's withdrawal from the EU, commonly referred to as Brexit, took place on January 31, 2020. The EU and the United Kingdom reached an agreement on their new partnership in the Trade and Cooperation Agreement, which entered into force on May 1, 2021. As of January 1, 2021, the Medicines and Healthcare Products Regulatory Agency, or the MHRA, became responsible for supervising medicines and medical devices in Great Britain, comprising England, Scotland and Wales under domestic law, whereas Northern Ireland continues to be subject to EU rules under the Northern Ireland Protocol, as amended by the so called Windsor Framework agreed in February 2023. As of January 1, 2025, the changes introduced by the Windsor Framework resulted in the MHRA being responsible for approving all medicinal products destined for the United Kingdom market (Great Britain and Northern Ireland), and the EMA will no longer have any role in approving medicinal products destined for Northern Ireland. The MHRA relies on the Human Medicines Regulations 2012 (SI 2012/1916) (as amended), or the HMR, as the basis for regulating medicines. The HMR has incorporated into the domestic law the body of EU law instruments governing medicinal products that pre-existed prior to the United Kingdom's withdrawal from the EU.

As of January 1, 2024 on, a new international recognition procedure, or IRP, applies which intends to facilitate approval of pharmaceutical products in the UK. The IRP is open to applicants that have already received an authorization for the same product from one of the MHRA's specified Reference Regulators, or RRs. The RRs notably include EMA and regulators in the EEA member states for approvals in the EU centralized procedure and mutual recognition procedure as well as the FDA (for product approvals granted in the U.S.).The RR assessment must have undergone a full and standalone review. RR assessments based on reliance or recognition cannot be used to support an IRP application. A CHMP positive opinion or an MRDC positive end of procedure outcome is an RR authorisation for the purposes of IRP.

Human Capital

As of February 3, 2025, we had 891 full-time employees, including a total of 384 employees with Ph.D. degrees. Of these full-time employees, 626 of these employees are located in the United States and 265 of these employees are located in our offices outside of the United States. Additionally, as of February 3, 2025, 33.6% of our full-time employees

self-identified as female, 0.4% self-identified as non-binary, and 0.7% chose not to disclose their gender, and 37.5% of our executive team self-identified as female. Further, 40.7% of our new hires since January 1, 2025 self-identify as female, 0.9% self-identify as non-binary, and 0.9% have chosen not to disclose their gender. As of February 3, 2025, 55.1% of our full-time employees in the United States self-identified as White, 28.6% self-identified as Asian, 4.6% self-identified as having two or more races, 3.8% self-identified as Black or African American, 3.2% self-identified as Hispanic or Latino, 0.2% self-identified as American Indian or Alaskan Native, 0.2% self-identified as Native Hawaiian or Other Pacific Islander, and 4.3% chose not to disclose their race or ethnicity. Our employees are our greatest asset and we strive to create a work environment that is inclusive, challenging and rewarding.

We are committed to embedding a long-term, formal Environmental, Social, and Governance, or ESG, strategy within our business, a commitment we refer to as Corporate Sustainability. In 2022, we completed a "double materiality assessment," where we worked to determine the ESG-related topics most important to both our company and our stakeholders. The assessment was informed by both internal and external stakeholders and by key ESG standards and frameworks such as the Global Reporting Initiative, Sustainability Accounting Standards Board and United Nations Sustainable Development Goals. This assessment serves as the foundation for our annual Corporate Sustainability Report and continues to serve as the foundation for our comprehensive, data-driven, Corporate Sustainability strategy.

Our workplace philosophy is focused on maintaining an inclusive workplace for employees with a wide range of perspectives, experiences and backgrounds, and ensuring that our employees feel safe, heard, comfortable, and valued. We continue to focus many of our recruiting efforts on attracting a broad candidate pipeline of top talent in the science and technology industries. Further, we utilize a standardized interviewing model to reduce unconscious bias and to create a consistent hiring process across our open positions.

A selected group of senior leaders, Employee Resource Group, or ERG, representatives and passionate employees meet monthly to discuss strategy, priorities, and goals for best supporting our workforce. This group also regularly seeks feedback from employees and provides a forum for voices to be heard across all levels of the organization. We currently have employee-led ERGs that provide spaces for all employees to advance inclusivity and create opportunities for education and awareness. While membership in our ERGs directly comprises approximately one-third of our employees, these forums provide an environment for community support, professional development, and educational opportunities for our entire employee population.

In an industry known for its fierce competition for talent, we have been able to maintain high retention and low turnover rates. For the year ended December 31, 2024, our employee retention rate was 93.1%.

Given our financial resources, our industry-leading position in the field of physics-based computational drug discovery and materials science research and our developing proprietary drug discovery programs, we believe that we will continue to be able to fill open positions in support of our software, drug discovery and materials science businesses.

We strategically recruit talent through various methods. Prospective employees are identified by leveraging our current employee network and our existing and growing relationships with computational chemistry professors and labs, and by hosting networking events. We maintain a strong presence at industry conferences and post job openings to industry-specific online career forums. Employee learning and development is a high priority for our company, and we believe it is essential for its growth and success. We offer employees cross-departmental rotations, leadership training and workshops, mentoring and reverse-mentoring programs and online learning with curated learning paths.

We are committed to providing our employees with compensation that meets the expectations of the market and industry norms. We monitor our compensation programs closely using comprehensive industry surveys and data to guide us, and we provide what we consider to be a competitive mix of incentives, including competitive salaries and bonuses, a 401(k) retirement plan with an employer matching contribution, participation in our equity programs, and health and welfare benefits, including, for example, access to a variety of mental health, family care, and reproductive health benefits for our employees based in the United States. We routinely review our compensation practices and analyze the equity of our compensation decisions for all employees. A small number of our employees who are located in Europe and Japan are covered by some type of collective bargaining agreement. We consider our relations with our employees to be good.

We recognize the value of in-person collaboration and relationship building while also being mindful of the needs and priorities our employees have outside of the workplace. We have long supported a hybrid work schedule, and our employees have the option of working remotely three days per week. This allows our employees to develop a work schedule that best suits their individual needs.

Our company culture encourages engagement, both among our employees and within the communities we live and work. Internally, we have a well-regarded mentorship program and learning opportunities for hard and soft skills. We also have a variety of communications channels that allow employees to stay informed and connected, and an annual performance review process that emphasizes regular connections and real-time feedback between employees and managers. In our local communities, we are focused on giving back through educational outreach to students and educators to increase awareness, interest and literacy for students in STEM, among other social impact areas of focus. To further our community engagement efforts, we provide an annual paid volunteer day benefit and matching gift program and we have established a social impact platform to provide employees access to local volunteer opportunities in various local currencies and languages.

Our Corporate Information

Our principal executive offices are located at 1540 Broadway, 24th Floor, New York, New York 10036, and our telephone number is (212) 295-5800. Our website address is www.schrodinger.com. The information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report or in any other report or document we file with the SEC and any reference to our website address is intended to be an inactive textual reference only.

We own or have rights to trademarks, service marks, and trade names that we use in connection with the operation of our business, including our corporate name, logos and website names. Other trademarks, service marks, and trade names appearing in this Annual Report are the property of their respective owners. Solely for convenience, some of the trademarks, service marks, and trade names referred to in this Annual Report are listed without the ® and ™ symbols.

Available Information

We make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. We make these reports available through our website as soon as reasonably practicable after we electronically file such reports with, or furnish such reports to, the SEC. We also make available, free of charge on our website, the reports filed with the SEC by our executive officers, directors and 10% stockholders pursuant to Section 16 under the Exchange Act as soon as reasonably practicable after copies of those filings are provided to us by those persons.

We may also disclose information to the public concerning our software, drug discovery programs, computational platform and other items through a variety of disclosure channels in order to achieve broad, non-exclusionary distribution of information to the public. Some of the information distributed through these disclosure channels may be considered material information. Investors and others are encouraged to review the information we make public in the locations below. This list may be updated from time to time.

- For information concerning our software, drug discovery programs, computational platform, please visit: www.schrodinger.com.
- For information provided to the investment community, including news releases, events and presentations, and filings with the SEC, please visit ir.schrodinger.com.
- For additional information, please follow us on LinkedIn and Instagram, or visit our blog, Extrapolations.com.

These websites and social media channels, and the contents thereof, are not incorporated by reference into this Annual Report nor deemed filed with the SEC.

Item 1A. Risk Factors.

You should carefully consider the risks and uncertainties described below together with all of the other information contained in this Annual Report and our other public filings with the SEC. The risks described below are not the only risks facing our company. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could cause our business, prospects, operating results, and financial condition to suffer materially.

Risks Related to Our Financial Position and Need for Additional Capital

We have a history of significant operating losses, and we expect to incur losses over the next several years.

We have a history of significant operating losses. Our net loss for the year ended December 31, 2024 was $187.1 million. Our net income for the year ended December 31, 2023 was $40.7 million. Our net loss for the year ended December 31, 2022 was $149.2 million. As of December 31, 2024, we had an accumulated deficit of $525.5 million. The net income we generated in the year ended December 31, 2023 was primarily due to the $147.2 million cash distributions we received from Nimbus Therapeutics, LLC, or Nimbus, on account of our equity stake in Nimbus, following the acquisition by Takeda Pharmaceuticals Company, Limited, or Takeda, of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its TYK2 inhibitor NDI-034858 and the non-cash gain on our investment in Structure Therapeutics Inc., or Structure Therapeutics, which, following Structure Therapeutics' initial public offering in February 2023, we valued based on the closing price of its American Depositary Shares as of December 31, 2023. However, the potential for future distributions from, or gains in the fair value of, our equity stakes in our drug discovery collaborators are difficult to predict due to the inherent uncertainty of the events which may trigger such distributions or gains. We therefore expect that gain on equity investments and fair value gains and losses will fluctuate significantly in future periods.

We anticipate that our operating expenses will increase substantially in the foreseeable future as we continue to invest in our proprietary drug discovery programs, sales and marketing infrastructure, and our computational platform. We are still in the early stages of development of our own proprietary drug discovery programs. We have no drug products approved or licensed for commercial sale, and as such, have not generated any revenue from our own drug product sales to date. We expect to continue to incur significant expenses and operating losses over the next several years. Our operating expenses and net income or loss may fluctuate significantly from quarter to quarter and year to year and you should not rely upon the results of any quarterly or annual periods as indications of future results. We anticipate that our expenses will increase substantially as we:

- continue to invest in and develop our computational platform and software solutions;
- continue our research and development efforts for our proprietary drug discovery programs;
- conduct preclinical studies and initiate and conduct clinical trials for any of our product candidates;
- prepare and make regulatory submissions for any of our product candidates;
- maintain, expand, enforce, defend, and protect our intellectual property;
- hire additional software engineers, programmers, sales and marketing, and other personnel to support our software business and other commercial operations;
- hire additional clinical, quality control, regulatory, chemical, manufacturing and control and other scientific personnel; and
- add operational, financial, and management information systems and personnel to support our operations as a public company.

If we are unable to increase sales of our software, increase revenue from our drug discovery collaborations, or if we and our current and future collaborators are unable to successfully develop and commercialize drug products, our revenues may be insufficient for us to achieve or maintain profitability.

To achieve and maintain profitability, we must succeed in significantly increasing our software sales and increasing revenue from our drug discovery collaborations, or we and our current or future collaborators must succeed in developing, and eventually commercializing, a drug product or drug products that generate significant revenue. We currently generate revenues from the sales of our software solutions and from achieving milestones under our collaborative drug discovery programs, and we expect to continue to derive most of our revenue from sales of our software and from achieving such milestones until such time as our or our collaborators' drug development and commercialization efforts are successful, if ever. As such, increasing sales of our software to existing customers, successfully marketing our software to

new customers, and achieving milestones under our drug discovery collaborations are critical to our success. Demand for our software solutions may be affected by a number of factors, including continued market acceptance by the biopharmaceutical industry, market adoption of our software solutions beyond the biopharmaceutical industry including for materials science applications, the ability of our platform to identify more promising molecules and accelerate and lower the costs of discovery as compared to traditional methods, timing of development and release of new offerings by our competitors, technological change, and the rate of growth in our target markets. If we are unable to continue to meet the demands of our customers, our business operations, financial results, and growth prospects will be adversely affected.

Achieving success in drug development will require us or our current or future collaborators to be effective in a range of challenging activities, including completing preclinical testing and clinical trials of product candidates, obtaining regulatory approval for these product candidates and manufacturing, marketing, and selling any products for which we or they may obtain regulatory approval. We are only in the early stages of most of these activities, and none of our current drug discovery collaborators have completed clinical development of any product candidate. We and our drug discovery collaborators may never succeed in these activities and, even if we do, we may never generate revenues that are significant enough to achieve and sustain profitability, or even if our collaborators do, we may not receive option fees, milestone payments, or royalties from them that are significant enough for us to achieve and sustain profitability. Because of the intense competition in the market for our software solutions and the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict when, or if, we will be able to achieve or sustain profitability.

Even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, increase sales of our software, develop a pipeline of product candidates, enter into collaborations, or even continue our operations. A decline in the value of our company could also cause our stockholders to lose all or part of their investment.

Our revenue has and may continue to fluctuate from quarter-to-quarter and year-to-year. For example, our total revenues decreased by 4% from $216.7 million in the fiscal year ended December 31, 2023 to $207.5 million in the fiscal year ended December 31, 2024, and increased by 20% from $181.0 million in the fiscal year ended December 31, 2022 to $216.7 million in the fiscal year ended December 31, 2023. Although we have experienced revenue growth in certain periods, we have also experienced revenue loss in certain periods, and we may not be able to sustain revenue growth and we may experience certain periods of revenue decline. You should not consider our revenue growth in prior periods as indicative of our future performance. As we grow our business, our revenue growth rates may decrease in future periods.

Our quarterly and annual results may fluctuate significantly, which could adversely impact the value of our common stock.

Our results of operations, including our revenues, gross margin, profitability, and cash flows, have historically varied from period to period, and we expect that they will continue to do so. As a result, period-to-period comparisons of our operating results may not be meaningful, and our quarterly and annual results should not be relied upon as an indication of future performance. Our quarterly and annual financial results may fluctuate as a result of a variety of factors, many of which are outside of our control. Factors that may cause fluctuations in our quarterly and annual financial results include, without limitation, those listed elsewhere in this "Risk Factors" section and those listed below:

- customer renewal rates and the timing and terms of customer renewals, including the seasonality of customer renewals of our on-premise software arrangements, for which revenue historically has been recognized at a single point in time in the first and fourth quarter of each fiscal year;
- our ability to attract new customers for our software;
- the addition or loss of large customers, including through acquisitions or consolidations of such customers;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations, and infrastructure;
- network outages or security breaches;
- industry and market conditions, including within the life sciences industry;
- general economic conditions, including the impact of increasing or decreasing inflation and interest rates;
- our ability to collect receivables from our customers;

- the amount of software purchased by our customers, including the mix of on-premise and hosted software sold during a period;
- variations in the timing of the sales of our software, which may be difficult to predict;
- changes in the pricing of our solutions and in our pricing policies or those of our competitors;
- the timing and success of the introduction of new software solutions by us or our competitors or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers, or strategic collaborators;
- changes in the fair value of or receipt of distributions or proceeds on account of the equity interests we hold in our drug discovery collaborators, such as Structure Therapeutics and Nimbus;
- the success of our drug discovery collaborators in developing and commercializing drug products for which we are entitled to receive milestone payments or royalties;
- the timing of the recognition of milestones achieved under our collaborative programs;
- variations in the number and size of milestones achieved under our collaborative programs;
- the timing of recognition of revenue of any payments from entering into collaborations or out-licensing our proprietary drug discovery programs, such as under our collaboration agreement with Novartis Pharma AG, or Novartis; and
- the timing of expenses related to our drug discovery programs, the development or acquisition of technologies or businesses and potential future charges for impairment of goodwill from acquired companies.

In addition, because we recognize revenues from our hosted software solutions ratably over the term of the agreement, a significant upturn or downturn in sales of our hosted software solutions may not be reflected immediately in our operating results. As a result of these factors, we believe that period-to-period comparisons of our operating results are not a good indication of our future performance and that our interim financial results are not necessarily indicative of results for a full year or for any subsequent interim period.

We will likely require additional capital to fund our operations. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations, we may not be able to compete successfully, which would harm our business, operations, and financial condition.

We expect to devote substantial financial resources to our ongoing and planned activities, including the development of drug discovery programs and continued investment in our computational platform. We expect our expenses to increase substantially in connection with our ongoing and planned activities, particularly as we advance our proprietary drug discovery programs, initiate or progress preclinical and Investigational New Drug, or IND,-enabling studies, submit IND applications, initiate and progress clinical trials and invest in the further development of our computational platform. In addition, if we decide to complete clinical development and seek regulatory approval on our own, we expect to incur significant additional expenses. Furthermore, we incur additional costs associated with operating as a public company, as compared to when we were a private company.

Our current drug discovery collaborators, from whom we are entitled to receive milestone payments upon achievement of various development, regulatory, and commercial milestones as well as royalties on commercial sales, if any, under the collaboration agreements that we have entered into with them, face numerous risks in the development of drugs, including the conduct of preclinical and clinical testing, obtaining regulatory approval, and achieving product sales. In addition, the amounts we are entitled to receive upon the achievement of such milestones tend to be smaller for near-term development milestones and increase if and as a collaborative product candidate advances through regulatory development to commercialization and will vary depending on the level of commercial success achieved, if any. We do not anticipate receiving significant milestone payments from many of our drug discovery collaborators for several years, if at all, and our drug discovery collaborators may never achieve milestones that would result in significant cash payments to us. In addition, while we have equity stakes in a number of our collaborators, the value of these equity stakes can vary significantly based on a number of factors beyond our control, and there can be no assurance that we can rely on such equity as capital to fund our operations. For these reasons we may need, or choose, to obtain additional capital to fund our continuing operations.

As of December 31, 2024, we had cash, cash equivalents, restricted cash, and marketable securities of $367.5 million. In January 2025, we received the upfront payment of $150.0 million from Novartis in connection with entering into our research collaboration and license agreement with Novartis. We believe that our existing cash, cash equivalents, and marketable securities will be sufficient to fund our operating expenses and capital expenditure requirements through at least the next 24 months. However, we have based this estimate on assumptions that may prove to be wrong, and our operating plans may change as a result of many factors currently unknown to us. As a result, we could deplete our capital resources sooner than we currently expect.

Our future capital requirements will depend on many factors, including:

- the growth of our software revenue;
- the timing and extent of spending to support research and development efforts;
- the continued expansion of software sales and marketing activities;
- the timing and receipt of payments from our drug discovery collaborations;
- spending to support, advance, and broaden our proprietary drug discovery programs; and
- the timing and receipt of any distributions or proceeds we may receive from our equity stakes in our drug discovery collaborators.

In the event that we require additional financing, we may not be able to raise such financing on terms acceptable to us or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations and invest in our computational platform, we may not be able to compete successfully, which would harm our business, operations, and financial condition.

Raising additional capital may cause dilution to our stockholders, restrict our operations, or require us to relinquish rights to our technologies or drug programs.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights as common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, selling or licensing our assets, making product acquisitions, making capital expenditures, or declaring dividends.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us or agree to exploit a drug development target exclusively for one of our collaborators when we may prefer to pursue the drug development target for ourselves.

If our estimates, judgments or assumptions relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make judgments, estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience, known trends and events, our beliefs of what could occur in the future considering available information and various other factors that we believe to be reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Significant judgment, assumptions and estimates used in preparing our consolidated financial statements include, with respect to revenue, determining the allocation of the transaction price and measurement of progress, including (1) the constraint on variable consideration, (2) the identification of performance obligations and the allocation of the transaction price to the performance obligations using their standalone selling price basis, and (3) the appropriate input or output based method to recognize collaboration revenue and the extent of progress to date.

Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing standards and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies, and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on our reputation, business, financial position, and profit.

Risks Related to Our Software

If our existing customers do not renew their licenses, do not buy additional solutions from us, or renew at lower prices, our business and operating results will suffer.

We expect to continue to derive a significant portion of our software revenues from renewal of existing license agreements. As a result, maintaining the renewal rate of our existing customers and selling additional software solutions to them is critical to our future operating results. Factors that may affect the renewal rate for our customers and our ability to sell additional solutions to them include:

- the price, performance, and functionality of our software solutions;
- the availability, price, performance, and functionality of competing software solutions;
- the effectiveness of our professional services;
- our ability to develop or acquire complementary software solutions, applications, and services;
- the success of competitive products or technologies;
- the stability, performance, and security of our technological infrastructure;
- the business environment of our customers;
- the willingness of our customers to continue to adopt computational approaches to drug discovery, which can be impacted by changes in our customer's management and/or scientific personnel; and
- the decisions of our customers to discontinue or reduce the amount of drug discovery they undertake internally.

We deliver our software through either (i) a product license that permits our customers to install the software solution directly on their own in-house hardware and use it for a specified term, or (ii) a subscription that allows our customers to access the cloud-based software solution on their own hardware without taking control of the licenses. Our customers have no obligation to renew their product licenses or subscriptions for our software solutions after the license term expires, which is typically after one year, and many of our contracts may be terminated or reduced in scope either immediately or upon notice. In addition, our customers may negotiate terms less advantageous to us upon renewal, which may reduce our revenues from these customers. Factors that are not within our control may contribute to a reduction in our software revenues. For instance, our customers may reduce the number of their employees who are engaged in research and who would have use of our software, which would result in a corresponding reduction in the number of user licenses needed for some of our solutions and thus a lower aggregate renewal fee. The loss, reduction in scope, or delay of a large contract, or the loss or delay of multiple contracts, could materially adversely affect our business.

Our future operating results also depend, in part, on our ability to sell new software solutions and licenses to our existing customers. For example, the willingness of existing customers to license our software will depend on our ability to scale and adapt our existing software solutions to meet the performance and other requirements of our customers, which we may not do successfully. If our customers fail to renew their agreements, renew their agreements upon less favorable terms or at lower fee levels, or fail to purchase new software solutions and licenses from us, our revenues may decline and our future revenues may be negatively impacted.

Our software sales cycle can vary and be long and unpredictable.

The timing of sales of our software solutions is difficult to forecast because of the length and unpredictability of our sales cycle. We sell our solutions primarily to biopharmaceutical companies, and our sales cycles can be as long as nine to twelve months or longer. Further, the length of time that potential customers devote to their testing and evaluation, contract negotiation, and budgeting processes varies significantly, depending on the size of the organization and the nature of their needs. In addition, we might devote substantial time and effort to a particular unsuccessful sales effort, and as a result, we could lose other sales opportunities or incur expenses that are not offset by an increase in revenue, which could harm our business.

A significant portion of our revenues are generated by sales to life sciences industry customers, and factors that adversely affect this industry could adversely affect our software sales.

A significant portion of our current software sales are to customers in the life sciences industry, in particular the biopharmaceutical industry. Demand for our software solutions could be affected by factors that adversely affect the life sciences industry. The life sciences industry is highly regulated and competitive and has experienced periods of considerable consolidation. Consolidation among our customers could cause us to lose customers, decrease the available market for our solutions, and adversely affect our business. In addition, changes in regulations that make investment in the life sciences industry less attractive or drug development more expensive could adversely impact the demand for our software solutions. For these reasons and others, selling software to life sciences companies can be competitive, expensive, and time consuming, often requiring significant upfront time and expense without any assurance that we will successfully complete a software sale. Accordingly, our operating results and our ability to efficiently provide our solutions to life sciences companies and to grow or maintain our customer base could be adversely affected as a result of factors that affect the life sciences industry generally.

We also intend to continue leveraging our solutions for broad application to industrial challenges in molecule design, including in the fields of aerospace, energy, semiconductors, electronic displays, and chemicals. However, we believe the materials science industry is in the very early stages of recognizing the potential of computational methods for molecular discovery, and there can be no assurance that the industry will adopt computational methods such as our platform. Any factor adversely affecting our ability to market our software solutions to customers outside of the life sciences industry, including in these new fields, could increase our dependence on the life sciences industry and adversely affect the growth rate of our revenues, operating results, and business.

The markets in which we participate are highly competitive, and if we do not compete effectively, our business and operating results could be adversely affected.

The overall market for molecular discovery and design software is global, rapidly evolving, competitive, and subject to changing technology and shifting customer interests and priorities. Our software solutions face competition from competitors in the business of selling or providing simulation and modeling software to biopharmaceutical companies. These competitors include BIOVIA, a brand of Dassault Systèmes SE, or BIOVIA, Chemical Computing Group (US) Inc., Cresset Biomolecular Discovery Limited, Cadence Design Systems, Inc., Optibrium Limited, Cyrus Biotechnology, Inc., Molsoft LLC, Insilico Medicine, Inc., Iktos, XtalPi Inc., AbCellera, Inductive Bio, Inc., Chemaxon, PerkinElmer, Inc., and Simulations Plus, Inc.

We also have competitors in materials science, such as BIOVIA and Materials Design, Inc., and in enterprise software for the life sciences, such as BIOVIA, Certara USA, Inc., Chemaxon, Revvity, Inc., and Dotmatics, Inc. In some cases, these competitors are well-established providers of these solutions and have long-standing relationships with many of our current and potential customers, including large biopharmaceutical companies. In addition, there are academic consortia that develop physics-based simulation programs for life sciences and materials applications. In the life sciences industry, the most prominent academic simulation packages include AMBER, CHARMm, GROMACS, GROMOS, OpenMM, and OpenFF. These packages are primarily maintained and developed by graduate students and post-doctoral researchers, often without the intent of commercialization.

We also face competition from solutions that biopharmaceutical companies develop internally and from smaller companies that offer products and services directed at more specific markets than we target, enabling these smaller competitors to focus a greater proportion of their efforts and resources on these markets, as well as a large number of companies that have been founded with the goal of applying machine learning technologies to drug discovery.

Many of our competitors are able to devote greater resources to the development, promotion, and sale of their software solutions and services. It is possible that our focus on proprietary drug discovery will result in loss of management focus and resources relating to our software business, thereby resulting in decreasing revenues from our software business. Furthermore, third parties with greater available resources and the ability to initiate or withstand substantial price competition could acquire our current or potential competitors. Our competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their product offerings or resources. If our competitors' products, services, or technologies become more accepted than our solutions, if our competitors are successful in bringing their products or services to market earlier than ours, if our competitors are able to respond more quickly and effectively to new or changing opportunities, technologies, or customer requirements, or if their products or services are more technologically capable than ours, then our software revenues could be adversely affected.

In addition, we are facing increasing competition from companies utilizing artificial intelligence, or AI, and other computational approaches for drug discovery. Some of these competitors are involved in drug discovery themselves and/or with partners, and others develop software or other tools utilizing AI which can be used, directly or indirectly, in drug discovery. To the extent these other AI approaches to drug discovery prove to be successful, or more successful, than our approach, the demand for our platform could be adversely affected, which could affect our software demand as well as reduce the demand for us as a collaborator in drug discovery.

We may be required to decrease our prices or modify our pricing practices in order to attract new customers or retain existing customers due to increased competition. Pricing pressures and increased competition could result in reduced sales, reduced margins, losses, or a failure to maintain or improve our competitive market position, any of which could adversely affect our business.

We have invested and expect to continue to invest in research and development efforts that further enhance our computational platform. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in research and development efforts that further enhance our computational platform, often in response to our customers' requirements. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect our margins and operating results and that such investments may not generate sufficient revenues to offset liabilities assumed and expenses associated with these new investments. The software industry changes rapidly as a result of technological and product developments, which may render our solutions less desirable. For example, in recent years, a number of companies have entered the drug discovery industry utilizing different AI approaches. While we believe we compete favorably and are meaningfully differentiated from such approaches with the combination of our physics-based computational platform and machine learning capabilities, the success of other such AI approaches to drug discovery could impact the demand for our solutions. We believe that we must continue to invest a significant amount of time and resources in our platform and software solutions to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, if technological developments render our solutions less desirable, or if a slowdown in general computing power impacts the rate at which we expect our physics-based simulations to increase in power and domain applicability, our revenue and operating results may be adversely affected.

If we are unable to collect receivables from our customers, our operating results may be adversely affected.

While the majority of our current customers are well-established, large companies and universities, we also provide software solutions to smaller companies. Our financial success depends upon the creditworthiness and ultimate collection of amounts due from our customers, including our smaller customers with fewer financial resources. If we are not able to collect amounts due from our customers, we may be required to write-off significant accounts receivable and recognize bad debt expenses, which could materially and adversely affect our operating results.

Defects or disruptions in our solutions could result in diminishing demand for our solutions, a reduction in our revenues, and subject us to substantial liability.

Our software business and the level of customer acceptance of our software depend upon the continuous, effective, and reliable operation of our software and related tools and functions. Our software solutions are inherently complex and may contain defects or errors. Errors may result from our own technology or from the interface of our software solutions with legacy systems and data, which we did not develop. The risk of errors is particularly significant when a new software solution is first introduced or when new versions or enhancements of existing software solutions are

released. We have from time to time found defects in our software, and new errors in our existing software may be detected in the future. Any errors, defects, disruptions, or other performance problems with our software could hurt our reputation and may damage our customers' businesses. If that occurs, our customers may delay or withhold payment to us, cancel their agreements with us, elect not to renew, make service credit claims, warranty claims, or other claims against us, and as a result, we could lose future sales. The occurrence of any of these events could result in diminishing demand for our software, a reduction of our revenue, an increase in collection cycles for accounts receivable, require us to increase our warranty provisions, or incur the expense of litigation or substantial liability.

We rely upon third-party providers of cloud-based infrastructure to host our software solutions. Any disruption in the operations of these third-party providers, limitations on capacity, or interference with our use could adversely affect our business, financial condition, and results of operations.

We outsource substantially all of the infrastructure relating to our hosted software solutions to third-party hosting services. Customers of our hosted software solutions need to be able to access our computational platform at any time, without interruption or degradation of performance, and we provide them with service-level commitments with respect to uptime. Our hosted software solutions depend on protecting the virtual cloud infrastructure hosted by third-party hosting services by maintaining its configuration, architecture, features, and interconnection specifications, as well as the information stored in these virtual data centers, which is transmitted by third-party internet service providers. Any limitation on the capacity of our third-party hosting services could impede our ability to onboard new customers or expand the usage of our existing customers, which could adversely affect our business, financial condition, and results of operations. In addition, any incident affecting our third-party hosting services' infrastructure that may be caused by cyber-attacks, natural disasters, fire, flood, severe storm, earthquake, power loss, telecommunications failures, terrorist or other attacks, and other similar events beyond our control could negatively affect our cloud-based solutions. A prolonged service disruption affecting our cloud-based solutions for any of the foregoing reasons would negatively impact our ability to serve our customers and could damage our reputation with current and potential customers, expose us to liability, cause us to lose customers, or otherwise harm our business. We may also incur significant costs for using alternative equipment or taking other actions in preparation for, or in reaction to, events that damage the third-party hosting services we use.

In the event that our service agreements with our third-party hosting services are terminated, or there is a lapse of service, elimination of services or features that we utilize, interruption of internet service provider connectivity, or damage to such facilities, we could experience interruptions in access to our platform as well as significant delays and additional expense in arranging or creating new facilities and services and/or re-architecting our hosted software solutions for deployment on a different cloud infrastructure service provider, which could adversely affect our business, financial condition, and results of operations.

If our security measures are breached or unauthorized access to customer data is otherwise obtained, our solutions may be perceived as not being secure, customers may reduce the use of or stop using our solutions, and we may incur significant liabilities.

Our solutions involve the collection, analysis, and storage of our customers' proprietary information and sensitive proprietary data related to the discovery efforts of our customers. As a result, unauthorized access or security breaches, as a result of third-party action, employee error, malfeasance, or otherwise could result in the loss of information, litigation, indemnity obligations, damage to our reputation, and other liability. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, if our employees fail to adhere to practices we have established to maintain a firewall between our drug discovery group, which we refer to as the Schrödinger therapeutics group, and our teams that work with software customers, or if the technical solutions we have adopted to maintain the firewall malfunction, our customers and collaborators may lose confidence in our ability to maintain the confidentiality of their intellectual property, we may have trouble attracting new customers and collaborators, we may be subject to breach of contract claims by our customers and collaborators, and we may suffer reputational and other harm as a result. Any or all of these issues could adversely affect our ability to attract new customers, cause existing customers to elect not to renew their licenses, result in reputational damage or subject us to third-party lawsuits or other action or liability, which could adversely affect our operating results. Our insurance may not be adequate to cover losses associated with such events, and in any case, such insurance may not cover all of the types of costs, expenses, and losses we could incur to respond to and remediate a security breach.

Any failure to offer high-quality technical support services could adversely affect our relationships with our customers and our operating results.

Our customers depend on our support organization to resolve technical issues relating to our solutions, as our software requires expert usage to fully exploit its capabilities. Certain of our customers also rely on us to troubleshoot problems with the performance of the software, introduce new features requested for specific customer projects, inform them about the best way to set up and analyze various types of simulations and illustrate our techniques for drug discovery using examples from publicly available data sets. We may be unable to respond quickly enough to accommodate short-term increases in customer demand for these support services. Increased customer demand for our services, without corresponding revenues, could increase costs and adversely affect our operating results. In addition, our sales process is highly dependent on the reputation of our solutions and business and on positive recommendations from our existing customers. Any failure to offer high-quality technical support, or a market perception that we do not offer high-quality support, could adversely affect our reputation, our ability to sell our solutions to existing and prospective customers and our business and operating results.

Our solutions utilize third-party open-source software, and any failure to comply with the terms of one or more of these open-source software licenses could adversely affect our business or our ability to sell our software solutions, subject us to litigation, or create potential liability.

Our solutions include software licensed by third parties under any one or more open-source licenses, including the GNU General Public License, the GNU Lesser General Public License, the Affero General Public License, the BSD License, the MIT License, the Apache License, and others, and we expect to continue to incorporate open-source software in our solutions in the future. Moreover, we cannot ensure that we have effectively monitored our use of open-source software or that we are in compliance with the terms of the applicable open-source licenses or our current policies and procedures. There have been claims against companies that use open-source software in their products and services asserting that the use of such open-source software infringes the claimants' intellectual property rights. As a result, we and our customers could be subject to suits by third parties claiming that what we believe to be licensed open-source software infringes such third parties' intellectual property rights, and we may be required to indemnify our customers against such claims. Additionally, if an author or other third party that distributes such open-source software were to allege that we had not complied with the conditions of one or more of these licenses, we or our customers could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contain the open-source software and required to comply with onerous conditions or restrictions on these solutions, which could disrupt the distribution and sale of these solutions. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, and results of operations, or require us to devote additional research and development resources to change our solutions.

Use of open-source software may entail greater risks than use of third-party commercial software, as open-source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code, including with respect to security vulnerabilities. In addition, certain open-source licenses require that source code for software programs that interact with such open-source software be made available to the public at no cost and that any modifications or derivative works to such open-source software continue to be licensed under the same terms as the open-source software license. The terms of various open-source licenses have not been interpreted by courts in the relevant jurisdictions, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market our solutions. By the terms of certain open-source licenses, we could be required to release the source code of our proprietary software, and to make our proprietary software available under open-source licenses, if we combine our proprietary software with open-source software in a certain manner. In the event that portions of our proprietary software are determined to be subject to an open-source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our solutions, or otherwise be limited in the licensing of our solutions, each of which could reduce or eliminate the value of our solutions. Disclosing our proprietary source code could allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales. Any of these events could create liability for us and damage our reputation, which could have a material adverse effect on our revenue, business, results of operations, and financial condition and the market price of our shares.

Risks Related to Drug Discovery

We may never realize a return on our investment of resources and cash in our drug discovery collaborations.

We use our computational platform to provide drug discovery services to collaborators who are engaged in drug discovery and development. These collaborators include start-up companies, pre-commercial biotechnology companies, and large-scale pharmaceutical companies. When we engage in drug discovery with these collaborators, we typically provide access to our platform and platform experts who assist the drug discovery collaborator in identifying molecules that have activity against one or more specified protein targets. We historically have not received significant initial cash consideration for these services, except for the upfront payment of $55.0 million we received from Bristol-Myers Squibb Company, or BMS, upon entry into our collaboration agreement with BMS and the upfront payment of $150.0 million that we received in January 2025 from Novartis in connection with our entry into the research collaboration and license agreement with Novartis. However, we have received equity consideration in certain of our collaborators and/or the right to receive option fees, cash milestone payments upon the achievement of specified development, regulatory, and commercial sales milestones for the drug discovery targets, and potential royalties. From time to time, we have also made additional equity investments in our drug discovery collaborators.

We may never realize a return on our investment of resources and cash in our drug discovery collaborations. Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. Our drug discovery collaborators may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product candidates. In addition, our ability to realize return from our drug discovery collaborations is subject to the following risks:

- drug discovery collaborators have significant discretion in determining the amount and timing of efforts and resources that they will apply to our collaborations and may not perform their obligations as expected;
- drug discovery collaborators may not pursue development or commercialization of any product candidates for which we are entitled to option fees, milestone payments, or royalties or may elect not to continue or renew development or commercialization programs based on results of clinical trials or other studies, changes in the collaborator's strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- drug discovery collaborators may delay clinical trials for which we are entitled to milestone payments;
- we may not have access to, or may be restricted from disclosing, certain information regarding our collaborators' product candidates being developed or commercialized and, consequently, may have limited ability to inform our stockholders about the status of, and likelihood of achieving, milestone payments or royalties under such collaborations;
- drug discovery collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with any product candidates and products for which we are entitled to milestone payments or royalties if the collaborator believes that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive;
- product candidates discovered in drug discovery collaborations with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause our collaborators to cease to devote resources to the commercialization of any such product candidates;
- existing drug discovery collaborators and potential future drug discovery collaborators may begin to perceive us to be a competitor more generally, particularly as we advance our proprietary drug discovery programs, and therefore may be unwilling to continue existing collaborations with us or to enter into new collaborations with us;
- a drug discovery collaborator may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution, or marketing of a product candidate or product, which may impact our ability to receive milestone payments;
- disagreements with drug discovery collaborators, including disagreements over intellectual property or proprietary rights, contract interpretation, or the preferred course of development, might cause delays or terminations of the research, development, or commercialization of product candidates for which we are eligible to receive milestone payments, or might result in litigation or arbitration;
- drug discovery collaborators may not properly obtain, maintain, enforce, defend or protect our intellectual property or proprietary rights or may use our proprietary information in such a way as to potentially lead to

disputes or legal proceedings that could jeopardize or invalidate our or their intellectual property or proprietary information or expose us and them to potential litigation;

- drug discovery collaborators may infringe, misappropriate, or otherwise violate the intellectual property or proprietary rights of third parties, which may expose us to litigation and potential liability;
- drug discovery collaborators could suffer from operational delays as a result of global health impacts, such as the recent COVID-19 pandemic; and
- drug discovery collaborations may be terminated prior to our receipt of any significant value from the collaboration, which has happened to us in the past and may happen to us again in the future.

Our drug discovery collaborations may not lead to development or commercialization of product candidates that results in our receipt of option fees, milestone payments, or royalties in a timely manner, or at all. If any drug discovery collaborations that we enter into do not result in the successful development and commercialization of drug products that result in option fees, milestone payments, or royalties to us, we may not receive return on the resources we have invested in the drug discovery collaboration. Moreover, even if a drug discovery collaboration initially leads to the achievement of milestones that result in payments to us, it may not continue to do so.

We also rely on collaborators for the development and potential commercialization of product candidates we discover internally when we believe it will help maximize clinical and commercial opportunities for the product candidate. For example, under our research collaboration and license agreement with Novartis, we are responsible, together with Novartis, for the discovery of small molecule compounds directed against specified targets pursuant to mutually agreed research plans. After the identification of a development candidate in any project plan, Novartis will be solely responsible for the further preclinical and clinical development, manufacturing and commercialization of products containing all compounds resulting from such project plan. We cannot be certain that we will successfully identify development candidates for Novartis to develop and commercialize under our research collaboration and license agreement. Further, Novartis may not achieve the discovery, development, and commercial milestones for those development candidates that would result in additional payments to us.

We may not realize returns on our equity investments in our drug discovery collaborators.

We may not realize returns on our equity investments in our drug discovery collaborators. None of the drug discovery collaborators in which we hold equity generate revenue from commercial sales of drug products. They are therefore dependent on the availability of capital on favorable terms to continue their operations. In addition, if the drug discovery collaborators in which we hold equity raise additional capital, our ownership interest in and degree of control over these drug discovery collaborators will be diluted, unless we have sufficient resources and choose to invest in the drug discovery collaborator further or successfully negotiate contractual anti-dilution protections for our equity investment. The financial success of our equity investment in any collaborator will likely be dependent on a liquidity event, such as a public offering, acquisition, or other favorable market event reflecting appreciation in the value of the equity we hold. The capital markets for public offerings and acquisitions are dynamic, and the likelihood of liquidity events for the companies in which we hold equity interests could significantly worsen. Further, valuations of privately held companies are inherently complex due to the lack of readily available market data. If we determine that any of our investments in such companies have experienced a decline in value, we may be required to record an impairment, which could negatively impact our financial results. The fair value of our equity interests in public companies, such as Structure Therapeutics, may fluctuate significantly in future periods since we determine the fair value of such equity interests based on the market value of such companies' common stock as of a given reporting date. All of the equity we hold in our drug discovery collaborators is subject to risk of partial or total loss of our investment.

Our drug discovery collaborators have significant discretion in determining when to make announcements, if any, about the status of our collaborations, including about clinical developments and timelines for advancing collaborative programs, and the price of our common stock may decline as a result of announcements of unexpected results or developments.

Our drug discovery collaborators have significant discretion in determining when to make announcements about the status of our collaborations, including about preclinical and clinical developments and timelines for advancing the collaborative programs. While as a general matter we intend to periodically report on the status of our collaborations, our drug discovery collaborators, and in particular, our privately-held collaborators, may wish to report such information more or less frequently than we intend to or may not wish to report such information at all. The price of our common stock may

decline as a result of the public announcement of unexpected results or developments in our collaborations, or as a result of our collaborators withholding such information.

Although we believe that our computational platform has the potential to identify more promising molecules than traditional methods and to accelerate drug discovery, our focus on using our platform technology to discover and design molecules with therapeutic potential may not result in the discovery and development of commercially viable products for us or our collaborators.

Our scientific approach focuses on using our platform technology to conduct "computational assays" that leverage our deep understanding of physics-based modeling and theoretical chemistry to design molecules and predict their key properties without conducting time-consuming and expensive physical experiments. Our computational platform underpins our software solutions, our drug discovery collaborations and our own proprietary drug discovery programs.

While the results of certain of our drug discovery collaborators suggest that our platform is capable of accelerating drug discovery and identifying high quality product candidates, these results do not assure future success for our drug discovery collaborators or for us with our proprietary drug discovery programs.

Even if we or our drug discovery collaborators are able to develop product candidates that demonstrate potential in preclinical studies, we or they may not succeed in demonstrating safety and efficacy of product candidates in human clinical trials. For example, in collaboration with us, Nimbus was able to identify a unique series of acetyl-CoA carboxylase, or ACC, allosteric protein-protein interaction inhibitors with favorable pharmaceutical properties that inhibit the activity of the ACC enzyme. Nimbus achieved proof of concept in a Phase 1b clinical trial of its ACC inhibitor, firsocostat, and later sold the program to Gilead Sciences, Inc., or Gilead Sciences, in a transaction valued at approximately $1.2 billion, comprised of an upfront payment and earn outs. Of this amount, $601.3 million has been paid to Nimbus to date, and we received a total of $46.0 million in cash distributions in 2016 and 2017. In December 2019, Gilead Sciences announced topline results from its Phase 2 clinical trial which included firsocostat, both as a monotherapy and in combination with other investigational therapies for advanced fibrosis due to nonalcoholic steatohepatitis, in which the primary endpoint was not met. Gilead Sciences is currently evaluating firsocostat in a Phase 2b clinical trial in combination with Novo Nordisk A/S's semaglutide, a GLP-1 receptor agonist, for compensated cirrhosis due to nonalcoholic steatohepatitis. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their product candidates.

We may not be successful in our efforts to identify, discover or develop product candidates and may fail to capitalize on programs, collaborations, or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.

Research programs to identify new product candidates require substantial technical, financial, and human resources. As an organization, we are advancing SGR-1505, our clinical-stage MALT1 inhibitor, SGR-2921, our clinical-stage CDC7 inhibitor, and SGR-3515, our clinical-stage Wee1/Myt1 inhibitor. We have not yet advanced any other programs into clinical development, and we may fail to identify additional product candidates for development. Similarly, a key element of our business plan is to expand the use of our computational platform through an increase in software sales and drug discovery collaborations. A failure to demonstrate the utility of our platform by successfully using it ourselves to discover internal product candidates could harm our business prospects.

Because we have limited resources, we focus our research programs on protein targets where we believe our computational assays are a good substitute for experimental assays, where we believe it is theoretically possible to discover a molecule with properties that are required for the molecule to become a drug and where we believe there is a meaningful commercial opportunity, among other factors. The focus of our initial proprietary drug discovery programs was in the area of oncology, and we have only recently begun expanding into other therapeutic areas, including neurology and immunology. We may forego or delay pursuit of opportunities with certain programs, collaborations, or product candidates or for indications that later prove to have greater commercial potential. However, the development of any product candidate we pursue may ultimately prove to be unsuccessful or less successful than another potential product candidate that we might have chosen to pursue on a more aggressive basis with our capital resources. If we do not accurately evaluate the commercial potential for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic collaboration, partnership, licensing, or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. Alternatively, we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a collaboration.

Our research programs may show initial promise in identifying potential product candidates internally or with collaborators, yet fail to yield product candidates for clinical development for a number of reasons, including:

- our research methodology or that of any collaborator may be unsuccessful in identifying potential product candidates that are successful in clinical development;
- potential product candidates may be shown to have harmful side effects or may have other characteristics that may make the product candidates unmarketable or unlikely to receive marketing approval;
- our current or future collaborators may change their development profiles for potential product candidates or abandon a therapeutic area; or
- new competitive developments may render our product candidates obsolete or noncompetitive.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, which would have a material adverse effect on our business.

We rely on contract research organizations to synthesize any molecules with therapeutic potential that we discover. If such organizations do not meet our supply requirements, or if such organizations do not otherwise perform satisfactorily, development of any product candidate we may develop may be delayed.

We rely and expect to continue to rely on third parties to synthesize any molecules with therapeutic potential that we discover, including SGR-1505, SGR-2921 and SGR-3515. Reliance on third parties may expose us to different risks than if we were to synthesize molecules ourselves. Our reliance on these third parties will reduce our control over these activities but will not relieve us of our responsibilities. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or synthesize molecules in accordance with regulatory requirements, if there are disagreements between us and such parties or if such parties are unable to expand capacities, we may not be able to fulfill, or may be delayed in producing sufficient product candidates to meet, our supply requirements, and we may not be able to complete, or may be delayed in completing, the necessary preclinical studies to enable us to progress viable product candidates for IND submissions or the necessary clinical trials and we will not be able to, or may be delayed in our efforts to, successfully develop and commercialize such product candidates. The facilities of these third parties may also be affected by natural disasters, such as floods or fire, or geopolitical developments or public health pandemics or such facilities could face production issues, such as contamination or regulatory concerns following a regulatory inspection of such facility. In such instances, we may need to locate an appropriate replacement third-party facility and establish a contractual relationship, which may not be readily available or on acceptable terms, which would cause additional delay and increased expense, and may have a material adverse effect on our business.

We or any third party may also encounter shortages in the raw materials or active pharmaceutical ingredient, or API, necessary to synthesize any molecule we may discover in the quantities needed for preclinical studies or clinical trials, as a result of capacity constraints or delays or disruptions in the market for the raw materials or API. Even if raw materials or API are available, we may be unable to obtain sufficient quantities at an acceptable cost or quality. The failure by us or the third parties to obtain the raw materials or API necessary to synthesize sufficient quantities of any molecule we may discover could delay, prevent, or impair our development efforts and may have a material adverse effect on our business.

If we are not able to establish or maintain collaborations to develop and commercialize any of the product candidates we discover internally, we may have to alter our development and commercialization plans for those product candidates and our business could be adversely affected.

We expect to rely on future collaborators for the development and potential commercialization of product candidates we discover internally when we believe it will help maximize the clinical and commercial opportunities of the product candidate. We face significant competition in seeking appropriate collaborators for these activities, and a number of more established companies may also be pursuing such collaborations. These established companies may have a competitive advantage over us due to their size, financial resources, and greater clinical development and commercialization expertise. Whether we reach a definitive agreement for such collaborations will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of preclinical studies and clinical trials, the likelihood of approval by the U.S. Food and Drug Administration, or FDA, or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The

collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large biopharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop any product candidates or bring them to market.

As a company, we have very limited experience in clinical development, which may adversely impact the likelihood that we will be successful in advancing our programs.

As a company, we have very limited experience in clinical development. Our limited experience in designing, conducting and completing clinical development activities may adversely impact the likelihood that we will be successful in advancing our programs. Further, any predictions you make about the future success or viability of our proprietary drug discovery programs may not be as accurate as they could be if we had a history of conducting and completing clinical trials and developing our own product candidates.

Further, if we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies governing clinical trials, our development plans may be impacted. For example, in December 2022, with the passage of Food and Drug Omnibus Reform Act, or FDORA, Congress required sponsors to develop and submit a diversity action plan for each phase 3 clinical trial or any other "pivotal study" of a new drug or biological product. These plans are meant to encourage the enrollment of more diverse patient populations in late-stage clinical trials of FDA-regulated products. Specifically, action plans must include the sponsor’s goals for enrollment, the underlying rationale for those goals, and an explanation of how the sponsor intends to meet them. In addition to these requirements, the legislation directs the FDA to issue new guidance on diversity action plans. In June 2024, the FDA issued draft guidance outlining the general requirements for diversity action plans. Unlike most guidance documents issued by the FDA, the guidance when finalized will have the force of law because FDORA specifically dictates that the form and manner for submission of diversity action plans are specified in FDA guidance. In January 2025, in response to an executive order issued by President Trump on Diversity, Equity and Inclusion programs, the FDA removed this draft guidance from its website. The implications of this action are not yet known.

In addition, the regulatory landscape related to clinical trials in the European Union, or EU, recently evolved. The EU Clinical Trials Regulation, or CTR, became applicable on January 31, 2022. While the Clinical Trials Directive required a separate clinical trial application, or CTA, to be submitted in each member state, to both the competent national health authority and an independent ethics committee, the CTR introduces a centralized process and only requires the submission of a single application to all member states concerned. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each member state, leading to a single decision per member state. The assessment procedure of the CTA has been harmonized as well, including a joint assessment by all member states concerned, and a separate assessment by each member state with respect to specific requirements related to its own territory, including ethics rules. Each member state’s decision is communicated to the sponsor via the centralized EU portal. Once the CTA is approved, clinical study development may proceed. The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. For clinical trials whose CTA was made under the Clinical Trials Directive before January 31, 2022, the Clinical Trials Directive applied until January 31, 2025. Additionally, sponsors were still permitted to choose to submit a CTA under either the Clinical Trials Directive or the CTR until January 31, 2023 and, if authorized, those will be governed by the Clinical Trials Directive until January 31, 2025. Beginning January 31, 2025, all ongoing trials are subject to the provisions of the CTR.

As our proprietary drug discovery business grows, we may encounter unforeseen expenses, difficulties, complications, delays, and other known and unknown factors. Our proprietary drug discovery business will need to transition to a business capable of supporting significant clinical development activities. We may not be successful in such a transition.

Conducting successful clinical trials requires the enrollment of a sufficient number of patients, and suitable patients may be difficult to identify and recruit.

Conducting successful clinical trials requires the enrollment of a sufficient number of patients, and suitable patients may be difficult to identify and recruit. Identifying and qualifying patients to participate in future clinical trials for any other product candidate we develop is critical to our success. Patient enrollment in clinical trials and completion of patient participation and follow-up depends on many factors, including the severity of disease; size of the patient population; the nature of the trial protocol; the attractiveness of, or the discomforts and risks associated with, the treatments received by enrolled subjects; the availability of clinical trial investigators with appropriate competencies and experience; support staff; the number of ongoing clinical trials in the same indication that compete for the same patients; proximity of patients to clinical sites; the number and availability of trial sites; the ability to comply with the eligibility and exclusion criteria for participation in the clinical trial; ability to obtain and maintain patient consents; patient compliance; the ability to monitor patients during and after treatment; and the impact of any health pandemic or epidemic. For example, patients may be discouraged from enrolling in our clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and effectiveness of our product candidates. Patients may also not participate in our clinical trials if they choose to participate in contemporaneous clinical trials of competitive products with competitors that have more clinical development experience than we do.

Our inability to locate and enroll a sufficient number of patients for our clinical trials would result in significant delays, could require us to abandon one or more clinical trials altogether and could delay or prevent our receipt of necessary regulatory approvals. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing.

We rely on, and plan to continue to rely on, third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, which may prevent or delay our ability to seek or obtain marketing approval for or commercialize our product candidates or otherwise harm our business.

We rely on, and plan to continue to rely on, third-party contract research organizations, or CROs, in addition to other third parties such as research collaboratives and consortia, clinical data management organizations, medical institutions and clinical investigators, to conduct our ongoing, planned and future clinical trials, including for SGR-1505, SGR-2921 and SGR-3515. These contract research organizations and other third parties play a significant role in the conduct and timing of these trials and subsequent collection and analysis of data. These third-party arrangements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements, our product development activities might be delayed.

Our reliance on third parties for research and development activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, and legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our responsibility to comply with any such standards. We and these third parties are required to comply with current good clinical practices, or cGCP, which are regulations and guidelines enforced by the FDA for all of our products in clinical development. Regulatory authorities in Europe and other jurisdictions have similar requirements. Regulatory authorities enforce these cGCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable cGCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that a given regulatory authority will determine that any of our clinical trials comply with cGCP regulations. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a U.S. government-sponsored database, clinicaltrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, third parties on whom we rely may also have relationships with other entities, some of which may be our competitors. In addition, these third parties are not our employees, and except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our on-going clinical, nonclinical and preclinical programs. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised, our clinical trials may be extended, delayed or terminated and we may not be able to obtain, or

may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines.

In addition, we currently rely on foreign CROs and contract manufacturing organizations, or CMOs, and will likely continue to rely on foreign CROs and CMOs in the future. Foreign CMOs may be subject to U.S. legislation, including sanctions, trade restrictions and other foreign regulatory requirements which could increase the cost or reduce the supply of material available to us, delay the procurement or supply of such material or have an adverse effect on our ability to secure significant commitments from governments to purchase our potential therapies. Moreover, in September 2024, the U.S. House of Representatives passed the BIOSECURE Act (H.R. 7085), and the Senate advanced a substantially similar bill (S.3558), which legislation, if passed and enacted into law, would restrict the ability of U.S. biopharmaceutical companies like us to purchase services or products from, or otherwise collaborate with, specifically named Chinese biotechnology companies and authorizes the U.S. government to impose such restrictions on entities transacting with additional Chinese biotechnology companies as a condition of U.S. government contract, grant, and loan funding. The legislation passed by the House of Representatives contains a grandfathering provision that would prevent disruption to the provision of services or products furnished under contracts with the targeted biotechnology companies entered before the effective date of the legislation until January 1, 2032. It is possible some of our contractual counterparties could be impacted by this legislation.

Our reliance on third parties to manufacture our product candidates increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate manufacturing facilities for the production of any product candidates, nor do we have plans to develop our own manufacturing operations. We rely and expect to continue to rely on third-party contract manufacturers for all of our required raw materials, drug substance, and finished drug product for the preclinical and clinical development of any product candidates we develop ourselves and for any commercial supply of approved products, if any. We have limited personnel with experience in drug manufacturing and lack the resources and the capabilities to manufacture any of our product candidates on a clinical or commercial scale.

In order to conduct preclinical studies and clinical trials of our product candidates, we will need to identify suitable manufacturers with the capabilities to manufacture our compounds in large quantities in a manner consistent with existing regulations. Our third-party manufacturers may be unable to successfully increase the manufacturing capacity for any of our product candidates in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities and at any other time. If our manufacturers are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or infeasible, and regulatory approval or commercial launch of that product candidate may be delayed or not obtained, which could significantly harm our business.

We do not currently have any agreements with third-party manufacturers for the long-term supply of any of our product candidates. In the future, we may be unable to enter into agreements with third-party manufacturers for commercial supplies of our product candidates, or may be unable to do so on acceptable terms.

Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails risks, including reliance on the third party for regulatory compliance and quality assurance; the possible breach of the manufacturing agreement by the third party; the possible misappropriation of our proprietary information, including our trade secrets and know-how; and the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates.

Our product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us. If the third parties that we engage to supply any materials or manufacture product for our preclinical tests and clinical trials should cease to continue to do so for any reason, we likely

would experience delays in advancing these trials while we identify and qualify replacement suppliers, and we may be unable to obtain replacement supplies on terms that are favorable to us. In addition, if we are not able to obtain adequate supplies of our product candidates or the substances used to manufacture them or any approved drug we may use in combination trials, it will be more difficult for us to develop our product candidates and compete effectively.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future results of operations and our ability to develop product candidates and commercialize any products that receive marketing approval on a timely and competitive basis.

If serious adverse or unacceptable side effects are identified during the development or commercialization of our product candidates, we may need to abandon or limit our development and/or commercialization efforts for such product candidates.

If serious adverse events or undesirable side effects are observed in any of our clinical trials, we may have difficulty recruiting patients to our clinical trials, patients may drop out of our trials, or we may be required to abandon the trials or our development efforts of one or more product candidates altogether or limit development to certain uses or subpopulations in which the serious adverse events, undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. We, the FDA, comparable foreign regulatory authorities or an independent institutional review board may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects or patients in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance of the approved product due to its tolerability versus other therapies. In addition, adverse events which had initially been considered unrelated to the study treatment may later, even following approval and/or commercialization, be found to be caused by the study treatment. Any of these developments could materially harm our business, financial condition and prospects.

The outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and the results of our clinical trials may not satisfy the requirements of the U.S. Food and Drug Administration or other comparable foreign regulatory authorities.

Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we will be required to demonstrate with substantial evidence through well-controlled clinical trials that our product candidates are safe and effective for their intended uses. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Success in preclinical studies and early-stage clinical trials does not mean that future clinical trials will be successful. The results of our product candidates in preclinical studies may not be indicative of future results in our ongoing or later stage clinical trials. Product candidates in later-stage clinical trials may fail to demonstrate sufficient safety and efficacy to the satisfaction of the FDA and other comparable foreign regulatory authorities despite having progressed through preclinical studies and early-stage clinical trials.

In some instances, there can be significant variability in safety and efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, differences in and adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. Patients treated with our product candidates may also be undergoing surgical, radiation and chemotherapy treatments and may be using other approved products or investigational new drugs, which can cause side effects or adverse events that are unrelated to our product candidate. As a result, assessments of efficacy can vary widely for a particular patient, and from patient to patient and site to site within a clinical trial. This subjectivity can increase the uncertainty of, and adversely impact, our clinical trial outcomes. We do not know whether any clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain marketing approval to market our product candidates. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization.

Moreover, preclinical studies and clinical data are often susceptible to varying interpretations and analyses and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials nonetheless failed to obtain FDA or comparable foreign regulatory authority approval. We cannot guarantee that the FDA or comparable foreign regulatory authorities will interpret trial results as we do, and more trials than we anticipated could

be required before we are able to submit applications seeking approval of our product candidates. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates. Even if regulatory approval is secured for any of our product candidates, the terms of such approval may limit the scope and use of our product candidate, which may also limit its commercial potential. Furthermore, the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval, which may lead to the FDA or comparable foreign regulatory authorities delaying, limiting or denying approval of our product candidates.

Interim, initial, "topline", and preliminary data from our clinical trials that we announce or publish in the future may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose interim, initial, preliminary or topline data from our clinical trials, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular trial. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available or as patients from our clinical trials continue other treatments for their disease. We will also have to make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, initial, topline or preliminary results that we report may differ from future results of the same trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Preliminary or topline data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary or topline data we previously published. As a result, interim, initial, topline and preliminary data should be viewed with caution until the final data are available.

Adverse differences between interim data and final data could significantly harm our reputation and business prospects and may cause volatility in the price of our common stock.

We conduct, and we intend to continue to conduct, clinical trials for our product candidates at sites outside the United States. The FDA may not accept data from trials conducted in such locations, and the conduct of trials outside the United States could subject us to additional delays and expense.

We conduct, and we intend to continue to conduct, clinical trials for our product candidates at trial sites that are located outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of these data is subject to certain conditions imposed by the FDA.

In cases where data from foreign clinical trials are intended to serve as the sole basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; (ii) the trials were performed by clinical investigators of recognized competence and pursuant to cGCP regulations; and (iii) the data may be considered valid without the need for an on-site inspection by the FDA, or if the FDA considers such inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means.

In addition, even where the foreign study data are not intended to serve as the sole basis for approval, the FDA will not accept the data as support for an application for marketing approval unless the study satisfies certain conditions. For example, the clinical trial must be well designed and conducted and performed by qualified investigators in accordance with cGCPs. The FDA must be able to validate the data from the trial, including, if necessary, through an onsite inspection. The trial population must also have a similar profile to the U.S. population and the data must be applicable to the U.S. population and U.S. medical practice in ways that the FDA deems clinically meaningful, except to the extent the disease being studied does not typically occur in the United States. In addition, while these clinical trials are subject to the applicable local laws, FDA acceptance of the data will be dependent upon its determination that the trials also complied with all applicable U.S. laws and regulations. There can be no assurance that the FDA will accept data from trials conducted outside of the United States. If the FDA does not accept the data from any trial that we conduct outside the United States, it would likely result in the need for additional trials, which would be costly and time-consuming and delay or permanently halt our development of our product candidates or potential product candidates in the future.

In addition, the conduct of clinical trials outside the United States could have a significant adverse impact on us. Risks inherent in conducting international clinical trials include: clinical practice patterns and standards of care that vary widely among countries; non-U.S. regulatory authority requirements that could restrict or limit our ability to conduct our clinical trials; administrative burdens of conducting clinical trials under multiple non-U.S. regulatory authority schema; foreign exchange rate fluctuations; and diminished protection of intellectual property in some countries.

If we and any current or future collaborators are unable to successfully complete clinical development, obtain regulatory approval for, or commercialize any product candidates, or experience delays in doing so, our business may be materially harmed.

We are early in our development efforts for our own proprietary drug discovery programs. Our ability to generate product revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our and any current or future collaborators' development and commercialization programs will depend on several factors, including the following:

- successful completion of necessary preclinical studies to enable the initiation of clinical trials;
- successful enrollment of patients in, and the completion of, the clinical trials;
- acceptance by the FDA or other regulatory agencies of regulatory filings for any product candidates we and our current or future collaborators may develop;
- expanding and maintaining a workforce of experienced scientists and other technical specialists to continue to develop any product candidates;
- obtaining and maintaining intellectual property protection and regulatory exclusivity for any product candidates we and our current or future collaborators may develop;
- making arrangements with third-party manufacturers for, or establishing, clinical and commercial manufacturing capabilities;
- establishing sales, marketing, and distribution capabilities for drug products and successfully launching commercial sales, if and when approved;
- acceptance of any product candidates we and our current or future collaborators may develop, if and when approved, by patients, the medical community, and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage, adequate pricing, and adequate reimbursement from third-party payors, including government payors;
- patients' willingness to pay out-of-pocket in the absence of coverage and/or adequate reimbursement from third-party payors;
- any restrictions resulting from a health epidemic or pandemic and its collateral consequences may result in internal and external operational delays and limitations; and
- maintaining a continued acceptable safety profile following receipt of any regulatory approvals.

Many of these factors are beyond our control, including clinical outcomes, the regulatory review process, potential threats to our intellectual property rights, and the manufacturing, marketing, and sales efforts of any current or future collaborator. Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. If we or our current or future collaborators are unable to develop, receive marketing approval for, and successfully commercialize any product candidates, or if we or they experience delays as a result of any of these factors or otherwise, we may need to spend significant additional time and resources, which would adversely affect our business, prospects, financial condition, and results of operations.

Even if any product candidate that we may develop receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payers and others in the medical community necessary for commercial success.

If any product candidate we may develop receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payers and others in the medical community. Sales of medical products depend in part on the willingness of physicians to prescribe the treatment, which is likely to be based on a

determination by these physicians that the products are safe, therapeutically effective and cost-effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that any of our product candidates, if approved for commercial sale, is safe, therapeutically effective and cost-effective as compared with competing treatments. Efforts to educate the medical community and third-party payers on the benefits of any product candidates we may develop may require significant resources and may not be successful. If any product candidates we may develop do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of any product candidates we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in clinical trials;
- the potential advantages and limitations compared to alternative treatments;
- the effectiveness of sales and marketing efforts;
- the cost of treatment in relation to alternative treatments;
- the clinical indications for which the product is approved;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- the timing of market introduction of competitive products;
- the availability of third-party coverage and adequate reimbursement;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products, if approved, together with other medications.

Clinical trial and product liability lawsuits against us could divert our resources, could cause us to incur substantial liabilities and could limit commercialization of our product candidates.

We face an inherent risk of clinical trial and product liability exposure related to the testing of our product candidates in clinical trials, and we will face an even greater risk if we commercially sell any products that we may develop. While we currently have no product candidates that have been approved for commercial sale, the use of product candidates by us in clinical trials, and the sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients that use the product, healthcare providers, pharmaceutical companies or others selling such products. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend any related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any product candidates we may develop.

We have insurance coverage in countries in which we conduct clinical trials and will need to increase our insurance coverage if we conduct clinical trials in additional countries or of additional product candidates or if we commence commercialization of any product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. If a successful clinical trial or product liability claim or series of claims is brought against us for uninsured liabilities or in

excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do, thus rendering our products non-competitive, obsolete or reducing the size of our market.

We face competition with respect to our and our collaborators' product candidates from many biopharmaceutical and biotechnology companies. The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary and novel products and product candidates. Our competitors have developed, are developing or may develop products, product candidates that are competitive with or superior to our product candidates. Any product candidates that we successfully develop and commercialize, internally or with our collaborators, will compete with existing therapies and new therapies that may become available in the future.

In particular, there is intense competition in the field of oncology, which is a focus of our drug discovery efforts. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, emerging and start-up companies, universities and other research institutions. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We also face competition in finding and establishing clinical trial sites, enrolling subjects for clinical trials, assessing combination studies and recruiting credible principal investigators and advisors from key clinical disciplines and academic centers.

For example, with respect to our MALT1 inhibitor, SGR-1505, which we are advancing for the treatment of patients with relapsed or refractory B-cell malignancies, we are aware of several MALT1 inhibitors in clinical development, including by AbbVie Inc., Ono Pharmaceutical Co., Ltd., HotSpot Therapeutics, and Recursion Pharmaceuticals, Inc. In addition, we are also aware of other therapeutics, such as bi-specifics and CAR-Ts, both approved and in clinical development, for the treatment of B-cell lymphomas.

With respect to our CDC7 inhibitor, SGR-2921, which we are advancing for the treatment of relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome, we are aware of several CDC7 inhibitors in Phase 1 clinical development, including by Chia Tai Tianqing Pharmaceutical Group Co., Ltd., Lin BioScience, Inc., and Cancer Research UK.

With respect to our Wee1/Myt1 inhibitor, SGR-3515, which we are advancing for the treatment of advanced solid tumors, we are aware of several Wee1 inhibitors in clinical development, including by Zentalis Pharmaceuticals, Debiopharm International SA, IMPACT Therapeutics, Inc., Shouyao Holdings Co. Ltd., BioCity Biopharma, and Aprea Therapeutics, Inc., as well as a Myt1 inhibitor in clinical development being advanced by Repare Therapeutics Inc. Furthermore, we are also aware of a Wee1/Myt1 inhibitor in preclinical development being advanced by Acrivon Therapeutics, Inc.

Large pharmaceutical and biotechnology companies, in particular, have extensive experience in building and accessing networks of expert investigators, designing and conducting clinical trials, obtaining regulatory approvals, and manufacturing and commercializing biotechnology products. These companies also have significantly greater research and development and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical and biotechnology companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than our products. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies, as well as in acquiring technologies complementary to, or necessary for, our programs. As a result of all of these factors, our competitors may succeed in obtaining approval from the FDA or other comparable foreign regulatory authorities or in discovering, developing and commercializing products in our field before we do.

Risks Related to Our Operations

Doing business internationally creates operational and financial risks for our business.

For the fiscal year ended December 31, 2024, sales to customers outside of the United States accounted for approximately 45% of our total revenues. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic, and political risks that are different from those in the United States. We have limited operating experience in some international markets, and we cannot assure you that our expansion efforts into other international markets will be successful. Our experience in the United States and other international markets in which we already have a presence may not be relevant to our ability to expand in other markets. Our international expansion efforts may not be successful in creating further demand for our solutions outside of the United States or in effectively selling our solutions in the international markets we enter. In addition, we face risks in doing business internationally that could adversely affect our business, including:

- the need to localize and adapt our solutions for specific countries, including translation into foreign languages;
- data privacy laws which require that customer data be stored and processed in a designated territory or handled in a manner that differs significantly from how we typically handle customer data;
- difficulties in staffing and managing foreign operations, including employee laws and regulations;
- different pricing environments, longer sales cycles, and longer accounts receivable payment cycles and collections issues;
- differences in healthcare systems, drug regulation and reimbursement, and drug discovery and development practices and technologies;
- new and different sources of competition;
- weaker protection for intellectual property and other legal rights than in the United States and practical difficulties in enforcing intellectual property and other rights outside of the United States;
- laws and business practices favoring local competitors;
- compliance challenges related to the complexity of multiple, conflicting, and changing governmental laws and regulations, including employment, tax, reimbursement and pricing, privacy and data protection, and anti-bribery laws and regulations;
- increased financial accounting and reporting burdens and complexities;
- restrictions on the transfer of funds;
- changes in diplomatic and trade relationships, including new tariffs, trade protection measures, import or export licensing requirements, trade embargoes, and other trade barriers;
- changes in social, political, and economic conditions or in laws, regulations, and policies governing foreign trade, manufacturing, development, and investment both domestically as well as in the other countries and jurisdictions;
- adverse tax consequences, including the potential for required withholding taxes;
- global health pandemics or epidemics, such as the recent COVID-19 pandemic; and
- unstable regional, economic and political conditions.

Our international agreements may provide for payment denominated in local currencies and our local operating costs are denominated in local currencies. Therefore, fluctuations in the value of the U.S. dollar and foreign currencies may impact our operating results when translated into U.S. dollars.

Furthermore, with respect to our proprietary drug discovery programs, the ongoing war between Russia and Ukraine may impact the ability of our CROs in the region to produce materials we require to conduct certain of our preclinical studies. If we are unable to obtain alternative sources for such materials that we require, the ability for us to timely execute and complete certain of our preclinical studies may be adversely impacted.

If we fail to manage our technical operations infrastructure, our existing customers, and our internal drug discovery team, may experience service outages, and our new customers may experience delays in the deployment of our solutions.

We have experienced significant growth in the number of users and data that our operations infrastructure supports. We seek to maintain sufficient excess capacity in our operations infrastructure to meet the needs of all of our customers and to support our proprietary drug discovery programs. We also seek to maintain excess capacity to facilitate the rapid provision of new customer deployments and the expansion of existing customer deployments. In addition, we need to properly manage our technological operations infrastructure in order to support version control, changes in hardware and software parameters and the evolution of our solutions. However, the provision of new hosting infrastructure requires adequate lead-time. We have experienced, and may in the future experience, website disruptions, outages, and other performance problems. These types of problems may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, security attacks, fraud, spikes in usage, and denial of service issues. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time. If we do not accurately predict our infrastructure requirements, our existing customers may experience service outages that may subject us to financial penalties, financial liabilities, and customer losses. If our operations infrastructure fails to keep pace with increased sales and usage, customers and our internal drug discovery team may experience delays in the deployment of our solutions as we seek to obtain additional capacity, which could adversely affect our reputation and adversely affect our revenues.

Changes in tax laws or in their implementation or interpretation could adversely affect our business and financial condition.

Changes in tax law may adversely affect our business or financial condition. The Tax Cuts and Jobs Act, or the 2017 Tax Act, as amended by the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, significantly revises the Internal Revenue Code of 1986, as amended, or the Code. The 2017 Tax Act, among other things, contains significant changes to corporate taxation, including a reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21% and limitation of the deduction for net operating losses, or NOLs, to 80% of current-year taxable income for losses arising in taxable years beginning after December 31, 2017 (though any such NOLs may be carried forward indefinitely). In addition, beginning in 2022, the 2017 Tax Act eliminates the option to deduct research and development expenditures currently and requires corporations to capitalize and amortize them over five years or 15 years (for expenditures attributable to foreign research).

In addition to the CARES Act, as part of Congress's response to the COVID-19 pandemic, economic relief legislation was enacted in 2020 and 2021 containing tax provisions. The Inflation Reduction Act, or IRA, was also signed into law in August 2022. The IRA introduced new tax provisions, including a one percent excise tax imposed on certain stock repurchases by publicly traded companies. The one percent excise tax generally applies to any acquisition of stock by the publicly traded company (or certain of its affiliates) from a stockholder of the company in exchange for money or other property (other than stock of the company itself), subject to a de minimis exception. Thus, the excise tax could apply to certain transactions that are not traditional stock repurchases. Regulatory guidance under the 2017 Tax Act, the IRA, and such additional legislation is and continues to be forthcoming, and such guidance could ultimately increase or lessen the impact of these laws on our business and financial condition. Additional tax legislation may be enacted, and any such additional legislation could have an impact on our company. In addition, it is uncertain if and to what extent various states will conform to the 2017 Tax Act, the IRA, and additional tax legislation.

Our ability to use our NOLs and research and development tax credit carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2024, we had federal NOLs of approximately $204.5 million and state NOLs of approximately $129.5 million, which, if not utilized, generally begin to expire in 2025. As of December 31, 2024, we also had federal orphan drug credits and federal research and development tax credit carryforwards of approximately $31.3 million and state research and development tax credit carryforwards of approximately $2.7 million. Unused credits begin to expire in 2025 and generally expire over time if they remain unused. These NOLs, orphan drug credits, and research and development tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities.

In addition, under Sections 382 and 383 of the Code, and corresponding provisions of state law, a corporation that undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three-year period, is subject to limitations on its ability to utilize its pre-change NOLs and research and development tax credit carryforwards to offset future taxable income. We have performed an

analysis through December 31, 2024 and determined that no such ownership change occurred in the periods presented. If such an ownership change were to occur in the future, our ability to use our NOLs and research and development tax credit carryforwards may be materially limited.

There is also a risk that due to regulatory changes, such as suspension of the use of NOLs, or other unforeseen reasons, our existing NOLs could expire or otherwise become unavailable to offset future income tax liabilities. As described above in "Changes in tax laws or in their implementation or interpretation could adversely affect our business and financial condition," the 2017 Tax Act, as amended by the CARES Act, includes changes to U.S. federal tax rates and rules governing NOL carryforwards that may significantly impact our ability to utilize NOLs to offset taxable income in the future. In addition, state NOLs generated in one state cannot be used to offset income generated in another state. For these reasons, we may be unable to use a material portion of our NOLs and other tax attributes.

Our international operations subject us to potentially adverse tax consequences.

We report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. These jurisdictions include Germany, United Kingdom, Japan, India and South Korea. The international nature and organization of our business activities are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added, or similar taxes, and we could be subject to tax liabilities with respect to past or future sales, which could adversely affect our results of operations.

We do not collect sales and use, value added, and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable or that we are not required to collect such taxes with respect to the jurisdiction. Sales and use, value added, and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties, and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties, and interest or future requirements may adversely affect our results of operations.

Unanticipated changes in our effective tax rate could harm our future results.

We are subject to income taxes in the United States and various foreign jurisdictions, and our domestic and international tax liabilities are subject to the allocation of expenses in differing jurisdictions. Forecasting our estimated annual effective tax rate is complex and subject to uncertainty, and there may be material differences between our forecasted and actual tax rates. Our effective tax rate could be adversely affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses as a result of acquisitions, the valuation of deferred tax assets and liabilities, and changes in federal, state, or international tax laws and accounting principles. Increases in our effective tax rate would reduce our profitability or in some cases increase our losses.

In addition, we may be subject to income tax audits by many tax jurisdictions throughout the world. Although we believe our income tax liabilities are reasonably estimated and accounted for in accordance with applicable laws and principles, an adverse resolution of one or more uncertain tax positions in any period could have a material impact on the results of operations for that period.

We have acquired, and we may again in the future acquire, companies, businesses, solutions or technologies, which could divert our management's attention, result in additional dilution to our stockholders, and otherwise disrupt our operations and adversely affect our operating results.

We have acquired, and we may again in the future acquire, businesses, solutions, or technologies that we believe could complement or expand our solutions, enhance our technical capabilities, or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing suitable acquisitions, whether or not they are consummated.

In addition, we have limited experience in acquiring other businesses. If we acquire additional businesses, we may not be able to integrate the acquired personnel, operations, and technologies successfully, effectively manage the combined business following the acquisition or preserve the operational synergies between our business units that we believe currently exist. We cannot assure you that following any acquisition we would achieve the expected synergies to justify the transaction, due to a number of factors, including:

- inability to integrate or benefit from acquired technologies or services in a profitable manner;
- unanticipated costs or liabilities associated with the acquisition;
- acquisition-related costs;
- difficulty integrating the accounting systems, operations, and personnel of the acquired business;
- difficulties and additional expenses associated with supporting legacy products and hosting infrastructure of the acquired business;
- difficulty converting the customers of the acquired business onto our solutions and contract terms, including disparities in the revenues, licensing, support, or professional services model of the acquired company;
- diversion of management's attention from other business concerns;
- adverse effects to our existing business relationships with business partners and customers as a result of the acquisition;
- the potential loss of key employees;
- use of resources that are needed in other parts of our business; and
- use of substantial portions of our available cash to consummate the acquisition.

In addition, a significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill and other intangible assets, which must be assessed for impairment at least annually. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results based on this impairment assessment process, which could adversely affect our results of operations.

Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business, and financial position may suffer.

Our operations may be interrupted by the occurrence of a natural disaster or other catastrophic event at our primary facilities.

Our operations are primarily conducted at our facilities in New York, New York, Portland, Oregon, and Hyderabad, India, and our internal hosting facility located in Clifton, New Jersey. The occurrence of natural disasters or other catastrophic events could disrupt our operations. Any natural disaster or catastrophic event in our facilities or the areas in which they are located could have a significant negative impact on our operations.

Risks Related to Our Intellectual Property

If we fail to comply with our obligations under our existing license agreements with Columbia University, under any of our other intellectual property licenses, or under any future intellectual property licenses, or otherwise experience disruptions to our business relationships with our current or any future licensors, we could lose intellectual property rights that are important to our business.

We are party to a number of license agreements pursuant to which we have been granted exclusive and non-exclusive worldwide licenses to certain patents, software code, and software programs to, among other things, reproduce, use, execute, copy, operate, sublicense, and distribute the licensed technology in connection with the marketing and sale of our software solutions and to develop improvements thereto. In particular, the technology that we license from Columbia University pursuant to our license agreements with them are used in and incorporated into a number of our software solutions which we market and license to our customers. For further information regarding our license agreements with Columbia University, see "Item 1. Business—License Agreements with Columbia University." Our license agreements with Columbia University and other licensors impose, and we expect that future licenses will impose, specified royalty and other obligations on us.

In spite of our best efforts, our current or any future licensors might conclude that we have materially breached our license agreements with them and might therefore terminate the license agreements, thereby delaying our ability to market and sell our existing software solutions and develop and commercialize new software solutions that utilize technology covered by these license agreements. If these in-licenses are terminated, or if the underlying intellectual property fails to provide the intended exclusivity, competitors could market products and technologies similar to ours. This could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under any collaborative development relationships;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our current or future licensors and us and our collaborators; and
- the priority of invention of patented technology.

In addition, license agreements are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement. For example, our counterparties have in the past and may in the future dispute the amounts owed to them pursuant to payment obligations. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may experience delays in the development and commercialization of new software solutions and in our ability to market and sell existing software solutions, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Our obligations under our existing or future drug discovery collaboration agreements may limit our intellectual property rights that are important to our business. Further, if we fail to comply with our obligations under our existing or future collaboration agreements, or otherwise experience disruptions to our business relationships with our prior, current, or future collaborators, we could lose intellectual property rights that are important to our business.

We are party to collaboration agreements with biopharmaceutical companies, pursuant to which we provide drug discovery services but have no ownership rights, or only co-ownership rights, to certain intellectual property generated through the collaborations. We are also party to a research collaboration and license agreement with Novartis for the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas, which also provides for joint ownership rights to certain intellectual property generated through the collaboration in certain scenarios. We may enter into additional collaboration agreements in the future, pursuant to which we may have no ownership rights, or only co-ownership rights, to certain intellectual property generated through the future collaborations. If we are unable to obtain ownership or license of such intellectual property generated through our prior, current, or future collaborations and overlapping with, or related to, our own proprietary technology or product candidates, then our business, financial condition, results of operations, and prospects could be materially harmed.

Our existing collaboration agreements contain certain exclusivity obligations that require us to design compounds exclusively for our collaborators with respect to certain specific targets over a specified time period. Our future collaboration agreements may grant similar exclusivity rights to future collaborators with respect to target(s) that are the subject of such collaborations. Existing or future collaboration agreements may also impose diligence obligations on us. For example, existing or future collaboration agreements may impose restrictions on us from pursuing the drug development targets for ourselves or for our other current or future collaborators, thereby removing our ability to develop and commercialize, or to jointly develop and commercialize with other current or future collaborators, product candidates, and technology related to the drug development targets. Under our collaboration with Novartis, for example, we are prohibited from researching, developing, manufacturing, modifying, improving or commercializing any small molecule directed against collaboration targets ourselves or with a third party during a specified period and subject to specified exceptions. In spite of our best efforts, our prior, current, or future collaborators might conclude that we have materially breached our collaboration agreements. If these collaboration agreements are terminated, or if the underlying intellectual property, to the extent we have ownership or license of such intellectual property, fails to provide the intended exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products and technology identical to ours. This could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Disputes may arise regarding intellectual property subject to a collaboration agreement, including:

- the scope of ownership or license granted under the collaboration agreement and other interpretation related issues;
- the extent to which our technology and product candidates infringe on intellectual property of the collaborator of which we do not have ownership or license under the collaboration agreement;
- the assignment or sublicense of intellectual property rights and other rights under the collaboration agreement;
- our diligence obligations under the collaboration agreement and what activities satisfy those diligence obligations; and
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by us and our current or future collaborators.

In addition, collaboration agreements are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property, or increase what we believe to be our obligations under the relevant agreements, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have owned, co-owned, or in-licensed under the collaboration agreements prevent or impair our ability to maintain our current collaboration arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected technology or product candidates, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we are unable to obtain, maintain, enforce, and protect patent protection for our technology and product candidates or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully develop and commercialize our technology and product candidates may be adversely affected.

Our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others or may license from others, particularly patents, in the United States and other countries with respect to any proprietary technology and product candidates we develop, including SGR-1505, SGR-2921, and SGR-3515, and any trade secrets and know-how relevant to our product candidates. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our technology and any product candidates we may develop that are important to our business and by in-licensing intellectual property related to our technology and product candidates. If we are unable to obtain or maintain patent protection with respect to any proprietary technology or product candidate, our business, financial condition, results of operations, and prospects could be materially harmed.

The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, maintain, defend, or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing, and prosecution of patent applications, or to maintain, enforce, and defend the patents, covering technology that we co-own with third parties or license from third parties. Therefore, these co-owned and in-licensed patents and applications may not be prepared, filed, prosecuted, maintained, defended, and enforced in a manner consistent with the best interests of our business.

The patent position of software and biopharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has in recent years been the subject of much litigation. In addition, the scope of patent protection outside of the United States is uncertain, and laws of non-U.S. countries may not protect our rights to the same extent as the laws of the United States or vice versa. With respect to both owned and in-licensed patent rights, we cannot predict whether the patent applications we, our collaborators, and our licensors are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection from competitors.

For example, in jurisdictions outside the United States, a license may not be enforceable unless all the owners of the intellectual property agree or consent to the license. Accordingly, any actual or purported co-owner of our patent rights could seek monetary or equitable relief requiring us to pay it compensation for, or refrain from, exploiting these patents due to such co-ownership.

Furthermore, patents have a limited lifespan. In the United States, and most other jurisdictions in which we have undertaken patent filings, the natural expiration of a patent is generally twenty years after it is filed, assuming all maintenance fees are paid. Various extensions may be available, on a jurisdiction-by-jurisdiction basis; however, the life of a patent, and thus the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, patents we may own or in-license may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing drugs similar or identical to our current or future product candidates, including generic versions of such drugs.

Further, we may not be aware of all third-party intellectual property rights or prior art potentially relating to our computational platform, technology, and any product candidates we may develop. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing of the priority application, or in some cases not published at all. Therefore, neither we nor our collaborators, or our licensor can know with certainty whether either we, our collaborators, or our licensor were the first to make the inventions claimed in the patents and patent applications we own or in-license now or in the future, or that either we, our collaborators, or our licensor were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability, and commercial value of our owned, co-owned, and in-licensed patent rights are highly uncertain. Moreover, our owned, co-owned, and in-licensed pending and future patent applications may not result in patents being issued that protect our technology and product candidates, in whole or in part, or that effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our owned, co-owned, or in-licensed current or future patents and our ability to obtain, protect, maintain, defend, and enforce our patent rights, narrow the scope of our patent protection and, more generally, could affect the value of, or narrow the

scope of, our patent rights. For example, recent Supreme Court decisions have served to curtail the scope of subject matter eligible for patent protection in the United States, and many software patents have since been invalidated on the basis that they are directed to abstract ideas.

In order to pursue protection based on our pending provisional patent applications, we will need to file Patent Cooperation Treaty applications, non-U.S. applications, and/or U.S. non-provisional patent applications prior to applicable deadlines. Even then, as highlighted above, patents may never issue from our patent applications, or the scope of any patent may not be sufficient to provide a competitive advantage.

Moreover, we, our collaborators, or our licensors may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, revocation, reexamination, *inter partes* review, post-grant review, or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding, or litigation could reduce the scope of, or invalidate, our patent rights or allow third parties to commercialize our technology or product candidates and compete directly with us, without payment to us. If the breadth or strength of protection provided by our owned, co-owned, or in-licensed current or future patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, or commercialize current or future technology or product candidates.

Additionally, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if our owned, co-owned, and in-licensed current and future patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us, or otherwise provide us with any competitive advantage. The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our owned and in-licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. Such proceedings also may result in substantial cost and require significant time from our management and employees, even if the eventual outcome is favorable to us. In particular, given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Furthermore, our competitors may be able to circumvent our owned, co-owned, or in-licensed current or future patents by developing similar or alternative technologies or products in a non-infringing manner. As a result, our owned, co-owned, and in-licensed current or future patent portfolio may not provide us with sufficient rights to exclude others from commercializing technology and products similar or identical to any of our technology and product candidates.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although we generally require all of our employees, consultants and advisors, and any other third parties who have access to our proprietary know-how, information or technology to assign or grant similar rights to their inventions to us, we cannot be certain that we have executed such agreements with all parties who may have contributed to our intellectual property, nor can we be certain that our agreements with such parties will be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy.

Changes to patent laws in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of patent laws in the United States, including patent reform legislation such as the Leahy-Smith America Invents Act, or the Leahy-Smith Act, could increase the uncertainties and costs surrounding the prosecution of our owned and in-licensed patent applications and the maintenance, enforcement or defense of our owned and in-licensed issued patents. The Leahy-Smith Act includes a number of significant changes to United States patent law. These changes include provisions that affect the way patent applications are prosecuted, redefine prior art, provide more efficient and cost-effective avenues for competitors to challenge the validity of patents, and enable third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent at USPTO-administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith Act, the United States transitioned to a

first-to-file system in which, assuming that the other statutory requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. As such, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of software, biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our patent rights and our ability to protect, defend and enforce our patent rights in the future.

A number of cases decided by the U.S. Supreme Court have involved questions of when claims reciting abstract ideas, laws of nature, natural phenomena and/or natural products are eligible for a patent, regardless of whether the claimed subject matter is otherwise novel and inventive. These cases include Association for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 12-398 (2013) or Myriad; Alice Corp. v. CLS Bank International, 573 U.S. 13-298 (2014); and Mayo Collaborative Services v. Prometheus Laboratories, Inc., or Prometheus, 566 U.S. 10-1150 (2012). In response to these cases, federal courts have held numerous patents invalid as claiming subject matter ineligible for patent protection. Moreover, the USPTO has issued guidance to the examining corps on how to apply these cases during examination. As a result of these decisions, obtaining broad patents in the United States covering software innovations is more challenging than before.

In addition to increasing uncertainty with regard to our ability to obtain future patents, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on these and other decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change or be interpreted in unpredictable ways that would weaken our ability to obtain new patents or to enforce any patents that may issue to us in the future. In addition, these events may adversely affect our ability to defend any patents that may issue in procedures in the USPTO or in courts.

Obtaining and maintaining our patent protection depends on compliance with various deadlines and procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated if we fail to comply with these deadlines and requirements. We may miss a filing deadline for patent protection on these inventions.

The USPTO and foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and after issuance of any patent. In addition, periodic maintenance fees, renewal fees, annuity fees and/or various other government fees are required to be paid. While an inadvertent lapse can be cured in some cases by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market with similar or identical products or platforms, which could have a material adverse effect on our business prospects and financial condition.

Intellectual property rights do not guarantee commercial success of current or future product candidates or other business activities. Numerous factors may limit any potential competitive advantage provided by our intellectual property rights.

The degree of future protection afforded by our intellectual property rights, whether owned or in-licensed, is uncertain because intellectual property rights have limitations, and may not adequately protect our business, provide a barrier to entry against our competitors or potential competitors, or permit us to maintain our competitive advantage.

Moreover, if a third-party has intellectual property rights that cover the practice of our technology, we may not be able to fully exercise or extract value from our intellectual property rights. The following examples are illustrative:

- patent applications that we own or may in-license may not lead to issued patents;
- patents, should they issue, that we may own or in-license, may not provide us with any competitive advantages, may be narrowed in scope, or may be challenged and held invalid or unenforceable;
- others may be able to develop and/or practice technology, including compounds that are similar to the chemical compositions of our current or future product candidates, that is similar to our technology or aspects of our technology but that is not covered by the claims of any patents we may own or in-license, should any patents issue;
- third parties may compete with us in jurisdictions where we do not pursue and obtain patent protection;
- we, or our future licensors or collaborators, might not have been the first to make the inventions covered by a patent application that we own or may in-license;
- we, or our future licensors or collaborators, might not have been the first to file patent applications covering a particular invention;
- others may independently develop similar or alternative technologies without infringing, misappropriating or otherwise violating our intellectual property rights;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights, and may then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not be able to obtain and/or maintain necessary licenses on reasonable terms or at all;
- third parties may assert an ownership interest in our intellectual property and, if successful, such disputes may preclude us from exercising exclusive rights, or any rights at all, over that intellectual property;
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third-party may subsequently file a patent covering such trade secrets or know-how;
- we may not be able to maintain the confidentiality of our trade secrets or other proprietary information;
- we may not develop or in-license additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, financial condition, results of operations and prospects.

We, our prior, existing, or future collaborators, and our existing or future licensors, may become involved in lawsuits to protect or enforce our patent or other intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors and other third parties may infringe, misappropriate, or otherwise violate our, our prior, current and future collaborators', or our current and future licensors' issued patents or other intellectual property. As a result, we, our prior, current, or future collaborators, or our current or future licensor may need to file infringement, misappropriation, or other intellectual property related claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke such parties to assert counterclaims against us alleging that we infringe, misappropriate, or otherwise violate their intellectual property. In addition, in a patent infringement proceeding, such parties could assert that the patents we, our collaborators, or our licensors have asserted are invalid or unenforceable. In patent litigation in the United States, defenses alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may institute such claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post-grant review, *inter partes* review, interference proceedings, derivation

proceedings, and equivalent proceedings in non-U.S. jurisdictions (e.g., opposition proceedings). The outcome following legal assertions of invalidity and unenforceability is unpredictable.

An adverse result in any such proceeding could put one or more of our owned, co-owned, or in-licensed current or future patents at risk of being invalidated or interpreted narrowly and could put any of our owned, co-owned, or in-licensed current or future patent applications at risk of not yielding an issued patent. A court may also refuse to stop the third party from using the technology at issue in a proceeding on the grounds that our owned, co-owned, or in-licensed current or future patents do not cover such technology. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information or trade secrets could be compromised by disclosure during this type of litigation. Any of the foregoing could allow such third parties to develop and commercialize competing technologies and products in a non-infringing manner and have a material adverse impact on our business, financial condition, results of operations, and prospects.

Interference or derivation proceedings provoked by third parties, or brought by us or by our collaborators or licensor, or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct clinical trials, continue our research programs, license necessary technology from third parties, or enter into development collaborations that would help us bring any product candidates to market.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our collaborators and licensor to develop, manufacture, market, and sell any product candidates we may develop and for our collaborators, licensor, customers, and partners to use our proprietary technologies without infringing, misappropriating, or otherwise violating the intellectual property and proprietary rights of third parties. There is considerable patent and other intellectual property litigation in the software, pharmaceutical, and biotechnology industries. We may become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our technology and product candidates, including interference proceedings, post grant review, *inter partes* review, and derivation proceedings before the USPTO and similar proceedings in non-U.S. jurisdictions such as oppositions before the European Patent Office. Numerous U.S. and non-U.S. issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our technologies or product candidates that we may identify may be subject to claims of infringement of the patent rights of third parties.

The legal threshold for initiating litigation or contested proceedings is low, so that even lawsuits or proceedings with a low probability of success might be initiated and require significant resources to defend. Litigation and contested proceedings can also be expensive and time-consuming, and our adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we can. The risks of being involved in such litigation and proceedings may increase if and as any product candidates near commercialization and as we gain the greater visibility associated with being a public company. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of merit. We may not be aware of all such intellectual property rights potentially relating to our technology and product candidates and their uses, or we may incorrectly conclude that third-party intellectual property is invalid or that our activities and product candidates do not infringe such intellectual property. Thus, we do not know with certainty that our technology and product candidates, or our development and commercialization thereof, do not and will not infringe, misappropriate or otherwise violate any third party's intellectual property.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations or methods, such as methods of manufacture or methods for treatment, related to the discovery, use or manufacture of the product candidates that we may identify or related to our technologies. Because patent applications can take many years to issue, there may be currently

pending patent applications which may later result in issued patents that the product candidates that we may identify may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Moreover, as noted above, there may be existing patents that we are not aware of or that we have incorrectly concluded are invalid or not infringed by our activities. If any third-party patents were held by a court of competent jurisdiction to cover, for example, the manufacturing process of the product candidates that we may identify, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize the product candidates that we may identify. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products, be forced to indemnify our customers, licensor, or collaborators or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

We may choose to take a license or, if we are found to infringe, misappropriate, or otherwise violate a third party's intellectual property rights, we could also be required to obtain a license from such third party to continue developing, manufacturing and marketing our technology and product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us and could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product. A finding of infringement could prevent us from commercializing any product candidates or force us to cease some of our business operations, which could materially harm our business. In addition, we may be forced to redesign any product candidates, seek new regulatory approvals and indemnify third parties pursuant to contractual agreements. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on our business, financial condition, results of operations, and prospects.

We may be subject to claims by third parties asserting that our employees, consultants, or contractors have wrongfully used or disclosed confidential information of third parties, or we have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Certain of our employees, consultants, and contractors were previously employed at universities or other software or biopharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require that our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our intellectual property assignment agreements with them may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could have a material adverse effect on our competitive business position and prospects. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products, which license may not be available on commercially reasonable terms, or at all, or such license may be non-exclusive. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our management and employees.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position may be harmed.

In addition to seeking patents for any product candidates and technology, we also rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology, and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets and other proprietary technology, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors, collaborators, and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants, but we cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology. Despite these efforts, any of these parties may inadvertently or intentionally breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside of the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position may be materially and adversely harmed.

If our product candidates or any of our future product candidates obtain regulatory approval, additional competitors could enter the market with generic versions of such products, which may result in a material decline in sales of our competing products.

Under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Amendments, to the FDCA, a company may file an ANDA, seeking approval of a generic version of an approved innovator product. Under the Hatch-Waxman Amendments, a company may also submit an NDA under section 505(b)(2) of the FDCA that references the FDA's prior approval of the innovator product or preclinical studies and/or clinical trials that were not conducted by, or for, the sponsor and for which the sponsor has not obtained a right of reference. A 505(b)(2) NDA product may be for a new or improved version of the original innovator product. The Hatch-Waxman Amendments also provide for certain periods of regulatory exclusivity, which preclude FDA approval (or in some circumstances, FDA filing and review) of an ANDA or 505(b)(2) NDA.

In certain circumstances, third parties may file an ANDA or NDA under Section 505(b)(2) as early as the so-called "NCE-1" date that is one year before the expiry of the five-year period of New Chemical Entity exclusivity or more generally four years after NDA approval. The third parties are allowed to rely on the safety and effectiveness data of the innovator's product, may not need to conduct clinical trials and can market a competing version of a product after the expiration or loss of patent exclusivity or the expiration or loss of regulatory exclusivity and often charge significantly lower prices. Upon the expiration or loss of patent protection or the expiration or loss of regulatory exclusivity for a product, the major portion of revenues for that product may be dramatically reduced in a very short period of time. If we are not successful in defending our patents and regulatory exclusivities, we will not derive the expected benefit from them.

In addition to the benefits of regulatory exclusivity, an innovator NDA holder may have patents claiming the active ingredient, product formulation or an approved use of the drug, which would be listed with the product in the FDA publication "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the Orange Book. If there are patents listed in the Orange Book for the applicable, approved innovator product, a generic or 505(b)(2) sponsor that seeks to market its product before expiration of the patents must include in their applications what is known as a "Paragraph IV" certification, challenging the validity or enforceability, or claiming non-infringement, of the listed patent or patents. Notice of the certification must be given to the patent owner and NDA holder and if, within 45 days of receiving notice, either the patent owner or NDA holder sues for patent infringement, approval of the ANDA or 505(b)(2) NDA is stayed for up to 30 months.

Accordingly, if any of our product candidates that are regulated as drugs are approved, competitors could file ANDAs for generic versions of these products or 505(b)(2) NDAs that reference our products. If there are patents listed for such drug products in the Orange Book, those ANDAs and 505(b)(2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA sponsor does or does not intend to challenge the patent. We cannot predict which, if any, patents in our current portfolio or patents we may obtain in the future will be eligible for listing in the Orange Book, how any generic competitor would address such patents, whether we would sue on any such patents or the outcome of any such suit.

Risks Related to Regulatory and Other Legal Compliance Matters

Even if we complete the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time consuming and uncertain and may prevent us from obtaining approvals for the commercialization of some or all of our product candidates. As a result, we cannot predict when or if, and in which territories, we will obtain marketing approval to commercialize a product candidate.

The research, testing, manufacturing, labeling, approval, selling, marketing, promotion and distribution of products are subject to extensive regulation by the FDA and comparable foreign regulatory authorities. We are not permitted to market our product candidates in the United States or in other countries until we receive approval of a new drug application from the FDA or marketing approval from applicable regulatory authorities outside the United States. Our product candidates are in various stages of development and are subject to the risks of failure inherent in drug development. We have not submitted an application for or received marketing approval for any of our product candidates in the United States or in any other jurisdiction. We have no experience as a company in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs to assist us in this process.

The process of obtaining marketing approvals, both in the United States and abroad, is lengthy, expensive and uncertain. It may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information, including manufacturing information, to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. The FDA or other regulatory authorities may determine that our product candidates are not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use.

In addition, under the Pediatric Research Equity Act, or PREA, applications and certain types of supplements to applications must contain data to assess the safety and effectiveness of the product in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective, unless the sponsor receives a deferral or waiver from the FDA. A deferral may be granted for several reasons, including a finding that the product or therapeutic candidate is ready for approval for use in adults before pediatric trials are complete or that additional safety or effectiveness data needs to be collected before the pediatric trials begin. The applicable legislation in the European Union also requires sponsors to either conduct clinical trials in a pediatric population in accordance with a Pediatric Investigation Plan approved by the Pediatric Committee of EMA, or to obtain a waiver or deferral from the conduct of these studies by this Committee. For any of our product candidates for which we are seeking regulatory approval in the United States or the European Union, we cannot guarantee that we will be able to obtain a waiver or alternatively complete any required studies and other requirements in a timely manner, or at all, which could result in associated reputational harm and subject us to enforcement action.

The FDA may determine that we must provide additional evidence and data before approving a BLA or NDA for our product candidates. For example, the FDA reviews an application to determine whether there is "substantial evidence" to support a finding of effectiveness for the proposed product for its intended use(s), The FDA has interpreted this evidentiary standard to generally require at least two adequate and well-controlled clinical trials to establish effectiveness of a new product. Under certain circumstances, however, the FDA has indicated that a single trial with certain characteristics and additional confirmatory evidence may satisfy this standard. The FDA issued draft guidance in September 2023 that outlines considerations for relying on confirmatory evidence in lieu of a second clinical trial to demonstrate effectiveness. In the event that we submit a BLA or NDA on the basis of one clinical trial and confirmatory evidence, the FDA could determine that such information is not sufficient to support approval of the application and the agency could require us to conduct an additional trial in support of a BLA or NDA

In addition, changes in marketing approval policies during the development period, changes in or the enactment or promulgation of additional statutes, regulations or guidance or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of

these relationships to the FDA or comparable foreign regulatory authorities. The FDA or a comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

Finally, we could be adversely affected by several significant administrative law cases decided by the U.S. Supreme Court in 2024. In *Loper Bright Enterprises v. Raimondo*, for example, the court overruled *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc*., which for 40 years required federal courts to defer to permissible agency interpretations of statutes that are silent or ambiguous on a particular topic. The U.S. Supreme Court stripped federal agencies of this presumptive deference and held that courts must exercise their independent judgment when deciding whether an agency such as the FDA acted within its statutory authority under the Administrative Procedure Act, or the APA. Additionally, in *Corner Post, Inc. v. Board of Governors of the Federal Reserve System*, the court held that actions to challenge a federal regulation under the APA can be initiated within six years of the date of injury to the plaintiff, rather than the date the rule is finalized. The decision appears to give prospective plaintiffs a personal statute of limitations to challenge longstanding agency regulations. Another decision, *Securities and Exchange Commission v. Jarkesy*, overturned regulatory agencies' ability to impose civil penalties in administrative proceedings. These decisions could introduce additional uncertainty into the regulatory process and may result in additional legal challenges to actions taken by federal regulatory agencies, including the FDA and CMS. In addition to potential changes to regulations as a result of legal challenges, these decisions may result in increased regulatory uncertainty and delays and other impacts, any of which could adversely impact our business and operations.

Failure to obtain marketing approval in foreign jurisdictions would prevent any product candidates we may develop from being marketed in such jurisdictions, which, in turn, would materially impair our ability to generate revenue.

In order to market and sell any product candidates we may develop in the European Union and many other foreign jurisdictions, we or our collaborators must obtain separate marketing approvals and comply with numerous and varying local regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We or these third parties may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our product candidates in any jurisdiction, which would materially impair our ability to generate revenue.

Additionally, we could face heightened risks with respect to obtaining marketing authorization in the UK as a result of the withdrawal of the UK from the EU, commonly referred to as Brexit. The UK is no longer part of the European Single Market and EU Customs Union. As of January 1, 2025, the Medicines and Healthcare Products Regulatory Agency, or MHRA, is responsible for approving all medicinal products destined for the United Kingdom market (i.e., Great Britain and Northern Ireland). At the same time, a new international recognition procedure, or IRP, will apply, which intends to facilitate approval of pharmaceutical products in the UK. The IRP is open to applicants that have already received an authorization for the same product from one of the MHRA's specified Reference Regulators, or RRs. The RRs notably include EMA and regulators in the EU/European Economic Area member states for approvals in the EU centralized procedure and mutual recognition procedure as well as the FDA (for product approvals granted in the U.S.). However, the concrete functioning of the IRP is currently unclear. Any delay in obtaining, or an inability to obtain, any marketing approvals may force us or our collaborators to restrict or delay efforts to seek regulatory approval in the UK for our product candidates, which could significantly and materially harm our business.

In addition, foreign regulatory authorities may change their approval policies and new regulations may be enacted. For instance, the European Union pharmaceutical legislation is currently undergoing a complete review process, in the context of the Pharmaceutical Strategy for Europe initiative, launched by the European Commission in November 2020. The European Commission's proposal for revision of several legislative instruments related to medicinal products (potentially reducing the duration of regulatory data protection, revising the eligibility for expedited pathways, etc.) was

published on April 26, 2023. The proposed revisions remain to be agreed and adopted by the European Parliament and European Council and the proposals may therefore be substantially revised before adoption, which is not anticipated before early 2026. The revisions may, however, have a significant impact on the pharmaceutical industry and our business in the long term.

We expect that we will be subject to additional risks in commercializing any of our product candidates that receive marketing approval outside the United States, including tariffs, trade barriers and regulatory requirements; economic weakness, including inflation, or political instability in particular foreign economies and markets; compliance with tax, employment, immigration and labor laws for employees living or traveling abroad; foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country; and workforce uncertainty in countries where labor unrest is more common than in the United States.

We, or our collaborators, may seek approval from the FDA or comparable foreign regulatory authorities to use accelerated development pathways for our product candidates. If we, or our collaborators, are not able to use such pathways, we, or they, may be required to conduct additional clinical trials beyond those that are contemplated, which would increase the expense of obtaining, and delay the receipt of, necessary marketing approvals, if we, or they, receive them at all. In addition, even if an accelerated approval pathway is available to us, or our collaborators, it may not lead to expedited approval of our product candidates, or approval at all.

Under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations, the FDA may grant accelerated approval to a product candidate to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies, upon a determination that the product has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug. The accelerated approval pathway may be used in cases in which the advantage of a new drug over available therapy may not be a direct therapeutic advantage, but is a clinically important improvement from a patient and public health perspective. Similar risks to those described above are also applicable to any application that we, or our collaborators, may submit in other jurisdictions outside of the United States.

There can be no assurance that the FDA or foreign regulatory agencies will agree with our, or our collaborators', surrogate endpoints or intermediate clinical endpoints in any of our, or their, clinical trials, or that we, or our collaborators, will decide to pursue or submit any NDA for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that, after feedback from the FDA or comparable foreign regulatory agencies, we, or our collaborators, will continue to pursue or apply for accelerated approval or any other form of expedited development, review or approval. Furthermore, for any submission of an application for accelerated approval or application under another expedited regulatory designation, there can be no assurance that such submission or application will be accepted for filing or that any expedited development, review or approval will be granted on a timely basis, or at all.

Finally, there can be no assurance that we will satisfy all FDA requirements, including new provisions, that govern accelerated approval. For example, with passage of the FDORA in December 2022, Congress modified certain provisions governing accelerated approval of drug and biologic products. Specifically, the new legislation authorized the FDA to require a sponsor to have its confirmatory clinical trial underway before accelerated approval is awarded and to submit progress reports on its post-approval studies to FDA every six months until the study is completed. Moreover, FDORA established expedited procedures authorizing FDA to withdraw an accelerated approval if certain conditions are met, including where a required confirmatory study fails to verify and describe the predicted clinical benefit or where evidence demonstrates the product is not shown to be safe or effective under the conditions of use. The FDA may also use such procedures to withdraw an accelerated approval if a sponsor fails to conduct any required post-approval study of the product with due diligence, including with respect to "conditions specified by the Secretary." The new procedures include the provision of due notice and an explanation for a proposed withdrawal, and opportunities for a meeting with the FDA Commissioner or the FDA Commissioner's designee and a written appeal, among other things. We will need to fully comply with these and other requirements in connection with the development and approval of any product candidate that qualifies for accelerated approval.

In March 2023, the FDA issued draft guidance that outlines its thinking and approach to accelerated approval. The FDA indicated that the accelerated approval pathway is commonly used for approval of oncology drugs due to the serious and life-threatening nature of cancer. Although single-arm trials have been commonly used to support accelerated approval, a randomized controlled trial is the preferred approach as it provides a more robust efficacy and safety assessment and allows for direct comparisons to an available therapy. To that end, the FDA outlined considerations for designing, conducting, and analyzing data for trials intended to support accelerated approvals of oncology therapeutics. Subsequently, in December 2024 and January 2025, the FDA issued additional draft guidances relating to accelerated approval. These guidances describe FDA's views on what it means to conduct a confirmatory trial with due diligence and how the FDA plans to interpret whether such a study needs to be underway at the time of approval. While these guidances are currently only in draft form and will ultimately not be legally binding even when finalized, sponsors typically observe the FDA's guidance closely to ensure that their investigational products qualify for accelerated approval.

Accordingly, a failure to obtain and maintain accelerated approval or any other form of expedited development, review or approval for our product candidates, or withdrawal of a product candidate, would result in a longer time period until commercialization of such product candidate, could increase the cost of development of such product candidate and could harm our competitive position in the marketplace.

We may seek certain designations for our product candidates, including Breakthrough Therapy, Fast Track and Priority Review designations in the United States, and PRIME Designation in the European Union, but we might not receive such designations, and even if we do, such designations may not lead to a faster development or regulatory review or approval process.

We may seek certain designations for one or more of our product candidates that could expedite review and approval by the FDA. A Breakthrough Therapy product is defined as a product that is intended, alone or in combination with one or more other products, to treat a serious condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For products that have been designated as Breakthrough Therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens.

The FDA may also designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. In July 2024, the FDA granted Fast Track designation to SGR-2921 in patients with relapsed or refractory acute myeloid leukemia.

We may also seek a priority review designation for one or more of our product candidates. If the FDA determines that a product candidate is intended to treat a serious condition and, if approved, offers a significant improvement in safety or effectiveness, the FDA may designate the product candidate for priority review. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority review designation means that the goal for the FDA to review an application is six months, rather than the standard review period of ten months.

These designations are within the discretion of the FDA. Accordingly, even if we believe that one of our product candidates meets the criteria for these designations, the FDA may disagree and instead determine not to make such designation. Further, even if we receive a designation, the receipt of such designation for a product candidate may not result in a faster development or regulatory review or approval process compared to products considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualifies for these designations, the FDA may later decide that the product candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

In the European Union, we may seek PRIME designation for our product candidates in the future. PRIME is a voluntary program aimed at enhancing the EMA's role to reinforce scientific and regulatory support in order to optimize development and enable accelerated assessment of new medicines that are of major public health interest with the potential

to address unmet medical needs. The program focuses on medicines that target conditions for which there exists no satisfactory method of treatment in the European Union or even if such a method exists, it may offer a major therapeutic advantage over existing treatments. PRIME is limited to medicines under development and not authorized in the European Union and the applicant intends to apply for an initial marketing authorization application through the centralized procedure. To be accepted for PRIME, a product candidate must meet the eligibility criteria in respect of its major public health interest and therapeutic innovation based on information that is capable of substantiating the claims. The benefits of a PRIME designation include the appointment of a Committee for Medicinal Products for Human Use rapporteur to provide continued support and help to build knowledge ahead of a marketing authorization application, early dialogue and scientific advice at key development milestones, and the potential to qualify products for accelerated review, meaning reduction in the review time for an opinion on approvability to be issued earlier in the application process. PRIME enables an applicant to request parallel EMA scientific advice and health technology assessment advice to facilitate timely market access. Even if we receive PRIME designation for any of our product candidates, the designation may not result in a materially faster development process, review or approval compared to conventional EMA procedures. Further, obtaining PRIME designation does not assure or increase the likelihood of EMA's grant of a marketing authorization.

We may not be able to obtain orphan drug exclusivity for any product candidates we may develop, and even if we do, that exclusivity may not prevent the FDA or the EMA from approving other competing products.

Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug or biologic intended to treat a rare disease or condition. A similar regulatory scheme governs approval of orphan products by the EMA in the European Union. Generally, if a product candidate with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing application for the same product for the same therapeutic indication for that time period. The applicable period is seven years in the United States and ten years in the European Union. The exclusivity period in the European Union can be reduced to six years if a product no longer meets the criteria for orphan drug designation, in particular if the product is sufficiently profitable so that market exclusivity is no longer justified.

In order for the FDA to grant orphan drug exclusivity to one of our products, the FDA must find that the product is indicated for the treatment of a condition or disease with a patient population of fewer than 200,000 individuals annually in the United States. The FDA may conclude that the condition or disease for which we seek orphan drug exclusivity does not meet this standard. Even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different products can be approved for the same condition. In addition, even after an orphan drug is approved, the FDA can subsequently approve the same product for the same condition if the FDA concludes that the later product is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusivity may also be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the product to meet the needs of the patients with the rare disease or condition.

In 2017, the Congress passed the FDARA, which, among other things, codified the FDA's pre-existing regulatory interpretation, to require that a drug sponsor demonstrate the clinical superiority of an orphan drug that is otherwise the same as a previously approved drug for the same rare disease in order to receive orphan drug exclusivity. Under Omnibus legislation signed by President Trump on December 27, 2020, the requirement for a product to show clinical superiority applies to drugs and biologics that received orphan drug designation before enactment of FDARA in 2017, but have not yet been approved or licensed by the FDA.

The FDA and Congress may further reevaluate the Orphan Drug Act and its regulations and policies. This may be particularly true in light of a decision from the Court of Appeals for the 11th Circuit in September 2021 finding that, for the purpose of determining the scope of exclusivity, the term "same disease or condition" means the designated "rare disease or condition" and could not be interpreted by the FDA to mean the "indication or use." Thus, the court concluded, orphan drug exclusivity applies to the entire designated disease or condition rather than the "indication or use."

Although there have been legislative proposals to overrule this decision, they have not been enacted into law. On January 23, 2023, the FDA announced that, in matters beyond the scope of that court order, the FDA will continue to apply its existing regulations tying orphan-drug exclusivity to the uses or indications for which the orphan drug was approved. We do not know if, when, or how the FDA may change the orphan drug regulations and policies in the future, and it is uncertain how any changes might affect our business. Depending on what changes the FDA may make to its orphan drug regulations and policies, our business could be adversely impacted.

In addition, to obtain orphan drug designation in the European Union, we would need to demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, the medicinal product will be of significant benefit to those affected by that condition. There is no assurance that we would be able to meet that standard for any of our product candidates. Further, if we do obtain orphan drug designation for a candidate product in the EU, we will not be able to maintain that designation if we are not able to show, to the satisfaction of the EU regulatory authorities, that the product candidate is of significant benefit to patients over available commercial products for the indication in the EU and any additional products that are ahead of our product candidate in clinical development for the indication.

Even if we, or any collaborators we may have, obtain marketing approvals for any product candidates we may develop, the terms of approvals and ongoing regulation of our products could require the substantial expenditure of resources and may limit how we, or they, manufacture and market such products, which could materially impair our ability to generate revenue.

Any product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such medicine, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, and requirements regarding the distribution of samples to physicians and recordkeeping. For example, the holder of an approved NDA is obligated to monitor and report adverse events and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the medicine may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the medicine.

Accordingly, assuming we, or any collaborators we may have, receive marketing approval for one or more product candidates we may develop, we, and such collaborators, and our and their contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control. If we and such collaborators are not able to comply with post-approval regulatory requirements, we and such collaborators could have the marketing approvals for our products withdrawn by regulatory authorities and our, or such collaborators', ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our business, operating results, financial condition and prospects. Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize any product candidates we may develop and generate revenues.

In addition, later discovery of previously unknown problems with our medicines, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such medicines, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a medicine;
- restrictions on the distribution or use of a medicine;
- requirements to conduct post-marketing clinical trials;
- receipt of warning or untitled letters;
- withdrawal of the medicines from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of medicines;
- fines, restitution or disgorgement of profits or revenue;
- suspension or withdrawal of marketing approvals;
- suspension of any ongoing clinical trials;

- refusal to permit the import or export of our medicines;
- product seizure; and
- injunctions or the imposition of civil or criminal penalties.

Additionally, if any product candidates we may develop receive marketing approval, the FDA could require us to adopt a REMS to ensure that the benefits outweigh its risks, which may include, among other things, a medication guide outlining the risks of the product for distribution to patients and a communication plan to healthcare practitioners. Furthermore, if we or others later identify undesirable side effects caused by our product candidate, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Finally, our ability to develop and market new drug products may be impacted by litigation challenging the FDA's approval of another company's drug product. In April 2023, the U.S. District Court for the Northern District of Texas invalidated the approval by the FDA of mifepristone, a drug product which was originally approved in 2000 and whose distribution is governed by various measures adopted under a REMS. The Court of Appeals for the Fifth Circuit declined to order the removal of mifepristone from the market but did hold that plaintiffs were likely to prevail in their claim that changes allowing for expanded access of mifepristone, which the FDA authorized in 2016 and 2021, were arbitrary and capricious. In June 2024, the Supreme Court reversed that decision after unanimously finding that the plaintiffs (anti-abortion doctors and organizations) did not have standing to bring this legal action against the FDA. On October 11, 2024, the Attorneys General of three states (Missouri, Idaho and Kansas) filed an amended complaint in the district court in Texas challenging FDA's actions. On January 16, 2025, the district court agreed to allow these states to file an amended complaint and continue to pursue this challenge. Depending on the outcome of this litigation, our ability to develop new drug product candidates and to maintain approval of existing drug products could be delayed, undermined or subject to protracted litigation.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire and retain key leadership and other personnel, or otherwise prevent new product candidates and services from being developed or commercialized in a timely manner, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other government agencies, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new product candidates to be reviewed or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

In addition, disruptions may result from events similar to the COVID-19 pandemic. During the COVID-19 pandemic, a number of companies announced receipt of complete response letters due to the FDA's inability to complete required inspections for their applications. In the event of a similar public health emergency in the future, the FDA may not be able to continue its current pace and review timelines could be extended. Regulatory authorities outside the United States facing similar circumstances may adopt similar restrictions or other policy measures in response to a similar public health emergency and may also experience delays in their regulatory activities.

Further, with the change in presidential administrations in 2025, there is substantial uncertainty as to how, if at all, the new administration will seek to modify or revise the requirements and policies of the FDA and other regulatory agencies with jurisdiction over our product candidates. There is also uncertainty as to how other measures being implemented by the Trump Administration across the government will impact our activities and those of the FDA and its operations. For example, the potential loss of FDA personnel could lead to further disruptions and delays in FDA review of our product candidates. Similarly, efforts by the new administration to substantially reduce research funding by the National Institutes of Health of medical research could have substantial direct or indirect impacts on our research activities.

Accordingly, if a prolonged government shutdown or other disruption occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Future shutdowns or other disruptions could also affect other government agencies such as the SEC, which may also impact our business by delaying review of our public filings, to the extent such review is necessary, and our ability to access the public markets

Current and future legislation may increase the difficulty and cost for us to obtain reimbursement for any of our product candidates that do receive marketing approval.

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we may receive for any approved products. If reimbursement of our products is unavailable or limited in scope, our business could be materially harmed.

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the ACA. In addition, other legislative changes have been proposed and adopted since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through the first half of 2032 under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act.

The American Taxpayer Relief Act of 2012, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any of our product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

Indeed, under current legislation, the actual reductions in Medicare payments may vary up to 4%. The Consolidated Appropriations Act, which was signed into law by President Biden in December 2022, made several changes to sequestration of the Medicare program. Section 1001 of the Consolidated Appropriations Act delays the 4% Statutory Pay-As-You-Go Act of 2010 sequester for two years, through the end of 2024. Triggered by enactment of the American Rescue Plan Act of 2021, the 4% cut to the Medicare program would have taken effect in January 2023. The Consolidated Appropriations Act's health care offset title includes Section 4163, which extends the 2% Budget Control Act of 2011 Medicare sequester for six months into 2032 and lowers the payment reduction percentages in 2030 and 2031.

Since enactment of the ACA, there have been and continue to be, numerous legal challenges and Congressional actions to repeal and replace provisions of the law. For example, with enactment of the Tax Cuts for Jobs Act in 2017, Congress repealed the "individual mandate." The repeal of this provision, which requires most Americans to carry a minimal level of health insurance, became effective in 2019. In June 2021, the United States Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the statute.

Litigation and legislation over the ACA are likely to continue, with unpredictable and uncertain results. During the first Trump Administration, the Congress and administration sought to overturn the ACA and related measures. Shortly

after taking office in January 2025, President Trump revoked numerous executive orders issued by President Biden, including at least two executive orders that were designed to further implement the ACA. We anticipate similar efforts to undermine the ACA, and the accompanying uncertainty, for the foreseeable future

In the European Union, on December 13, 2021, Regulation No 2021/2282 on Health Technology Assessment, or HTA, amending Directive 2011/24/EU, was adopted. While the HTA entered into force in January 2022, it will only begin to apply from January 2025 onwards, with preparatory and implementation-related steps to take place in the interim. Once applicable, it will have a phased implementation depending on the concerned products. The HTA intends to boost cooperation among European Union member states in assessing health technologies, including new medicinal products as well as certain high-risk medical devices, and provide the basis for cooperation at the European Union level for joint clinical assessments in these areas. It will permit European Union member states to use common HTA tools, methodologies, and procedures across the European Union, working together in four main areas, including joint clinical assessment of the innovative health technologies with the highest potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual European Union member states will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technology, and making decisions on pricing and reimbursement.

We expect that these healthcare reforms, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and additional downward pressure on the price that we receive for any approved product and/or the level of reimbursement physicians receive for administering any approved product we might bring to market. Reductions in reimbursement levels may negatively impact the prices we receive or the frequency with which our products are prescribed or administered. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. Accordingly, such reforms, if enacted, could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain marketing approval and may affect our overall financial condition and ability to develop or commercialize product candidates.

The prices of prescription pharmaceuticals in the United States and foreign jurisdictions are subject to considerable legislative and executive actions and could impact the prices we obtain for our products, if and when licensed, as well as impact our ability to find collaborators for our drug discovery programs on commercially acceptable terms.

The prices of prescription pharmaceuticals have been the subject of considerable discussion in the United States. There have been several Congressional inquiries, as well as proposed and enacted state and federal legislation designed to, among other things, bring more transparency to pharmaceutical pricing, review the relationship between pricing and manufacturer patient programs, and reduce the costs of pharmaceuticals under Medicare and Medicaid.

In addition, in October 2020, the Department of Health and Human Services, or HHS, and the FDA published a final rule allowing states and other entities to develop a Section 804 Importation Program to import certain prescription drugs from Canada into the United States. That regulation was challenged in a lawsuit by the Pharmaceutical Research and Manufacturers of America, or PhRMA, but the case was dismissed by a federal district court in February 2023 after the court found that PhRMA did not have standing to sue HHS. Several states have passed laws allowing for the importation of drugs from Canada and a few states have passed legislation establishing working groups to examine the impact of a state importation program. Several states have submitted Section 804 Importation Program proposals to the FDA. In January 2024, the FDA approved Florida's plan for Canadian drug importation. Florida now has authority to import certain drugs from Canada for a period of two years once certain conditions are met. Florida will first need to submit a pre-import request for each drug selected for importation, which must be approved by the FDA. Florida will also need to relabel the drugs and perform quality testing of the products to meet FDA standards.

Further, on November 20, 2020, HHS finalized a regulation that would eliminate the current safe harbor for Medicare drug rebates and create new safe harbors for beneficiary point-of-sale discounts and pharmacy benefit manager service fees. It originally was set to go into effect on January 1, 2022, but with passage of the IRA has been delayed by Congress until January 1, 2032.

The IRA has implications for Medicare Part D, which is a program available to individuals who are entitled to Medicare Part A or enrolled in Medicare Part B to give them the option of paying a monthly premium for outpatient prescription drug coverage. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (beginning in 2026), with prices that can be negotiated subject to a cap; imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); and replaces the

Part D coverage gap discount program with a new discounting program (beginning in 2025). The IRA permits the Secretary of the HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years.

Specifically, with respect to price negotiations, Congress authorized Medicare to negotiate lower prices for certain costly single-source drug and biologic products that do not have competing generics or biosimilars and are reimbursed under Medicare Part B and Part D. CMS may negotiate prices for ten high-cost drugs paid for by Medicare Part D starting in 2026, followed by 15 Part D drugs in 2027, 15 Part B or Part D drugs in 2028, and 20 Part B or Part D drugs in 2029 and beyond. This provision applies to drug products that have been approved for at least 9 years and biologics that have been licensed for 13 years, but it does not apply to drugs and biologics that have been approved for a single rare disease or condition.

The first cycle of negotiations for the Medicare Drug Price Negotiation Program commenced in the summer of 2023. On August 15, 2024, the HHS published the results of the first Medicare drug price negotiations for ten selected drugs that treat a range of conditions, including diabetes, chronic kidney disease, and rheumatoid arthritis. The prices of these ten drugs will become effective January 1, 2026. On January 17, 2025, CMS announced its selection of 15 additional drugs covered by Part D for the second cycle of negotiations. Thereafter, following the change in administrations, CMS issued a public statement on January 29, 2025, declaring that lowering the cost of prescription drugs is a top priority of the new administration and CMS is committed to considering opportunities to bring greater transparency in the negotiation program. The second cycle of negotiations with participating drug companies will occur during 2025, and any negotiated prices for this second set of drugs will be effective starting January 1, 2027.

We would be fully at risk of government action if our products or those of our partners are the subject of Medicare price negotiations. Moreover, given the risk that could be the case, these provisions of the IRA may also further heighten the risk that we would not be able to achieve the expected return on our drug products or full value of our patents protecting our products if prices are set after such products have been on the market for nine years.

Furthermore, these provisions of the IRA may cause some companies to shift their research portfolio and priorities more towards large molecules (*i.e.*, biologics such as antibodies) rather than small molecules. Although we do have applications of our technology to biologics, we do not yet have the same validation or value for large molecule discovery as we do for small molecule discovery. Accordingly, if the IRA causes the pharmaceutical industry to pivot investment and portfolio strategy away from small molecule drug discovery and towards biologics, it could have a material adverse effect on the expected value of our drug discovery programs and also on the perceived value of using our software to develop product candidates. In addition, if investment levels and development interest in small molecule therapeutics decreased, it may become more difficult for us to enter into collaborations on commercially acceptable terms, or at all, for our proprietary drug discovery programs. If we are unable to find suitable collaborators and/or partners for our programs, we may be forced to fund and undertake development or commercialization activities on our own for more programs than we would otherwise expect to, or plan for, which could adversely affect our business and financial condition.

On June 6, 2023, Merck & Co., Inc., filed a lawsuit against HHS and CMS asserting that, among other things, the IRA's Drug Price Negotiation Program for Medicare constitutes an uncompensated taking in violation of the Fifth Amendment of the U.S. Constitution. Subsequently, other parties, including the U.S. Chamber of Commerce and other pharmaceutical companies also filed lawsuits in various courts with similar constitutional claims against HHS and CMS. HHS has generally won substantive disputes in these cases, and various federal district court judges have expressed skepticism regarding the merits of the legal arguments being pursued by the pharmaceutical industry. Certain of these cases are now on appeal, and on October 30, 2024, the Court of Appeals for the Third Circuit heard oral argument in three of these cases. We expect that litigation involving these and other provisions of the IRA will continue, with unpredictable and uncertain results.

Further, the legislation subjects drug manufacturers to civil monetary penalties and a potential excise tax for failing to comply with the legislation by offering a price that is not equal to or less than the negotiated "maximum fair price" under the law or for taking price increases that exceed inflation. In addition to the drug price negotiation program, the IRA established inflation rebate programs under Medicare Part B and Part D. These programs require manufacturers to pay rebates to Medicare if they raise their prices for certain Part B and Part D drugs faster than the rate of inflation. On December 9, 2024, with issuance of its 2025 Physician Fee Schedule final regulation, CMS finalized its rules governing the IRA inflation rebate programs. The new law also caps Medicare out-of-pocket drug costs at an estimated $2,000 a year beginning in 2025.

Accordingly, while it is currently unclear how the IRA will be effectuated, we cannot predict with certainty what impact any federal or state health reforms will have on us, but such changes could impose new or more stringent regulatory requirements on our activities or result in reduced reimbursement for approved products, any of which could adversely affect our business, results of operations and financial condition.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare organizations and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing. We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures. This may be increasingly true with respect to products approved pursuant to the accelerated approval pathway. State Medicaid programs and other payers are developing strategies and implementing significant coverage barriers, or refusing to cover these products outright, arguing that accelerated approval drugs have insufficient or limited evidence despite meeting the FDA's standards for accelerated approval.

In the European Union, similar political, economic and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In markets outside of the United States and the European Union, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In many countries, including those of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control and access. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we or our collaborators may be required to conduct a clinical trial that compares the cost-effectiveness of our product to other available therapies. If reimbursement is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be materially harmed.

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition, or results of operations.

The regulatory framework for the collection, use, safeguarding, sharing, transfer, and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, virtually every jurisdiction in which we operate has established its own data security and privacy frameworks with which we must comply. For example, the collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data and employee data, is subject to the European Union General Data Protection Regulation, or the GDPR, which took effect across all member states of the European Economic Area, or EEA, in May 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR increases our obligations with respect to any clinical trials conducted in the EEA by expanding the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial subjects and investigators. In addition, the GDPR also imposes strict rules on the transfer of personal data to countries outside the European Union, including the United States and, as a result, increases the scrutiny that such rules should apply to transfers of personal data from any clinical trial sites located in the EEA to the United States. In October 2022, President Biden signed an executive order to implement the EU-U.S. Data Privacy Framework, which serves as a replacement to the EU-U.S. Privacy Shield. The European Commission initiated the process to adopt an adequacy decision for the EU-U.S. Data Privacy Framework in December 2022, and the European Commission adopted the adequacy decision on July 10, 2023. The adequacy decision permits companies in the United States who self-certify to the EU-U.S. Data Privacy Framework to rely on it as a valid data transfer mechanism for data transfers from the European Union to the United States. However, some privacy advocacy groups have already suggested that they will be challenging the EU-U.S. Data Privacy Framework. If these challenges are successful, they may not only impact the EU-U.S. Data Privacy Framework, but also further limit the viability of the

standard contractual clauses and other data transfer mechanisms. The uncertainty around this issue has the potential to impact our business internationally.

Following the withdrawal of the United Kingdom from the European Union, the United Kingdom's Data Protection Act 2018 applies to the processing of personal data that takes place in the United Kingdom and includes parallel obligations to those set forth by GDPR. In relation to data transfers, both the United Kingdom and the European Union have determined, through separate "adequacy" decisions, that data transfers between the two jurisdictions are in compliance with the United Kingdom's Data Protection Act 2018 and the GDPR, respectively. In October 2023, the United Kingdom and the United States implemented a U.S.-U.K. "data bridge," which functions similarly to the EU-U.S. Data Privacy Framework and provides an additional legal mechanism for companies to transfer data from the United Kingdom to the United States. Any changes or updates to these developments have the potential to impact our business.

The GDPR also permits data protection authorities to require destruction of improperly gathered or used personal information and/or impose substantial fines for violations of the GDPR, which can be up to four percent of global revenues or 20 million Euros, whichever is greater, and confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that European Union member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric, or health data.

Given the breadth and depth of changes in data protection obligations, preparing for and complying with the GDPR's requirements is rigorous and time intensive and requires significant resources and a review of our technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors, or consultants that process or transfer personal data collected in the European Union. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personal information, could require us to change our business practices and put in place additional compliance mechanisms, may interrupt or delay our development, regulatory and commercialization activities and increase our cost of doing business, and could lead to government enforcement actions, private litigation, and significant fines and penalties against us, and could have a material adverse effect on our business, financial condition, or results of operations.

Similar privacy and data security requirements are either in place or underway in the United States. There are a broad variety of data protection laws that may be applicable to our activities, and a range of enforcement agencies at both the state and federal levels that can review companies for privacy and data security concerns. The Federal Trade Commission, or FTC, and state Attorneys General are aggressive in reviewing privacy and data security protections for consumers. For example, the FTC has been particularly focused on the unpermitted processing of health and genetic data through its recent enforcement actions and is expanding the types of privacy violations that it interprets to be "unfair" under Section 5 of the Federal Trade Commission Act, as well as the types of activities it views to trigger the Health Breach Notification Rule (which the FTC also has the authority to enforce). The agency is also in the process of developing rules related to commercial surveillance and data security that may impact our business. We will need to account for the FTC's evolving rules and guidance for proper privacy and data security practices in order to mitigate our risk for a potential enforcement action, which may be costly. If we are subject to a potential FTC enforcement action, we may be subject to a settlement order that requires us to adhere to very specific privacy and data security practices, which may impact our business. We may also be required to pay fines as part of a settlement (depending on the nature of the alleged violations). If we violate any consent order that we reach with the FTC, we may be subject to additional fines and compliance requirements.

States are also active in creating specific rules relating to the processing of personal information. For example, the California Consumer Privacy Act, or CCPA, which went into effect on January 1, 2020, is creating similar risks and obligations as those created by GDPR. Because of this, we may need to engage in additional activities (e.g., data mapping) to identify the personal information we are collecting and the purposes for which such information is collected. In addition, we will need to ensure that our policies recognize the rights granted to consumers (as that phrase is broadly defined in the CCPA and can include business contact information), including granting consumers the right to opt-out of the sale of their personal information. Many other states are considering similar legislation. In November 2020, California voters passed a ballot initiative for the California Privacy Rights Act, or the CPRA, which went into effect on January 1, 2023 and significantly expanded the CCPA to incorporate additional GDPR-like provisions including requiring that the use, retention, and sharing of personal information of California residents be reasonably necessary and proportionate to the purposes of collection or processing, granting additional protections for sensitive personal information, and requiring greater disclosures related to notice to residents regarding retention of information.

In addition to California, a number of other states have passed comprehensive privacy laws similar to the CCPA and CPRA. These laws are either in effect or will go into effect sometime before the end of 2026. Like the CCPA and CPRA, these laws create obligations related to the processing of personal information, as well as special obligations for the processing of "sensitive" data (which includes health data in some cases). Some of the provisions of these laws may apply to our business activities. There are also states that are considering or have already passed comprehensive privacy laws that will go into effect in the near future. There are also states that are specifically regulating health information that may affect our business. For example, Washington state recently passed a health privacy law that will regulate the collection and sharing of health information, and the law also has a private right of action, which further increases the relevant compliance risk. These laws may impact our business activities, including our identification of research subjects, relationships with business partners and ultimately the marketing and distribution of our products.

Plaintiffs' lawyers are also increasingly using privacy-related statutes at both the state and federal level to bring lawsuits against companies for their data-related practices. In particular, there have been a significant number of cases filed against companies for their use of pixels and other web trackers. These cases often allege violations of the California Invasion of Privacy Act and other state laws regulating wiretapping, as well as the federal Video Privacy Protection Act. The rise in these types of lawsuits creates potential risk for our business.

Even if we are not determined to have violated these laws, investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our reputation and our business.

We, and the collaborators who use our computational platform, may be subject to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security, and other healthcare laws and regulations. Failure to comply with such laws and regulations, may result in substantial penalties.

We, and the collaborators who use our computational platform, may be subject to broadly applicable healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell, and distribute our software solutions and any products for which we obtain marketing approval. Such healthcare laws and regulations include, but are not limited to, the federal health care Anti-Kickback Statute; federal civil and criminal false claims laws, such as the federal False Claims Act; the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA; the Federal Food, Drug, and Cosmetic Act; the federal Physician Payments Sunshine Act; and analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws and transparency laws.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. Violations of applicable healthcare laws and regulations may result in significant civil, criminal, and administrative penalties, damages, disgorgement, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements, and/or oversight if a corporate integrity agreement or similar agreement is executed to resolve allegations of non-compliance with these laws and the curtailment or restructuring of operations. In addition, violations may also result in reputational harm, diminished profits, and future earnings.

We are subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws, and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, be precluded from developing, manufacturing, and selling certain products outside the United States or be required to develop and implement costly compliance programs, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the U.K. Bribery Act 2010, or Bribery Act, the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Bribery Act, FCPA, and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed, or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. Compliance with the FCPA, in particular, is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the biopharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, FCPA, or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. If we further expand our operations outside of the United States, we will need to dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union, including applicable export control regulations, economic sanctions on countries and persons, customs requirements, and currency exchange regulations, collectively referred to as the Trade Control laws. In addition, various laws, regulations, and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

We will also need to carefully navigate the current administration's implementation of the FCPA and related statutes. On February 10, 2025, President Trump issued an Executive Order directing the Attorney General to review the guidelines and policies governing FCPA investigations and enforcement actions. Per the Executive Order, this review will result in new DOJ FCPA guidelines intended to enhance American economic competitiveness and to safeguard national security interests. During the 180-day review period, any new FCPA investigations and enforcement actions are to be suspended absent authorization from the Attorney General, and all existing FCPA investigations and enforcement actions will be reviewed. Additionally, after the Attorney General issues revised guidelines, the Executive Order directs her to assess whether "remedial measures" related to past FCPA actions are warranted.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA, or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA, and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations, and liquidity. The U.S. Securities and Exchange Commission, or SEC, also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions. Any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by the United Kingdom, U.S., or other authorities could also have an adverse impact on our reputation, our business, results of operations, and financial condition.

Changes in U.S. and international trade policies, particularly with respect to China, may adversely impact our business and operating results.

The U.S. government has recently made statements and taken certain actions that may lead to potential changes to U.S. and international trade policies, including imposing several rounds of tariffs and export control restrictions affecting certain products manufactured in China. In March 2018, the Trump administration announced the imposition of tariffs on steel and aluminum entering the United States and in June 2018, the Trump administration announced further tariffs targeting goods imported from China. Recently both China and the United States have each imposed tariffs indicating the potential for further trade barriers, including the U.S. Commerce Department adding numerous Chinese entities to its "unverified list," which requires U.S. exporters to go through more procedures before exporting goods to such entities. It is unknown whether and to what extent new tariffs, export controls, or other new laws or regulations will be adopted, or the effect that any such actions would have on us or our industry, and it is unclear whether the Biden administration will work to reverse these measures or pursue similar policy initiatives.

Further, some of our manufacturers and suppliers are located in China. Trade tensions and conflicts between the United States and China have been escalating in recent years and, as such, we are exposed to the possibility of product supply disruption and increased costs and expenses in the event of changes to the laws, rules, regulations and policies of the governments of the United States or China, or due to geopolitical unrest and unstable economic conditions. Certain Chinese biotechnology companies may become subject to trade restrictions, sanctions, other regulatory requirements or proposed legislation by the U.S. government, which could restrict or even prohibit our ability to work with such entities,

thereby potentially disrupting their supply of material to us. For example, in February 2024, U.S. lawmakers called for investigations into and the imposition of possible economic sanctions against Chinese biotechnology companies WuXi AppTec and WuXi Biologics, or collectively WuXi, over alleged ties to the Chinese military.

In addition, in September 2024, the U.S. House or Representatives passed the BIOSECURE Act (H.R. 7085), and the Senate has advanced a substantially similar bill, which legislation, if passed by the Senate and enacted into law, would restrict the ability of U.S. biotechnology companies like us to purchase services or products from, or otherwise collaborate with, specifically named Chinese biotechnology companies, including WuXi, and authorizes the U.S. government to impose such restrictions on entities' transactions with additional Chinese biotechnology companies as a condition of U.S. government contract, grant and loan funding. If these bills become law, or similar laws are passed, they would have the potential to severely restrict the ability of companies to contract with certain Chinese biotechnology companies of concern without losing the ability to contract with, or otherwise received funding from, the U.S. government. Such disruptions could have adverse effects on the development of our product candidates and our business operations.

Our employees, independent contractors, consultants, and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading laws, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, consultants, and vendors. Misconduct by these partners could include intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately, or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. This could include violations of HIPAA, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the European Union Data Protection Directive. We are also exposed to risks in connection with any insider trading violations by employees or others affiliated with us. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards, regulations, guidance, or codes of conduct. Furthermore, our employees may, from time to time, bring lawsuits against us for employment issues, including injury, discrimination, wage and hour disputes, sexual harassment, hostile work environment, or other employment issues. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

Our internal information technology systems, or those of our third-party vendors, contractors, or consultants, may fail or suffer security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our services, compromise sensitive information related to our business, or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.

We are increasingly dependent upon information technology systems, infrastructure, and data to operate our business. In the ordinary course of business, we collect, store, and transmit confidential information (including but not limited to intellectual property, proprietary business information, and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party vendors and other contractors and consultants who have access to our confidential information.

Despite the implementation of security measures, given the size and complexity of our internal information technology systems and those of our third-party vendors and other contractors and consultants, and the increasing amounts of confidential information that they maintain, our information technology systems are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war, and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, third-party vendors, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information), which may compromise our system infrastructure, or that of our third-party vendors and other contractors and

consultants or lead to data leakage. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity, and sophistication of attempted attacks and intrusions from around the world have increased. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures that are effective against all such security threats. For example, third parties have in the past and may in the future illegally pirate our software and make that software publicly available on peer-to-peer file sharing networks or otherwise. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or those of our third-party vendors and other contractors and consultants, or inappropriate disclosure of confidential or proprietary information, we could incur liability and reputational damage and the further development and commercialization of our software could be delayed. The costs related to significant security breaches or disruptions could be material and exceed the limits of the cybersecurity insurance we maintain against such risks. If the information technology systems of our third-party vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring.

While we have not experienced any significant system failure, accident, or security breach to date, and believe that our data protection efforts and our investment in information technology reduce the likelihood of such incidents in the future, we cannot assure you that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems, or those of our third-party vendors and other contractors and consultants, or other cyber incidents that could have a material adverse effect upon our reputation, business, operations, or financial condition. For example, if such an event were to occur and cause interruptions in our operations, or those of our third-party vendors and other contractors and consultants, it could result in a material disruption of our programs and the development of our services and technologies could be delayed. Furthermore, significant disruptions of our internal information technology systems or those of our third-party vendors and other contractors and consultants, or security breaches could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. For example, any such event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our customers or employees, could harm our reputation directly, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business. Further, sophisticated cyber attackers (including foreign adversaries engaged in industrial espionage) are skilled at adapting to existing security technology and developing new methods of gaining access to organizations' sensitive business data, which could result in the loss of sensitive information, including trade secrets. For example, attackers have used artificial intelligence and machine learning to launch more automated, targeted and coordinated attacks against targets. Additionally, actual, potential, or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts and consultants.

Climate change-related risks and uncertainties and legal or regulatory responses to climate change could negatively impact our business, financial condition, results of operations, prospects and reputation.

We are subject to increasing climate-related risks and uncertainties, many of which are outside of our control. Climate change may result in more frequent severe weather events, potential changes in precipitation patterns, and extreme variability in weather patterns, which can disrupt our operations as well as those of our vendors, suppliers, and collaborators.

Climate-related macroeconomic trends, including the transition to a lower carbon economy, the effects of carbon pricing, changes in public sentiment, and the potential enactment of climate-related rules and regulations, continue to evolve and may increase our legal, compliance and business costs. Further, increases in climate-related litigation instituted against companies, the cost of climate-related insurance premiums, and the implementation of a more robust business continuity plan and a disaster recovery plan could increase the costs necessary to maintain our operations or achieve any sustainability commitments we may make, which could harm our business.

We annually assess the impacts of our operations and of our customers on the climate. The execution and achievement of any future commitments that we may make or of any goals that we may set relating to climate change are subject to risks and uncertainties. Given the focus on sustainable investing and corporate sustainability, if we fail to adopt policies and practices to enhance environmental initiatives, our reputation and our customer and stakeholder relationships could be negatively impacted, which may make it more difficult for us to compete effectively or to gain access to financing on acceptable terms when needed, which would negatively affect our business, financial condition, results of operations, prospects, and reputation.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.

We are highly dependent on the research and development, clinical, financial, operational, scientific, software engineering, and other business expertise of our executive officers, as well as the other principal members of our management, scientific, clinical, and software engineering teams. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees.

The loss of the services of our executive officers or other key employees could impede the achievement of our development and sales goals in our software business and the achievement of our research, development, and commercialization objectives in our drug discovery business. In either case, the loss of the services of our executive officers or other key employees could seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals with the breadth of skills and experience required to successfully develop, gain regulatory approval of, and commercialize products in the life sciences industry.

Recruiting and retaining qualified scientific, clinical, manufacturing, accounting, legal, and sales and marketing personnel, as well as software engineers and computational chemists, will also be critical to our success. In the technology industry, there is substantial and continuous competition for engineers with high levels of expertise in designing, developing, and managing software and related services, as well as competition for sales executives, data scientists, and operations personnel. Competition to hire these individuals is intense, and we may be unable to hire, train, retain, or motivate these key personnel on acceptable terms given the competition among numerous biopharmaceutical and technology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors to assist us in formulating our research and development and commercialization strategy and advancing our computational platform. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited and our business would be adversely affected.

We are pursuing multiple business strategies and expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in managing our multiple business units and our growth, which could disrupt our operations.

Currently, we are pursuing multiple business strategies simultaneously, including activities in research and development, software sales, and collaborative and proprietary drug discovery. We believe pursuing these multiple business strategies offers financial and operational synergies, but these diversified operations place increased demands on our limited resources. Furthermore, we have recently experienced, and we expect to continue to experience, significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, clinical and regulatory affairs. To manage our multiple business units and our ongoing and anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to our limited financial resources and our management team’s limited attention and limited experience in managing a company with such ongoing and anticipated growth, we may not be able to effectively manage our multiple business units and the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations has led to and may continue to lead to significant costs and may divert our management and business development resources. Our management, personnel, and systems may not be adequate to support this future growth. Any inability to manage our multiple business units and growth could delay the

execution of our business plans or disrupt our operations and the synergies we believe currently exist between our business units. In addition, adverse developments in one of these business units may disrupt these synergies.

Risks Related to Ownership of Our Common Stock

An active trading market for our common stock may not be sustained.

Our shares of common stock began trading on the Nasdaq Global Select Market on February 6, 2020. Prior to February 6, 2020, there was no public market for our common stock, and we cannot assure you that an active trading market for our shares will be sustained. As a result, it may be difficult for our stockholders to sell their shares without depressing the market price of our common stock, or at all.

Our executive officers, directors, and principal stockholders, if they choose to act together, have the ability to influence all matters submitted to stockholders for approval.

As of February 19, 2025, our executive officers and directors and our stockholders who beneficially owned more than 5% of our outstanding common stock, in the aggregate, beneficially owned shares representing approximately 51.0% of our common stock and all of our limited common stock, or, if the holder of our limited common stock exercised its right to convert each share of its limited common stock for one share of our common stock, approximately 57.1% of our common stock. As a result, if these stockholders were to choose to act together, they would be able to influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would influence the election of directors and approval of any merger, consolidation, or sale of all or substantially all of our assets.

This concentration of ownership control may:

- delay, defer, or prevent a change in control;
- entrench our management and board of directors; or
- delay or prevent a merger, consolidation, takeover, or other business combination involving us that other stockholders may desire.

This concentration of ownership may also adversely affect the market price of our common stock.

The price of our common stock is volatile and fluctuates substantially, which could result in substantial losses for our stockholders.

Our stock price has been, and is likely to continue to be, volatile. Since our initial public offering in February 2020 and through February 19, 2025, the intraday price of our common stock has fluctuated from a low of $15.85 to a high of $117.00. As a result of volatility, our stockholders may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- our investment in, and the success of, our software solutions;
- the success of our research and development efforts for our proprietary drug discovery programs;
- initiation and progress of preclinical studies and clinical trials for any product candidates that we may develop;
- results of or developments in preclinical studies and clinical trials of any product candidates we may develop or those of our competitors or potential collaborators;
- the success of our drug discovery collaborators and any milestone or other payments we receive from such collaborators;
- the success of competitive products or technologies;
- regulatory or legal developments in the United States and other countries;
- the recruitment or departure of key personnel;
- variations in our financial results or the financial results of companies that are perceived to be similar to us;

- guidance or announcements by us with respect to our anticipated financial or operational performance;
- sales of common stock by us, our executive officers, directors or principal stockholders, or others, or the anticipation of such sales;
- equity or debt financing;
- market conditions in the biopharmaceutical sector;
- general economic, industry, and market conditions;
- the societal and economic impact of public health epidemics; and
- the other factors described in this "Risk Factors" section.

In the past, following periods of volatility in the market price of a company's securities, securities class-action litigation has often been instituted against that company. Any lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment. We also may decide to settle lawsuits on unfavorable terms. Any such negative outcome could result in payments of substantial damages or fines, damage to our reputation, or adverse changes to our offerings or business practices. Such litigation may also cause us to incur other substantial costs to defend such claims and divert management's attention and resources.

Our actual operating results may differ significantly from our guidance.

We have released, and may in the future release, guidance in our annual or quarterly earnings conference calls or releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of such guidance. Our guidance, which includes forward-looking statements, has been and will be based on projections prepared by our management. Neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person expresses any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we have released, and would continue to release, guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Our actual results have, and may in the future, vary from our guidance and the variations may be material.

We and our collaborators may not achieve projected discovery and development milestones and other anticipated key events in the time frames that we or they announce, which could have an adverse impact on our business and could cause our stock price to decline.

From time to time, we expect that we will make public statements regarding the expected timing of certain milestones and key events, such as the commencement and completion of preclinical and IND-enabling studies and clinical trials in our proprietary drug discovery programs as well as developments and milestones under our collaborations. For example, Structure Therapeutics has also made public statements regarding its expectations for the development of programs under collaboration with us, and Structure Therapeutics and other collaborators may in the future make additional statements about their goals and expectations related to collaborations with us. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our current and future collaborators' drug discovery and development programs, the amount of time, effort, and resources committed by us and our current and future collaborators, and the numerous uncertainties inherent in the development of drugs. As a result, there can be no assurance that our or our current and future collaborators' programs will advance or be completed in the time frames we or they announce or expect. If we or any collaborators fail to achieve one or more of these milestones or other key events as planned, our business could be materially adversely affected and the price of our common stock could decline.

If securities analysts do not publish or cease publishing research or reports or publish misleading, inaccurate or unfavorable research about our business or if they publish negative evaluations of our stock, the price and trading volume of our stock could decline.

The market price and trading volume for our common stock relies, in part, on the research and reports that industry or financial analysts publish about us or our business. We do not have control over these analysts. There can be no assurance that existing analysts will continue to cover us or that new analysts will begin to cover us. There is also no assurance that any covering analyst will provide favorable coverage. Although we have obtained analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock or publish inaccurate or unfavorable research about our business, or provides more favorable relative recommendations about our competitors, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price and trading volume to decline.

We have broad discretion in the use of our cash, cash equivalents, and marketable securities and may not use them effectively.

Our management has broad discretion in the deployment and use of our cash, cash equivalents, and marketable securities and could use such funds in ways that do not improve our results of operations or enhance the value of our common stock or in ways that our stockholders may not agree with. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations, and prospects and could cause the price of our common stock to decline.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be the sole source of gain for our stockholders.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all of our future earnings to fund the development and expansion of our business. Any determination to pay dividends in the future will be at the discretion of our board of directors. As a result, capital appreciation of our common stock, if any, will be the sole source of gain for our stockholders for the foreseeable future.

Sales of a substantial number of shares of our common stock in the public market could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock, impair our ability to raise capital through the sale of additional equity securities, and make it more difficult for our stockholders to sell their common stock at a time and price that they deem appropriate. As of February 19, 2025, we had outstanding 63,874,200 shares of common stock and 9,164,193 shares of limited common stock. All of our outstanding shares of common stock, including shares of common stock issuable upon the conversion of shares of our limited common stock, are available for sale in the public market, subject only to the restrictions of Rule 144 under the Securities Act of 1933, as amended, in the case of our affiliates. In addition, certain of our executive officers, directors and affiliated stockholders have entered or may enter into Rule 10b5-1 plans providing for sales of shares of our common stock from time to time. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the executive officer, director or affiliated stockholder when entering into the plan, without further direction from the executive officer, director or affiliated stockholder. A Rule 10b5-1 plan may be amended or terminated in some circumstances. Our executive officers, directors and affiliated stockholders also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

We have also filed a universal shelf registration statement on Form S-3 which allows us to offer and sell an indeterminate number of shares of common stock, preferred stock, depositary shares or warrants, or an indeterminate principal amount of debt securities, from time to time pursuant to one or more offerings at prices and terms to be determined at the time of the sale. Moreover, certain holders of our common stock and our limited common stock have rights, subject to specified conditions, to include their shares in registration statements that we may file for ourselves or other stockholders and may require us to file Form S-3 registration statements covering their shares.

We are party to an amended and restated sales agreement with Leerink Partners LLC (formerly SVB Securities LLC), or Leerink Partners, as sales agent, with respect to an "at the market" offering program, or the ATM, under which we could offer and sell, from time to time pursuant to our Form S-3, shares of our common stock having an aggregate offering price of up to $250.0 million, through Leerink Partners. The number of shares that are sold by Leerink Partners after we

request that sales be made will fluctuate based on the market price of our common stock during the sales period and limits we set with Leerink Partners. Therefore, it is not possible to predict the number of shares that will be ultimately issued by us, if any, pursuant to the amended and restated sales agreement. As of December 31, 2024, we have sold 323,085 shares of common stock for total net proceeds of $8.7 million, and have $241.1 million of common stock remaining available for sale under the ATM.

We also have filed registration statements on Form S-8 to register shares of common stock that we may issue under our equity compensation plans. Shares registered under such registration statements are available for sale in the public market upon issuance, subject to volume limitations applicable to affiliates, vesting arrangements and exercise of options.

We have incurred and will continue to incur increased costs as a result of operating as a public company, and our management has devoted and will continue to be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, we have incurred and will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company. The Securities Exchange Act of 1934, as amended, or the Exchange Act, Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote and will need to continue to devote a substantial amount of time and resources to these compliance initiatives, potentially at the expense of other business concerns, which could harm our business, financial condition, results of operations, and prospects. Moreover, these rules and regulations have increased and will continue to increase our legal and financial compliance costs, and have made and will continue to make some activities more time-consuming and costly compared to when we were a private company.

We frequently evaluate our compliance with these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

As a public company, we are obligated to develop and maintain proper and effective internal control over financial reporting. Any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to furnish a report by our management on our internal control over financial reporting on an annual basis. This assessment needs to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Pursuant to Section 404, we are also required to have our independent registered public accounting firm issue an opinion on the effectiveness of our internal control over financial reporting on an annual basis.

During our evaluation of our internal control, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. In addition, if we have an unremediated material weakness, we would receive an adverse opinion regarding our internal control over financial reporting from our independent registered public accounting firm. For example, in connection with the audit of our consolidated financial statements for the year ended December 31, 2022, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting. While we remediated this material weakness as of December 31, 2023, we cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. If in the future we again identify a material weakness, we cannot assure you that any measures we may take in the future will be sufficient to remediate such material weakness or avoid the identification of additional material weaknesses in the future. If the steps we take do not remediate a future material weakness in a timely manner, there could be a reasonable possibility that this control deficiency or others could result in a material misstatement of our annual or interim financial statements that would not be prevented or detected on a timely basis.

Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, or results of operations. If we are unable to conclude in the future that our internal control over financial reporting is effective, or if we or our independent registered public accounting firm determines we have a material weakness in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, the market price of shares of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

As a public company, we are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current directors and members of management.

Provisions in our certificate of incorporation and our bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control of our company that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings to the board of directors or to the secretary at the request of the holders of at least 25% of the outstanding shares of our common stock and limited common stock; and
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a "poison pill" that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our certificate of incorporation designates the state courts in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could discourage lawsuits against the company and our directors, officers, and employees.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders to our company or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (4) any action asserting a claim arising pursuant to any provision of our certificate of incorporation or bylaws (in each case, as they may be amended from time to time) or governed by the internal affairs doctrine. These choice of forum provisions will not apply to suits brought to enforce a duty or liability created by the Securities Act of 1933, as amended, the Exchange Act or any other claim for which federal courts have exclusive jurisdiction.

This exclusive forum provision may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with us or our directors, officers, or employees, which may discourage such lawsuits against us and our directors, officers, and employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition, and operating results.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

We have certain processes for assessing, identifying and managing cybersecurity risks, which are built into our overall information technology function and are designed to help protect our information assets and operations from internal and external cyber threats, as well as secure our networks and systems. Such processes include physical, procedural and technical safeguards, response plans, regular tests on our systems, incident simulations and routine review of our policies and procedures to identify risks and refine our practices. We engage certain external parties, including consultants, computer security firms and risk management advisors, peer companies, industry groups and governance experts, to enhance our cybersecurity oversight. We consider the internal risk oversight programs of third-party service providers before engaging them in order to help protect our company from any related vulnerabilities. As part of our overall risk mitigation strategy, we also maintain cybersecurity insurance coverage; however, such insurance may not be sufficient in type or amount to cover us against claims related to security breaches, cyber-attacks and other related breaches.

We do not believe that there are currently any known risks from cybersecurity threats that are reasonably likely to materially affect our company or our business strategy, results of operations or financial condition.

The audit committee of our board of directors provides direct oversight over cybersecurity risk and provides regular updates to the board of directors regarding such oversight. The audit committee receives periodic updates from management regarding cybersecurity matters and is notified between such updates regarding significant new cybersecurity threats or incidents.

Our vice president of information security leads the operational oversight of company-wide cybersecurity strategy, policy, standards and processes and works across relevant departments to assess and help prepare our company and our employees to address cybersecurity risks, including phishing attacks, ransomware, data breaches, and insider threats. Our vice president of information security has over 15 years of information security experience, including in developing, overseeing and managing information technology and information security teams. He has been with our company since 2017 and has served as our vice president of information security since April 2023. He previously served as our executive director of information security from January 2022 through April 2023, senior director of information security from February 2019 through January 2022 and director of information security from June 2017 through February 2019. Prior to joining our company, our vice president of information security worked at several technology companies and served in roles of increasing responsibility with respect to information security during his tenure.

In an effort to deter and detect cyber threats, we annually provide all employees, including part-time and temporary employees, with a cybersecurity awareness program, which covers timely and relevant topics, including social engineering and phishing, and educates employees on the importance of reporting all incidents immediately. We also use technology-based tools to mitigate cybersecurity risks throughout our information security systems. These tools are integrated into our comprehensive security framework, used to bolster our employee-based cybersecurity programs and are regularly updated to respond to evolving threats.

Item 2. Properties.

Our principal facilities consist of office space. We occupy approximately 136,047 square feet of office space in New York, New York under a lease that currently expires in December 2037, 35,000 square feet of office space in Portland, Oregon under a lease that currently expires in September 2026, and 48,987 square feet of office space in Hyderabad, India under a lease that currently expires in April 2028. Additionally, we lease office space at our other office locations around the world. We believe our facilities are adequate and suitable for our current needs and that should it be needed, suitable additional or alternative space will be available to accommodate our operations.

Item 3. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently subject to any material legal proceedings.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

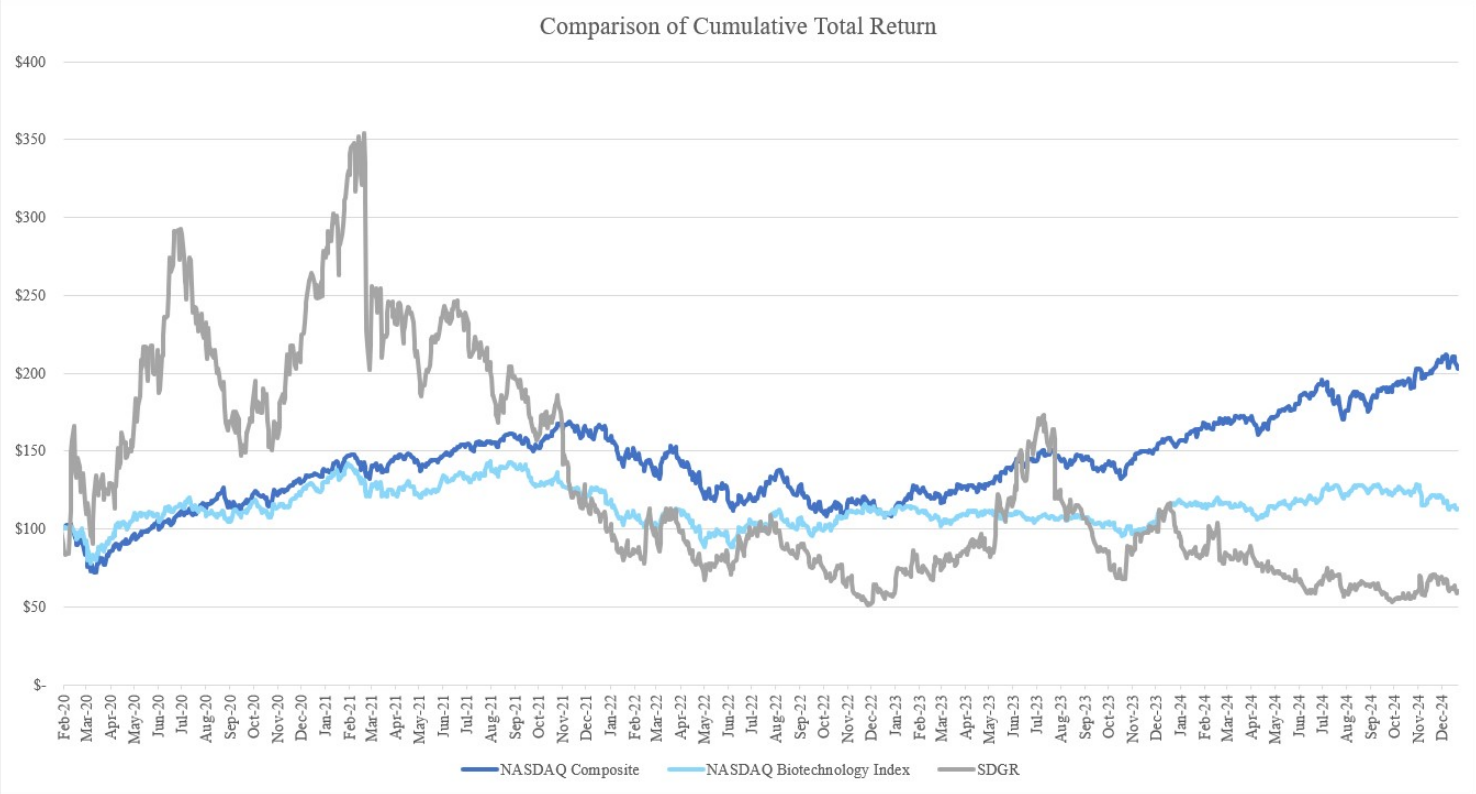
Market Information

Our common stock has been publicly traded on the Nasdaq Global Select Market under the symbol "SDGR" since February 6, 2020. Prior to that date, there was no public market for our common stock. Our limited common stock is not listed or traded on any stock exchange.

Performance Graph

The following performance graph and related information shall not be deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liabilities under that Section, nor shall such information be incorporated by reference into any future filing under the Exchange Act or the Securities Act of 1933, as amended, or the Securities Act, except to the extent that we specifically incorporate it by reference into such filing.

The following graph compares the cumulative total return on our common stock with the cumulative total return of the Nasdaq composite and the Nasdaq Biotechnology Index from February 6, 2020 (the first date that shares of our common stock were publicly traded on the Nasdaq Global Select Market) through December 31, 2024. The graph assumes an investment of $100 on February 6, 2020, in each of the foregoing indices and in our common stock. Data for each of the indices and our common stock assumes that all dividends were reinvested on the day of issuance, if any. The comparisons are not intended to forecast or be indicative of future performance of our common stock.



Holders of Record

As of February 19, 2025, there were approximately 87 holders of record of our common stock and one holder of record of our limited common stock. The actual number of stockholders is greater than this number of holders of record and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other

nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividends

We have never declared or paid cash dividends on our common stock or our limited common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on then-existing conditions, including our results of operations, financial condition, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

Recent Sales of Unregistered Securities

Not applicable.

Issuer Purchases of Equity Securities

Not applicable.

Item 6. [Reserved.]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties.

The following discussion and analysis of our financial condition and results of operations covers fiscal 2024 and fiscal 2023 items and year-over-year comparisons between fiscal 2024 and fiscal 2023. Discussions of fiscal 2022 items and year-over-year comparisons between fiscal 2023 and 2022 that are not included in this Form 10-K can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, that was filed with the SEC on February 28, 2024.

As a result of many factors, including those factors set forth in "Risk Factors" of this Annual Report, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. For further information regarding our forward-looking statements, see "Cautionary Note Regarding Forward-Looking Statements and Industry Data" in this Annual Report.

Overview

We are transforming the way therapeutics and materials are discovered. Our differentiated, physics-based computational platform enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly and at a lower cost, compared to traditional methods. Our software platform is licensed by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. We are applying our computational platform to advance a broad pipeline of drug discovery programs in collaboration with leading biopharmaceutical companies. In addition, we use our computational platform to discover novel molecules for our pipeline of proprietary drug discovery programs, which we are advancing through preclinical and clinical development.

Since our founding, we have been primarily focused on developing our computational platform, which is capable of predicting critical properties of molecules with a high degree of accuracy, as well as advancing drug discovery programs both with our collaborators and on our own. We have devoted substantially all of our resources to introducing new capabilities and refining our software, conducting research and development activities, recruiting skilled personnel, and providing general and administrative support for these operations.

Over the last decade, we have entered into a number of collaborations with leading biopharmaceutical companies that have provided us with significant revenue and have the potential to produce additional milestone payments, option fees, and future royalties. In 2018, we began to develop a pipeline of proprietary drug discovery programs with the goal of using our platform to produce a portfolio of novel, high value therapeutics. In June 2022, the U.S. Food and Drug Administration, or FDA, cleared our first investigational new drug application, or IND, for our MALT1 inhibitor, which we refer to as SGR-1505. We have initiated dosing in a Phase 1 clinical trial of SGR-1505, which is designed as an open-label, multi-center dose escalation trial in patients with relapsed or refractory B-cell malignancies. The trial is designed to evaluate the safety, pharmacokinetics, pharmacodynamics, maximum tolerated dose and/or recommended dose of SGR-1505. Exploratory cohorts will evaluate additional pharmacokinetics, pharmacodynamics, preliminary anti-tumor activity, and safety to establish the recommended dose. We anticipate reporting initial data from the trial in the second quarter of 2025.

We also completed a Phase 1 clinical trial of SGR-1505 in 73 healthy volunteers to gather additional data, including data relating to the safety, tolerability and pharmacokinetics of SGR-1505, as well as the effect of food and drug-drug interactions. In the healthy volunteer trial, SGR-1505 was generally well tolerated with no drug-related serious adverse events or dose limiting toxicities observed. In the trial, we observed that SGR-1505 achieved greater than 90 percent inhibition of IL-2 secretion in an activated T cell whole blood assay at 100mg twice a day (n=4), confirming target engagement and meeting the pharmacodynamic goals for the trial. Inhibition of IL-2 secretion is a marker for target engagement and pathway modulation as it is tightly linked to MALT1 and the downstream NF-κB signaling. The data supported continued evaluation of SGR-1505 in the ongoing Phase 1 clinical trial in patients with relapsed or refractory B-cell malignancies. In addition, in August 2023, the FDA granted orphan drug designation to SGR-1505 for the potential treatment of mantle cell lymphoma.

In July 2023, the FDA cleared our IND for our CDC7 inhibitor, which we refer to as SGR-2921. In July 2024, the FDA granted Fast Track designation to SGR-2921 in patients with relapsed or refractory acute myeloid leukemia, or AML. In addition, in January 2025, the FDA granted orphan drug designation to SGR-2921 in patients with relapsed or refractory AML. We have initiated dosing in a Phase 1 clinical trial of SGR-2921, which is designed as an open-label, multi-center dose-escalation clinical trial in patients with relapsed or refractory AML or high-risk myelodysplastic syndrome. The trial is designed to evaluate the safety and tolerability of SGR-2921 as a monotherapy and to identify the recommended Phase 2 dose, including the maximum tolerated dose. Secondary and exploratory objectives of the trial include evaluating the pharmacokinetics and pharmacodynamics of SGR-2921 and investigating preliminary anti-tumor activity. We anticipate reporting initial data from the trial in the second half of 2025.

In March 2024, we also submitted an IND to the FDA for our novel Wee1/Myt1 inhibitor, which we refer to as SGR-3515, and the FDA cleared the IND in April 2024. We recently initiated dosing in a Phase 1 clinical trial of SGR-3515 in patients with advanced solid tumors. The trial is a dose-escalation trial designed to evaluate the safety, tolerability and recommended Phase 2 dose of SGR-3515. Secondary and exploratory objectives of the trial include evaluating the pharmacokinetics and preliminary anti-tumor activity of SGR-3515. We anticipate reporting initial data from the trial in the second half of 2025.

In July 2024, we launched an initiative to expand our computational platform to predict toxicity associated with binding to off-target proteins. The goal of this initiative is to develop a computational solution to improve the properties of drug development candidates and reduce the risk of development failure. The project is being funded initially by $19.5 million in grants from the Bill & Melinda Gates Foundation.

We have funded our operations to date principally from the sale of our equity securities, including our initial public offering and our follow-on public offering, and to a lesser extent, from sales of our software solutions and from upfront payments, research funding and milestone payments from our drug discovery collaborations, and from distributions on account of, or proceeds from the sale of, our equity stakes in our collaborators. In 2023, on account of our equity stake in Nimbus Therapeutics, LLC, or Nimbus, we received an aggregate of $147.2 million in cash distributions from Nimbus in connection with Takeda's acquisition of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its TYK2 inhibitor NDI-034858.

On August 15, 2024, Morphic Holding, Inc., or Morphic, one of our drug discovery collaborators and co-founded companies, was acquired by Eli Lilly and Company, or Lilly, for $57.00 per share, or approximately $3.2 billion. In connection with the acquisition, we received $47.6 million for the 834,968 shares of Morphic we owned. We are also entitled to low single-digit royalties on our clinical development programs under our collaboration agreement with Morphic, including MORF-057.

We currently conduct our operations through two reportable segments: software and drug discovery. The software segment is focused on selling our software to transform drug discovery across the life sciences industry, as well as to customers in materials science industries. The drug discovery segment is focused on generating revenue from a diverse portfolio of preclinical and clinical programs, internally and through collaborations, that have advanced to various stages of discovery and development.

Our software segment generates revenue from software product licenses, hosted software subscriptions, software maintenance, professional services, and contributions. The revenue we generate through our software solutions from each of our customers varies largely depending on the type and number of software licenses our customers purchase from us. The licenses that our customers purchase from us provide them the ability to perform a certain number of calculations used in the design of molecules for drug discovery or materials science. The amount we charge per license depends on the specific software products our customers purchase from us, and the number of licenses needed to perform calculations per software product varies. With the exception of certain limited products, the number of licenses a customer requires is typically based on the scale at which they are running our software products and is not based on how many users have access to the software. As customers increase the number of licenses they purchase from us, they will typically be able to run a greater number of simultaneous instances of our products, thereby increasing the number of calculations they will be able to perform in parallel, subject to having enough computational capacity. We deliver our software through either (i) a product license that permits our customers to install the software solution directly on their own in-house hardware and use it for a specified term, or (ii) a subscription that allows our customers to access our cloud-based software solution on their own hardware without taking control of licenses.

Our collaboration agreements typically include upfront consideration, discovery, development, commercial and regulatory milestones, and royalties from future sales of commercialized products. We generate drug discovery revenue through the performance of specified research and development activities under our collaboration agreements and upon the achievement of discovery and development milestones, and we have the potential to generate drug discovery revenue from commercial and regulatory milestones, option fees, and royalties under our collaboration agreements. In the future, we may also derive drug discovery revenue from our collaborations from option fees, the achievement of regulatory and commercial milestones, and royalties on commercial drug sales. In addition to revenue from our collaborations, we may also derive drug discovery revenue from collaborating on or out-licensing our proprietary drug discovery programs when we believe it will help maximize the clinical and commercial opportunities for the program.

We are party to an exclusive, worldwide collaboration and license agreement with Bristol-Myers Squibb Company, or BMS, pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. After mutual agreement on the targets(s) of interest, we are responsible for the discovery of development candidates. Once a development candidate meeting specified criteria for a target has been identified, BMS will be solely responsible for the development, manufacturing and commercialization of such development candidate. We are eligible to receive up to $482.0 million in total milestone payments for the one remaining neurology target currently subject to the collaboration, of which we have recognized $32.0 million as of December 31, 2024, as well as a tiered percentage royalty on net sales of each product commercialized by BMS ranging from mid-single digits to low-double digits, subject to certain specified reductions. See "Collaboration and License Agreement" in Note 3 to our consolidated financial statements for additional information relating to this agreement.

In September 2022, we entered into a collaboration with Lilly under which we are responsible for the discovery and optimization of small molecule compounds addressing an immunology target. Lilly will be responsible for the completion of preclinical development, clinical development and commercialization. Under the terms of the agreement, we received an upfront payment and we are eligible to receive up to $420.0 million in discovery, development and commercial milestone payments. We are also eligible to receive low single- to low double-digit royalties on net sales of any products emerging from the collaboration in all markets.

In November 2024, we entered into a research collaboration and license agreement with Novartis Pharma AG, or Novartis, pursuant to which we and Novartis agreed to collaborate on the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas. The agreement is intended to advance multiple development candidates for development and commercialization by Novartis. Under the terms of the research collaboration and license agreement, Novartis paid us an initial upfront fee of $150.0 million in January 2025 and we will be eligible to receive up to $2.272 billion in total milestone payments across the initial programs. Such milestones consist of up to $892.0 million in discovery and development milestones and up to $1.38 billion in commercial milestones. We are also entitled to a tiered percentage royalty on net sales of each product commercialized by Novartis ranging from mid

single-digits to low double-digits, subject to certain specified reductions. No milestone revenue has been recognized as of December 31, 2024. In November 2024, we also entered into an expanded three-year software agreement with Novartis that substantially increases Novartis' access to our computational predictive modeling technology and enterprise informatics platform. See "Collaboration and License Agreement" in Note 3 to our consolidated financial statements for additional information relating to this agreement.

For the year ended December 31, 2024, we generated total revenue of $207.5 million and had a net loss of $187.1 million.

Key Factors Affecting Our Performance

Ability to drive additional revenue from our software solutions from existing customers

Our large existing base of customers represents a significant opportunity for us to expand our revenue through increased utilization of our software. We had 1,752 and 1,785 active customers for the years ended December 31, 2024 and 2023, respectively. We define the number of active customers as the number of customers who had an annual contract value, or ACV, of at least $1,000 in the fiscal year. Included in the number of customers are entities we derive software contribution revenue from, which for the year ended December 31, 2024, consisted of Gates Ventures, LLC and the Bill & Melinda Gates Foundation. We use $1,000 as a threshold for defining our active customers as this amount will generally exclude customers who only license our PyMOL software, which is our open-source molecular visualization system broadly available at low cost. The revenue that we generate through our software solutions from each of our customers varies depending on the number of licenses for each software solution that each customer purchases from us. Accordingly, we work with our customers to improve their experience and increase the utility of our platform in order to expand the scale at which they deploy our platform in their business. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate that this scaling-up will drive future revenue growth.

Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an ACV at higher thresholds. For the year ended December 31, 2024, we had 61 customers with an ACV of at least $500,000 compared to 54 for the year ended December 31, 2023. Furthermore, we had 31, 27, and 18 customers with an ACV of at least $1.0 million for the years ended December 31, 2024, 2023, and 2022, respectively. We also had eight customers with an ACV of at least $5.0 million for the year ended December 31, 2024, compared to four customers for each of the years ended December 31, 2023 and 2022.

With respect to contracts that have a duration of one year or less, or contracts of more than one year in duration that are billed annually, we define ACV as the contract value billed during the applicable period. For contracts with a duration of more than one year that are billed upfront, ACV in each period represents the total billed contract value divided by the term. ACV should be viewed independently of revenue and does not represent revenue calculated in accordance with generally accepted accounting principles in the United States, or U.S. GAAP, on an annualized basis, as it is an operating metric that can be impacted by contract execution start and end dates and renewal rates. ACV is not intended to be a replacement for, or forecast of, revenue. Our ACV was $190.8 million and $154.2 million for the years ended December 31, 2024 and 2023, respectively.

Ability to retain our customer base for our software solutions

Another important driver of our performance is our ability to retain our customer base. We had 235, 222, and 227 customers with an ACV of at least $100,000 for the years ended December 31, 2024, 2023, and 2022, respectively. For the year ended December 31, 2024, our year-over-year customer retention rate for such customers was 95% and was 92% or higher for each of the previous 10 fiscal years. Our customer retention rate for our customers with an ACV of at least $500,000 was 100% for the year ended December 31, 2024 and 98% for the year ended December 31, 2023. We calculate year-over-year customer retention for our customers with an ACV of at least $100,000 or $500,000 by starting with the number of such customers we had in the previous fiscal year. We then calculate how many of these customers were active customers in the current fiscal year. We then divide this number by the number of customers with an ACV of at least $100,000 or $500,000, as applicable, that, we had in the previous fiscal year to arrive at the year-over-year customer retention rate for such customers.

We believe our sales and marketing approach and the quality of our software solutions result in long-term relationships and high retention with our largest customers. This is demonstrated by the length of our key relationships, with the average tenure of our 10 largest software customers in 2024 being nearly 21 years. Furthermore, we have significantly penetrated the pharmaceutical industry, with 19 of the top 20 pharmaceutical companies, measured by 2023

revenue, licensing our software in 2024. Our ability to continue to grow our software revenue is dependent upon our ability to retain customers through the continued support and investment in our sales and marketing efforts and the ongoing enhancement of our software solutions.

Advancement of our collaborative programs

We have entered into a number of collaborations with leading biopharmaceutical companies to advance drug discovery. We will seek to enter into additional collaboration agreements, driven by the synergies we expect to achieve between our platform and the capabilities and expertise of our potential collaborators. We believe that our collaborations will be a significant driver of value for us in the form of equity stakes, research fees, preclinical, clinical, and commercial milestone payments, and option fees, as well as royalties on any potential future sales of products, if approved. We continue to work with our current collaborators to advance existing programs through discovery research stages and initiate additional programs. However, we do not generally exercise control over the development programs of our collaborators and depend on our collaborators' decisions with respect to clinical development and commercialization. Our ability to continue to derive value from our collaborations will be driven by our capability to make progress in these programs, whether our collaborators successfully advance such programs beyond the discovery stage, and the strategic priorities of our collaboration partners. We track the aggregate number of collaborative programs for which we are eligible to receive any amount of royalties on sales and as of December 31, 2024, we had an aggregate of 13 collaborative programs for which we are eligible to receive future royalties compared to 12 collaborative programs as of December 31, 2023.

Ability to progress and expand our pipeline of proprietary drug discovery programs

We are advancing our pipeline of proprietary programs through preclinical and clinical development. Our initial programs were focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Since then, we have expanded into other therapeutic areas, including immunology and neurology. We have initiated dosing in a Phase 1 clinical trial of SGR-1505 in patients with relapsed or refractory B-cell malignancies, a Phase 1 clinical trial of SGR-2921 in patients with relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome, and a Phase 1 clinical trial for SGR-3515 in patients with advanced solid tumors. We anticipate reporting initial data from the Phase 1 clinical trial of SGR-1505 in patients with relapsed or refractory B-cell malignancies in the second quarter of 2025, and from each of the Phase 1 clinical trial of SGR-2921 in patients with relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome and the Phase 1 clinical trial for SGR-3515 in patients with advanced solid tumors in the second half of 2025. We continue to advance new programs where we can leverage our computational platform to discover novel molecules, including our programs targeting PRMT5-MTA, $EGFR^{C797S}$, NLRP3, and LRRK2. As we progress and expand our pipeline of proprietary programs, we will strategically evaluate on a program-by-program basis advancing them ourselves, entering into collaborations to co-develop them with leading industry partners, or out-licensing them to maximize their probability of clinical and commercial success.

Components of Results of Operations

Software Products and Services Revenue

Our software business generates revenue from five sources: (i) on-premise software license fees, (ii) hosted software subscription fees, (iii) software maintenance fees, (iv) professional services fees, and (v) contributions.

On-premise software. Our on-premise software license arrangements grant customers the right to use our software on their own in-house servers or their own cloud instances for a specified term, typically for one year, though in recent years, we have entered into a small number of large multi-year on-premise software license agreements. We recognize revenue for on-premise software license fees upfront, either upon transfer of control of the license or the effective date of the agreement, whichever is later.

Hosted software. Hosted software revenue consists primarily of fees to provide our customers with hosted licenses, which allows these customers to access our cloud-based software solution on their own hardware without taking control of the licenses, and is recognized ratably over the term of the arrangement, which is typically one year, though in recent years, we have entered into a small number of large multi-year hosted software license agreements. When a customer enters into a hosted arrangement for which revenue is recognized over time, the amount paid upfront that is not recognized in the current period is included in deferred revenue in our statement of financial position until the period in which it is recognized.

Software maintenance. Software maintenance includes technical support, updates, and upgrades related to our on-premise software licenses. Software maintenance revenue is recognized ratably over the term of the arrangement. Software maintenance activities are performed in connection with the use of our on-premise software, and may fluctuate from period to period.

Professional services. Professional services include training, technical setup, installation or assisting customers with modeling services, where we use our software to perform tasks such as virtual screening on behalf of our customers. These services are generally not related to the core functionality of our software and are recognized as revenue when resources are consumed. Since each professional services agreement represents a unique, ad hoc engagement, professional services revenue may fluctuate from period to period.

Software contribution revenue. Software contribution revenue consists of funds received under non-reciprocal agreements with Gates Ventures, LLC and the Bill & Melinda Gates Foundation. The agreement with Gates Ventures, LLC was originally entered into in June 2020 and further extended through August 2026. The agreement is an unconditional non-exchange contribution without restrictions. Revenue is recognized annually, when invoiced, in accordance with Accounting Standard Codification, or ASC, Topic 958*, Not-for-Profit Entities,* or Topic 958, as the agreement is not an exchange transaction.

In July 2024, we entered into a one-year agreement with the Bill & Melinda Gates Foundation to initially fund our initiative to accelerate the expansion of our computational platform to predict toxicity associated with binding to off-target proteins. In November 2024, we entered into an expansion of the agreement which extends the funding and effort for this initiative through April 2026. Revenue is recognized as conditions are met and on a cost reimbursement basis in accordance with Topic 958.

Drug Discovery Revenue

Drug discovery services. We generate drug discovery revenue through the performance of specified research and development activities under our collaboration agreements and upon the achievement of discovery and development milestones, and we have the potential to generate drug discovery revenue from commercial and regulatory milestones, option fees, and royalties under our collaboration agreements. The majority of our current collaborations are in the discovery and preclinical development stages. Milestone payments typically increase in magnitude as a program advances. However, our focus is increasingly on investing in our proprietary drug discovery programs, which may result in a smaller number of collaborative programs over time and, as a result, fewer milestone payments on account of those collaborative programs. In addition to revenue from our collaborations, we may also derive drug discovery revenue from out-licensing our proprietary drug discovery programs when we believe it will help maximize the probability of clinical and commercial success of the program. Overall, we expect that our drug discovery revenue will fluctuate from period to period due to the inherently uncertain nature of the timing of milestone achievements and our dependence on the program decisions of our collaborators.

Drug discovery contribution revenue. Contribution revenue consists of funds received under agreements with the Bill & Melinda Gates Foundation on a cost reimbursement basis, to perform services aimed at accelerating drug discovery in women's health. Revenue is recognized as conditions are met in accordance with Topic 958.

Cost of Revenues

Software products and services. Cost of revenues for software includes personnel-related expenses (comprised of salaries, benefits, and stock-based compensation) for employees directly involved in the delivery of software solutions, maintenance and professional services, royalties paid for products sold and services performed using third-party licensed software functionality, and allocated overhead (facilities and information technology support) costs. Pursuant to various third-party arrangements, we license technology that is used in our software. These arrangements require us to pay royalties based on sales volume, and such royalty payments represented 3.5% and 4.1% of software revenues in the years ended December 31, 2024 and 2023, respectively.

Drug discovery. Costs of revenue for drug discovery includes personnel-related expenses and costs of third-party contract research organizations, or CROs, that support discovery activities in our collaborations, royalties paid for services performed using third-party licensed software functionality, allocated compute capacity and overhead costs. While we have incurred costs associated with discovery efforts since late 2017, we have recognized and expect to continue to recognize

revenues in the future if and when milestones are deemed probable or achieved. Generally, drug discovery costs of revenue for collaborations are incurred in advance of the revenue milestone achievement.

Royalty payments to third-parties represented 9.5% and 3.5% of drug discovery revenues in the years ended December 31, 2024 and 2023, respectively. We expect our drug discovery costs of revenue to trend lower over time as we shift our focus to proprietary drug discovery programs. However, these trends will be impacted by the number and stage of our collaborative programs, especially in the case of new collaborative programs.

Gross Profit and Gross Margin

Gross profit represents revenue less cost of revenues. Gross margin is gross profit expressed as a percentage of revenue. Our software products and services gross margin may fluctuate from period to period as our revenue fluctuates, and as a result of changes in sales mix between on-premise and hosted software solutions due to timing of recognition. For example, the cost of royalties due for sales of our hosted software arrangements are recognized upfront, whereas the associated hosted software revenue for these arrangements is recognized over the term of the underlying agreement.

While the gross margin of our drug discovery business will fluctuate significantly from period to period depending on factors such as the timing of recognition of milestones, the number and mix of collaborative programs, and their respective stages of development, we expect the gross margins to generally trend higher over time as more programs advance to later stages of development, the milestones increase in size and our ongoing research and development obligations to such programs decline in cost.

Research and Development Expense

Research and development expense accounts for a significant portion of our operating expenses. We recognize research and development expense as incurred. Research and development expense consists of drug discovery and development program costs and costs incurred for continuous development of the technology and science that supports our computational platform, primarily:

- personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation for employees engaged in research and development functions;
- expenses incurred under agreements with third-party CROs and consultants involved in our proprietary drug discovery programs; and
- allocated compute capacity on our proprietary drug discovery programs and overhead (facilities and information technology support) costs.

We expect our research and development expense to increase in absolute dollars as we continue to invest in activities related to discovery and development of our proprietary drug discovery programs, in advancing our computational platform, and as we incur expenses associated with hiring additional personnel directly involved in such efforts. The amount to which our research and development expense may increase in the future will also be dependent on our development plans for our proprietary drug discovery programs, including the timing of any partnering, collaboration or out-licensing decisions. At this time, we do not know, nor can we reasonably estimate, the nature, timing, or costs of the efforts that will be necessary to complete the development of any of our proprietary drug discovery programs.

Sales and Marketing Expense

Sales and marketing expense consists primarily of personnel-related costs for our sales and marketing staff and application scientists supporting our sales efforts, including salaries, benefits, bonuses, and stock-based compensation. Other sales and marketing costs include promotional events that promote and expand knowledge of our company and platform, including industry conferences and events and our annual user group meetings in the United States and Europe, advertising, and allocated overhead costs. Due to the inherent scientific complexity of our software solutions, a high level of scientific expertise is needed to support our sales and marketing efforts. We plan to make focused investments in sales and marketing over the foreseeable future to foster the growth of our business as we aim to expand software sales to existing customers and increase our customer base.

General and Administrative Expense

General and administrative expense consists of personnel-related expenses associated with our executive, legal, finance, human resources, information technology, and other administrative functions, including salaries, benefits, bonuses, and stock-based compensation. General and administrative expense also includes professional fees for external legal, accounting and other consulting services, allocated overhead costs, and other general operating expenses.

We expect to continue to incur additional expenses as a result of operating as a public company, including costs to comply with the rules and regulations applicable to companies listed on a U.S. securities exchange and costs related to compliance and reporting obligations pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC. In addition, as a public company, we expect to continue to incur increased expenses such as insurance and professional services. As a result, we expect the dollar amount of our general and administrative expense to increase for the foreseeable future.

Gain on Equity Investments

Gain on equity investments consists of realized gains in the form of cash distributions from our equity investments.

Change in Fair Value

Fair value gains and losses consist of adjustments to the fair value of our equity investments, which may include Nimbus, Structure Therapeutics Inc., or Structure Therapeutics, and Morphic. We remeasure our investments at each period end.

We expect that fair value gains and losses will fluctuate significantly in future periods.

Other Income

Other income consists of interest earned on our cash equivalents and marketable securities, interest expense, and transactional foreign exchange gains and losses.

Income Tax Expense

Income tax expense consists of U.S. federal and state income taxes and income taxes in certain foreign jurisdictions in which we conduct business. We maintain a full valuation allowance on our federal and state deferred tax assets as we have concluded that it is not more likely than not that the deferred tax assets will be realized.

Results of Operations

Comparison of the years ended December 31, 2024 and 2023

The following table summarizes our results of operations data for the years ended December 31, 2024 and 2023:

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
Revenues:				
Software products and services	$ 180,365	$ 159,124	$ 21,241	13%
Drug discovery	27,174	57,542	(30,368)	(53)%
Total revenues	207,539	216,666	(9,127)	(4)%
Cost of revenues:				
Software products and services	36,900	29,514	7,386	25%
Drug discovery	38,556	46,460	(7,904)	(17)%
Total cost of revenues	75,456	75,974	(518)	(1)%
Gross profit	132,083	140,692	(8,609)	(6)%
Operating expenses:				
Research and development	201,785	181,766	20,019	11%
Sales and marketing	39,917	37,226	2,691	7%
General and administrative	99,677	99,148	529	1%
Total operating expenses	341,379	318,140	23,239	7%
Loss from operations	(209,296)	(177,448)	(31,848)	18%
Other income:				
Gain on equity investments	—	147,213	(147,213)	N/M
Change in fair value	5,683	53,461	(47,778)	N/M
Other income	17,902	19,693	(1,791)	N/M
Total other income	23,585	220,367	(196,782)	N/M
(Loss) income before income taxes	(185,711)	42,919	(228,630)	N/M
Income tax expense	1,412	2,199	(787)	N/M
Net (loss) income	$ (187,123)	$ 40,720	$ (227,843)	N/M

N/M – not meaningful

Revenues

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
Revenues:				
Software				
On-premise software	$ 104,020	$ 104,511	$ (491)	—%
Hosted software	35,253	20,381	14,872	73%
Software maintenance	23,279	23,066	213	1%
Professional services	9,797	9,366	431	5%
Software contribution	8,016	1,800	6,216	345%
Total software products and services	180,365	159,124	21,241	13%
Drug discovery				
Drug discovery services	25,143	54,720	(29,577)	(54)%
Drug discovery contribution	2,031	2,822	(791)	(28)%
Total drug discovery	27,174	57,542	(30,368)	(53)%
Total revenues	$ 207,539	$ 216,666	$ (9,127)	(4)%

Software Products and Services Revenue

On-premise software. The decrease in revenues for on-premise software during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily attributable to a decrease in multi-year customer contracts with upfront revenue recognition in the current period versus the comparable period.

Hosted software. The increase in revenues for hosted software during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily due to customers switching from on premise to hosted software purchases, as well as increased spend from existing hosted customers and growth in new customers purchasing hosted software subscriptions, for which revenue is recognized ratably over the period of the contract.

Software maintenance. Software maintenance revenues remained consistent during the year ended December 31, 2024 as compared to the year ended December 31, 2023 primarily due to the fluctuation of on-premise software renewal periods, including multi-year customer arrangements, in the current period versus the comparable period, as well as increased spend from existing customers. Software maintenance revenue is recognized ratably over the period of the contract.

Professional services. Professional services revenues remained consistent during the year ended December 31, 2024 as compared to the year ended December 31, 2023 primarily due to the progress and completion of technology and modeling service projects.

Software contribution revenue. The increase in software contribution revenues during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was due to the agreements with the Bill & Melinda Gates Foundation entered into during the year ended December 31, 2024, aimed to accelerate the expansion of our computational software platform, and the extension of the agreement with Gates Ventures, LLC.

Drug Discovery Revenue

Drug discovery services. The decrease in revenues for drug discovery services during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily due to the timing and amount of collaboration milestones achieved, including $25.0 million received from BMS during the year ended December 31, 2023, as well as BMS electing not to proceed with further development for two programs during 2023, which resulted in increased revenue recognition due to the accelerated completion of our obligations related to such programs during the year ended December 31, 2023. This decrease was partially offset by collaboration milestones achieved in 2024, as well as the progress of

existing and new collaborations. We expect that our revenue will fluctuate from period to period due to the inherently uncertain nature of the timing of milestone achievement and our dependence on the program decisions of our collaborators.

Drug discovery contribution revenue. The decrease in drug discovery contribution revenue during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was due to fluctuation in allotted funds spent under an agreement with the Bill & Melinda Gates Foundation, aimed at accelerating drug discovery in women's health, which began in November 2021.

Cost of Revenues

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
Cost of revenues:				
Software products and services	$ 36,900	$ 29,514	$ 7,386	25%
Gross margin	80 %	81 %		
Drug discovery	38,556	46,460	(7,904)	(17)%

Software products and services. The increase in cost of revenues for software products and services during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was attributable to increases of approximately $4.3 million in cloud computing expense and approximately $3.3 million in personnel-related expense, partially offset by a decrease of approximately $0.2 million in royalty expense.

Software products and services gross margin. The decrease in software gross margin during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily due to an increase in expenses related to our agreement with the Bill & Melinda Gates Foundation to accelerate the expansion of our computational software platform, partially offset by an increase in revenue.

Drug discovery. The decrease in cost of revenues for drug discovery during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was attributable to decreases of approximately $7.9 million in third-party CRO costs due to the discontinuation of certain collaboration projects and approximately $0.9 million in personnel-related expense reflecting the redeployment of our discovery organization towards proprietary drug discovery programs, partially offset by approximately $0.6 million in royalty expense and approximately $0.3 million in cloud computing expense.

Research and Development Expense

A significant portion of our research and development costs have been external preclinical and clinical CRO costs, which we track on a program-by-program basis related to a product candidate, once the candidate has been identified. Our internal research and development costs are primarily personnel-related costs, rent expense, and other indirect costs and are not tracked on a program-by-program basis. All other research and development costs are related to non-program related costs. The following table summarizes our research and development expense for the years ended December 31, 2024 and 2023:

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
External costs by program:				
SGR-1505	$10,693	$15,337	$ (4,644)	(30)%
SGR-2921	10,290	6,090	4,200	69%
SGR-3515	5,930	6,363	(433)	(7)%
Other early development candidates and unallocated costs	32,371	30,880	1,491	5%
Total external costs for programs in preclinical and clinical development	59,284	58,670	614	1%
Internal costs for discovery, preclinical and clinical development:				
Employee compensation and benefits	41,262	32,949	8,313	25%
Facility and other	2,233	2,015	218	11%
Total internal costs	43,495	34,964	8,531	24%
All other research and development	99,006	88,132	10,874	12%
Total research and development expense	$201,785	$181,766	$20,019	11%

The increase in external costs of $0.6 million during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily attributable to an increase in costs associated with the ongoing Phase 1 clinical trial and other development activities for SGR-2921, as well as other external research costs to support our early-stage product candidates, partially offset by a decrease in costs for SGR-1505 and SGR-3515 due to timing of work performed.

The increase in internal costs for programs in discovery, preclinical and clinical development of $8.5 million during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily attributable to an increase in personnel-related expense and rent expense.

The increase in all other research and development expense during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was attributable to increases of approximately $4.8 million in personnel-related expense, approximately $3.5 million in cloud computing expense, approximately $1.4 million related to office rent, approximately $0.7 million related to professional services, and approximately $0.5 million in other expenses.

Sales and Marketing Expense

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
Sales and marketing	$ 39,917	$ 37,226	$ 2,691	7%

The increase in sales and marketing expense during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was attributable to increases of approximately $2.1 million in personnel-related expense, approximately $0.6 million in travel and entertainment expense, and approximately $0.3 million in cloud computing expense, partially offset by decreases of approximately $0.1 million related to office facilities and approximately $0.2 million in other expenses.

General and Administrative Expense

	Year Ended December 31,		Change	
	2024	2023	$	%
	(in thousands)			
General and administrative	$ 99,677	$ 99,148	$ 529	1%

The increase in general and administrative expense during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was attributable to increases of approximately $5.0 million of personnel-related expense, approximately $2.2 million related to professional services, and approximately $0.4 million in cloud computing expense, partially offset by decreases of approximately $4.3 million in royalties related to cash distributions we received from Nimbus, approximately $0.5 million in amortization related to the acceleration of customer relationship intangible assets, approximately $0.4 million in travel and entertainment expense, approximately $0.1 million related to office facilities, and approximately $1.8 million in other expenses.

Gain on Equity Investments

	Year Ended December 31,		
	2024	2023	Change
	(in thousands)		
Gain on equity investments	$ —	$ 147,213	$ (147,213)

There was no gain on equity investments during the year ended December 31, 2024. The gain on equity investments during the year ended December 31, 2023 was due to the realized gain on our equity investment in Nimbus following the closing of Takeda's acquisition of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its tyrosine kinase 2 inhibitor, NDI-034858.

Change in Fair Value

	Year Ended December 31,		
	2024	2023	Change
	(in thousands)		
Change in fair value	$ 5,683	$ 53,461	$ (47,778)

The change in fair value during the year ended December 31, 2024 was primarily due to an unrealized gain on our investment in Morphic of $23.5 million, partially offset by an unrealized loss on our investment in Structure Therapeutics of $18.1 million. The change in fair value during the year ended December 31, 2023 was due to an unrealized gain on our investment in Structure Therapeutics of $49.8 million, an unrealized gain on our investment in Nimbus of $1.9 million, and an unrealized gain on our investment in Morphic of $1.8 million.

Other Income

	Year Ended December 31,		
	2024	2023	Change
	(in thousands)		
Other income	$ 17,902	$ 19,693	$ (1,791)

The decrease in other income during the year ended December 31, 2024 as compared to the year ended December 31, 2023 was primarily attributable to a decrease of approximately $1.2 million in interest income on our investment portfolio and a decrease of approximately $0.6 million primarily related to unfavorable foreign currency fluctuations.

Income Tax Expense

	Year Ended December 31,		
	2024	2023	Change
	(in thousands)		
Income tax expense	$ 1,412	$ 2,199	$ (787)

Income tax expense for the year ended December 31, 2024 represents state income tax obligations and taxes in foreign jurisdictions for which we conduct business. Income tax expense for the year ended December 31, 2023 represents our federal and certain state income tax obligations and taxes in foreign jurisdictions for which we conduct business. As of December 31, 2024, we have a full valuation allowance on our U.S. federal and state deferred tax assets.

At December 31, 2024, we had federal and state net operating loss carryforwards of approximately $204.5 million and $129.5 million, respectively. The state net operating loss carryforwards will expire between 2025 and 2044, if not utilized. The federal net operating loss carryforwards are limited to 80% of taxable income generated in a given year and carry forward indefinitely. At December 31, 2024, we had federal orphan drug credits and federal research and development tax credit carryforwards of approximately $31.3 million and state research and development tax credit carryforwards of approximately $2.7 million. These carryforwards will expire between 2025 and 2044, if not utilized.

As required by ASC Topic 740, *Income Taxes*, our management has evaluated the positive and negative evidence bearing upon the realizability of our deferred tax assets, which are composed principally of net operating loss carryforwards and research and development credit carryforwards. Management has determined that it is more likely than not that we will not realize the benefits of our federal and state deferred tax assets and, as a result, a valuation allowance of $177.2 million and $136.0 million has been established at December 31, 2024 and 2023, respectively. The change in the valuation allowance for the years ended December 31, 2024 and 2023 was $41.2 million and $1.9 million, respectively. We recorded income tax expense of $1.4 million and $2.2 million for the years ended December 31, 2024 and 2023, respectively.

Quarterly Results of Operations

The following tables summarize our selected unaudited quarterly results of operations data for each of the eight quarters in the period ended December 31, 2024. The information for each of these quarters has been prepared on the same basis as our audited annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal, recurring nature that are necessary for the fair statement of the results of operations for these periods. This data should be read in conjunction with our audited consolidated financial statements included elsewhere in this Annual Report. Historical results are not necessarily indicative of the results that may be expected for the full fiscal year or any other period.

	Three Months Ended							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	(in thousands)							
Revenues:								
Software products and services	$ 79,662	$ 31,884	$ 35,404	$ 33,415	$ 68,655	$ 28,904	$ 29,352	$ 32,213
Drug discovery	8,655	3,406	11,930	3,183	5,471	13,665	5,837	32,569
Total revenues	88,317	35,290	47,334	36,598	74,126	42,569	35,189	64,782
Cost of revenues:								
Software products and services[1]	13,278	8,479	7,167	7,976	8,670	7,034	6,695	7,115
Drug discovery[1]	10,909	9,083	8,832	9,732	7,906	11,896	14,684	11,974
Total cost of revenues	24,187	17,562	15,999	17,708	16,576	18,930	21,379	19,089
Gross profit	64,130	17,728	31,335	18,890	57,550	23,639	13,810	45,693
Operating expenses:								
Research and development[1]	49,362	50,977	50,835	50,611	51,487	46,833	42,705	40,741
Sales and marketing[1]	9,704	10,349	9,693	10,171	9,950	9,109	9,022	9,145
General and administrative[1]	25,776	24,824	23,536	25,541	25,734	23,890	23,216	26,308
Total operating expenses	84,842	86,150	84,064	86,323	87,171	79,832	74,943	76,194
Loss from operations	(20,712)	(68,422)	(52,729)	(67,433)	(29,621)	(56,193)	(61,133)	(30,501)
Other (expense) income:								
(Loss) gain on equity investments	—	—	—	—	(109)	—	—	147,322
Change in fair value	(22,080)	25,459	(5,833)	8,137	(8,408)	(14,522)	40,654	35,737
Other income	3,539	4,737	4,598	5,028	6,626	5,804	4,326	2,937
Total other (expense) income	(18,541)	30,196	(1,235)	13,165	(1,891)	(8,718)	44,980	185,996
(Loss) income before income taxes	(39,253)	(38,226)	(53,964)	(54,268)	(31,512)	(64,911)	(16,153)	155,495
Income tax expense (benefit)	963	(90)	83	456	(842)	(2,887)	(20,431)	26,359
Net (loss) income	$ (40,216)	$ (38,136)	$ (54,047)	$ (54,724)	$ (30,670)	$ (62,024)	$ 4,278	$ 129,136

(1) Includes stock-based compensation as indicated in the table located further below.

Revenues:

	Three Months Ended							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	(in thousands)							
Revenues:								
Software								
On-premise software	$ 55,393	$ 12,250	$ 18,758	$ 17,619	$ 53,947	$ 13,806	$ 16,814	$ 19,944
Hosted software	11,176	8,814	8,087	7,176	6,016	5,463	4,451	4,451
Software maintenance	5,886	5,658	5,840	5,895	5,687	5,752	5,877	5,750
Professional services	2,315	2,038	2,719	2,725	3,005	2,083	2,210	2,068
Revenue from contracts with customers	74,770	28,760	35,404	33,415	68,655	27,104	29,352	32,213
Software contribution	4,892	3,124	—	—	—	1,800	—	—
Total software products and services revenue	79,662	31,884	35,404	33,415	68,655	28,904	29,352	32,213
Drug discovery								
Drug discovery services	8,132	2,813	11,506	2,692	4,955	12,730	5,232	31,803
Drug discovery contribution	523	593	424	491	516	935	605	766
Total drug discovery revenue	8,655	3,406	11,930	3,183	5,471	13,665	5,837	32,569
Total revenues	$ 88,317	$ 35,290	$ 47,334	$ 36,598	$ 74,126	$ 42,569	$ 35,189	$ 64,782

Deferred Revenue:

	As of							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	(in thousands)							
Deferred revenue	$ 220,758	$ 46,973	$ 47,879	$ 57,513	$ 65,274	$ 55,415	$ 62,294	$ 71,926

Gross Margin:

	Three Months Ended							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
Software products and services gross margin	83 %	73 %	80 %	76 %	87 %	76 %	77 %	78 %

Stock-Based Compensation:

	Three Months Ended							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	(in thousands)							
Stock-based compensation:								
Cost of revenues:								
Software products and services	$ 664	$ 665	$ 669	$ 645	$ 671	$ 654	$ 625	$ 600
Drug discovery	$ 538	$ 573	$ 691	$ 490	$ 585	$ 580	$ 765	$ 699
Research and development	$ 4,152	$ 4,218	$ 4,228	$ 4,066	$ 4,070	$ 4,101	$ 3,807	$ 3,514
Sales and marketing	$ 988	$ 971	$ 968	$ 974	$ 935	$ 914	$ 941	$ 851
General and administrative	$ 6,137	$ 5,971	$ 6,252	$ 6,043	$ 6,272	$ 6,405	$ 5,635	$ 5,217
Total stock-based compensation expense	$ 12,479	$ 12,398	$ 12,808	$ 12,218	$ 12,533	$ 12,654	$ 11,773	$ 10,881

Depreciation and Amortization:

	Three Months Ended							
	December 31, 2024	September 30, 2024	June 30, 2024	March 31, 2024	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	(in thousands)							
Depreciation and amortization:								
Cost of revenues:								
Software products and services	$ 130	$ 135	$ 120	$ 122	$ 124	$ 109	$ 101	$ 112
Drug discovery	$ 181	$ 158	$ 108	$ 120	$ 83	$ 110	$ 130	$ 116
Research and development	$ 897	$ 878	$ 793	$ 780	$ 710	$ 591	$ 525	$ 518
Sales and marketing	$ 159	$ 174	$ 169	$ 165	$ 151	$ 172	$ 141	$ 140
General and administrative	$ 266	$ 262	$ 264	$ 278	$ 286	$ 291	$ 268	$ 874
Total depreciation and amortization expense	$ 1,633	$ 1,607	$ 1,454	$ 1,465	$ 1,354	$ 1,273	$ 1,165	$ 1,760

Quarterly Revenue Trends

On-premise software revenue is subject to seasonality that generally favors the first and fourth quarter of each year, primarily due to the timing of customer renewals for on-premise software arrangements, for which revenue is recognized at a single point in time. Hosted software revenue grew more steadily over the periods presented, as existing customers and new customers increased their spend on hosted solutions, for which revenue is recognized ratably over the term of the contract. As a result, a portion of the software products and services revenue we reported in each period was attributable to sales we made in prior periods. Software maintenance revenue is related to on-premise software sales and also is recognized ratably over the term of the underlying agreement. Therefore, increases or decreases in customer sales, customer expansion, or renewals in a period may not be immediately reflected in revenue for the period. Our professional services arrangements are typically project-based and, therefore, fluctuated based on individual customer needs and ongoing project support. Drug discovery revenue fluctuated from period to period based on the achievement of specific collaboration milestones, as well as advancements of collaborative services.

Milestone payments typically increase in magnitude as a program advances.

Quarterly Deferred Revenue Trends

Deferred revenue consists of the unearned portion of customer billings, which is recognized as revenue in accordance with our revenue recognition policy, as well as the unearned portion of unbilled collaboration milestones that are deemed probable in advance of actual achievement. Deferred revenue balances have fluctuated based on the measurement of progress toward completion for service projects, the timing of sales, shifts in product mix, and fluctuations to the number and size of milestones that were deemed probable in advance of actual achievement.

Quarterly Gross Margin Trends

Our software products and services gross margin experienced fluctuations over the periods presented due to increased headcount and the product mix for software and services, as the cost of royalties due on sales of our hosted software is recognized upfront, while the associated revenue is recognized over the term of the related agreement. Currently, gross margin is less meaningful for measuring the operating results of our drug discovery business.

Quarterly Operating Expense Trends

Operating expenses generally increased during the periods presented due to increased headcount and personnel-related expenses involved in research and development, sales and marketing, general and administrative activities, and CRO costs related to our proprietary drug discovery programs. These increases in headcount across our operations have supported the overall growth and management of our business. CRO cost increases were driven by the expansion and progression of our proprietary drug discovery programs.

Quarterly Other (Expense) Income Trends

Other (expense) income during the periods presented consisted primarily of fair value gains and losses related to our equity investments in Morphic and Structure Therapeutics, and, to a lesser degree, interest income.

Segment Information

See Note 14 – Segment Reporting in our audited consolidated financial statements for additional information regarding our segments.

Liquidity, Capital Resources and Funding Requirements

We have a history of significant operating losses and have incurred negative cash flows from operations from inception through the year ended December 31, 2024. As of December 31, 2024, we had an accumulated deficit of $525.5 million.

We have funded our operations to date principally from the sale of our equity securities, including our initial public offering and our follow-on public offering, and to a lesser extent, from sales of our software solutions and from upfront payments, research funding and milestone payments from our drug discovery collaborations, and from distributions on account of, or proceeds from the sale of, our equity stakes in our collaborators. Our operating cash flows are impacted by the magnitude and timing of our software sales and by the magnitude and timing of our drug discovery milestone achievements and research funding fees.

On February 28, 2024, we filed a universal shelf registration statement on Form S-3 which allows us to offer and sell an indeterminate number of shares of common stock, preferred stock, depositary shares or warrants, or an indeterminate principal amount of debt securities, from time to time pursuant to one or more offerings at prices and terms to be determined at the time of the sale.

In February 2024, we entered into an amended and restated sales agreement with Leerink Partners LLC (formerly SVB Securities LLC), or Leerink Partners, as sales agent, with respect to an at-the-market offering program, or the ATM, under which we could offer and sell, from time to time pursuant to our Registration Statement on Form S-3, shares of common stock, having an aggregate offering price of up to $250.0 million through Leerink Partners. The amended and restated sales agreement amends and restates the original sales agreement that we entered into with Leerink Partners with respect to the ATM in May 2023, which is no longer in effect. As of December 31, 2024, 323,085 shares of common stock, were sold under the ATM for total net proceeds of $8.7 million and gross proceeds of $8.9 million, before deducting sales agent commissions. As of December 31, 2024, we had $241.1 million of common stock remaining available for sale under the ATM.

As of December 31, 2024, we had cash, cash equivalents, restricted cash, and marketable securities of $367.5 million. In January 2025, we received the upfront payment of $150.0 million from Novartis in connection with entering into our research collaboration and license agreement with Novartis.

We believe our existing cash, cash equivalents, and marketable securities as of December 31, 2024, together with the upfront payment we received from Novartis, will be sufficient to fund our operating expenses and capital expenditure requirements through at least the next 24 months. Our future capital requirements will depend on many factors, including the growth of our software revenue, the timing and extent of spending to support research and development efforts, the continued expansion of software sales and marketing activities, the timing and receipt of milestone payments from our collaborations, as well as spending to support, advance, and broaden our proprietary drug discovery programs. Furthermore, our capital requirements will also change depending on the timing and receipt of any distributions we may receive from our equity stakes in our drug discovery collaborators. The potential for these distributions, and the amounts which we may be entitled to receive, are difficult to predict due to the inherent uncertainty of the events which may trigger such distributions.

We plan to utilize the existing cash, cash equivalents, and marketable securities on hand primarily to fund our software and drug discovery activities. With respect to our proprietary drug discovery programs, as part of our strategy we may choose to advance them into preclinical and clinical development ourselves, enter into collaborations to co-develop them with leading industry partners, or out-license them to maximize their clinical and commercial opportunities.

We may be required to seek additional equity or debt financing. In the event that we require additional financing, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital or generate cash flows necessary to maintain or expand our operations and invest in our platform, we may not be able to compete successfully, which would harm our business, operations and financial condition. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

Our contractual obligations as of December 31, 2024 include lease obligations of $177.5 million, consisting of our continuing rent obligations through December 2037, primarily for our office located in New York, New York for $136.0 million, which expires in December 2037. In addition, see Note 6 – Commitments and Contingencies to our consolidated financial statements appearing in Item 8 of this Annual Report for more information relating to our operating lease obligations.

In December 2022, we entered into an agreement with a third-party to establish an exclusive integrated drug discovery dedicated facility in Hyderabad, India. The agreement contains a minimum payment obligation, which totals $21.8 million over five years after the date of first occupancy.

In December 2020, we entered into a five-year agreement with a third-party cloud provider for compute power. The agreement contains a minimum payment obligation, which totals $60.0 million over the five years after the date we entered into the agreement. There is no annual commitment.

We also enter into agreements in the normal course of business with CRO vendors for research, preclinical studies, and clinical trials, professional consultants for expert advice, and other vendors for various products and services. These contracts do not contain any minimum purchase commitments and are cancellable at any time by us, generally upon 30 days prior written notice, and therefore we believe that our non-cancelable obligations under these agreements are not material. We have also agreed to pay volume-based royalties to third-parties for use of software functionality under various licensing and related agreements. See Note 2 – Significant Accounting Policies to our audited consolidated financial statements appearing in Item 8 of this Annual Report for more information relating to our royalty obligations.

Cash Flows

The following table presents a summary of our cash flows for the periods shown:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Net cash used in operating activities	$ (157,368)	$ (136,733)
Net cash provided by investing activities	148,836	193,034
Net cash provided by financing activities	10,123	9,048
Net increase in cash and cash equivalents and restricted cash	$ 1,591	$ 65,349

Operating activities

During the year ended December 31, 2024, operating activities used approximately $157.4 million of cash, primarily due to a net loss of $187.1 million, which included changes to our operating assets and liabilities of $13.1 million, a $5.7 million non-cash gain on changes in fair value, and $1.4 million of non-cash operating expenses, depreciation and investment accretion costs. These items were partially offset by $49.9 million of stock-based compensation.

During the year ended December 31, 2023, operating activities used approximately $136.7 million of cash, due to a $147.2 million gain from equity investments, of which the cash received is included in investing activities, $53.5 million of non-cash gain on changes in fair value, $22.4 million in changes in our operating assets and liabilities, and $2.1 million of non-cash operating expenses. These items were offset by a net income of $40.7 million, including depreciation and investment accretion costs and $47.8 million in stock-based compensation.

Investing activities

During the year ended December 31, 2024, investing activities provided approximately $148.8 million of cash, consisting of $110.4 million provided by marketable securities maturities, net of purchases, and $48.8 million primarily provided by the disposition of equity investments. These items were partially offset by $7.3 million in cash used for purchases of property and equipment and $3.1 million primarily used for purchases of our equity investment in Ajax Therapeutics, Inc.

During the year ended December 31, 2023, investing activities provided approximately $193.0 million of cash, consisting of $147.2 million cash distributions received, on account of our equity investment in Nimbus, from Nimbus in connection with Takeda's acquisition of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its TYK2 inhibitor NDI-034858 and $63.3 million provided by marketable securities maturities, net of purchases. These items were partially offset by $13.4 million in cash used for purchases of property and equipment, and $4.1 million used for purchases of our equity investment in Structure Therapeutics.

Financing activities

During the year ended December 31, 2024, financing activities provided approximately $10.1 million of cash, consisting of $8.7 million attributable to net proceeds received from the ATM and $1.4 million attributable to proceeds received from stock option exercises.

During the year ended December 31, 2023, financing activities provided approximately $9.0 million of cash, primarily attributable to proceeds from stock option exercises.

Seasonality

Generally, the first and fourth quarter of each year have been our largest quarters for software products and services revenue, primarily due to the timing of customer renewals of on-premise software arrangements, for which revenue is recognized at a single point in time. Seasonality has been a less significant factor for our hosted software arrangements, for which revenue is recognized ratably over time. Seasonality has not been a factor for our drug discovery revenues. Historical seasonality may not be indicative of future periods.

Critical Accounting Policies and Estimates

Critical accounting policies are those that are both most important to the portrayal of a company's financial condition and results, and that require management's most difficult, subjective, and complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements and the accompanying notes. We base our estimates on historical experience, known trends and events, and our beliefs of what could occur in the future considering available information. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts, and experience. The effects of material revisions in estimates, if any, are reflected in the consolidated financial statements prospectively from the date of change in estimates.

While our significant accounting policies are described in more detail in Note 2 – Significant Accounting Policies to our consolidated financial statements appearing in Item 8 of this Annual Report, we believe the following critical accounting estimates used in the preparation of our consolidated financial statements require the most difficult, subjective and complex judgments and estimates and have had, or are reasonably likely to have a material impact on our financial condition or results of operations.

Revenue

We recognize revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers*, or Topic 606, except for contracts that are within the scope of other standards, such as contribution grants and certain collaboration arrangements. In accordance with Topic 606, we recognize revenue when our customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services.

To determine revenue recognition for arrangements that we determine are within the scope of Topic 606, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as we satisfy a performance obligation.

Significant management judgment is applied to determine the allocation of the transaction price and measurement of progress, including (1) the constraint on variable consideration, (2) the identification of performance obligations and allocation of the transaction price to the performance obligations using their standalone selling price, or SSP, and (3) the appropriate input or output based method to recognize collaboration revenue and the extent of progress to date.

Variable consideration: Our revenue may include upfront payments for the performance of services in the future, which have both fixed and variable consideration. We include the unconstrained amount of estimated variable consideration in the transaction price. The amount included in the transaction price is constrained to the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. At the end of each subsequent reporting period, we re-evaluate the estimated variable consideration included in the transaction price and any related constraint and, if necessary, adjust our estimate of the overall transaction price.

Research and development, regulatory or commercial milestones in our collaboration agreements may include some, but not necessarily all, of the following types of events:

- completion of preclinical research and development work leading to selection of product candidates;
- initiation of Phase 1, Phase 2, and Phase 3 clinical trials;
- filing of regulatory applications for marketing approval in the United States, Europe or Japan;
- marketing approval in major markets, such as the United States, Europe, or Japan;
- commercial milestones and/or commercial royalties; and
- achievement of certain other technical, scientific, or development criteria.

At the inception of each arrangement that includes research, development, or regulatory milestone payments, we evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control or that of the licensee, such as certain regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on an SSP basis consistent with the allocation objectives of Topic 606, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achievement of such development milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which may affect license, collaboration, and other revenues and earnings in the period of adjustment. The process of successfully achieving the criteria for the milestone payments is highly uncertain. Consequently, there is a risk that we may not earn all of the milestone payments from each of our collaborators. We recognized $14.1 million and $27.7 million from drug discovery milestones for the years ended December 31, 2024 and 2023, respectively.

Software performance obligations and transaction price allocation: At contract inception, we assess the goods or services promised within each contract that falls under the scope of Topic 606 to identify distinct performance obligations, which requires the most difficult, subjective, and complex judgments based on the nature of each transaction. We allocate the transaction price to each distinct performance obligation on an SSP basis. We determine the SSP using information that includes historical discounting practices, market conditions, cost-plus analysis, and other observable inputs. We typically have more than one SSP for individual software license performance obligations due to the stratification of those items by classes of customers and circumstances. In these instances, we may use information such as the size and geographic region of the customer in determining the SSP. We may also estimate SSP based on management judgment by considering available data such as internal cost and margin objectives, pricing strategies, market/competitive conditions, historical profitability data, as well as other observable inputs. We establish SSP ranges for our products and services and reassess them periodically. The determination of SSP required significant management judgment.

Collaboration agreement performance obligations, transaction price allocation, and measurement of progress: At the inception of each arrangement, we utilize judgment to assess the nature of the performance obligations to determine

whether they are distinct or a single combined performance obligation. We allocate the transaction price to each performance obligation based on the relative SSP of each performance obligation at inception. We determine the SSP at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant judgment is used to determine the inputs for total costs to perform the research activities, which may include the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed by third-parties to complete the research plan. Revenue is recognized on a proportional performance basis over the period of service, using input-based measurements to estimate the performance. Changes to these assumptions may have a material effect on the amount and timing of revenue recognized. We recognized revenue of $8.3 million and $25.1 million related to collaboration agreements with proportional performance measurement for the years ended December 31, 2024 and 2023, respectively.

Recent Accounting Pronouncements

See Note 2 – Significant Accounting Policies to our consolidated financial statements appearing elsewhere in this Annual Report for a discussion of recently issued accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments, including cash equivalents and marketable securities, are in the form of U.S. Treasury and corporate bonds and a money market fund that is invested in U.S. Treasury and corporate bonds. Due to the nature of these investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of this investment portfolio.

We are also exposed to market risk related to changes in foreign currency exchange rates. We maintain bank accounts denominated in Japanese yen, British pound sterling, Indian rupee, European Union euro, and Korean Republic won to accommodate deposits of amounts due from certain customers. We also contract with certain vendors that are located outside of the United States whose invoices are denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these arrangements. Our hedging activity related to our foreign currency exchange rate risk is immaterial. Our cash balances and outstanding vendor invoices denominated in foreign currencies were not material as of December 31, 2024 and 2023, and our market risk associated with foreign currency exchange rates was deemed insignificant. An immediate 10% change in foreign exchange rates would not have a material effect on our consolidated financial statements.

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Schrödinger, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Schrödinger, Inc. and subsidiaries (the Company) as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2024, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 26, 2025 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Identification of performance obligations in complex or unusual revenue arrangements

As discussed in Notes 3(a) and 3(b) to the consolidated financial statements, the Company reported on-premise software revenue of $104,020 thousand, hosted software revenue of $35,253 thousand, software contribution revenue of $8,016 thousand, and drug discovery services revenue of $25,143 thousand for the year ended December 31, 2024. As discussed in Note 3(d), the Company's contracts with customers often include promises to transfer multiple products and services. At contract inception, the Company assesses the products and services promised within each contract to determine distinct performance obligations that should be accounted for separately.

We identified the determination of distinct performance obligations in complex or unusual revenue arrangements as a critical audit matter. There was subjective auditor judgment in evaluating whether promised products and services in

complex or unusual revenue arrangements are separate performance obligations or inputs into a combined performance obligation.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the revenue process, including controls related to the determination of distinct performance obligations. For a selection of complex or unusual revenue arrangements, we evaluated whether the performance obligations identified by the Company were capable of being distinct in the context of the contract by obtaining an understanding of the Company's product and service offerings, obtaining and inspecting contracts, and evaluating the application of the revenue recognition accounting guidance for the selected contract.

/s/ KPMG LLP

We have served as the Company's auditor since 2010.

Portland, Oregon
February 26, 2025

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Schrödinger, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Schrödinger, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2024 and 2023, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2024, and the related notes (collectively, the consolidated financial statements), and our report dated February 26, 2025 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Portland, Oregon
February 26, 2025

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
(in thousands, except for share and per share amounts)

Assets	December 31, 2024	December 31, 2023
Current assets:		
Cash and cash equivalents	$ 147,326	$ 155,315
Restricted cash	15,331	5,751
Marketable securities	204,798	307,688
Accounts receivable, net of allowance for doubtful accounts of $210 and $220	235,692	65,992
Unbilled and other receivables, net of allowance for unbilled receivables of $100 and $100	19,641	23,124
Prepaid expenses	12,205	9,926
Total current assets	634,993	567,796
Property and equipment, net	24,196	23,325
Equity investments	43,208	83,251
Goodwill	4,791	4,791
Right of use assets - operating leases	111,883	117,778
Other assets	4,155	6,014
Total assets	$ 823,226	$ 802,955
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 10,666	$ 16,815
Accrued payroll, taxes, and benefits	42,110	31,763
Deferred revenue	111,944	56,231
Lease liabilities - operating leases	16,755	16,868
Other accrued liabilities	10,272	11,996
Total current liabilities	191,747	133,673
Deferred revenue, long-term	108,814	9,043
Lease liabilities - operating leases, long-term	101,074	111,014
Other liabilities, long-term	146	667
Total liabilities	401,781	254,397
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, $0.01 par value. Authorized 10,000,000 shares; zero shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	—	—
Common stock, $0.01 par value. Authorized 500,000,000 shares; 63,710,409 and 62,977,316 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	637	630
Limited common stock, $0.01 par value. Authorized 100,000,000 shares; 9,164,193 shares issued and outstanding at December 31, 2024 and December 31, 2023, respectively	92	92
Additional paid-in capital	946,037	885,973
Accumulated deficit	(525,541)	(338,418)
Accumulated other comprehensive income	220	281
Total stockholders' equity	421,445	548,558
Total liabilities and stockholders' equity	$ 823,226	$ 802,955

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
(in thousands, except for share and per share amounts)

	Year Ended December 31,		
	2024	2023	2022
Revenues:			
Software products and services	$ 180,365	$ 159,124	$ 135,578
Drug discovery	27,174	57,542	45,377
Total revenues	207,539	216,666	180,955
Cost of revenues:			
Software products and services	36,900	29,514	29,576
Drug discovery	38,556	46,460	50,357
Total cost of revenues	75,456	75,974	79,933
Gross profit	132,083	140,692	101,022
Operating expenses:			
Research and development	201,785	181,766	126,372
Sales and marketing	39,917	37,226	30,642
General and administrative	99,677	99,148	90,825
Total operating expenses	341,379	318,140	247,839
Loss from operations	(209,296)	(177,448)	(146,817)
Other income (expense)			
Gain on equity investments	—	147,213	11,825
Change in fair value	5,683	53,461	(18,084)
Other income	17,902	19,693	3,953
Total other income (expense)	23,585	220,367	(2,306)
(Loss) income before income taxes	(185,711)	42,919	(149,123)
Income tax expense	1,412	2,199	63
Net (loss) income	$ (187,123)	$ 40,720	$ (149,186)
Net (loss) income per share attributable to common and limited common stockholders, basic:	$ (2.57)	$ 0.57	$ (2.10)
Weighted average shares used to compute net (loss) income per share of common and limited common stockholders, basic:	72,670,295	71,776,301	71,173,419
Net (loss) income per share of common and limited common stockholders, diluted:	$ (2.57)	$ 0.54	$ (2.10)
Weighted average shares used to compute net (loss) income per share of common and limited common stockholders, diluted:	72,670,295	74,986,816	71,173,419

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Statements of Comprehensive (Loss) Income
(in thousands)

	Year Ended December 31,		
	2024	2023	2022
Net (loss) income attributable to common and limited common stockholders	$ (187,123)	$ 40,720	$ (149,186)
Changes in market value of investments, net of tax:			
Unrealized (loss) gain on marketable securities	(61)	2,663	(1,731)
Comprehensive (loss) income	$ (187,184)	$ 43,383	$ (150,917)

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Statements of Stockholders' Equity
(in thousands, except for share amounts)

	Common stock		Limited common stock		Additional paid-in	Accumulated	Accumulated other comprehensive	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	(loss) income	equity
Balance at December 31, 2021	61,834,515	$ 618	9,164,193	$ 92	$ 786,964	$ (229,952)	$ (651)	$ 557,071
Change in unrealized loss on marketable securities	—	—	—	—	—	—	(1,731)	(1,731)
Issuances of common stock upon stock option exercises	329,224	4	—	—	2,106	—	—	2,110
Stock-based compensation	—	—	—	—	39,630	—	—	39,630
Net loss	—	—	—	—	—	(149,186)	—	(149,186)
Balance at December 31, 2022	62,163,739	622	9,164,193	92	828,700	(379,138)	(2,382)	447,894
Reclassification of non-controlling interest	—	—	—	—	—	—	—	—
Change in unrealized gain on marketable securities	—	—	—	—	—	—	2,663	2,663
Issuances of common stock upon stock option exercises	800,336	8	—	—	9,432	—	—	9,440
Issuance of common stock upon vesting of RSUs	13,241	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	47,841	—	—	47,841
Net income	—	—	—	—	—	40,720	—	40,720
Balance at December 31, 2023	62,977,316	630	9,164,193	92	885,973	(338,418)	281	548,558
Change in unrealized loss on marketable securities	—	—	—	—	—	—	(61)	(61)
Issuances of common stock upon stock option exercises	169,820	2	—	—	1,486	—	—	1,488
Issuance of common stock upon vesting of RSUs and PRSUs	240,188	2	—	—	—	—	—	2
Issuance of common stock in ATM offering, net	323,085	3	—	—	8,675	—	—	8,678
Stock-based compensation	—	—	—	—	49,903	—	—	49,903
Net loss	—	—	—	—	—	(187,123)	—	(187,123)
Balance at December 31, 2024	63,710,409	$ 637	9,164,193	$ 92	$ 946,037	$ (525,541)	$ 220	$ 421,445

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2024	2023	2022
Cash flows from operating activities:			
Net (loss) income	$ (187,123)	$ 40,720	$ (149,186)
Adjustments to reconcile net (loss) income to net cash used in operating activities:			
Gain on equity investments	—	(147,213)	(11,825)
Changes in fair value	(5,683)	(53,461)	18,084
Depreciation and amortization	6,159	5,552	4,344
Stock-based compensation	49,903	47,841	39,630
Noncash investment (accretion) amortization	(7,592)	(7,761)	629
Loss on disposal of property and equipment	8	142	19
(Increase) decrease in assets, net of acquisition:			
Accounts receivable, net	(169,700)	(10,039)	(23,697)
Unbilled and other receivables	3,483	(9,987)	(4,253)
Reduction in the carrying amount of right of use assets - operating leases	8,942	7,766	7,287
Prepaid expenses and other assets	(3,482)	(8,462)	(7,067)
(Decrease) increase in liabilities, net of acquisition:			
Accounts payable	(6,119)	7,321	1,179
Accrued payroll, taxes, and benefits	10,347	6,881	6,477
Deferred revenue	155,484	(18,256)	(1,903)
Lease liabilities - operating leases	(10,053)	(3,694)	1,900
Other accrued liabilities	(1,942)	5,917	(1,301)
Net cash used in operating activities	(157,368)	(136,733)	(119,683)
Cash flows from investing activities:			
Purchases of property and equipment	(7,311)	(13,403)	(8,014)
Purchases of equity investments	(3,072)	(4,125)	(600)
Distribution from equity investment	—	147,213	11,825
Proceeds from disposition and sale of equity investments	48,798	—	—
Acquisition, net of acquired cash	—	—	(6,427)
Purchases of marketable securities	(251,339)	(320,624)	(271,472)
Proceeds from maturity of marketable securities	361,760	383,973	364,711
Net cash provided by investing activities	148,836	193,034	90,023
Cash flows from financing activities:			
Issuances of common stock upon stock option exercises	1,490	9,440	2,110
Payment of offering costs	(177)	(373)	—
Issuance of common stock in ATM offering	8,868	—	—
Principal payments on finance leases	(58)	(19)	—
Net cash provided by financing activities	10,123	9,048	2,110
Net increase (decrease) in cash and cash equivalents and restricted cash	1,591	65,349	(27,550)
Cash and cash equivalents and restricted cash, beginning of year	161,066	95,717	123,267
Cash and cash equivalents and restricted cash, end of year	$ 162,657	$ 161,066	$ 95,717
Supplemental disclosure of cash flow and noncash information			
Cash paid for income taxes	$ 1,080	$ 2,828	$ 787
Supplemental disclosure of non-cash investing and financing activities			
Purchases of property and equipment in accounts payable	162	192	169
Purchases of property and equipment in accrued liabilities	157	457	293
Acquisition of right of use assets - operating leases, contingency resolution	2,848	514	1,513
Acquisition of right of use assets - operating leases	—	15,085	34,763
Acquisition of lease liabilities - operating leases	—	15,085	34,430
Acquisition of right of use assets in exchange for lease liabilities - finance leases	—	279	—

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

For the years ended December 31, 2024, 2023, and 2022

(in thousands, except for share and per share amounts and note 3(c))

(1) Description of Business

Schrödinger, Inc. (the "Company") has developed a differentiated, physics-based computational platform that enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly and at a lower cost, compared to traditional methods. The Company's software platform is licensed by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. The Company is also applying its computational platform to advance a broad pipeline of drug discovery programs in collaboration with leading biopharmaceutical companies. In addition, the Company uses its computational platform to discover novel molecules for its pipeline of proprietary drug discovery programs, which the Company is advancing through preclinical and clinical development.

(2) Significant Accounting Policies

(a) Recently Issued Accounting Pronouncements

In November 2023, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2023-07, *Segment Reporting* (Topic 280) — *Improvements to Reportable Segment Disclosures,* which improves reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. This standard is effective for annual periods beginning after December 15, 2023, and interim periods within annual periods beginning after December 15, 2024, with early adoption permitted. The Company adopted this new standard for the year ended December 31, 2024 with no material impact on its consolidated financial statements.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes* (Topic 740) — *Improvements to Income Tax Disclosures*, which requires public business entities to disclose specific categories in the tax rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold. This standard is effective for annual periods beginning after December 15, 2024, and interim periods within annual periods beginning after December 15, 2025, on a prospective basis, with early adoption permitted. The Company has not yet adopted ASU 2023-09 and is still evaluating the impact of the adoption on its consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, *Income Statement — Reporting Comprehensive Income— Expense Disaggregation Disclosures* (Subtopic 220-40) — *Disaggregation of Income Statement Expenses*. which requires disclosure in the notes to the financial statements of specified information about certain costs and expenses. This standard is effective for annual periods beginning after December 15, 2026, and interim periods within annual periods beginning after December 15, 2027, on a prospective basis, with early adoption and retrospective application permitted. The Company has not yet adopted ASU 2024-03 and is still evaluating the impact of the adoption on its consolidated financial statements.

(b) Basis of Presentation and Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the assumptions used in the allocation of revenue and estimates regarding the progress of completing performance obligations under collaboration agreements. Actual results could differ from those estimates, and such differences may be material to the consolidated financial statements.

(c) Principles of Consolidation

The Company’s consolidated financial statements include the accounts of Schrödinger, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The functional currency

for foreign entities is the United States dollar. The Company accounts for investments over which it has significant influence, but not a controlling financial interest, using the equity method.

(d) Cash and Cash Equivalents and Marketable Securities and Restricted Cash

Included in cash and cash equivalents were cash equivalents of $102,054 and $85,497 as of December 31, 2024 and 2023, respectively, which consisted of money market funds and certificates of deposit, and are stated at cost, which approximates market value. The Company classifies all highly liquid investments with an original maturity of 90 days or less to be cash equivalents. The Company classifies all marketable securities, which consist of fixed income securities, as available for sale securities.

At times, cash balances held at financial institutions were in excess of the Federal Deposit Insurance Corporation's insured limits; however, the Company primarily places its cash with high-credit quality financial institutions.

Restricted cash primarily consists of letters of credit held with the Company's financial institution related to facility leases and is classified as current in the Company's balance sheets based on the maturity of the underlying letters of credit. The Company also has restricted cash related to a certificate of deposit held as collateral for its credit card facility. Additionally, funds received from certain grants are restricted as to their use and are therefore classified as restricted cash.

(e) Accounts Receivable

Accounts receivable are stated at original invoice amount less an allowance for doubtful accounts. Management estimates the allowance for doubtful accounts by evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Account balances are considered delinquent if payment is not received by the due date. Accounts receivable are written off when deemed uncollectible. Recovery of accounts receivable previously written off is recorded when received. Changes in the balance of accounts deemed uncollectible were deemed immaterial as of December 31, 2024 and 2023. Interest is not charged on accounts receivable.

(f) Fair Value of Financial Instruments

The carrying values of cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities approximate fair value due to their short maturities.

(g) Property and Equipment

Property and equipment are stated at cost. The Company did not capitalize any interest during 2024 and 2023. Maintenance and repairs are expensed as incurred.

Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which range from 3 to 10 years. Amortization of leasehold improvements is calculated using the straight-line method over the remaining life of the lease or the useful life of the asset, whichever is shorter.

Property and equipment are reviewed for impairment as discussed below under "Accounting for the Impairment of Long-Lived Assets."

(h) Goodwill

Goodwill represents the excess purchase price over the fair value of net assets acquired which is not allocable to separately identifiable intangible assets. Other identifiable intangible assets are separately recognized if the intangible asset is obtained through contractual or other legal right or if the intangible asset can be sold, transferred, licensed or exchanged.

Goodwill is not amortized but tested for impairment at least annually, and more frequently if events or circumstances indicate the carrying amount more likely than not exceeds the fair value. The Company has the option to qualitatively or quantitatively assess its goodwill for impairment.

The Company tests its goodwill for impairment on October 1 of each year. In 2024, the Company evaluated its goodwill using a qualitative process. If the qualitative factors determine that it is more likely than not that the fair value exceeds the carrying amount, goodwill is not impaired. If the qualitative assessment determines it is more likely than not the fair value is less than the carrying amount, the Company would further evaluate for potential impairment. This

qualitative assessment indicated that it was more likely than not the Company's reporting unit's fair value exceeded its carrying value. No impairment of goodwill was recognized for the years ended December 31, 2024, 2023, and 2022.

(i) Accounting for the Impairment of Long-Lived Assets

Long-lived assets, such as property and equipment and intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group be tested for potential impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying value. If the carrying value of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that carrying value exceeds fair value. Fair value is determined using various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, depending on the nature of the asset. No impairment was identified for the years ended December 31, 2024, 2023, and 2022.

(j) Warranties

The Company typically warrants that its products will perform in a manner consistent with the product specifications provided to the customer for a period of 30 days. Historically, the Company has not been required to make payments under these obligations. Therefore, no liabilities for such obligations are presented in the consolidated financial statements.

(k) Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of trade receivables and contract assets, which represent contracted unbilled receivables.

The Company does not require customers to provide collateral to support accounts receivable. If deemed necessary, credit reviews of significant new customers may be performed prior to extending credit. The determination of a customer's ability to pay requires judgment, and failure to collect from a customer can adversely affect revenue, cash flows, and results of operations.

As of December 31, 2024, one customer accounted for 68% of total accounts receivable. As of December 31, 2023, two customers accounted for 15% and 11% of total accounts receivable, respectively. As of December 31, 2024, three customers accounted for 33%, 23%, and 16% of total contract assets, respectively. As of December 31, 2023, two customers accounted for 42% and 22% of total contract assets, respectively. For the year ended December 31, 2024, one customer accounted for 10% of total revenues. For the year ended December 31, 2023, two customers accounted for 26% and 11% of total revenues, respectively. For the year ended December 31, 2022, one customer accounted for 16% of total revenues.

(l) Royalties

Royalties represent a component of cost of revenues and consist of royalties paid to owners of intellectual property used in or bundled with the Company's software. Generally, royalties are incurred and recorded at the time a customer enters into a binding purchase agreement, although some royalty agreements are based instead on cash collections. Royalty expense was $9,342, $13,349, and $9,191 for the years ended December 31, 2024, 2023, and 2022, respectively.

(m) Software Development Costs

Costs to develop new software products and substantial enhancements to existing software products are expensed as incurred. Historically, the Company has not capitalized any software development costs because the software development process was essentially completed concurrent with the establishment of technological feasibility.

(n) Research and Development and Advertising

Research and development and advertising costs are expensed as incurred. The Company did not incur any significant advertising costs in 2024, 2023, and 2022.

(o) Stock-Based Compensation

The Company calculates stock-based compensation expense utilizing fair value–based methodologies and recognizes expense over the vesting period of such awards. For performance-based restricted stock units, the Company records stock-based compensation expense with a cumulative catch-up at the time when performance conditions are considered probable of achievement, and on a straight-line basis over the remaining period for which the performance criteria are expected to be completed.

(p) Commissions

Commissions represent a component of sales and marketing expense and consist of the variable compensation paid to the Company's sales representatives. Generally, sales commissions are earned and recorded as expense at the time that a customer has entered into a binding purchase agreement. Commissions paid to sales representatives are recoverable only in the case that the Company cannot collect against any invoiced fee associated with a sales order. Commission expense was $1,803, $1,636, and $2,291 in 2024, 2023, and 2022, respectively.

(q) Income Taxes

The Company records deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial statement carrying amounts and the tax basis of the assets and liabilities. Deferred tax assets are reduced by a valuation allowance when it is estimated to become more likely than not that a portion of the deferred tax assets will not be realized. Accordingly, the Company currently maintains a full valuation allowance against existing net deferred tax assets.

The Company recognizes the benefit of a tax position in the consolidated financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Interest and penalties accrued on unrecognized tax benefits are included within income tax expense in the consolidated financial statements.

(r) Comprehensive (Loss) Income

Comprehensive (loss) income includes net (loss) income and changes in equity related to changes in unrealized gains or losses on marketable securities.

(s) Equity Investments

In the normal course of business, the Company has entered, and may continue to enter, into collaboration agreements with companies to perform drug design services for such companies in exchange for equity ownership stakes in such companies. If it is determined that the Company has control over the investee, the investee is consolidated in the financial statements. If the investee is consolidated with the Company and less than 100% of the equity is owned by the Company, the Company will present non-controlling interest to represent the portion of the investee owned by other investors. If it is determined that the Company does not have control over the investee, the Company evaluates the investment for the ability to exercise significant influence.

Equity investments over which the Company has significant influence may be accounted for under equity method accounting in accordance with Accounting Standards Codification ("ASC") Topic 323 ("Topic 323"), *Equity Method and Joint Ventures*. If it is determined that the Company does not have significant influence over the investee, and there is no readily determinable fair value for the investment, the equity investment may be accounted for at cost less impairment, in accordance with ASC Topic 321 ("Topic 321"), *Investments - Equity Securities*.

For further information regarding the Company's equity investments, see Note 5, Fair Value Measurements and Note 11, Equity Investments.

(t) Net (Loss) Income per Share Attributable to Common and Limited Common Stockholders

The outstanding equity of the Company consists of common stock and limited common stock. Under the Company's certificate of incorporation, the rights of the holders of common stock and limited common stock are identical, except with respect to voting and conversion. Holders of limited common stock are precluded from voting such shares in

any election of directors or on the removal of directors. Limited common stock may be converted into common stock at any time at the option of the stockholder.

Undistributed earnings allocated to the participating securities are subtracted from net income in determining net income (loss) attributable to common and limited common stockholders. Basic net income (loss) per share is computed by dividing net income (loss) attributable to common and limited common stockholders by the weighted-average number of shares of common and limited common stock outstanding during the period.

For the calculation of diluted net income, net income attributable to common and limited common stockholders for basic net income is adjusted by the effect of dilutive securities, including awards under the Company's equity compensation plans. Diluted net income per share attributable to common and limited common stockholders is computed by dividing the resulting net income attributable to common and limited common stockholders by the weighted-average number of fully diluted shares of common and limited common stock outstanding.

(3) Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for promised goods or services. The Company's performance obligations are satisfied either over time or at a point in time, which can result in different revenue recognition patterns.

The following table illustrates the timing of the Company's revenue recognition patterns:

	Year Ended December 31,		
	2024	2023	2022
Software products and services – point in time	51.4 %	49.1 %	47.3 %
Software products and services – over time	35.5	24.3	27.6
Drug Discovery – point in time	6.8	12.7	8.8
Drug Discovery – over time	6.3	13.9	16.3

(a) Software Products and Services

The Company enters into contracts that can include various combinations of licenses, products and services, most of which are distinct and are accounted for as separate performance obligations. For contracts with multiple performance obligations, the Company allocates the transaction price of the contract to each performance obligation on a relative standalone selling price ("SSP") basis. Revenue is recognized net of any sale and value-added taxes collected from customers and subsequently remitted to governmental authorities.

The Company's software business derives revenue from five sources: (i) on-premise software license fees, (ii) hosted software subscription fees, (iii) software maintenance fees, (iv) professional services fees, and (v) contributions.

On-premise software. The Company's on-premise software license arrangements grant customers the right to use its software on their own in-house servers or their own cloud instances for a specified term, typically for one year, though in recent years, the Company has entered into a small number of large multi-year on-premise software license agreements. The Company recognizes revenue for on-premise software license fees upfront, either upon transfer of control of the license or the effective date of the agreement, whichever is later. In instances where the timing of the transfer of control differs from the timing of invoicing, the Company considers whether a significant financing component exists. The Company has elected the practical expedient to not assess for significant financing where the term is less than one year. The Company's updates and upgrades are not integral to maintaining the utility of the software licenses. Payments typically are received upfront or annually.

Hosted software. Hosted software revenue consists primarily of fees to provide the Company's customers with hosted licenses, which allows these customers to access the Company's cloud-based software solution on their own hardware without taking control of the licenses, and is recognized ratably over the term of the arrangement, which is typically one year, though in recent years, the Company has entered into a small number of large multi-year hosted software license agreements. When a customer enters into a hosted arrangement for which revenue is recognized over time,

the amount paid upfront that is not recognized in the current period is included in deferred revenue in the Company's statement of financial position until the period in which it is recognized.

Software maintenance. Software maintenance includes technical support, updates, and upgrades related to the Company's on-premise software licenses. Software maintenance revenue is recognized ratably over the term of the arrangement. Software maintenance activities are performed in connection with the use of the Company's on-premise software.

Professional services. Professional services include training, technical setup, installation or assisting customers with modeling services, where the Company uses its software to perform tasks such as virtual screening on behalf of the Company's customers. These services are generally not related to the core functionality of the Company's software and are recognized as revenue when resources are consumed.

Software contribution revenue. Software contribution revenue consists of funds received under non-reciprocal agreements with Gates Ventures, LLC and the Bill & Melinda Gates Foundation. The agreement with Gates Ventures, LLC was originally entered into in June 2020 and further extended through August 2026. The agreement is an unconditional non-exchange contribution without restrictions. Revenue is recognized annually, when invoiced, in accordance with ASC Topic 958, *Not-for-Profit Entities* ("Topic 958"), as the agreement is not an exchange transaction.

The agreement with Gates Ventures, LLC initially covered the period from June 23, 2020 through June 22, 2023 for total consideration of up to $3,000. The agreement was then extended through August 13, 2026 and provides for total additional consideration of up to $6,000. The Company recognized revenue of $2,000, $1,800, and $1,000 related to these agreements during the years ended December 31, 2024, 2023, and 2022, respectively. As of December 31, 2024, the Company had no deferred revenue balance related to this agreement. As of December 31, 2024 and 2023, the Company had no accounts receivable related to this agreement.

In July 2024, the Company entered into a one-year agreement with the Bill & Melinda Gates Foundation to fund the initiative to accelerate the expansion of the Company's computational platform to predict toxicity associated with binding to off-target proteins. In November 2024, the Company and the Bill & Melinda Gates Foundation entered into an amendment to the agreement to expand the original term of the agreement to April 30, 2026 and provide supplemental funds on terms similar to the original agreement. Revenue is recognized as conditions are met and on a cost reimbursement basis in accordance with Topic 958. The Company recognized revenue of $6,016 related to these agreements during the year ended December 31, 2024. As of December 31, 2024, the Company had a $8,484 deferred revenue balance related to these agreements. As of December 31, 2024, the Company had no accounts receivable related to these agreements.

The following table presents the revenue recognized from the sources of software products and services revenue:

	Year Ended December 31,		
	2024	2023	2022
On-premise software	$ 104,020	$ 104,511	$ 84,487
Hosted software	35,253	20,381	14,890
Software maintenance	23,279	23,066	19,996
Professional services	9,797	9,366	15,205
Revenue from contracts with customers	172,349	157,324	134,578
Software contribution	8,016	1,800	1,000
Total software revenue	$ 180,365	$ 159,124	$ 135,578

(b) Drug Discovery

Drug discovery services. Revenue from drug discovery and collaboration services contracts includes revenue from research services and the achievement of milestones.

Research services revenue is generally recognized over time, typically by measuring the progress toward complete satisfaction of the relevant performance obligation using an appropriate input method based on the services promised to the customer, such as costs incurred and hours expended. This method of recognizing revenue requires the Company to make estimates of the work required to complete the performance obligation in order to determine the progress towards

completion. Payments for research services are generally due upfront at the start of a contract or periodically through the contract term.

In addition, the Company is generally entitled to receive variable consideration as certain milestones are achieved. The Company estimates the amount of variable consideration using the most likely amount method. The Company evaluates milestones on a case-by-case basis, including whether there are factors outside the Company's control that could result in a significant reversal of revenue, and the likelihood and magnitude of a potential reversal. If achievement of a milestone is not considered probable or the event is outside of the Company's control, the Company constrains (reduces) variable consideration to exclude the milestone payment until it is deemed probable of being achieved or the event occurs. Upon removal of the constraint on variable consideration, revenue may be recognized at a point in time or over time by applying the allocation guidance of ASC Topic 606, *Revenue from Contracts with Customers* ("Topic 606").

As of December 31, 2024, there were no milestones not yet achieved that were determined to be probable of achievement. As of December 31, 2023 and 2022, milestones not yet achieved that were determined to be probable of achievement totaled $350 and $4,000, respectively, and $350 and $3,939 of those milestones were recognized as revenue for the years ended December 31, 2023, and 2022, respectively.

Drug discovery contribution revenue. Drug discovery contribution revenue consists of funds received under an agreement with the Bill & Melinda Gates Foundation on a cost reimbursement basis, to perform services aimed at accelerating drug discovery in women's health. The initial agreement began in November 2021 and expired in September 2023. In September 2023, the Company entered into a new agreement with the Bill & Melinda Gates Foundation to perform services aimed at accelerating drug discovery in women's health that expires in October 2025. Revenue is recognized as costs are incurred in accordance with Topic 958. As of December 31, 2024 and 2023, the Company had deferred revenue balances related to these agreements of $949 and $1,581, respectively.

The following table presents the revenue recognized from the sources of drug discovery revenue:

	Year Ended December 31,		
	2024	2023	2022
Drug discovery services revenue from contracts with customers	$ 25,143	$ 54,720	$ 43,427
Drug discovery contribution	2,031	2,822	1,950
Total drug discovery revenue	$ 27,174	$ 57,542	$ 45,377

(c) Collaboration and License Agreement

Bristol Myers-Squibb. On November 22, 2020, the Company entered into an exclusive, worldwide collaboration and license agreement with Bristol-Myers Squibb Company ("BMS"), pursuant to which the Company and BMS agreed to collaborate in the discovery, research and preclinical development of new small molecule compounds for disease indications in oncology, neurology, and immunology therapeutics areas. Under the agreement, the Company was initially responsible, at its own cost and expense, for the discovery of small molecule compounds directed to five specified biological targets pursuant to a mutually agreed research plan for each such target. In December 2022, the Company and BMS entered into an amendment to the agreement to include an additional target in neurology on terms similar to the original agreement. As a result of BMS electing not to proceed with further development of certain targets, there is one remaining neurology target under the agreement, as amended, as of December 31, 2024.

Once a development candidate meeting specified criteria for a target under the agreement has been identified by the Company, BMS will be solely responsible for the further development, manufacturing and commercialization of such development candidate at its own cost and expense. The Company is solely responsible for the development of any programs that have been returned by BMS.

Under the terms of the agreement, as amended, BMS paid the Company an initial upfront payment of $55.0 million in November 2020, an additional upfront payment in December 2022, and a program fee in December 2024. As of December 31, 2024 the Company is eligible to receive up to $482.0 million in total milestone payments related to the one remaining neurology target currently subject to the collaboration, consisting of up to $257.0 million in the aggregate for the achievement of certain specified research, development, and regulatory milestones and $225.0 million in the aggregate for

the achievement of certain specified commercial milestones. As of December 31, 2024, the Company has recognized $32.0 million in revenue related to milestones under this agreement.

The Company is also entitled to a tiered percentage royalty on annual net sales ranging from mid-single digits to low-double digits, subject to certain specified reductions. Royalties are payable by BMS on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last valid claim covering the licensed product in such country, expiration of all applicable regulatory exclusivities in such country for such licensed product and the tenth anniversary of the first commercial sale of such licensed product in such country.

The Company assessed the collaboration and license agreement in accordance with Topic 606 and concluded that BMS is a customer based on the agreement structure. At inception, the Company identified one performance obligation for each of the five programs initially covered under the agreement, which includes research activities for each program and a license grant for the underlying intellectual property. The Company determined that the license grant for intellectual property is not separable from the research activities, as the research activities are expected to significantly modify or enhance the license grant over the period of service, and therefore are not distinct in the context of the contract.

The Company determined that the transaction price at the onset of the agreement was $55.0 million. Additional consideration to be paid to the Company upon the achievement of future milestone payments was excluded from the transaction price as they represent milestone payments that were not considered probable as of the inception date such that there is not a significant risk of revenue reversal.

The Company has allocated the transaction price of $55.0 million to each performance obligation based on the SSP of each performance obligation at inception. The Company determined the estimated SSP at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to perform the research activities included the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed to complete the research plan.

Revenue associated with the research activities is recognized on a proportional performance basis over the period of service for research activities, using input-based measurements of total costs of research incurred to estimate the proportion performed. Progress towards completion is remeasured at the end of each reporting period.

During the years ended December 31, 2024, 2023, and 2022, the Company recognized $10.8 million, $43.2 million, and $22.1 million, respectively, of revenue associated with the agreement based on the research activities performed and milestones achieved. As of December 31, 2024 and 2023, there was $5.9 million and $7.3 million, respectively, of deferred revenue related to the agreement, which was classified as either current or non-current in the consolidated balance sheet based on the period the services are expected to be performed. As of December 31, 2024 and 2023, the Company had no outstanding receivables for this collaboration.

Novartis. On November 11, 2024, the Company entered into a research collaboration and license agreement with Novartis Pharma AG ("Novartis"), pursuant to which the Company and Novartis agreed to collaborate on the discovery, research and preclinical development of small molecule compounds for targets in certain specified therapeutic areas. The agreement is intended to advance multiple development candidates for development and commercialization by Novartis. The Company also entered into an expanded three-year software agreement with Novartis that substantially increases Novartis' access to the Company’s computational predictive modeling technology and enterprise informatics platform. Under Topic 606, the research collaboration and license agreement as well as the three-year software agreement ("the agreements") are collectively accounted for as a single contract.

Under the terms of the research collaboration and license agreement, once a development candidate has been identified, Novartis will be solely responsible for the further development, manufacturing and commercialization of such development candidate.

Novartis agreed to pay the Company an initial upfront payment of $150.0 million under the terms of the research collaboration and license agreement, and the Company will be eligible to eligible to receive up to $2.272 billion in total milestone payments across the initial programs. Such milestones consist of up to $892.0 million in discovery and development milestones and up to $1.38 billion in commercial milestones. The Company is also entitled to a tiered percentage royalty ranging from mid-single-digits to low double-digits on products commercialized by Novartis under the

agreement, subject to certain specified reductions. As of December 31, 2024, no revenue has been recognized related to milestones under this agreement.

The Company assessed the research collaboration and license agreement in accordance with Topic 606 and concluded that Novartis is a customer based on the agreement structure. The promises identified by the Company include research activities for each program under the agreement, a license grant for the underlying intellectual property, and software licenses and services. The Company determined that the license grant for intellectual property is not separable from the research activities, as the research activities are expected to significantly modify or enhance the license grant over the period of service, and therefore are not distinct in the context of the contract. Software licenses and services provided under the agreement are considered distinct and are accounted for as separate performance obligations in accordance with Topic 606.

The Company has allocated the transaction price for the agreements to each performance obligation based on the SSP of each performance obligation at inception. The Company determined the estimated SSP at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to perform the research activities included the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed to complete the research plan.

Revenue associated with the research activities is recognized on a proportional performance basis over the period of service for research activities, using input-based measurements of total costs of research incurred to estimate the proportion performed. Progress towards completion is remeasured at the end of each reporting period.

During the year ended December 31, 2024, the Company recognized $0.6 million of revenue associated with the research collaboration and license agreement. As of December 31, 2024, there was $116.7 million of deferred revenue, net of contract assets, related to the agreements, which was classified as either current or non-current in the condensed consolidated balance sheet based on the period the services are expected to be performed. As of December 31, 2024, the Company had $150.0 million outstanding receivables for this collaboration.

(d) Significant Judgments

Significant judgments and estimates are required under Topic 606. Due to the complexity of certain contracts, the actual revenue recognition treatment required under Topic 606 for the Company’s arrangements may be dependent on contract-specific terms and may vary in some instances.

The Company's contracts with customers often include but are not limited to promises to transfer multiple software products and services, including training, professional services, technical support services, and rights to unspecified updates, as well as collaborative research services, licenses to intellectual properties, and customer options. Determining whether licenses and services are distinct performance obligations that should be accounted for separately, or are not distinct and therefore should be accounted for together, requires significant judgment. In some arrangements, such as most of the Company's term-based software license arrangements, may include multiple software licenses, a right to updates or upgrades to the licensed software products, and technical support. The Company has concluded that such promised licenses and services are separate distinct performance obligations. In other arrangements, including collaboration services arrangements, the licenses and certain services may not be distinct from each other.

The Company is required to estimate the total consideration expected to be received from contracts with customers, including any variable consideration. For collaborative arrangements, under which the Company is eligible to receive variable consideration in the form of milestones payments, judgment is required to evaluate whether the milestones are considered probable of being achieved. If it is probable that a significant revenue reversal would not occur, the constraint is removed and value of the associated milestone is included in the estimated transaction price using the most likely amount method based on contractual requirements and historical experience. Once the estimated transaction price is established, amounts are allocated to the performance obligations that have been identified. The transaction price is allocated to each separate performance obligation on a relative SSP basis consistent with the allocation objectives of Topic 606.

Judgment is required to determine the SSP for each distinct performance obligation. The Company rarely licenses or sells products on a standalone basis, so the Company is required to estimate the range of SSPs for each performance obligation. In instances where the SSP is not directly observable because the Company does not sell the license, product, or service separately, the Company determines the SSP using information that includes historical discounting practices,

market conditions, cost-plus analysis, and other observable inputs. The Company typically has more than one SSP for individual software license performance obligations due to the stratification of those items by volume of sales, classes of customers and other relevant circumstances. In these instances, the Company may use information such as the size and geographic region of the customer in determining the SSP. Professional service revenue is recognized as costs and hours are incurred, and judgment is required in estimating both the project status and the costs incurred or hours expended.

If a group of agreements are so closely related to each other that they are, in effect, part of a single arrangement, such agreements are deemed to be one arrangement for revenue recognition purposes. The Company exercises significant judgment to evaluate the relevant facts and circumstances in determining whether the separate agreements should be accounted for separately or as, in substance, a single arrangement. The Company's judgments about whether a group of contracts comprises a single arrangement can affect the allocation of consideration to the distinct performance obligations, which could have an effect on results of operations for the periods involved.

Judgment is required to determine the total costs to perform research activities, which include the length of time required, the internal hours expected to be incurred on the services, and the number and costs of various studies that may be performed by third parties to complete the research plan.

Generally, the Company has not experienced significant returns or refunds to customers.

The Company's estimates related to revenue recognition may require significant judgment and a change in these estimates could have an effect on the Company's results of operations during the periods involved.

(e) Contract Balances

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in receivables, contract assets, or contract liabilities (deferred revenue) on the consolidated balance sheets. The Company records a contract asset when revenue is recognized prior to invoicing. A deferred revenue liability is recorded when revenue is expected to be recognized subsequent to invoicing. For the Company's time-based software agreements, customers are generally invoiced at the beginning of the arrangement for the entire term, though when the term spans multiple years the customers may be invoiced on an annual basis. For certain drug discovery agreements where the milestones are deemed probable in a period prior to when the milestone is achieved, the Company records a contract asset for the full value of the milestone.

Contract assets are included in unbilled and other receivables within the consolidated balance sheets and are transferred to receivables when the Company invoices the customer.

Contract balances were as follows:

	As of December 31, 2024	As of December 31, 2023
Contract assets	$ 16,564	$ 21,107
Deferred revenue, short-term:		
Software products and services	75,660	44,218
Drug discovery	36,284	12,013
Deferred revenue, long-term:		
Software products and services	14,393	2,407
Drug discovery	94,421	6,636

For the years ended December 31, 2024 and 2023, the Company recognized $53,438 and $64,120 of revenue, respectively, that was included in deferred revenue at the end of the respective preceding periods. All other deferred revenue activity is due to the timing of invoices in relation to the timing of revenue, as described above. The Company expects to recognize as revenue approximately 51% of its December 31, 2024 deferred revenue balance in the next 12 months and the remainder thereafter. Additionally, contracted but unsatisfied performance obligations that had not yet been billed to the customer or included in deferred revenue were $59,519 as of December 31, 2024.

Payment terms and conditions vary by contract type, although terms typically require payment within 30 to 60 days. In instances where the timing of revenue recognition differs from that of invoicing, the Company has determined that its contracts generally do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing the Company's products and services, not to facilitate financing arrangements.

(f) Deferred Sales Commissions

The Company has applied the practical expedient for sales commission expense, as any material compensation paid to sales representatives to obtain a contract relates to a period of one year or less. The Company has not capitalized any costs related to sales commissions.

(4) Property and Equipment

Property and equipment consisted of the following:

	As of December 31,	
	2024	2023
Computers and equipment	$ 23,527	$ 22,122
Leasehold improvements	3,693	3,787
Furniture and fixtures	6,876	6,230
Lab equipment	10,375	8,757
Right of use asset - finance leases	579	579
	45,050	41,475
Less accumulated depreciation	(20,854)	(18,150)
	$ 24,196	$ 23,325

Depreciation expense for 2024, 2023, and 2022 was $6,159, $4,965, and $3,831, respectively, and is included within cost of revenues and research and development, sales and marketing, and general and administrative expenses within the consolidated statements of operations.

(5) Fair Value Measurements

Various inputs are used in determining the fair value of the Company's financial assets and liabilities. These inputs are summarized into the following three broad categories:

Level 1 – quoted prices in active markets for identical securities

Level 2 – other significant observable inputs, including quoted prices for similar securities, interest rates, credit risk, etc.

Level 3 – significant unobservable inputs, including the Company's own assumptions in determining fair value

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. Marketable securities, which consist primarily of corporate and U.S. government agency bonds, are classified as available for sale and fair value did not differ significantly from carrying value as of December 31, 2024 and 2023. The following table presents information about the Company's assets measured at fair value as of December 31, 2024:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents and restricted cash	$ 162,657	$ —	$ —	$ 162,657
Marketable securities	—	204,798	—	204,798
Equity investments	36,202	—	—	36,202
Total	$ 198,859	$ 204,798	$ —	$ 403,657

The following table presents information about the Company's assets measured at fair value as of December 31, 2023:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash and cash equivalents and restricted cash	$ 161,066	$ —	$ —	$ 161,066
Marketable securities	—	307,688	—	307,688
Equity investments	79,623	—	1,928	81,551
Total	$ 240,689	$ 307,688	$ 1,928	$ 550,305

The fair value of the Company's investment in Nimbus Therapeutics, LLC ("Nimbus"), classified as Level 3 in the fair value hierarchy, was recorded as an equity method investment under Topic 323 using the hypothetical liquidated book value method ("HLBV method") through June 30, 2023, as further described in Note 11, Equity Investments. Significant unobservable inputs used to determine Nimbus' fair value under the HLBV method were the entity's annual financial statements and the Company's liquidation preference. Following the dilution of the Company's investment in Nimbus during the year ended December 31, 2023, the fair value of the Company's investment was recorded under Topic 321 as a non-marketable equity security as the Company no longer exercises significant influence over Nimbus. This change in accounting method resulted in an unrealized gain of $1,928 and subsequent removal from the Level 3 fair value hierarchy table during the year ended December 31, 2024.

Unrealized gains and losses arising from changes in fair value of the Company's equity investments are classified within change in fair value in the consolidated statements of operations. Realized gains arising from distributions receivable from the Company's equity investments are classified within gain on equity investments in the consolidated statements of operations.

For further information regarding the Company's equity investments, see Note 11, Equity Investments.

(6) Commitments and Contingencies

(a) Leases

The Company has multiple operating leases for office space and a finance lease for equipment that expire at various dates through 2037. The Company has elected the package of practical expedients under the transition guidance of ASC Topic 842, *Leases*, to exclude short-term leases from the balance sheet and to combine lease and non-lease components. The Company classifies finance lease right of use assets under property and equipment, net and finance short-term and long-term lease liabilities under other accrued liabilities and other liabilities, long-term, respectively.

Upon inception of a lease, the Company determines if an arrangement is a lease, if it is classified as an operating or finance lease, if it includes options to extend or terminate the lease, and if it is reasonably certain that the Company will exercise the options. Lease cost, representing lease payments over the term of the lease and any capitalizable direct costs less any incentives received, is recognized on a straight-line basis over the lease term as lease expense.

In determining the present value of lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date if the rate implicit in the lease is not readily determinable. Upon execution of a new lease, the Company performs an analysis to determine its incremental borrowing rate using its current borrowing rate, adjusted for various factors including level of collateralization and lease term. As of December 31, 2024, the remaining weighted average lease term for operating and finance leases was 11 years.

During the year ended December 31, 2024, operating lease right of use assets increased by $2,952 due to contingency resolutions associated with office leases.

Variable and short-term lease costs for the Company's operating and finance leases were immaterial for the year ended December 31, 2024. Additional details of the Company's operating and finance leases are presented in the following table:

	Year Ended December 31,		
	2024	2023	2022
Lease costs	$ 18,097	$ 16,769	$ 11,999
Cash paid for leases	17,718	12,263	3,275

Maturities of operating and finance lease liabilities as of December 31, 2024 under noncancelable leases were as follows:

Year ending December 31:	
2025	$ 17,452
2026	17,136
2027	15,975
2028	14,939
2029	14,522
Thereafter	97,509
Total future minimum lease payments	177,533
Less: imputed interest	(59,506)
Present value of future minimum lease payments	118,027
Less: current portion of lease payments	16,878
Lease liabilities, long-term	$ 101,149

(b) Legal Matters

From time to time, the Company may become involved in routine litigation arising in the ordinary course of business. While the results of such litigation cannot be predicted with certainty, management believes that the final outcome of such matters is not likely to have a material adverse effect on the Company’s financial position or results of operations or cash flows.

(7) Income Taxes

Income tax expense (benefit) is comprised of the following:

	Year Ended December 31,		
	2024	2023	2022
Current:			
Federal	$ (202)	$ 727	$ (195)
State	352	509	(280)
Foreign	1,515	963	538
Current income tax expense	1,665	2,199	63
Deferred:			
Federal	—	—	—
State	—	—	—
Foreign	(253)	—	—
Deferred income tax benefit	(253)	—	—
Income tax expense	$ 1,412	$ 2,199	$ 63

Components of (loss) income before income taxes by tax jurisdiction were as follows:

	Year Ended December 31,		
	2024	2023	2022
United States	$ (190,298)	$ 39,076	$ (150,147)
Foreign	4,587	3,843	1,021
(Loss) income before income taxes	$ (185,711)	$ 42,919	$ (149,126)

Reconciliation of income tax expense at the applicable statutory income tax rates to the effective income tax rate is as follows:

	Year Ended December 31,		
	2024	2023	2022
Statutory federal income tax rate	21.0 %	21.0 %	21.0 %
State taxes, net of federal benefits	3.6	5.8	5.1
Section 162(m) limitation	—	1.2	(1.1)
Stock compensation	(1.8)	1.7	0.6
Return-to-provision adjustments	(1.5)	(3.3)	0.2
Research and development credit	4.8	(14.1)	3.1
Tax contingencies, net of reversals	(0.5)	1.4	(0.3)
Change in valuation allowance	(22.2)	(4.4)	(28.6)
Other	(4.2)	(4.2)	—
Effective income tax rate	(0.8)%	5.1 %	— %

Income tax expense for the year ended December 31, 2024 represents the Company's income tax obligations in certain states and taxes in foreign jurisdictions in which it conducts business. Income tax expense for the years ended December 31, 2023 represents the Company's federal and certain state income tax obligations and taxes in foreign jurisdictions for which it conducts business. Income tax expense for the year ended December 31, 2022 represents the Company's income tax obligations in certain states and taxes in foreign jurisdictions in which it conducts business. As of December 31, 2024, the Company has a full valuation allowance on U.S. federal and state deferred tax assets.

The total change in valuation allowance for the year ended December 31, 2024 was $41,195, which was primarily due to temporary differences for capitalized research and development expenses and share based compensation, partially offset by adjustments to equity method investments.

Tax effects of temporary differences that give rise to significant portions of deferred income tax assets and deferred income tax liabilities were as follows:

	As of December 31,		
	2024	2023	2022
Deferred income tax assets:			
Net operating loss carryforwards	$ 51,542	$ 44,116	$ 67,758
Capitalized research and development	62,215	13,224	5,511
Accrued expenses	37,544	71,676	43,362
Deferred revenue	5,462	5,296	6,532
Lease liabilities	27,551	32,491	28,952
Credits	29,884	21,903	18,456
Gross deferred tax assets	214,198	188,706	170,571
Less valuation allowance	(177,226)	(136,031)	(137,957)
Net deferred tax assets	36,972	52,675	32,614
Deferred income tax liabilities:			
Unrealized gain on equity investments	(7,284)	(18,553)	(4,439)
Prepaid expenses	(652)	(1,554)	(1,435)
Depreciation and amortization	(29,036)	(32,568)	(26,740)
Net deferred income tax assets	$ —	$ —	$ —

As of December 31, 2024, the Company had federal and state net operating loss ("NOL") carryforwards of $204,474 and $129,490, respectively. The state NOL carryforwards will expire between 2025 and 2044, if not used by the Company to reduce income taxes payable in future periods. Utilization of post-2017 federal NOL carryforwards is limited to 80% of taxable income generated in a given year and carry forward indefinitely. As of December 31, 2024, the Company had federal orphan drug credits and federal research and development tax credit carryforwards of $31,294 and state research and development tax credit carryforwards of $2,736. The federal and state carryforwards, with the exception of $2,223 indefinite state credits will expire between 2025 and 2044, if not utilized.

Pursuant to Internal Revenue Code Sections 382 and 383, the utilization of NOLs and other tax attributes may be substantially limited due to cumulative changes in ownership greater than 50% that may have occurred or could occur during applicable testing periods. The Company has performed an analysis through December 31, 2024 and determined no such ownership change has occurred in the periods presented.

The Company has not recognized a deferred tax liability for the undistributed earnings of its foreign operations as the Company considers these earnings to be indefinitely reinvested. The determination of a hypothetical unrecognized deferred tax liability as of December 31, 2024 is not practicable because of the complexity and variety of assumptions necessary to compute the tax.

The Company classifies interest and penalties related to unrecognized tax benefits within income tax expense in the consolidated statement of operations. Following is a reconciliation of total gross unrecognized tax benefits:

	Year Ended December 31,		
	2024	2023	2022
Balance, January 1	$ 2,742	$ 2,142	$ 1,702
Additions for tax positions taken in prior years	258	89	35
Reductions for tax positions taken in prior years	—	(4)	(24)
Additions for tax positions related to the current year	648	515	429
Balance, December 31	$ 3,648	$ 2,742	$ 2,142

The Company does not anticipate any significant increases or decreases in its uncertain tax positions within the next 12 months.

The Company and its subsidiaries file U.S. federal income tax returns and various state, local and foreign income tax returns. As of December 31, 2024, the Company's statutes of limitations are open for all federal and state tax returns filed after the years ended December 31, 2021 and 2020, respectively. NOL and credit carryforwards for all years are subject to examination and adjustments for the three years following the year in which the carryforwards are utilized. The Company is not currently under Internal Revenue Service or state examination.

(8) Stockholders' Equity

(a) Common Stock

As of December 31, 2024, the Company had authorized 500,000,000 shares of common stock with a par value of $0.01 per share. Holders of common stock are entitled to one vote per share, to receive dividends, if and when declared by the board of directors, and upon liquidation or dissolution, to receive a portion of the assets available for distributions to stockholders, subject to preferential amounts owed to holders of the Company's preferred stock, if any.

Common stockholders have no preemptive or other subscription rights and there are no redemption or sinking fund provisions with respect to such shares. The rights, preferences and privileges of holders of the common stock are subject to and may be adversely affected by the right of the holders of shares of any series of preferred stock that the Company may designate and issue in the future.

In February 2024, the Company entered into an amended and restated sales agreement with Leerink Partners LLC ("Leerink Partners"), as sales agent, with respect to an at-the-market offering program (the "ATM") under which the Company could offer and sell, from time to time pursuant to its Registration Statement on Form S-3, shares of common stock, having an aggregate offering price of up to $250,000, through Leerink Partners. The amended and restated sales agreement amends and restates the original sales agreement that the Company entered into with Leerink Partners with respect to the ATM in May 2023, which is no longer in effect. During the year ended December 31, 2024, 323,085 shares of common stock were sold under the ATM for total net proceeds of $8,691 and gross proceeds of $8,868, before deducting sales agent commissions. As of December 31, 2024, the Company had $241,132 of common stock remaining available for sale under the ATM.

(b) Limited Common Stock

As of December 31, 2024, the Company had authorized 100,000,000 shares of limited common stock with a par value of $0.01 per share. Holders of limited common stock are entitled to one vote per share, however, the holders of limited common stock shall not be entitled to vote such shares in any election of directors or on the removal of directors. Holders of limited common stock are entitled to the same dividend rights as holders of common stock, if and when declared by the board of directors, and upon liquidation or dissolution, to receive a portion of the assets available for distributions to stockholders, subject to preferential amounts owed to holders of the Company's preferred stock, if any. Holders of the Company's limited common stock have the right to convert each share of limited common stock into one share of the Company's common stock.

Limited common stockholders have no preemptive or other subscription rights and there are no redemption or sinking fund provisions with respect to such shares. The rights, preferences and privileges of holders of the limited

common stock are subject to and may be adversely affected by the right of the holders of shares of any series of preferred stock that the Company may designate and issue in the future.

(c) Preferred Stock

As of December 31, 2024, the Company had authorized 10,000,000 shares of undesignated preferred stock with a par value of $0.01 per share. The Company's board of directors has the discretion to determine the rights, preferences, privileges, and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges, and liquidation preferences, of each series of preferred stock.

(9) Stock-Based Compensation

Stock Incentive Plans

As of December 31, 2024, the Company's stock incentive plans included the 2010 Stock Plan (the "2010 Plan"), the 2020 Equity Incentive Plan (the "2020 Plan"), the 2021 Inducement Equity Incentive Plan, as amended (the "2021 Plan"), and the 2022 Equity Incentive Plan, as amended (the "2022 Plan") (together, the "Plans").

The 2022 Plan provides for the award of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock units, other stock-based awards, and cash-based awards to employees, directors, consultants or advisors. Shares of common stock subject to outstanding awards granted under the 2020 Plan and the 2010 Plan that expire, terminate, or are otherwise surrendered, cancelled, forfeited, or repurchased by the Company are available for issuance under the 2022 Plan.

The 2021 Plan provides for the award of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock units, and other stock-based awards to persons who were not previously an employee or director of the Company or who are commencing employment with the Company following a bona fide period of non-employment, in either case, as an inducement material to such person’s entry into employment with the Company and in accordance with the requirements of the Nasdaq Stock Market Rule 5635(c)(4). Neither consultants nor advisors are eligible to participate in the 2021 Plan.

The 2020 Plan provided for the award of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock units, and other stock-based awards to employees, directors, consultants or advisors. As of June 15, 2022, the effective date of the 2022 Plan, no further awards will be made under the 2020 Plan. Any options or awards outstanding under the 2020 Plan are governed by the terms of the 2020 Plan.

The 2010 Plan provided for the granting of incentive stock options and nonstatutory stock options to employees, directors, consultants or advisors. As of the effective date of the 2020 Plan, no further awards will be made under the 2010 Plan. Any options or awards outstanding under the 2010 Plan are governed by the terms of the 2010 Plan.

As of December 31, 2024, there were 6,391,224 shares available for grant under the Plans. The following table presents classification of stock-based compensation expense within the consolidated statements of operations:

	Year Ended December 31,		
	2024	2023	2022
Cost of sales	$ 4,935	$ 5,177	$ 5,382
Research and development	16,662	15,493	11,816
Sales and marketing	3,902	3,639	2,818
General and administrative	24,404	23,532	19,614
Total stock-based compensation	$ 49,903	$ 47,841	$ 39,630

Restricted Stock Units

Each restricted stock unit ("RSU") represents the right to receive one share of the Company's common stock upon vesting. The fair value of RSUs granted by the Company was calculated based upon the Company's closing stock price on the date of the grant, and the stock-based compensation expense is recognized over the vesting period. RSUs generally vest

over four years with 25% of the grants vesting at the end of the first year and the remaining vesting annually over the following three years.

Restricted stock unit activity was as follows:

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Beginning, January 1, 2024	773,814	$ 26.19
Granted	1,244,993	24.78
Vested	(231,188)	29.25
Forfeited	(105,071)	24.71
Balance, December 31, 2024	1,682,548	24.82

The weighted average grant date fair value for each RSU granted during the years ended December 31, 2024, 2023, and 2022 was $24.78, $26.09, and $26.86, respectively.

As of December 31, 2024, there was $32,264 of unrecognized compensation cost related to RSUs granted under the Plans, which is expected to be recognized over a weighted average period of 2.90 years. During the years ended December 31, 2024 and 2023, 231,188 and 13,241 RSUs vested, respectively. The fair value of RSUs vested during the years ended December 31, 2024 and 2023 was $5,822 and $355, respectively. No RSUs vested during year ended December 31, 2022.

Performance-Based Restricted Stock Units

In March 2024 and February 2023, the Company awarded performance-based restricted stock units ("PRSUs") under the 2022 Plan. Each PRSU represents a contingent right to receive one share of common stock upon the achievement of specified performance goals. The fair value of PRSUs granted by the Company was calculated based upon the Company's closing stock price on the date of the grant, and the stock-based compensation expense is recognized when the grant date is determined and performance conditions are probable of achievement. At the point when performance conditions are considered probable of achievement, the Company records stock-based compensation expense with a cumulative catch-up expense in the period first recognized and on a straight-line basis over the remaining period for which the performance criteria are expected to be completed.

In March 2024, the Company awarded to all executive officers PRSUs for a maximum of 180,000 shares (based on 150% achievement of the applicable performance conditions outlined in the awards), with a target award of 120,000 PRSUs (based on 100% achievement of the applicable performance conditions), and a threshold award of 60,000 PRSUs (based on 50% achievement of the applicable performance conditions). All such PRSUs were considered granted under ASC 718, *Compensation—Stock Compensation* ("Topic 718") in March 2024. Such PRSUs are scheduled to vest, if at all, upon the certification by the Company's compensation committee of the achievement of the applicable performance conditions following the filing of the Company's Annual Report on Form 10-K for the fiscal year ending December 31, 2026.

In February 2023, the Company awarded to certain executive officers PRSUs for a maximum of 62,693 shares (based on 150% achievement of the applicable performance conditions outlined in the awards), with a target award of 41,795 PRSUs (based on 100% achievement of the applicable performance conditions), and a threshold award of 20,898 PRSUs (based on 50% achievement of the applicable performance conditions). All such PRSUs were considered granted under Topic 718 in February 2023. Such PRSUs are scheduled to vest, if at all, upon the certification by the Company's compensation committee of the achievement of the applicable performance conditions following the filing of the Company's Annual Report on Form 10-K for the fiscal year ending December 31, 2025.

In August 2022, the Company awarded 90,000 PRSUs to an executive officer of which 30,150 PRSUs were considered granted under Topic 718 at the time the PRSUs were awarded. In March 2024 and 2023, of the 90,000 PRSUs awarded in August 2022, an additional 14,850 and 45,000 PRSUs were considered granted under Topic 718, respectively. During the year ended December 31, 2024, the Company's compensation committee determined the achievement of the awards set to vest upon the certification by the Company's compensation committee following the filing of the Company's

Annual Report on Form 10-K for the fiscal year ended December 31, 2023. Of the 36,000 PRSUs that were eligible to vest, the Company's compensation committee determined that the applicable performance conditions had been met for 9,000 of the PRSUs, which vested during the year ended December 31, 2024, and that the applicable performance conditions had not been met for 27,000 PRSUs, which were forfeited during the year ended December 31, 2024. The remaining 54,000 PRSUs are scheduled to vest, if at all, upon the certification by the Company's compensation committee of the achievement of the applicable performance conditions following the filing of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024 and following the filing of the Company's Annual Report on Form 10-K for the fiscal year ending December 31, 2025.

Performance-based restricted stock unit activity was as follows:

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Beginning, January 1, 2024	116,945	$ 24.05
Granted	134,850	26.08
Vested	(9,000)	28.55
Forfeited	(54,000)	22.87
Balance, December 31, 2024	188,795	25.62

The weighted average grant date fair value for each PRSU granted during the years ended December 31, 2024, 2023, and 2022 was $26.08, $22.48, and $28.55, respectively. During the year ended December 31, 2024, 9,000 PRSUs vested. The fair value of PRSUs vested during the year ended December 31, 2024 was $241. No PRSUs vested during the years ended 2023 and 2022.

Stock Options

Stock options must be granted at an exercise price not less than 100% of the fair market value per share at the grant date. The board of directors or compensation committee determines the exercise price of the Company's stock options based on the closing price of the common stock as reported on the Nasdaq Global Select Market on the date of the grant. The maximum contractual term of options granted under the Plans is typically 10 years, options generally vest over four years with 25% of the shares underlying the option vesting at the end of the first year and the remaining vesting monthly over the following three years. In March 2024 and February 2023, the Company granted the chief executive officer premium priced options to purchase 87,271 and 65,525 shares of common stock, respectively, with exercise prices equal to 110% of the closing price of the Company's common stock on the date of grant.

During the years ended December 31, 2024, 2023, and 2022, 169,820, 800,336, and 329,224 options under the Plans were exercised for total proceeds of $1,488, $9,440, and $2,110, respectively.

The fair value of each option award is determined on the date of grant using the Black Scholes Merton option-pricing model. The calculation of fair value included several assumptions that require management's judgment. The expected terms of options granted to employees during the years ended December 31, 2024, 2023, and 2022 were calculated using an average of historical exercises. Estimated volatility for 2024, 2023, and 2022 incorporated a calculated volatility derived from the historical closing prices of shares of common stock of similar entities whose share prices were publicly available for the expected term of the option. The risk-free interest rate was based on the U.S. Treasury constant maturities in effect at the time of grant for the expected term of the option. The Company accounts for forfeitures as they occur; as such, the Company does not estimate forfeitures at the time of grant.

Following are the weighted average valuation assumptions used for option awards during the periods presented:

	Year Ended December 31,		
	2024	2023	2022
Valuation assumptions			
Expected dividend yield	— %	— %	— %
Expected volatility	65 %	66 %	57 %
Expected term (years)	5.32	4.92	4.78
Risk-free interest rate	4.22 %	3.77 %	2.13 %

Stock option activity was as follows:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate intrinsic value
Beginning, January 1, 2024	11,274,277	$ 30.06		
Granted	1,264,176	25.19		
Exercised	(169,820)	8.78		
Forfeited	(226,832)	31.20		
Expired	(220,648)	47.79		
Balance, December 31, 2024	11,921,153	29.49	6.31	$ 30,996
Exercisable, December 31, 2024	8,873,733	30.14	5.65	$ 30,985

The weighted average grant date fair value per share of options granted during the years ended December 31, 2024, 2023, and 2022 was $14.88, $15.79, and $13.67, respectively. The intrinsic value of options exercised during the years ended December 31, 2024, 2023, and 2022 was $2,365, $16,213, and $6,548, respectively.

As of December 31, 2024, there was $40,480 of unrecognized compensation cost related to unvested stock options granted under the Plans, which is expected to be recognized over a weighted average period of 2.07 years. The fair value of shares vested during the years ended December 31, 2024, 2023, and 2022 was $39,422, $46,877, and $43,559, respectively.

(10) Net (Loss) Income per Share Attributable to Common and Limited Common Stockholders

The following table presents the calculation of basic and diluted net (loss) income per share attributable to common and limited common stockholders for the years presented (in thousands, except for share and per share data):

	Year Ended December 31,		
	2024	2023	2022
Numerator:			
Net (loss) income attributable to common and limited common stockholders	$ (187,123)	$ 40,720	$ (149,186)
Denominator:			
Weighted average shares used to compute net (loss) income per share of common and limited common stockholders, basic:	72,670,295	71,776,301	71,173,419
Effect of the exercise of common stock options and vested RSUs on weighted average common and limited common shares	—	3,210,515	—
Weighted average shares used to compute net (loss) income per share of common and limited common stockholders, diluted:	72,670,295	74,986,816	71,173,419
Net (loss) income per share attributable to common and limited common stockholders, basic:	$ (2.57)	$ 0.57	$ (2.10)
Net (loss) income per share of common and limited common stockholders, diluted:	$ (2.57)	$ 0.54	$ (2.10)

Since the Company was in a loss position for the years ended December 31, 2024 and 2022, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares and limited common shares outstanding would have been anti-dilutive.

For the year ended December 31, 2023, in order to calculate diluted net income per share, the weighted average shares used to compute net income is adjusted by the effect of dilutive securities, including awards under the Plans. Diluted net income per share is computed by dividing the resulting net income by the weighted average number of fully diluted common and limited shares outstanding.

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	Year Ended December 31,		
	2024	2023	2022
Shares subject to outstanding common stock options and unvested RSUs	13,603,701	6,351,996	11,013,177

(11) Equity Investments

(a) Nimbus

The Company previously provided collaboration services for Nimbus Therapeutics, LLC ("Nimbus") under the terms of a master services agreement executed on May 18, 2010, as amended. Collaboration agreements are separate from the transaction that resulted in equity ownership and related fees are paid in cash to the Company. Nimbus was previously recorded as an equity method investment under the HLBV method, as the entity is a limited liability company and the Company was determined to have significant influence due to the Company's collaboration with Nimbus on a number of drug discovery targets, as well as the Company's level of ownership in Nimbus. During the period ended September 30, 2023, the Company's equity ownership in Nimbus was diluted to the point that the Company no longer has significant influence over the entity. As the Company no longer has significant influence over Nimbus, after June 30, 2023, the equity investment in Nimbus is valued as a non-marketable equity security.

As of December 31, 2024 and 2023, the carrying value of the Nimbus investment was $2,436 and $1,928, respectively. The Company has no obligation to fund Nimbus' losses in excess of its investment. During the year ended

December 31, 2024, the Company reported an unrealized gain of $508 on the Nimbus investment. During the year ended December 31, 2023, the company reported a realized gain of $147,213 on the Nimbus investment, which reflected the total cash distribution the Company received from Nimbus on account of Takeda's acquisition of Nimbus Lakshmi, Inc., a wholly-owned subsidiary of Nimbus, and its tyrosine kinase 2 inhibitor NDI-034858, as well as an unrealized gain of $1,928 on the Nimbus investment due to the change in accounting method. The Company reported no gains or losses on the Nimbus investment during the year ended December 2022.

(b) Morphic

On August 15, 2024, the Company disposed of its equity stake in Morphic Holding, Inc. ("Morphic") for aggregate consideration of $47,588 in connection with Eli Lilly and Company's acquisition of Morphic. Prior to the disposition of the Morphic investment, the Company accounted for its investment in Morphic at fair value based on the share price of Morphic's common stock at the measurement date.

During the years ended December 31, 2024 and 2023, the Company reported a mark-to-market gain of $23,474 and $1,778, respectively, on the Morphic investment. During the year ended December 31, 2022, the Company reported a mark-to-market loss of $17,226 on the Morphic investment. As of December 31, 2024 and 2023, the carrying value of the Company's investment in Morphic was zero and $24,114, respectively.

(c) Ajax

In May 2021, the Company purchased 631,377 shares of Series B preferred stock of Ajax Therapeutics, Inc. ("Ajax") for $1,700 in cash. In April 2024, the Company purchased 1,416,450 shares of Series C preferred stock of Ajax for $3,000 in cash. The Company has concluded that its equity investment in Ajax should be valued as a non-marketable equity security as the Company does not exercise significant influence over Ajax. During the year ended December 31, 2024, the Company recorded an impairment loss of $202 on the Ajax investment. No gain or loss was recorded on the Ajax investment during the years ended December 31, 2023 and 2022.

As of December 31, 2024 and 2023, the carrying value of the Company's investment in Ajax was $4,498 and $1,700, respectively.

(d) Structure Therapeutics

In July 2021, the Company purchased 494,035 shares of Series B preferred stock of Structure Therapeutics for $2,000 in cash. In April 2022, the Company purchased an additional 148,210 shares of Series B preferred stock for $600 in cash. On February 7, 2023, Structure Therapeutics completed its initial public offering ("IPO"). Immediately upon the closing of Structure Therapeutics' IPO, all of the outstanding Series B preferred stock automatically converted into ordinary shares on a one-for-one basis. The Company purchased 275,000 American Depository Shares ("ADSs") at $15.00 per ADS in the IPO. Each ADS represents three ordinary shares. The Company accounts for its investment in Structure Therapeutics at fair value based on the closing price of Structure Therapeutics' ADSs as of the reporting date.

During the year ended December 31, 2024, the Company recorded a mark-to-market loss of $18,096 on the Structure Therapeutics investment. During the year ended December 31, 2023, the Company recorded a mark-to-market gain of $49,755 on the investment. During the year ended December 31, 2022, the Company recorded a loss of $858 on the Structure Therapeutics investment under the hypothetical liquidation book value method.

As of December 31, 2024 and 2023, the carrying value of the Company's investment in Structure Therapeutics was $36,202 and $55,509, respectively.

(12) Employee Benefit Plan

The Company offers a 401(k) employee savings plan to its U.S.-based employees. The Company made discretionary matching contributions equal to 100% of the first 4% of compensation contributed by employees for the years ended December 31, 2024, 2023, and 2022. Matching contributions during 2024, 2023, and 2022 were $4,478, $4,135, and $3,243, respectively.

(13) Related Party Transactions

(a) Board Member

For the years ended December 31, 2024, 2023, and 2022, the Company paid consulting fees of $428, $420, and $410, respectively, to a member of its board of directors.

(b) Bill & Melinda Gates Foundation

The Bill & Melinda Gates Foundation, an entity under common control with Bill & Melinda Gates Foundation Trust, a stockholder of the Company, issued a grant under which it agreed to pay the Company directly for certain licenses and services provided to a specified group of third-party organizations. Revenue recognized for licenses and services provided by the Company under this grant were $111, $253, and $387 for the years ended December 31, 2024, 2023, and 2022, respectively.

For the years ended December 31, 2024, 2023, and 2022, the Company recognized $2,031, $2,822, and $1,949, respectively, in drug discovery contribution revenue related to funds received under agreements with the Bill & Melinda Gates Foundation, aimed at accelerating drug discovery in women's health. As of December 31, 2024 and 2023, restricted cash on hand related to the arrangement was $1,021 and $2,251, respectively.

For the year ended December 31, 2024, the Company recognized $6,016 in software contribution revenue related to funds received under agreements with the Bill & Melinda Gates Foundation to fund the initiative to accelerate the expansion of the Company's computational platform to predict toxicity associated with binding to off-target proteins. As of December 31, 2024, restricted cash on hand related to the arrangement was $8,606.

As of December 31, 2024 and 2023, the Company had no receivables due from the Bill & Melinda Gates Foundation related to any of these agreements.

Gates Ventures, LLC is an entity under the control of William H. Gates III, who may be deemed to be the beneficial owner of more than 5% of the Company's voting securities. The Company received $1,000 in contribution revenue in connection with its entry into an agreement with Gates Ventures, LLC annually from June 2020 to June 2022. In August 2023, the Company renewed the agreement with Gates Ventures, LLC and recognized $1,800 in contribution revenue upon extension of the agreement and $2,000 in contribution revenue upon the first anniversary of the extension. As of December 31, 2024 and 2023, the Company had no receivables due from Gates Ventures, LLC.

(14) Segment Reporting

The Company has determined that its chief executive officer ("CEO") is its chief operating decision maker ("CODM"). The Company's CEO evaluates the financial performance of the Company based on two reportable segments: Software and Drug Discovery. The Software segment is focused on licensing the Company's software to transform molecular discovery. The Drug Discovery segment is focused on building a portfolio of preclinical and clinical drug programs, internally and through collaborations.

The CODM reviews segment performance and allocates resources based upon segment revenue and segment gross profit of the Software and Drug Discovery reportable segments. Segment gross profit is derived by deducting cost of sales from U.S. GAAP revenue. Cost of sales are expenditures made that are directly attributable to the reportable segment. These expenditures are allocated to the segments based on headcount or by expenses directly incurred to support the Software or Drug Discovery segments. The reportable segment expenditures include compensation, supplies, and services from contract research organizations.

Certain cost items are not allocated to the Company's reportable segments. These cost items primarily consist of non-drug discovery program related compensation and general operational expenses associated with the Company's research and development, sales and marketing, and general and administrative. These costs are incurred by both segments and due to the integrated nature of the Company's Software and Drug Discovery segments, any allocation methodology would be subjective and may not provide meaningful analysis.

Segment revenue is primarily earned in the United States and there are no intersegment revenues. Additionally, the Company reports assets on a consolidated basis and does not allocate assets to its reportable segments for purposes of assessing segment performance or allocating resources.

Presented below is financial information with respect to the Company's reportable segments for the years presented:

	Year Ended December 31,		
	2024	2023	2022
Segment revenues:			
Software	$ 180,365	$ 159,124	$ 135,578
Drug discovery	27,174	57,542	45,377
Total segment revenues	207,539	216,666	180,955
Segment cost of revenues:			
Software	36,900	29,514	29,576
Drug discovery	38,556	46,460	50,357
Total segment cost of revenues	75,456	75,974	79,933
Segment gross profit:			
Software	143,465	129,610	106,002
Drug discovery	(11,382)	11,082	(4,980)
Total segment gross profit	132,083	140,692	101,022
Unallocated (expense) income:			
Research and development	(201,785)	(181,766)	(126,372)
Sales and marketing	(39,917)	(37,226)	(30,642)
General and administrative	(99,677)	(99,148)	(90,825)
Gain on equity investments	—	147,213	11,825
Change in fair value	5,683	53,461	(18,084)
Other income	17,902	19,693	3,953
Income tax expense	(1,412)	(2,199)	(63)
Consolidated net (loss) income	$ (187,123)	$ 40,720	$ (149,186)

Revenues by geographic area are determined based on the address provided by the Company's customers and partners. The following table sets forth revenues by geographic area for the years ended December 31, 2024, 2023, and 2022:

	Year Ended December 31,		
	2024	2023	2022
United States	$ 114,869	$ 161,961	$ 123,556
APAC	25,802	24,569	21,680
EMEA	65,650	29,135	34,451
Rest of World	1,218	1,001	1,268
	$ 207,539	$ 216,666	$ 180,955

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of December 31, 2024. The term "disclosure controls and procedures," means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on such evaluation of our disclosure controls and procedures as of December 31, 2024, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the company, as such term is defined in Rule 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed by, or under the supervision of, our principal executive officer and principal financial officer and effected by our board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Management assessed our internal control over financial reporting as of December 31, 2024, using the criteria established in *Internal Control - Integrated Framework (2013)* set forth by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on the results of its evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2024. Our independent registered public accounting firm, KPMG LLP, has issued an attestation report on the effectiveness of our internal control over financial reporting, which is included in Item 8 of this Annual Report.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the fourth quarter of 2024 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

Our management, including our principal executive officer and principal financial officer, do not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud due to inherent limitations of internal controls. Because of such limitations, there is risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting or disclosure controls and procedures. However, these inherent limitations are known features of the disclosure and financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Item 9B. Other Information.

(b) Director and Officer Trading Arrangements

A significant portion of the compensation of our directors and officers (as defined in Rule 16a-1(f) under the Exchange Act) is in the form of equity awards and, from time to time, directors and officers engage in open-market transactions with respect to the securities acquired pursuant to such equity awards or our other securities, including to satisfy tax withholding obligations when equity awards vest or are exercised, and for diversification or other personal reasons.

Transactions in our securities by directors and officers are required to be made in accordance with our insider trading policy, which requires that the transactions be in accordance with applicable U.S. federal securities laws that prohibit trading while in possession of material nonpublic information. Rule 10b5-1 under the Exchange Act provides an affirmative defense that enables directors and officers to prearrange transactions in our securities in a manner that avoids concerns about initiating transactions while in possession of material nonpublic information.

The following table describes, for the fourth quarter of 2024, each trading arrangement for the sale or purchase of our securities adopted or terminated by our directors and officers that is either (1) a contract, instruction or written plan intended to satisfy the affirmative defense conditions of Rule 10b5-1(c), or a Rule 10b5-1 trading arrangement, or (2) a "non-Rule 10b5-1 trading arrangement" (as defined in Item 408(c) of Regulation S-K):

Name and Title	Action Taken (Date of Action)	Type of Trading Arrangement	Nature of Trading Arrangement	Duration of Trading Arrangement	Aggregate Number of Shares of Common Stock
Robert Abel Executive Vice President, Chief Scientific Officer, Platform	Adoption (November 26, 2024)	Rule 10b5-1 trading arrangement for exercise of stock options and sales of shares	Sale	Until December 31, 2025, or such earlier date upon which all transactions are completed or expire without execution	Up to 107,605 shares
Karen Akinsanya, President of R&D, Therapeutics	Adoption (December 17, 2024)	Rule 10b5-1 trading arrangement for exercise of stock options and sales of shares	Sale	Until December 31, 2025, or such earlier date upon which all transactions are completed or expire without execution	Up to 121,178 shares

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not Applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item 10 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2025 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2024 pursuant to General Instruction G(3) of Form 10-K.

We have adopted a written code of business conduct and ethics that applies to our directors, officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted a current copy of the code on our website, www.schrodinger.com. In addition, we intend to post on our website all disclosures that are required by law or Nasdaq listing standards concerning any amendments to, or waivers from, any provision of the code. Our website is not incorporated by reference into this Annual Report and you should not consider any information contained in or accessible from our website to be a part of this Annual Report.

Item 11. Executive Compensation.

The information required by this Item 11 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2025 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2024 pursuant to General Instruction G(3) of Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item 12 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2025 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2024 pursuant to General Instruction G(3) of Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item 13 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2025 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2024 pursuant to General Instruction G(3) of Form 10-K.

Item 14. Principal Accountant Fees and Services.

The information required by this Item 14 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2025 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2024 pursuant to General Instruction G(3) of Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(1) **Financial Statements**

The following documents are included in the pages herein and are filed as part of this Annual Report.

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Reports of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2024 and 2023	F-5
Consolidated Statements of Operations for the Years ended December 31, 2024, 2023, and 2022	F-6
Consolidated Statements of Comprehensive (Loss) Income for the Years ended December 31, 2024, 2023, and 2022	F-7
Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2024, 2023, and 2022	F-8
Consolidated Statements of Cash Flows for the Years ended December 31, 2024, 2023, and 2022	F-9
Notes to Consolidated Financial Statements	F-10

(2) **Financial Statement Schedules**

All financial statement schedules have been omitted because they are not applicable, not required, or the information required is shown in the consolidated financial statements or the notes thereto.

(3) **Exhibits**

The exhibits filed as part of this Annual Report are listed below.

Exhibit Number	Description of Exhibit	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Restated Certificate of Incorporation, as amended	10-Q	001-39206	3.1	7/31/2024	
3.2	Amended and Restated Bylaws of Schrödinger, Inc.	8-K	001-39206	3.1	4/13/2023	
4.1	Specimen Stock Certificate evidencing the shares of common stock	S-1/A	333-235890	4.1	1/27/2020	
4.2	Amended and Restated Share Exchange Agreement, dated January 24, 2020, by and between the Registrant and Bill & Melinda Gates Foundation Trust	S-1/A	333-235890	4.2	1/27/2020	
4.3	Description of Securities Registered Under Section 12 of the Exchange Act	10-K	001-39206	4.3	3/4/2021	
10.1	Amended and Restated Investors' Rights Agreement, dated as of November 9, 2018, by and among the Registrant and the other parties thereto, as amended	10-K	001-39206	10.1	2/28/2024	
10.2+	2010 Stock Plan, as amended	S-1	333-235890	10.2	1/10/2020	
10.3+	Form of Notice of Stock Option Grant and Stock Option Agreement under 2010 Stock Plan	S-1	333-235890	10.3	1/10/2020	
10.4+	2020 Equity Incentive Plan	S-1/A	333-235890	10.4	1/27/2020	
10.5+	Form of Stock Option Agreement and Form of Restricted Stock Unit Agreement for U.S. Participants under the 2020 Equity Incentive Plan	10-K	001-39206	10.5	2/24/2022	
10.6+	Form of Stock Option Agreement for Non-U.S. Participants under the 2020 Equity Incentive Plan	10-Q	001-39206	10.2	11/12/2020	

10.7+	Form of Restricted Stock Unit Agreement for Non-U.S. Participants under the 2020 Equity Incentive Plan	10-K	001-39206	10.6	2/24/2022
10.8+	2020 Employee Stock Purchase Plan, as amended	10-Q	001-39206	10.4	7/31/2024
10.9+	Fifth Amended and Restated Director Compensation Policy	10-Q	001-39206	10.3	5/1/2024
10.10+	Senior Executive Incentive Compensation Plan	S-1	333-235890	10.8	1/10/2020
10.11+	Amended and Restated Executive Severance and Change in Control Benefits Plan, as amended	8-K	001-39206	10.2	8/18/2022
10.12+	Employment Agreement, dated May 11, 2010, by and between the Registrant and Ramy Farid	S-1	333-235890	10.10	1/10/2020
10.13+	Employment Agreement, dated August 16, 2022, by and between the Registrant and Geoffrey Porges	8-K	001-39206	10.1	8/18/2022
10.14+	Employment Agreement, dated March 17, 2003, by and between the Registrant and Jenny Herman	10-K	001-39206	10.15	2/28/2023
10.15+	Employment Agreement, dated May 14, 2018, by and between the Registrant and Karen Akinsanya	S-1	333-235890	10.14	1/10/2020
10.16+	Employment Agreement, dated April 27, 2010, by and between the Registrant and Yvonne Tran	S-1	333-235890	10.16	1/10/2020
10.17+	Employment Agreement, dated September 11, 2006, by and between the Registrant and Patrick Lorton	S-1	333-235890	10.17	1/10/2020
10.18+	Employment Agreement, dated March 9, 2009, by and between the Registrant and Robert Abel	S-1	333-235890	10.19	1/10/2020
10.19+	Employment Agreement, dated July 28, 2023, by and between the Registrant and Margaret Dugan	10-K	001-39206	10.19	2/28/2024
10.20+	Consultant Agreement, dated July 1, 1999, between the Registrant and Richard A. Friesner, as amended	10-Q	001-39206	10.1	7/31/2024
10.21+	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors	S-1	333-235890	10.21	1/10/2020
10.22	Office Lease Agreement, dated April 5, 2021, by and between the Registrant and SPUSV5 1540 Broadway, LLC	8-K	001-39206	10.1	4/8/2021
10.23	First Amendment to Lease, dated May 19, 2022, by and between the Registrant and SPUSV5 1540 Broadway, LLC	10-Q	001-39206	10.1	8/4/2022
10.24	Second Amendment to Lease, dated June 13, 2024, by and between the Registrant and SPUSV5 1540 Broadway, LLC	10-Q	001-39206	10.2	7/31/2024
10.25	Lease, dated August 6, 2008, between One Main Place Portland – Oregon, Inc., Landlord, and Registrant, Tenant, as amended	S-1	333-235890	10.23	1/10/2020
10.26	Office Lease Amendment, dated May 6, 2021, by and between Registrant and MADISON-OFC ONE MAIN PLACE OR LLC	10-Q	001-39206	10.2	8/12/2021
10.27†	Agreement, dated as of May 5, 1994, between The Trustees of Columbia University in the City of New York and Registrant, as amended	S-1	333-235890	10.24	1/10/2020
10.28†	Agreement, dated as of July 15, 1998, between The Trustees of Columbia University in the City of New York and Registrant, as amended	S-1	333-235890	10.25	1/10/2020

10.29†	Agreement, dated as of September 2001, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC, as amended	S-1	333-235890	10.26	1/10/2020
10.30†	Agreement, dated as of June 19, 2003, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.27	1/10/2020
10.31†	Software and Patent License Agreement, dated May 27, 2008, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.28	1/10/2020
10.32†	Services Royalty Amendment, dated November 1, 2008, by and between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.29	1/10/2020
10.33†	Master License Agreement, dated as of September 11, 2024, by and between Schrödinger, LLC and The Trustees of Columbia University.	8-K	001-39206	10.1	9/12/2024
10.34+	Global Bonus Plan	S-1/A	333-235890	10.33	1/27/2020
10.35†	Independent Contractor Agreement, dated June 23, 2020, by and between the Registrant and Gates Ventures, LLC	10-Q	001-39206	10.2	8/10/2020
10.36†	Amendment #1 to the Independent Contractor Agreement, dated August 14, 2023, by and between the Registrant and Gates Ventures, LLC	10-Q	001-39206	10.1	11/1/2023
10.37+	2021 Inducement Equity Incentive Plan, as amended	10-Q	001-39206	10.4	11/3/2022
10.38+	Nonstatutory Stock Option Agreement under 2021 Inducement Equity Incentive Plan	10-K	001-39206	10.39	3/4/2021
10.39+	Form of Option Agreement for Non-U.S. Participants under the 2021 Inducement Equity Incentive Plan	10-Q	001-39206	10.3	8/4/2022
10.40+	Form of Restricted Stock Unit Agreement for U.S. Participants under 2021 Inducement Equity Incentive Plan	10-Q	001-39206	10.1	5/4/2023
10.41+	Form of Restricted Stock Unit Agreement for Non-U.S. Participants under 2021 Inducement Equity Incentive Plan	10-Q	001-39206	10.2	5/4/2023
10.42+	Schrödinger, Inc. 2022 Equity Incentive Plan, as amended	10-Q	001-39206	10.3	7/31/2024
10.43+	Form of Option Agreement for U.S. Participants under the 2022 Equity Incentive Plan	10-Q	001-39206	10.4	8/4/2022
10.44+	Form of Option Agreement for Non-U.S. Participants under the 2022 Equity Incentive Plan	10-Q	001-39206	10.5	8/4/2022
10.45+	Form of Restricted Stock Unit Agreement for U.S. Participants under the 2022 Equity Incentive Plan	10-Q	001-39206	10.6	8/4/2022
10.46+	Form of Restricted Stock Unit Agreement for Non-U.S. Participants under the 2022 Equity Incentive Plan	10-Q	001-39206	10.7	8/4/2022
10.47+	Amended and Restated Sales Agreement, dated as of February 28, 2024, by and between Schrödinger, Inc. and Leerink Partners LLC.	8-K	001-39206	1.1	2/29/2024

10.48†	Research Collaboration and License Agreement, dated as of November 11, 2024, by and between Schrödinger, Inc. and Novartis Pharma AG					X
19.1	Schrödinger, Inc. Global Insider Trading Policy					X
21.1	Subsidiaries of the Registrant					X
23.1	Consent of KPMG LLP, independent registered public accounting firm					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2#	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
97.1+	Schrödinger, Inc. Clawback Policy	10-K	001-39206	97.1	2/28/2024	
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover page formatted as Inline XBRL and contained in Exhibit 101.					X

† Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

\# The certifications attached as Exhibits 32.1 and 32.2 that accompany this Annual Report, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Schrödinger, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report, irrespective of any general incorporation language contained in such filing.

\+ Management contract or compensatory plan or arrangement filed in response to Item 15(a)(3) of the Instructions to the Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized**.**

SCHRÖDINGER, INC.

Date: February 26, 2025

By: /s/ Ramy Farid

Ramy Farid, Ph.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Ramy Farid Ramy Farid, Ph.D.	President and Chief Executive Officer, Director (Principal Executive Officer)	February 26, 2025
/s/ Geoffrey Porges, MBBS Geoffrey Porges	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 26, 2025
/s/ Jenny Herman Jenny Herman	Senior Vice President, Finance and Corporate Controller (Principal Accounting Officer)	February 26, 2025
/s/ Michael Lynton Michael Lynton	Chairman of the Board	February 26, 2025
/s/ Jeffrey Chodakewitz Jeffrey Chodakewitz, M.D.	Director	February 26, 2025
/s/ Richard Friesner Richard Friesner, Ph.D.	Director	February 26, 2025
/s/ Gary Ginsberg Gary Ginsberg	Director	February 26, 2025
/s/ Rosana Kapeller-Libermann Rosana Kapeller-Libermann, M.D., Ph.D.	Director	February 26, 2025
/s/ Arun Oberoi Arun Oberoi	Director	February 26, 2025
/s/ Gary Sender Gary Sender	Director	February 26, 2025
/s/ Nancy Thornberry Nancy Thornberry	Director	February 26, 2025

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant ☒ Filed by a Party other than the Registrant ☐

Check the appropriate box:

- ☐ Preliminary Proxy Statement
- ☐ **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- ☒ Definitive Proxy Statement
- ☐ Definitive Additional Materials
- ☐ Soliciting Material Pursuant to §240.14a-12

SCHRÖDINGER, INC.

(Name of registrant as specified in its charter)

(Name of person(s) filing proxy statement, if other than the registrant)

Payment of Filing Fee (Check all boxes that apply):

- ☒ No fee required
- ☐ Fee paid previously with preliminary materials
- ☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11

1540 Broadway, 24th Floor
New York, New York 10036

NOTICE OF 2025 ANNUAL MEETING OF STOCKHOLDERS

To Be Held on Wednesday, June 18, 2025

Dear Stockholders:

You are cordially invited to virtually attend the 2025 annual meeting of stockholders, or the Annual Meeting, of Schrödinger, Inc. The Annual Meeting will be held via the Internet at a virtual audio web conference at www.virtualshareholdermeeting.com/SDGR2025 on **Wednesday**, **June 18, 2025**, at 12:00 p.m., Eastern time.

At the Annual Meeting, the stockholders will consider and vote on the following matters:

1. Election of four Class II directors, Jeffrey Chodakewitz, Michael Lynton, Nancy A. Thornberry, and Bridget van Kralingen, each to serve for a three-year term expiring at the 2028 annual meeting of stockholders and until his or her respective successor has been duly elected and qualified;

2. Approval of an advisory vote on executive compensation;

3. Ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025; and

4. Transaction of any other business that may properly come before the Annual Meeting or any adjournment or postponement thereof.

Our Annual Meeting will be a "virtual meeting" of stockholders, which will be conducted exclusively via the Internet at a virtual web conference. There will not be a physical meeting location, and stockholders will not be able to attend the Annual Meeting in person. This means that you can attend the Annual Meeting online, vote your shares during the online meeting and submit questions during the online meeting. We believe that hosting a "virtual meeting" will enable greater stockholder attendance and participation from any location around the world.

You can find more information, including the nominees for director, in the proxy statement for the Annual Meeting, which is available for viewing, printing and downloading at www.proxyvote.com. The board of directors recommends that you vote "FOR" each of the Class II directors (Proposal No. 1), "FOR" the approval of the advisory vote on executive compensation, commonly referred to as the "say-on-pay" vote (Proposal No. 2), and "FOR" the ratification of the appointment of our independent registered public accounting firm (Proposal No. 3), each as outlined in the attached proxy statement.

We are pleased to comply with the rules of the Securities and Exchange Commission that allow companies to distribute their proxy materials over the Internet under the "notice and access" approach. As a result, we plan to send to our stockholders a Notice of Internet Availability of Proxy Materials, or the Notice of Availability, instead of a paper copy of the proxy statement and our annual report for the fiscal year ended December 31, 2024, or the 2024 Annual Report. We plan to mail the Notice of Availability on or about April 24, 2025, and the Notice of Availability contains instructions on how to access our proxy materials over the Internet. The Notice of Availability also contains instructions on how each of our stockholders can request a paper copy of our proxy materials, including the proxy statement, our 2024 Annual Report, and a form of proxy card.

Stockholders of record at the close of business on April 21, 2025, the record date for the Annual Meeting, are entitled to notice of, and to vote at, the Annual Meeting or any adjournment or postponement thereof.

Your vote is important to us regardless of the number of shares you own. Whether or not you expect to virtually attend the Annual Meeting online, please vote your shares to ensure your representation and the presence of a quorum at the Annual Meeting. If you are a stockholder of record, you may vote your shares by proxy prior to the Annual Meeting on the Internet by visiting www.proxyvote.com, by telephone by calling 1-800-690-6903 and following the recorded instructions, or by completing, signing, dating, and returning a proxy card. If you mail your proxy card or vote by telephone or the Internet and then decide to attend the Annual Meeting and vote your shares online during the Annual Meeting, you may still do so. Your proxy is revocable in accordance with the procedures set forth in the proxy statement.

If your shares are held in "street name," that is, held for your account by a bank, broker or other nominee, you will receive instructions from the bank, broker or other nominee that you must follow for your shares to be voted.

If you have any questions or require any assistance with voting your shares, please contact our proxy solicitor:

Georgeson LLC
1290 Avenue of the Americas, 9th Floor, New York, NY 10104
(800) 561-3947 (toll-free in North America)
+1 (781) 575-2137 (outside of North America)

A complete list of registered stockholders will be available to stockholders of record for examination at 1540 Broadway, 24th Floor, New York, New York 10036 during the 10-day period ending on the day before the Annual Meeting. Further information about how to attend the Annual Meeting online, vote your shares and submit questions is included in the accompanying proxy statement.

By Order of the Board of Directors,
/s/ Yvonne Tran

Yvonne Tran
Chief Legal Officer and Corporate Secretary

New York, New York

April 24, 2025

Important Notice Regarding Internet Availability of Proxy Materials for the 2025 Annual Meeting of Stockholders to be held on June 18, 2025: The attached proxy statement and our 2024 annual report to stockholders, which includes our annual report on Form 10-K for the fiscal year ended December 31, 2024, are available for viewing, printing and downloading at www.proxyvote.com. These documents are also available to any stockholder who wishes to receive a paper copy upon written request to Schrödinger, Inc., 1540 Broadway, 24th Floor, New York, New York 10036, Attention: Investor Relations. The proxy statement and our annual report on Form 10-K for the fiscal year ended December 31, 2024 are also available on the SEC's website at www.sec.gov.

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1540 Broadway, 24th Floor
New York, New York 10036
(212) 295-5800

PROXY STATEMENT FOR THE
2025 ANNUAL MEETING OF STOCKHOLDERS
To Be Held on Wednesday, June 18, 2025

INFORMATION CONCERNING SOLICITATION AND VOTING

This proxy statement contains information about the Annual Meeting of Stockholders of Schrödinger, Inc., or the Annual Meeting, to be held on Wednesday, June 18, 2025, at 12:00 p.m., Eastern time. The Annual Meeting will be held via the Internet at www.virtualshareholdermeeting.com/SDGR2025. There will not be a physical meeting location, and stockholders will not be able to attend the Annual Meeting in person. Further information about how to attend the Annual Meeting online is included in this proxy statement.

The board of directors of Schrödinger, Inc. is using this proxy statement to solicit proxies for use at the Annual Meeting and at any adjournment or postponement of that meeting. In this proxy statement, unless expressly stated otherwise or the context otherwise requires, references to "Schrödinger," "the Company," "our company," "we," "us," "our" and similar terms refer to Schrödinger, Inc. References to our website are inactive textual references only and the contents of our website are not incorporated by reference into this proxy statement.

All properly submitted proxies will be voted in accordance with the instructions contained in those proxies. If no instructions are specified, the shares represented by the proxies will be voted in accordance with the recommendations of our board of directors.

Instead of mailing a paper copy of our proxy materials to all of our stockholders, we are providing access to our proxy materials over the Internet under the Securities and Exchange Commission's "notice and access" rules. As a result, we are mailing to our stockholders a Notice of Internet Availability of Proxy Materials, or the Notice of Availability, instead of a paper copy of this proxy statement and our annual report for the fiscal year ended December 31, 2024, or the 2024 Annual Report. We plan to mail the Notice of Availability on or about April 24, 2025, and the Notice of Availability contains instructions on how to access our proxy materials over the Internet. The Notice of Availability also contains instructions on how each of our stockholders can request a paper copy of our proxy materials, including this proxy statement, our 2024 Annual Report, and a form of proxy card.

Important Notice Regarding the Availability of Proxy Materials for
the Annual Meeting of Stockholders to be Held on June 18, 2025:

This proxy statement and our 2024 Annual Report are
available for viewing, printing and downloading at www.proxyvote.com.

A copy of our annual report on Form 10-K for the fiscal year ended December 31, 2024, as filed with the Securities and Exchange Commission, or SEC, except for exhibits, will be furnished without charge to any stockholder upon written request Schrödinger, Inc., 1540 Broadway, 24th Floor, New York, New York 10036, Attention: Investor Relations. This proxy statement and our annual report on Form 10-K for the fiscal year ended December 31, 2024 are also available on the SEC's website at www.sec.gov.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Q: What is the Purpose of the Annual Meeting?

A: At the Annual Meeting, our stockholders will consider and vote on the following matters:

1. Election of four Class II directors, Jeffrey Chodakewitz, Michael Lynton, Nancy A. Thornberry, and Bridget van Kralingen, each to serve for a three-year term expiring at the 2028 annual meeting of stockholders and until his or her respective successor has been duly elected and qualified;

2. Approval of an advisory vote on executive compensation;

3. Ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025; and

4. Transaction of any other business that may properly come before the Annual Meeting or any adjournment or postponement thereof.

As of the date of this proxy statement, we are not aware of any business to come before the meeting other than the first three items noted above.

Q: How Does the Board of Directors Recommend that I Vote on the Proposals?

A: Our board of directors unanimously recommends that you vote:

FOR the election of the four nominees to serve as Class II directors on our board of directors, each for a three-year term expiring at the 2028 annual meeting of stockholders and until his or her respective successor has been duly elected and qualified;

FOR the approval of the advisory vote on executive compensation; and

FOR the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025.

Q: How Can I Access the Proxy Materials?

A: The proxy materials, including this proxy statement, a proxy card and our 2024 Annual Report are available for viewing, printing and downloading on the Internet at www.proxyvote.com. If you would like to receive a paper copy of our proxy materials, you should follow the instructions for requesting paper materials in the Notice of Availability.

Q: Who Can Vote at the Annual Meeting?

A: Only stockholders at the close of business on the record date of April 21, 2025 are entitled to receive notice of the Annual Meeting and to vote the shares of our common stock and/or limited common stock that they held on that date. As of April 21, 2025, there were 64,209,652 shares of our common stock issued and outstanding and 9,164,193 shares of our limited common stock issued and outstanding. Each share of common stock is entitled to one vote on each matter properly brought before the Annual Meeting. Each share of limited common stock is entitled to one vote on each matter properly brought before the Annual Meeting, except for the election or removal of directors. Accordingly, each share of limited common stock is not entitled to vote on Proposal No. 1, but may vote on Proposal No. 2 and Proposal No. 3.

Q: What is the Difference Between a "Stockholder of Record" and a Beneficial Owner of Shares Held in "Street Name"?

A: *Stockholder of Record*. If your shares are registered directly in your name with our transfer agent, Computershare Trust Company, N.A., then you are considered the "stockholder of record" of those shares. In this case, your Notice of Availability has been sent to you directly by us. You may vote your shares by proxy prior to the Annual Meeting by following the instructions contained in the Notice of Availability and in the section titled "How Do I Vote?" below.

Beneficial Owner of Shares Held in Street Name. If your shares are held by a bank, broker or other nominee, then you are considered the beneficial owner of those shares, which are held in "street name." In this case, your Notice of Availability will be sent to you by that organization. The organization holding your shares is considered the stockholder of record for purposes of voting at the Annual Meeting. As the beneficial owner, you have the right to instruct that organization as to how to vote the shares held in your account by following the instructions contained on the voting instruction form provided to you by that organization.

Q: Why is the Annual Meeting a Virtual, Online Meeting?

A: We believe that hosting a virtual meeting will facilitate stockholder attendance and participation at our Annual Meeting by enabling stockholders to participate from any location around the world. Our virtual meeting will be governed by our Rules of Conduct and Procedures which will be posted and accessible during the Annual Meeting at www.virtualshareholdermeeting.com/SDGR2025. We have designed the virtual annual meeting to provide stockholders with the same rights and opportunities to participate as stockholders would have had at an in-person meeting, including the right to vote and ask questions through the virtual meeting platform.

Q: How Do I Virtually Attend the Annual Meeting?

A: The Annual Meeting will be a virtual meeting and you may not attend in person. The Annual Meeting will start at 12:00 p.m., Eastern time, on June 18, 2025. You may log on to the virtual meeting at www.virtualshareholdermeeting.com/SDGR2025 starting 30 minutes before it begins. We will have technicians standing by and ready to assist you with any technical difficulties you may have accessing the virtual meeting starting at 11:45 a.m., Eastern time, on June 18, 2025. If you encounter any difficulties accessing the virtual Annual Meeting, please contact technical support by following the instructions and technical support contact information, which will be provided to you at the virtual meeting website listed above.

Q: How Do I Vote?

A: **If you are the stockholder of record of your shares**, you can vote your shares by proxy prior to the Annual Meeting or online during the Annual Meeting. If you choose to vote by proxy prior to the Annual Meeting, you may do so by telephone, via the Internet or by mail as follows:

- *By Telephone Prior to the Annual Meeting*. You may transmit your proxy over the phone by calling 1-800-690-6903 and following the instructions provided in the Notice of Availability and on the proxy card. You will need to have your Notice of Availability or proxy card in hand when you call.

- *Via the Internet Prior to the Annual Meeting*. You may transmit your proxy via the Internet by following the instructions provided in the Notice of Availability and on the proxy card. You will need to have your Notice of Availability or proxy card in hand when you access the website. The website for voting is available at www.proxyvote.com.

- *By Mail Prior to the Annual Meeting*. If you requested printed copies of proxy materials, you may vote by mailing your proxy card as described in the proxy materials.

Telephone and Internet voting for stockholders of record will be available until 11:59 p.m. Eastern time, on June 17, 2025, and mailed proxy cards must be received by 11:59 p.m. Eastern time on June 17, 2025, in order to be counted at the Annual Meeting. If the Annual Meeting is adjourned or postponed, these deadlines may be extended.

If you choose to vote **online during the Annual Meeting**, you may vote your shares electronically while attending the Annual Meeting by following the instructions found on your Notice of Availability, proxy card and/or voting instruction form. If you vote by proxy prior to the Annual Meeting and choose to attend the Annual Meeting online, there is no need to vote again during the Annual Meeting unless you wish to change your vote.

If your shares are held in street name, your bank, broker or other nominee is required to vote the shares it holds on your behalf according to your instructions. The proxy materials, as well as voting and revocation instructions, will be forwarded to you by the bank, broker or other nominee that holds your shares. In order to vote your shares you will need to follow the instructions that your bank, broker or other nominee provides you. The voting deadlines and availability of telephone and Internet voting for beneficial owners of shares held in "street name" will depend on the voting processes of the bank,

broker or other nominee that holds your shares. Therefore, we urge you to carefully review and follow the voting instruction form and any other materials that you receive from that organization.

Even if you plan to attend the Annual Meeting online, we urge you to vote your shares by proxy in advance of the Annual Meeting so that, if you become unable to attend the Annual Meeting, your shares will be voted as directed by you.

Q: Can I Vote My Shares by Filling Out and Returning the Notice of Internet Availability of Proxy Materials?

A: No. The Notice of Availability and proxy card contain instructions on how to vote by proxy via the Internet, by telephone, by requesting and returning a paper proxy card, or by voting online while virtually attending the Annual Meeting.

Q: How Do I Submit a Question for the Annual Meeting?

A: Questions may be submitted prior to the Annual Meeting at www.proxyvote.com or you may submit questions in real time during the Annual Meeting using our Annual Meeting platform at www.virtualshareholdermeeting.com/SDGR2025. Our virtual meeting will be governed by our Rules of Conduct and Procedures which will be posted and accessible during the Annual Meeting at www.virtualshareholdermeeting.com/SDGR2025. The Rules of Conduct and Procedures will address the ability of stockholders to ask questions during the meeting, including rules on permissible topics, and rules for how questions and comments will be recognized and disclosed to meeting participants. We will answer appropriate questions that are pertinent to the matters to be voted on by the stockholders at the Annual Meeting. Because time is limited at the Annual Meeting, we may not be able to answer all questions that are submitted. If there are any matters of individual concern to a stockholder and not of general concern to all stockholders, or if a question was not otherwise answered, such matters may be raised separately after the Annual Meeting by contacting Investor Relations at ir@schrodinger.com. To promote fairness and the efficient use of our resources and to address all stockholder questions, we will limit each stockholder to two questions, which should each be succinct and should cover only one topic. Questions from multiple stockholders on the same topic or that are otherwise related may be grouped, summarized, and answered together.

Q: May I See a List of Stockholders Entitled to Vote as of the Record Date?

A: A list of stockholders as of the close of business on the record date will be available for examination by the stockholders for any purpose germane to the Annual Meeting for a period of 10 days ending on June 17, 2025 at 1540 Broadway, 24th Floor, New York, New York 10036.

Q: How Many Shares Must Be Represented to Have a Quorum and Hold an Annual Meeting of Stockholders?

A: A quorum of stockholders is necessary to hold a valid meeting. Our Amended and Restated Bylaws provide that a quorum will exist if stockholders holding a majority in voting power of the shares of capital stock issued and outstanding and entitled to vote at the meeting are present at the meeting in person, present by means of remote communication or represented by proxy. Where a separate vote by a class of capital stock is required by law or our Restated Certificate of Incorporation, as amended, or the Restated Certificate of Incorporation, the holders of a majority in voting power of the shares of such class of the capital stock issued and outstanding and entitled to vote on such matter, present in person, present by means of remote communication or represented by proxy, shall constitute a quorum entitled to take action with respect to the vote on such matter. Shares present virtually during the Annual Meeting will be considered shares present by means of remote communication at the Annual Meeting. Our board of directors has authorized the means of remote communication by which we plan to conduct the Annual Meeting. If a quorum is not present, we expect to adjourn the Annual Meeting until a quorum is obtained.

Abstentions and broker non-votes count as present for establishing a quorum but will not be counted as votes cast. Broker non-votes occur when your bank, broker or other nominee submits a proxy for your shares (because the bank, broker or other nominee has received instructions from you on one or more proposals, but not all proposals, or has not received instructions from you but is entitled to vote on a particular “discretionary” matter) but does not indicate a vote for a particular proposal because the bank, broker or other nominee either does not have the authority to vote on that proposal and has not received voting instructions from you or has discretionary authority but chooses not to exercise it.

Q: What Ballot Measures are Considered "Discretionary" versus "Non-Discretionary"?

A: The election of directors (Proposal No. 1) and the advisory vote on executive compensation (Proposal No. 2) are matters considered non-discretionary under applicable rules. A bank, broker or other nominee cannot vote without instructions on non-discretionary matters, and therefore there may be broker non-votes on Proposal Nos. 1 and 2.

The ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025 (Proposal No. 3) is a matter considered discretionary under applicable rules. A bank, broker or other nominee generally may exercise discretionary authority and vote on discretionary matters if no voting instructions have been provided. Therefore, if your shares are held in "street name," your bank, your broker or other nominee may exercise discretionary authority to vote on Proposal No. 3 in the absence of voting instructions from you. If they exercise this discretionary authority, no broker non-votes are expected in connection with Proposal No. 3.

Q: What Vote is Required to Approve Each Proposal?

A: A nominee will be elected as a director in an uncontested election if the votes cast "for" such nominee's election by the stockholders entitled to vote exceed the votes cast "against" the nominee's election (Proposal No. 1). Stockholders are not entitled to vote any shares of limited common stock in an election of directors. Abstentions and broker non-votes will not be counted as votes "for" or "against" such nominee's election. Accordingly, abstentions and broker non-votes will have no effect on the voting on Proposal No. 1.

The affirmative vote of the holders of shares of capital stock having a majority in voting power of the votes cast by the holders of all of the shares present or represented by proxy and voted "for" or "against" such matter will be required for: approval of the advisory vote on executive compensation (Proposal No. 2), and the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025 (Proposal No. 3). Abstentions and broker non-votes will not be counted as votes cast or voted on Proposal Nos. 2 and 3. Accordingly, abstentions and broker non-votes will have no effect on the voting on Proposal Nos. 2 and 3.

As described in more detail in Proposal No. 2, because this proposal is non-binding, our board of directors may decide that it is in our and our stockholders' best interests to compensate our named executive officers in an amount or manner that differs from that which is approved by our stockholders.

Q: What Happens if an Incumbent Director Nominee Fails to Receive More "For" Votes than "Against" Votes in an Uncontested Election?

A: Under our majority vote standard for the election of directors, the votes cast "for" a nominee must exceed the votes cast "against" that nominee. Our Corporate Governance Guidelines set forth a process that takes effect if an incumbent director nominee receives more "against" votes than "for" votes in an uncontested election. Upon such an occurrence, the affected director is expected, promptly following certification of the stockholder vote, to submit to the board of directors his or her offer to resign from the board. Such incumbent director shall continue to serve as a director while our nominating and corporate governance committee decides whether to accept or reject the resignation offer. The nominating and corporate governance committee will promptly consider the resignation offer submitted by such incumbent director and recommend to the board of directors the action to be taken with respect to such resignation offer. Such action may range from accepting the resignation, to maintaining such incumbent director but addressing what the nominating and corporate governance committee believes to be the underlying cause of the votes "against" the director, to resolving that such incumbent director will not be re-nominated for election in the future, to rejecting the resignation, to such other action that the nominating and corporate governance committee determines to be in the best interests of our company and our stockholders. In reaching its recommendation, the nominating and corporate governance committee will consider all factors it deems relevant. The board of directors will then act on the nominating and corporate governance committee's recommendation, considering the factors considered by the nominating and corporate governance committee and such additional factors the board of directors believes to be relevant. After the board's determination, we will promptly publicly disclose the board's decision regarding the action to be taken with respect to such incumbent director's resignation. If the board's decision is to not accept the resignation, such disclosure will include the reasons for not accepting the resignation. If the director's resignation is accepted, then the board of directors may fill the resulting vacancy in accordance with our amended and restated bylaws or may decrease the size of our board of directors. Our Corporate Governance Guidelines are posted on our website at www.schrodinger.com.

Q: Can I Revoke My Proxy and Can I Change My Vote?

A: If you are a stockholder of record, you may revoke your proxy before the vote is taken at the Annual Meeting:

- by submitting a new proxy with a later date before the applicable deadline either signed and returned by mail or transmitted using the telephone or Internet voting procedures described in the "How Do I Vote?" section above;
- by voting online at the Annual Meeting using the procedures described in the "How Do I Vote?" section above; or
- by filing a written revocation with our corporate secretary.

If your shares are held in "street name," you may submit new voting instructions by contacting your bank, broker or other nominee holding your shares. You may also vote online during the Annual Meeting, which will have the effect of revoking any previously submitted voting instructions.

Your virtual attendance at the Annual Meeting, without voting online during the Annual Meeting, will not automatically revoke your proxy.

Q: How Are the Votes Counted?

A: Votes cast online during the Annual Meeting or by proxy by mail, via the Internet or by telephone will be tabulated by the inspector of election appointed for the Annual Meeting, who will also determine whether a quorum is present.

Q: What are the Costs of Proxy Solicitation?

A: We will bear the costs of soliciting proxies. Our directors, officers and regular employees, without additional remuneration, may solicit proxies by mail, telephone, facsimile, email, personal interviews and other means.

We have retained Georgeson LLC, a proxy solicitation firm, or the Proxy Solicitor, to solicit proxies in connection with the Annual Meeting at a cost of approximately $15,000, plus reimbursement of certain expenses and fees for additional services requested. We will also indemnify the Proxy Solicitor against losses arising out of its provisions of these services on our behalf. Proxies will be solicited by the Proxy Solicitor by mail, telephone, e-mail and in person.

Q: Where Can I Find the Voting Results?

A: We plan to announce preliminary voting results at the Annual Meeting and will publish final results in a Current Report on Form 8-K to be filed with the SEC within four business days following the Annual Meeting.

Cautionary Note Regarding Forward-Looking Statements

This proxy statement contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Such forward-looking statements include those regarding our plans, strategies and expectations for our business and the potential benefits of our strategic plans and focus. Statements including words such as "aim," "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "goal," "intend," "may," "might," "plan," "potential," "predict," "project," "should," "strategy," "target," "will," "would" and statements in the future tense are forward-looking statements. These forward-looking statements reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to the company and on assumptions the company has made. Actual results may differ materially from those described in these forward-looking statements and are subject to a variety of assumptions, uncertainties, risks and important factors that are beyond our control, including the demand for our software platform, our ability to further develop our computational platform, our reliance upon third-party providers of cloud-based infrastructure to host our software solutions, factors adversely affecting the life sciences industry, our reliance upon third-party drug discovery collaborators, the uncertainties inherent in drug development and commercialization, such as the conduct of research activities and the timing of and our ability to initiate and complete preclinical studies and clinical trials, whether results from preclinical studies and early clinical trials will be predictive of the results of later preclinical studies and clinical trials, uncertainties associated with the regulatory review of investigational new drug submissions, clinical trials and applications for marketing approvals, the ability to retain and hire key personnel and other risks detailed under the caption "Risk Factors" in our Securities and Exchange Commission filings and reports, including our Annual

Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the Securities and Exchange Commission on February 26, 2025, as well as our future filings and reports. Any forward-looking statements contained in this proxy statement speak only as of the date hereof. Except as required by law, we undertake no duty or obligation to update any forward-looking statements contained in this proxy statement as a result of new information, future events, changes in expectations or otherwise.

PROPOSAL NO. 1—ELECTION OF FOUR CLASS II DIRECTORS

Our board of directors currently consists of ten members. In accordance with the terms of our Restated Certificate of Incorporation, our board of directors is divided into three classes (Class I, Class II and Class III), with members of each class serving staggered three-year terms. The members of the classes are divided as follows:

- the Class I directors are Ramy Farid, Gary Ginsberg and Arun Oberoi, and their term expires at the annual meeting of stockholders to be held in 2027;
- the Class II directors are Jeffrey Chodakewitz, Michael Lynton, Nancy A. Thornberry and Bridget van Kralingen, and their term expires at the Annual Meeting; and
- the Class III directors are Richard A. Friesner, Rosana Kapeller-Libermann and Gary Sender, and their term expires at the annual meeting of stockholders to be held in 2026.

Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

Our Restated Certificate of Incorporation provides that the authorized number of directors may be changed only by resolution of our board of directors. Our Restated Certificate of Incorporation also provides that our directors may be removed only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of all outstanding shares of common stock, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Upon the recommendation of our nominating and corporate governance committee, our board of directors has nominated Jeffrey Chodakewitz, Michael Lynton, Nancy A. Thornberry, and Bridget van Kralingen, for election as Class II directors at the Annual Meeting. Dr. Chodakewitz, Mr. Lynton, Ms. Thornberry, and Ms. van Kralingen are all presently directors, and have indicated a willingness to continue to serve as directors, if elected. Ms. van Kralingen was elected to our board of directors in March 2025 by our board of directors, upon the recommendation of the nominating and corporate governance committee, and she is standing for election by our stockholders for the first time at this Annual Meeting.

If no contrary indication is made, proxies are to be voted for Dr. Chodakewitz, Mr. Lynton, Ms. Thornberry, and Ms. van Kralingen, or in the event that Dr. Chodakewitz, Mr. Lynton, Ms. Thornberry, or Ms. van Kralingen is not a candidate or is unable to serve as a director at the time of the election (which is not currently expected), for any nominee who is designated by our board of directors to fill the vacancy. Our Corporate Governance Guidelines provide that director nominees should represent a broad range of personal and professional characteristics, backgrounds, experiences and skills, including gender, racial or ethnic identity, international experience and/or expertise in a particular discipline or field. Our priority in selection of board members is identification of members who will further the interests of our stockholders through their established records of professional accomplishment, the ability to contribute positively to the collaborative culture among our board members, knowledge of our business, understanding of the competitive landscape in which we operate and adherence to high ethical standards. In addition, as further described under "*Executive Summary — Stockholder Engagement and Election of Directors Vote Support*," we regularly solicit feedback from our stockholders, and our nominating and corporate governance committee, together with senior management, consider board, governance and related matters raised by our stockholders during our engagements to ensure that we are identifying and nominating directors who, among other things, have demonstrated business acumen and have a commitment to understanding our industry and company. Certain individual qualifications and skills of our directors that contribute to our board of directors' effectiveness as a whole are described in the following paragraphs.

Nominees for Election as Class II Directors

Biographical information as of April 1, 2025, including principal occupation and business experience during the last five years, for our nominees for election as Class II directors at the Annual Meeting is set forth below.

Jeffrey Chodakewitz, M.D., age 69, has served as a member of our board of directors since April 2020. Dr. Chodakewitz has served as an advisory partner to Ascenta Capital, a private equity and venture capital firm, since December 2022 and has served as an executive/senior advisor to Blackstone Life Sciences, a life sciences fund, from March 2019 to January 2022. Before joining Blackstone Lifesciences, Dr. Chodakewitz served as executive vice president, clinical medicine and external innovation, at Vertex Pharmaceuticals Incorporated, or Vertex, a publicly traded pharmaceutical company, from April 2018 to March 2019. Dr. Chodakewitz served as executive vice president, global medicines development and medical

affairs, and chief medical officer of Vertex from October 2014 to March 2018. Dr. Chodakewitz served as senior vice president and chief medical officer of Vertex from January 2014 to October 2014. Prior to joining Vertex, Dr. Chodakewitz spent over 20 years at Merck & Co., Inc., a pharmaceutical company, where he held a variety of roles including vice president of clinical research—infectious diseases & vaccines, vice president of clinical pharmacology/early stage development, senior vice president of late stage development, and senior vice president of global scientific strategy (infectious diseases, respiratory/immunology). Dr. Chodakewitz currently serves on the board of directors of Adicet Bio, Inc. (formerly known as resTORbio, Inc.), a publicly traded biopharmaceutical company, and Praxis Precision Medicines, Inc., a publicly traded biotechnology company. Dr. Chodakewitz also served as a member of the board of directors of Tetraphase Pharmaceuticals, Inc., a then publicly-traded biopharmaceutical company, from June 2014 to July 2020 and Freeline Therapeutics Holdings plc, a then publicly-traded biopharmaceutical company, from September 2019 to February 2024. Dr. Chodakewitz received a B.S. in Biochemistry from Yale University and an M.D. from the Yale University School of Medicine. We believe that Dr. Chodakewitz's experience with pharmaceutical and biotechnology companies qualifies him to serve on our board of directors.

Michael Lynton, age 65, has served as a member of our board of directors since January 2018 and chairman of our board of directors since October 2018. Mr. Lynton served as chief executive officer of Sony Entertainment Inc., an international entertainment company, from April 2012 to August 2017, as chairman and chief executive officer of Sony Pictures Entertainment Inc., from January 2004 to May 2017 and as chief executive officer of Sony Corporation of America, from March 2012 to August 2017. Mr. Lynton currently serves as chairman of the board of directors of Snap Inc., a publicly traded technology company, and Warner Music Group Corp., a publicly traded media company, and as a member of the board of directors of Ares Management Corporation, a publicly traded, global alternative asset manager. Mr. Lynton also served as a member of the board of directors of Pandora Media, Inc. from August 2017 to February 2019, Pearson plc., a publicly traded publishing and education company, from February 2018 to June 2021 and The Boston Beer Company, Inc., a publicly traded beverage company, from October 2020 to May 2023. Mr. Lynton received a B.A. in History and Literature from Harvard College and an M.B.A. from Harvard Business School. We believe that Mr. Lynton's public company board and management experience and his extensive business and leadership experience qualifies him to serve as chairman of our board of directors.

Nancy A. Thornberry, age 68, has served as a member of our board of directors since September 2019. Ms. Thornberry previously served as chair, R&D of Kallyope, Inc., or Kallyope, a biotechnology company, from October 2021 to May 2024, and as chief executive officer of Kallyope from November 2015 to October 2021. Between August 2013 and October 2015, Ms. Thornberry was self-employed as a consultant to companies in the biotechnology and pharmaceutical industries. Prior to that, Ms. Thornberry spent over 30 years at Merck & Co., Inc., a pharmaceutical company, where she held a variety of positions including senior vice president and franchise head, diabetes and endocrinology, from April 2011 to July 2013, senior vice president and franchise head, diabetes and obesity, from September 2009 to April 2011, vice president, worldwide basic research head, diabetes and obesity, from February 2007 to September 2009 and executive director, metabolic disorders, from 2004 to February 2007, among other positions. Ms. Thornberry currently serves on the board of directors of Denali Therapeutics Inc., a publicly traded biopharmaceutical company, Vertex Pharmaceuticals Incorporated, a publicly traded biotechnology company, and the New York Genome Center. Ms. Thornberry received a B.S. in Chemistry and Biology from Muhlenberg College. We believe Ms. Thornberry's scientific background and experience in the life sciences industry qualifies her to serve on our board of directors.

Bridget van Kralingen, age 61, has served as a member of a board of our directors since March 2025. Ms. van Kralingen has served as a Senior Partner and member of the executive committee at Motive Partners, a specialty private equity firm focused on technology-enabled financial and business services, since November 2022. Prior to joining Motive Partners, Ms. van Kralingen served as Senior Vice President of International Business Machines Corporation, or IBM, a multinational technology company. Ms. van Kralingen joined IBM in 2004 and held a number of positions of increasing responsibility, including Chief Executive/Senior Vice President, IBM Global Markets; Senior Vice President, Global Industries, Clients, Platforms and Blockchain; Senior Vice President, Global Business Services; General Manager IBM North America; General Manager, Global Business Services in Europe, Middle East and Africa; and Global Managing Partner, Financial Services Sector, Global Business Services. Prior to joining IBM, Ms. van Kralingen served as Managing Partner, US Financial Services with Deloitte Consulting. Ms. van Kralingen currently serves on the board of directors of Teradyne, Inc., a publicly traded global supplier of automated test equipment and robotics solutions, The Travelers Companies, Inc., a publicly traded global insurance company, and Discovery Limited, a South African-founded financial services organization. Ms. van Kralingen served on the board of directors of the Royal Bank of Canada from June 2011 to April 2024. Ms. van Kralingen received a Master of Commerce in Industrial and Organisational Psychology from the University of South Africa, a Bachelor of Commerce from the University of the Witwatersrand, South Africa, and an

honours degree in commerce from the University of Johannesburg. We believe Ms. van Kralingen's extensive software and technology solutions experience qualifies her to serve on our board of directors.

The board of directors recommends voting "FOR" the election of Jeffrey Chodakewitz, Michael Lynton, Nancy A. Thornberry, and Bridget van Kralingen as Class II directors for a three-year term ending at the annual meeting of stockholders to be held in 2028.

Directors Continuing in Office

Biographical information as of April 1, 2025, including principal occupation and business experience during the last five years, for our directors continuing in office after the Annual Meeting is set forth below.

Class III Directors (Term Expires at 2026 Annual Meeting of Stockholders)

Richard A. Friesner, Ph.D., age 72, has served as a member of our board of directors since August 1990, when he co-founded us. Dr. Friesner is currently the William P. Schweitzer professor of chemistry at Columbia University, the principal investigator of the Friesner Research Group, a research laboratory within the Department of Chemistry at Columbia University, and he has served as a professor of chemistry at Columbia University since September 1990. Dr. Friesner is a Fellow of the American Academy of Sciences and a member of the National Academy of Sciences. Dr. Friesner received a B.S. in Chemistry from the University of Chicago and a Ph.D. in Chemistry from the University of California, Berkeley. We believe that Dr. Friesner's extensive experience in theoretical chemistry and his extensive knowledge of our company since inception, as well as his distinguished scientific record, qualifies him to serve on our board of directors.

Rosana Kapeller-Libermann, M.D., Ph.D., age 61, has served as a member of our board of directors since January 2019. Dr. Kapeller-Libermann has served as president and chief executive officer of Rome Therapeutics, Inc., a therapeutics company, since April 2019. She has also served in various roles at GV, a venture capital investment arm of Alphabet Inc., since 2018, including as an entrepreneur in residence from November 2018 to April 2020, a fellow from April 2020 to December 2023, and as a consultant since December 2023. Prior to that, Dr. Kapeller-Libermann served as founding chief scientific officer of Nimbus Therapeutics, or Nimbus, a biotechnology company, from February 2010 to March 2018. Prior to joining Nimbus, she served as vice president of research at Aileron Therapeutics, Inc., a biopharmaceutical company, from August 2005 to September 2009. Dr. Kapeller-Libermann received an M.D. from Universidade do Estado do Rio de Janeiro and a Ph.D. in Molecular and Cellular Physiology from Tufts University. We believe Dr. Kapeller-Libermann's scientific experience in the field of drug discovery and extensive experience working with life sciences companies qualifies her to serve on our board of directors.

Gary Sender, age 63, has served as a member of our board of directors since July 2019. Mr. Sender previously served as chief financial officer of Nabriva Therapeutics plc, or Nabriva, a publicly traded biopharmaceutical company, from May 2016 to March 2021. Prior to joining Nabriva, Mr. Sender served as chief financial officer and executive vice president at Synergy Pharmaceuticals Inc., or Synergy, a publicly traded biopharmaceutical company, from November 2015 to May 2016. Prior to joining Synergy, from August 2009 to June 2015, Mr. Sender served as senior vice president, finance at Shire plc., or Shire, a biopharmaceutical company since acquired by Takeda Pharmaceutical Company Limited. Prior to joining Shire, Mr. Sender served as founding chief financial officer of Tengion, Inc., a regenerative medicine company, from August 2004 to July 2009. Mr. Sender currently serves on the board of directors of Harmony BioSciences Holdings, Inc., a publicly traded pharmaceutical company, and iBio, Inc., a publicly traded biotechnology company. Mr. Sender also spent over 15 years in several leadership roles within Merck & Co., Inc., a pharmaceutical company. Mr. Sender received a B.S. in Finance from Boston University and an M.B.A. from Carnegie-Mellon University. We believe Mr. Sender's extensive experience in the life sciences industry, and in particular his financial acumen, qualifies him to serve on our board of directors.

Class I Directors (Term Expires at 2027 Annual Meeting of Stockholders)

Ramy Farid, Ph.D., age 60, has served as our president since January 2008, our chief executive officer since January 2017 and as a member of our board of directors since December 2012. Dr. Farid has been with our company for over 20 years and served as senior vice president from January 2005 to December 2007, vice president, scientific development and product management from January 2003 to December 2004 and product manager from January 2002 to December 2002. Dr. Farid serves on the board of directors of multiple biotechnology companies co-founded by us, and previously served on the board of directors of Morphic Holding, Inc., a then-publicly traded biotechnology company. Prior to joining our

company, Dr. Farid was an assistant professor in the Chemistry Department at Rutgers University. Dr. Farid received a B.S. in Chemistry from the University of Rochester and a Ph.D. from the California Institute of Technology, and he was a National Institutes of Health postdoctoral fellow in the Department of Biochemistry and Biophysics at the University of Pennsylvania. Dr. Farid currently serves on the board of directors of Vir Biotechnology, Inc., a publicly traded biotechnology company. Dr. Farid previously served on the board of directors of Structure Therapeutics, Inc., a publicly traded biopharmaceutical company, from April 2019 to June 2024. We believe that Dr. Farid's extensive knowledge of our company and current role as our president and chief executive officer qualifies him to serve on our board of directors.

Gary Ginsberg, age 62, has served as a member of our board of directors since April 2020. Mr. Ginsberg served as the senior vice president and global head of communications at SoftBank Group Corp., or Softbank, an investment firm from November 2018 until December 2020. Before joining SoftBank, Mr. Ginsberg served as executive vice president of corporate marketing and communications at Time Warner Inc., a media company, from February 2010 to August 2018. Prior to that, Mr. Ginsberg spent 11 years at News Corporation, a media company, most recently as executive vice president of global marketing and corporate affairs and a member of the office of the chairman. Mr. Ginsberg currently serves on the board of directors of Townsquare Media, Inc., a publicly traded media company. Mr. Ginsberg also served on the board of directors of Synacor, Inc. from January 2012 to June 2020. Mr. Ginsberg received an A.B. in History from Brown University and a J.D. from Columbia University School of Law. We believe that Mr. Ginsberg's business and leadership experience qualifies to him to serve on our board of directors.

Arun Oberoi, age 70, has served as a member of our board of directors since May 2022. Mr. Oberoi served as the executive vice president of global sales and services from April 2012 to August 2021 at Red Hat, Inc., a provider of enterprise open-source software solutions, which was acquired by International Business Machines Corporation, or IBM, in July 2019. Prior to that, from December 2010 to January 2012, Mr. Oberoi served as president and chief executive officer of Viridity Software, Inc., a data center infrastructure management company. From March 2008 to June 2010, Mr. Oberoi served as chief executive officer of Aveksa, Inc., an access governance and management software company. From January 2004 to February 2006, Mr. Oberoi was executive vice president of global sales and technical services at Micromuse, Inc., or Micromuse, a provider of network and service management solutions. Micromuse was acquired by IBM in February 2006, where Mr. Oberoi subsequently served as vice president within IBM Tivoli until March 2008. Prior to joining Micromuse, Mr. Oberoi held a series of senior executive positions at Hewlett-Packard Company from August 1997 until December 2003, including as vice president and general manager, worldwide corporate accounts and industries, sales and marketing. Mr. Oberoi serves on the board of directors of Proofpoint, Inc., an enterprise security company, and Talend S.A., an open source integration software provider, which are both portfolio companies of Thoma Bravo, L.P., Deeplite, Inc., a provider of intelligent AI optimization software, Paymentus Holdings, Inc., a publicly traded electronic billing and payments solutions provider. He has served as chairman of the supervisory board of SUSE S.A., a provider of open source hybrid cloud infrastructure software and portfolio company of EQT partners since January 2024. Mr. Oberoi received a B.A. from the University of Delhi and an M.B.A. from Kellogg School of Management, Northwestern University. We believe that Mr. Oberoi's enterprise software, technology and business leadership experience qualifies him to serve on our board of directors.

Executive Officers Who Are Not Directors

Biographical information as of April 1, 2025 for our executive officers who are not directors is set forth below.

Robert Abel, Ph.D., age 43, has served as our executive vice president and chief scientific officer, platform since January 2024 and previously served as our chief computational scientist, and head of modeling R&D from March 2021 to January 2024. Dr. Abel has been with our company for nearly 15 years and previously served as our executive vice president, science, from January 2020 to March 2021, senior vice president, science, from April 2017 to December 2019, vice president, scientific development from January 2014 to April 2017, director of structure-based science from January 2011 to December 2013, senior principal scientist and product manager from January 2010 to December 2010 and senior scientist from March 2009 to December 2009. Dr. Abel received a B.S. in Chemistry from the University of Florida and a Ph.D. in Chemical Physics from Columbia University. In graduate school, Dr. Abel was a National Science Foundation Graduate Research Fellow and a Department of Homeland Security Research Fellow and worked from May 2005 to August 2005 at Los Alamos National Laboratory under the auspices of the DHS Research Fellowship.

Karen Akinsanya, Ph.D., age 57, has served as our president of R&D, therapeutics since February 2022 and previously served as our executive vice president, chief biomedical scientist, head of discovery R&D from January 2020 to February 2022 and as our senior vice president and chief biomedical scientist from April 2018 to December 2019. Dr. Akinsanya spent 12 years at Merck & Co., Inc., or Merck, a pharmaceutical company, where she held a variety of positions across

Merck Research Labs, including associate vice president, early scientific assessment lead, business development & licensing from December 2013 to July 2017, collaboration lead and executive director, cardiovascular research from January 2010 to December 2013, and associate director, clinical pharmacology from October 2005 to December 2009. Prior to Merck, Dr. Akinsanya held a number of roles in drug discovery at Ferring Pharmaceuticals in the United Kingdom and the United States from 1997 to 2005. In 2007, Dr. Akinsanya founded Envision Science Group LLC, or Envision, a translational science consulting company, where she currently serves as president. Dr. Akinsanya provided consulting services on behalf of Envision to companies in the pharmaceutical industry between July 2017 and April 2018. Dr. Akinsanya currently serves on the board of directors of Nautilus Biotechnology, Inc., a publicly traded biotechnology company. Dr. Akinsanya received a B.Sc. in Biochemistry from Queen Mary College, University of London, a Ph.D. in Endocrine Physiology from the Imperial College and completed postdoctoral studies at the Ludwig Institute for Cancer Research, University College, London.

Margaret Dugan, M.D., age 68, has served as our chief medical officer since July 2023. Dr. Dugan is a board-certified medical oncologist and hematologist with more than 30 years of clinical, medical research, and drug development experience. Prior to joining our company, Dr. Dugan served as chief medical officer of Dracen Pharmaceuticals, Inc., or Dracen, an oncology company, from April 2018 to February 2023. Prior to her role at Dracen, Dr. Dugan held roles of increasing responsibility, including serving as a senior vice president at Novartis AG, where she led oncology-focused global strategic drug development, including several regulatory filings and approvals. Dr. Dugan currently serves on the board of directors of BeiGene, Ltd., a publicly traded biotechnology company. Dr. Dugan received a B.A. in Biology from New York University and an M.D. from New York University School of Medicine.

Patrick Lorton, age 41, has served as our executive vice president and chief operating officer, software since January 2024 and as our executive vice president, chief technology officer since March 2021. Mr. Lorton has been with our company for over 15 years and previously served as our senior vice president and chief technology officer from April 2017 to March 2021, vice president of engineering from January 2016 to April 2017, director of software engineering from January 2015 to January 2016, associate director of software engineering from December 2012 to January 2015, project leader from January 2011 to December 2012 and scientific developer from September 2006 to December 2012. Prior to joining our company, Mr. Lorton served as a chemistry research assistant from December 2005 to September 2006 and a computer science research assistant from August 2004 to July 2006 at Indiana University Bloomington. Mr. Lorton received a B.S. in Computer Science and a B.A. in Mathematics and Chemistry from Indiana University Bloomington.

Geoffrey Porges, age 64, has served as our executive vice president and chief financial officer since August 2022. Dr. Porges previously served as vice chairman of SVB Securities LLC (now known as Leerink Partners LLC), the former investment banking subsidiary of SVB Financial Group, or SVB Securities, from January 2022 to August 2022, and as venture partner of SVB Capital, the private equity arm of SVB Financial Group, from January 2022 to April 2023. Prior to his role as vice chairman, Dr. Porges held positions of increasing responsibility at SVB Securities, including serving as senior managing director from February 2019 to January 2022 and as senior biopharmaceuticals analyst and director of therapeutics research from November 2015 to February 2019. Prior to joining SVB Securities, Dr. Porges spent 13 years at Alliance Bernstein, an investment management firm, most recently serving as managing director. Prior to joining Alliance Bernstein, Dr. Porges was chief operating officer and head of health, medical and biotechnologies programs at BTG Plc, a pharmaceutical company, from 1999 to 2002 and was a member of the board of directors of Acambis plc from 2001 to 2003. Dr. Porges received a Bachelor of Medicine and a Bachelor of Surgery from the University of Sydney and an M.B.A. from Harvard Business School.

Yvonne Tran, age 54, has served as our chief people officer since May 2023 and as our executive vice president and chief legal officer since April 2017. She served as our general counsel from April 2010 to April 2017. Prior to joining our company, Ms. Tran previously served as senior corporate counsel at Oracle America, Inc., or Oracle, a technology company, from January 2008 to April 2010. Prior to joining Oracle, Ms. Tran served as outside legal consultant from January 2006 to January 2008 and deputy general counsel from April 2000 to January 2006 at DoubleClick, Inc., an advertising technology company since acquired by Google LLC. Ms. Tran received a B.A. in Molecular Biophysics and Biochemistry from Yale University and a J.D. from the University of Virginia School of Law.

PROPOSAL NO. 2—ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are providing our stockholders the opportunity to vote to approve, on an advisory, non-binding basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with the SEC's rules. This proposal, which is commonly referred to as "say-on-pay," is required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which added Section 14A to the Exchange Act. At the 2022 annual meeting of stockholders, stockholders approved, on an advisory basis, an annual advisory vote on the compensation of our named executive officers. In accordance with the results of this vote, the Board determined to implement an advisory vote on the compensation of our named executive officers every year.

Our executive compensation program is designed to attract, motivate, and retain our executive officers, who are critical to our success. Under this program, our named executive officers are rewarded for the achievement of our short- and long-term strategic and financial goals and for driving corporate financial performance and stability. The program contains elements of cash and equity-based compensation and is designed to align the interests of our executive officers with those of our stockholders.

The section of this proxy statement titled "Executive and Director Compensation" beginning on page 25, including "Compensation Discussion and Analysis," describes in detail our executive compensation program, including the updates we made to the program to broaden our use of performance-based equity awards to our full team of executive officers starting in 2024, and the decisions made by our compensation committee and our board of directors with respect to the fiscal year ended December 31, 2024. Highlights of our executive compensation program include the following:

- Using a performance-based annual cash incentive program to link executive compensation to the achievement of long-term and short-term company goals;
- Setting challenging short-term goals for our cash incentive program;
- Providing a significant portion of our executive compensation in the form of equity with time-based vesting;
- Providing a significant portion of our executive compensation in the form of performance-based restricted stock units;
- Using market data from our peer group to set competitive compensation levels; and
- Maintaining stock ownership guidelines for our executives.

As we describe in greater detail in the "Compensation Discussion and Analysis" section of this proxy statement, our executive compensation program embodies a pay-for-performance philosophy that supports our business strategy and aligns the interests of our executive officers with our stockholders. The board of directors and compensation committee believe this link between compensation and the achievement of our short- and long-term strategic and financial goals has helped drive our performance over time. At the same time, we believe our program does not encourage excessive risk-taking by management.

Our board of directors is asking stockholders to approve a non-binding advisory vote on the following resolution:

RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the "Compensation Discussion and Analysis", the compensation tables and any related material disclosed in this proxy statement, is hereby approved.

As an advisory vote, this proposal is not binding. The outcome of this advisory vote does not overrule any decision by the Company or the board of directors (or any committee thereof), create or imply any change to the fiduciary duties of the Company or the board of directors (or any committee thereof), or create or imply any additional fiduciary duties for the Company or the board of directors (or any committee thereof). However, our compensation committee and board of directors value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for our named executive officers.

The board of directors recommends that stockholders vote to approve the compensation of our named executive officers by voting "FOR" this proposal.

PROPOSAL NO. 3—RATIFICATION OF THE APPOINTMENT OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2025

Our stockholders are being asked to ratify the appointment by the audit committee of the board of directors of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025. KPMG LLP has served as our independent registered public accounting firm since 2010.

The audit committee is solely responsible for selecting our independent registered public accounting firm for the fiscal year ending December 31, 2025. Stockholder approval is not required to appoint KPMG LLP as our independent registered public accounting firm. However, the board of directors believes that submitting the appointment of KPMG LLP to the stockholders for ratification is good corporate governance. If the stockholders do not ratify this appointment, the audit committee will reconsider whether to retain KPMG LLP. If the selection of KPMG LLP is ratified, the audit committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time it decides that such a change would be in the best interest of our company and our stockholders.

A representative of KPMG LLP is expected to virtually attend the Annual Meeting and will have an opportunity to make a statement if he or she desires to do so and is expected to be available to respond to appropriate questions from our stockholders.

We incurred the following fees from KPMG LLP for the audit of the consolidated financial statements and for other services provided during the years ended December 31, 2024 and 2023.

Fee Category	2024	2023
Audit fees (1)	$ 2,298,000	$ 2,136,781
Audit-related fees (2)	10,000	—
Tax fees (3)	570,947	426,092
All other fees	—	—
Total fees	$ 2,878,947	$ 2,562,873

(1) "Audit fees" consist of professional services provided by KPMG LLP in connection with the integrated audit of our annual consolidated financial statements, the review of our unaudited quarterly consolidated financial statements, and audit services provided in connection with other regulatory filings.

(2) "Audit-related fees" consist of professional services provided by KPMG LLP for assurance and related services.

(3) "Tax fees" consist primarily of professional services provided by KPMG LLP that encompass a variety of permissible tax services, including federal and state tax compliance services, technical tax advice related to federal and state income tax matters, assistance with sales tax, and other tax consulting matters.

Audit Committee Pre-Approval Policy and Procedures

Our audit committee has adopted policies and procedures relating to the approval of all audit and other permitted non-audit services provided to us by our independent registered public accounting firm. These policies provide that we will not engage our independent registered public accounting firm to render audit or non-audit services unless the service is specifically approved in advance by our audit committee or the engagement to render the service is entered into pursuant to the pre-approval procedure.

From time to time, our audit committee may pre-approve services that are expected to be provided to us by our independent registered public accounting firm during the next 12 months. These services may include audit services, audit-related services, tax services and other permissible non-audit services. Our independent registered public accounting firm and senior management will periodically report to the audit committee regarding the extent of services provided by our independent registered public accounting firm.

During our 2024 and 2023 fiscal years, no services were provided to us by KPMG LLP other than in accordance with the pre-approval policies and procedures described above.

The board of directors recommends voting "FOR" the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025.

CORPORATE GOVERNANCE

Director Nomination Process

Our nominating and corporate governance committee is responsible for identifying individuals qualified to serve as directors, consistent with criteria approved by our board, and recommending the persons to be nominated for election as directors, except where we are legally required by contract, law or otherwise to provide third parties with the right to nominate director candidates.

The process followed by our nominating and corporate governance committee to identify and evaluate director candidates includes requests to board members and others for recommendations, meetings from time to time to evaluate biographical information and background material relating to potential candidates and interviews of selected candidates by members of the committee and our board. While there are no specific minimum qualifications for a committee-recommended nominee to our board of directors, the qualifications, qualities and skills that our nominating and corporate governance committee believes must be met by a committee-recommended nominee for a position on our board of directors are as follows:

- Nominees should have a reputation for integrity, honesty and adherence to high ethical standards.
- Nominees should have demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to our current and long-term objectives and should be willing and able to contribute positively to our decision-making process.
- Nominees should have a commitment to understand our company and our industry and to regularly attend and participate in meetings of our board of directors and its committees.
- Nominees should have the interest and ability to understand the sometimes conflicting interests of our various constituencies, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders.
- Nominees should not have, nor appear to have, a conflict of interest that would impair the nominee's ability to represent the interests of all of our stockholders and to fulfill the responsibilities of a director.
- Nominees shall not be discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law. Nominees should represent a broad range of personal and professional characteristics, backgrounds, experiences and skills including international experience and/or expertise in a particular discipline or field.
- Nominees should normally be able to serve for at least five years before reaching the age of 75.

The nominating and corporate governance committee may use a third-party search firm in those situations where particular qualifications are required or where existing contacts are not sufficient to identify an appropriate candidate.

Stockholders may recommend individuals to the nominating and corporate governance committee for consideration as potential director candidates. Any such proposals should be submitted to our corporate secretary at our principal executive offices and should include appropriate biographical and background material to allow the nominating and corporate governance committee to properly evaluate the potential director candidate and the number of shares of our stock beneficially owned by the stockholder proposing the candidate. The specific requirements for the information that is required to be provided for such recommendations to be considered for an annual meeting are specified in our amended and restated bylaws and must be received by us no later than the date referenced below under the heading "*Stockholder Proposals for our 2026 Annual Meeting of Stockholders*."

Assuming that biographical and background material has been provided on a timely basis, any recommendations received from stockholders will be evaluated in the same manner as potential nominees proposed by the nominating and corporate governance committee. If our board of directors decides to nominate a stockholder-recommended candidate and recommends his or her election, then his or her name will be included on our proxy card for the next annual meeting.

Director Independence

Applicable Nasdaq rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, Nasdaq rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, among other things, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and (2) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In March 2025, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Dr. Farid and Dr. Friesner, is an "independent director" as defined under applicable Nasdaq rules. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each non-employee director. Dr. Farid is not an independent director under these rules because he is our president and chief executive officer, and Dr. Friesner is not an independent director under these rules because he has received more than $120,000 in consulting fees from us during a 12-month period within the last three years. See "*Transactions with Related Persons*" for more information regarding Dr. Friesner.

There are no family relationships among any of our directors or executive officers.

Board Committees

Our board of directors has established an audit committee, a compensation committee, a nominating and corporate governance committee and a drug discovery committee. Each of the audit committee, compensation committee, nominating and corporate governance committee and drug discovery committee operates under a charter, and each such committee reviews its respective charter at least annually. A current copy of the charter for each of the audit committee, the compensation committee, the nominating and corporate governance committee and the drug discovery committee is posted on the "Governance" section of the "Investors" page of our website, which is located at www.schrodinger.com. Our board of directors also appoints from time to time ad hoc committees to address specific matters.

Audit Committee

The members of our audit committee are Gary Sender, Gary Ginsberg, Michael Lynton, and Arun Oberoi. Gary Sender serves as chair of the audit committee. Our audit committee met seven times during 2024. Our audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;

- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk identification, risk assessment and risk management policies, including coordinating the board of directors' oversight of major financial risk exposures and risks relating to data privacy and cybersecurity;
- establishing procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions;
- periodically reviewing our investment policy, adopting changing to such policy, and periodically reviewing our investment activities and our portfolio in light of our investment policy; and
- preparing the audit committee report required by Securities and Exchange Commission, or SEC, rules.

All audit and non-audit services to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that Gary Sender is an "audit committee financial expert" as defined in applicable SEC rules and that each of the members of our audit committee possesses the financial sophistication required for audit committee members under Nasdaq rules. We believe that the composition of our audit committee meets the requirements for independence under current Nasdaq and SEC rules and regulations.

Compensation Committee

The members of our compensation committee are Gary Sender, Gary Ginsberg and Rosana Kapeller-Libermann. Gary Sender serves as chair of the compensation committee. Our compensation committee met five times during 2024. Our compensation committee's responsibilities include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and making recommendations to our board of directors with respect to management succession planning at the request of our board of directors;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis" disclosure;
- overseeing our human capital management strategy and practices, including talent acquisition and retention, efforts to promote inclusion and pay equity practices;
- reviewing our equity ownership guidelines for directors and executives and overseeing compliance with such guidelines;
- overseeing the administration of our clawback policy; and

- preparing the compensation committee report.

We believe that the composition of our compensation committee meets the requirements for independence under current Nasdaq and SEC rules and regulations.

Under its charter, the compensation committee may form, and delegate authority to, subcommittees, consisting of independent directors, as it deems appropriate. In addition, under its charter, the compensation committee may delegate to one or more executive officers the power to grant options or other stock awards pursuant to our 2021 Inducement Equity Incentive Plan, as amended, and the 2022 Equity Incentive Plan, as amended, or the 2022 Plan, to employees who are not directors or executive officers of our company. During 2024, the compensation committee did not delegate authority to such subcommittees or executive officers.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Michael Lynton, Jeffrey Chodakewitz, and Nancy A. Thornberry. Michael Lynton serves as chair of the nominating and corporate governance committee. Our nominating and corporate governance committee met two times during 2024. Our nominating and corporate governance committee's responsibilities include:

- recommending to our board of directors the persons to be nominated for election as directors and to each of our board's committees;
- reviewing and making recommendations to our board of directors with respect to our board leadership structure;
- developing and recommending to our board of directors corporate governance principles;
- overseeing an annual evaluation of our board of directors; and
- reviewing and making recommendations to our board of directors with respect to our environmental, social and governance policies and practices, including with respect to our corporate sustainability efforts.

We believe that the composition of our nominating and corporate governance committee meets the requirements for independence under current Nasdaq and SEC rules and regulations.

Drug Discovery Committee

The members of our drug discovery committee are Jeffrey Chodakewitz, Rosana Kapeller-Libermann, and Nancy A. Thornberry. Jeffrey Chodakewitz serves as chair of the drug discovery committee. The drug discovery committee assists our board's oversight of our drug discovery and research activities and assists us in evaluating related issues. Our drug discovery committee met five times during 2024. Our drug discovery committee's responsibilities include:

- reviewing, evaluating, and advising our board of directors and management regarding our long-term strategic goals and objectives and the quality and direction of our research and development programs;
- monitoring and evaluating trends in research and development, and advising our board of directors and management on such trends;
- reviewing, evaluating, and advising our board of directors and management on significant drug discovery and development transactions;
- regularly reviewing our research and development pipeline;
- assisting our board of directors with its oversight responsibility for enterprise risk management in areas affecting our drug discovery research and development; and
- reviewing such other topics as delegated to the committee from time to time by our board of directors.

Compensation Committee Interlocks and Insider Participation

The directors who served as members of our compensation committee at any point during the year ended December 31, 2024 were Gary Sender, Gary Ginsberg and Rosana Kapeller-Libermann. None of our executive officers serves, or in the past year has served, as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

Board of Director Meetings and Attendance

Our board of directors recognizes the importance of director attendance at board and committee meetings. The full board of directors met five times during 2024. During 2024, each then-serving member of the board of directors attended in person or participated in 75% or more of the aggregate of (i) the total number of meetings held by the board of directors (during the period that such person served as a director) and (ii) the total number of meetings held by all committees of the board of directors on which such person served (during the periods that such person served).

Director Attendance at Annual Meeting of Stockholders

Our corporate governance guidelines provide that directors are responsible for attending the annual meeting of stockholders. Each then-serving member of the board of directors attended the 2024 annual meeting of stockholders.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted a current copy of the code on the "Governance" section of the "Investors" page on our website, which is located at www.schrodinger.com. In addition, we intend to post on our website all disclosures that are required by law or Nasdaq listing standards concerning any amendments to, or waivers from, any provision of the code.

Corporate Governance Guidelines

Our board of directors has adopted corporate governance guidelines to assist the board of directors in the exercise of its duties and responsibilities and to serve the best interests of our company and our stockholders. These guidelines provide that:

- the principal responsibility of our board of directors is to oversee our management;
- a majority of the members of the board of directors must be independent directors, unless otherwise permitted by Nasdaq rules;
- the independent directors meet in executive session at least twice a year;
- directors have full and free access to management and, as necessary, independent advisors;
- new directors participate in an orientation program and all directors are expected to participate in continuing director education on an ongoing basis; and
- our nominating and corporate governance committee will oversee an annual self-evaluation of the board to determine whether it and its committees are functioning effectively.

A copy of the corporate governance guidelines is available on the "Governance" section of the "Investors" page on our website, which is located at www.schrodinger.com.

Board Leadership Structure and Oversight of Risk

Our corporate governance guidelines provide that the nominating and corporate governance committee shall periodically assess the board of directors' leadership structure, including whether the offices of chief executive officer and chairman of the board of directors should be separate. Our guidelines provide the board of directors with flexibility to determine whether the two roles should be combined or separated based upon our needs and the board of directors' assessment of its leadership from time to time. We do not currently have a lead independent director because the chairman of our board of directors is independent within the meaning of the Nasdaq listing rules.

We currently separate the roles of chief executive officer and chairman of the board of directors. Our president and chief executive officer is responsible for setting the strategic direction for our company and the day-to-day leadership and performance of our company, while the chairman of our board of directors presides over meetings of the board of directors, including executive sessions of the board of directors, and performs oversight responsibilities. Separating the duties of the chairman from the duties of the chief executive officer allows our chief executive officer to focus on our day-to-day business, while allowing the chairman to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Specifically, our chairman runs meetings of our independent directors, assists with developing the board's meeting agendas, facilitates communications between management and the board of directors and assists with other corporate governance matters. Our board of directors believes that this structure ensures a greater role for the independent directors in the oversight of our company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our board of directors. Our board of directors believes its administration of its risk oversight function has not affected its leadership structure. Our board of directors believes that we have an appropriate leadership structure for us at this time which demonstrates our commitment to good corporate governance. Although the roles of chairman and chief executive officer are currently separate, our nominating and corporate governance committee and board of directors believe it is appropriate for our chief executive officer to serve as a member of our board of directors.

Risk is inherent with every business and how well a business manages risk can ultimately determine its success. We face a number of risks, including those described under "Risk Factors" in our annual report on Form 10-K for the year ended December 31, 2024. Our board of directors is actively involved in oversight of risks that could affect us. Our board of directors oversees our risk management processes directly and through its committees. Our board of directors encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Our management is responsible for risk management on a day-to-day basis and our board of directors and its committees oversee the risk management activities of management. Our board of directors satisfies this responsibility through full reports by each committee chair regarding the committee's considerations and actions, as well as through regular reports directly from officers responsible for oversight of particular risks within our company.

Our audit committee oversees risk management activities related to financial controls and legal, cybersecurity, data privacy and compliance risks. Oversight by the audit committee includes direct communication with our external auditors. Our compensation committee oversees risk management activities relating to our compensation policies and practices and assesses whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. Our compensation committee also oversees risk management activities relating to management succession planning and our human capital management strategy and practices. Oversight by the compensation committee includes direct communication with our compensation consultants. Our nominating and corporate governance committee oversees risk management activities relating to board and committee composition and our environmental, social and governance, or ESG, corporate responsibility and sustainability efforts. Our drug discovery committee assists our board of directors in its oversight of our drug discovery and research activities, including having oversight responsibility for enterprise risk management in areas affecting our drug discovery research and development. In addition, members of our senior management team attend our board meetings quarterly and are available to address any questions or concerns raised by the board on risk management and any other matters. Our board of directors believes that full and open communication between management and the board of directors is essential for effective risk management and oversight.

Insider Trading Policy and Hedging, Pledging and Margin Accounts

We have adopted an insider trading policy governing the purchase, sale, and/or other dispositions of our securities by directors, employees, certain family members of directors and employees, and certain entities controlled by any of the foregoing. We believe our insider trading policy is reasonably designed to promote compliance with insider trading laws, rules and regulations, and Nasdaq listing standards. Our insider trading policy is filed as Exhibit 19.1 to our annual report

on Form 10-K for the year ended December 31, 2024. We also do not engage in transactions in our securities while in possession of material nonpublic information concerning our company or our securities.

Our insider trading policy, among other things, expressly prohibits short sales and derivative transactions of our stock by our directors, named executive officers and other employees, including short sales "against the box"; purchases or sales of puts, calls or other derivative securities based on the company's securities; and purchases of financial instruments (including prepaid variable forward contracts, equity swaps, collars and exchange funds) or other transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of company securities.

In addition, our insider trading policy generally prohibits our directors, named executive officers and other employees from purchasing our securities on margin, borrowing against company securities held in a margin account, or pledging our securities as collateral for a loan. However, an exception may be granted in extraordinary situations where a person wishes to pledge company securities as collateral for a loan (other than a margin loan) and clearly demonstrates the financial capacity to repay the loan without resort to the pledged securities. Any exception must be approved by our chief financial officer or chief legal officer or, in the case of a director or executive officer, by our audit committee. Other than the 331,778 shares of our common stock pledged by Dr. Friesner as collateral for a loan, no director, named executive officer or other employees have pledged any shares of our common stock. Prior to approving the pledge by Dr. Friesner, our audit committee considered (1) that Dr. Friesner's pledge of our shares was not designed to shift or hedge any economic risk associated with his ownership of our common stock, (2) that the total number of shares of common stock pledged as collateral for the loan constituted less than 1.0% of our total outstanding shares as the time of the pledge, (3) that the amount of the pledged shares was considerably lower than the average daily and weekly trading volume of our common stock, (4) the amount of the contemplated $2.0 million loan relative to the market value of the pledged shares of common stock and (5) Dr. Friesner's representation that he has the financial capacity to repay the borrowed amount under the loan without resort to the pledged shares. Our audit committee also routinely reviews Dr. Friesner's pledge of our shares to assess whether such pledge poses an undue risk to the company based on the above factors.

Our Commitment to Environmental, Social, and Governance Matters

We are committed to embedding a long-term, formal ESG strategy within our business, a commitment we refer to as Corporate Sustainability. Our board is engaged in our company's Corporate Sustainability matters, and our nominating and corporate governance committee maintains formal oversight of our ESG efforts. We believe that a commitment to Corporate Sustainability is integral to our mission to improving human health and quality of life. This commitment requires us to be responsive to ESG-related matters that impact both us and our stakeholders, including the communities in which we operate. We expect to continue to focus on the ESG issues that we have identified as most important to our company, our business and our stakeholders, including, among other things, risk mitigation, impact creation and measurement, and increasing corporate transparency.

More information about our ESG initiatives can be found in *Part I, Item 1. Business — Human Capital* of our Annual Report on Form 10-K for the year ended December 31, 2024, filed with the SEC on February 26, 2025, and in our Corporate Sustainability Report, available on the "Corporate Sustainability" section of our website, which is located at www.schrodinger.com.

Board Diversity Matrix

We have elected to include our board diversity matrix in this proxy statement as set forth below:

Board Diversity Matrix (as of April 24, 2025)

Board Size:				
Total Number of Directors			10	
Gender:	Female	Male	Non-Binary	Did Not Disclose Gender
Directors	3	7	—	—
Number of Directors who Identify in any of the Categories Below:				
African American or Black	—	—	—	—
Alaskan Native or Native American	—	—	—	—
Asian	—	1	—	—
Hispanic or Latinx	—	—	—	—
Native Hawaiian or Pacific Islander	—	—	—	—
White	3	6	—	—
Two or More Races or Ethnicities	—	—	—	—
LGBTQ+			—	
Did Not Disclose Demographic Background			—	

Board Skills Matrix

We have elected to include our board skills matrix in this proxy statement as set forth below:

	Industry Experience						Skills Experience							
	Life Science	Biotechnology	Biopharma	Pharmaceuticals	Technology	Enterprise Software	Executive Leadership	Finance and Accounting	Operations	Strategy and Innovation	Business Development	Cybersecurity	Risk Management	Environmental, Social and Governance (ESG) Management
Jeffrey A. Chodakewitz, M.D.	✓	✓	✓	✓			✓		✓	✓	✓			✓
Ramy Farid, Ph.D.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Richard A. Friesner, Ph.D.	✓	✓			✓		✓			✓				
Gary Ginsberg					✓		✓	✓		✓	✓	✓	✓	✓
Rosana Kapeller-Libermann, M.D., Ph.D.	✓	✓	✓				✓	✓	✓	✓				
Michael Lynton					✓		✓		✓	✓		✓	✓	✓
Arun Oberoi					✓	✓	✓	✓	✓	✓	✓	✓	✓	
Gary Sender	✓	✓	✓	✓			✓	✓			✓	✓	✓	
Nancy A. Thornberry	✓	✓	✓	✓	✓		✓		✓	✓	✓			✓
Bridget van Kralingen					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

As part of any director nominee search, our nominating and corporate governance committee is committed to seeking out highly qualified director candidates who represent a broad range of personal and professional characteristics, backgrounds, experiences and skills including international experience and/or expertise in a particular discipline or field.

Communication with Our Directors

Any interested party with concerns about our company may report such concerns to the board of directors, or the chairman of our board of directors, or otherwise the chair of the nominating and corporate governance committee, by submitting a written communication to the attention of such director at the following address:

Schrödinger, Inc.
1540 Broadway, 24th Floor
New York, NY 10036
Attention: Board of Directors

You may submit your concern anonymously or confidentially by postal mail. You may also indicate whether you are a stockholder, customer, supplier, or other interested party.

A copy of any such written communication may also be forwarded to our legal counsel and a copy of such communication may be retained for a reasonable period of time. The director may discuss the matter with our legal counsel, with independent advisors, with non-management directors, or with our management, or may take other action or no action as the director determines in good faith using reasonable judgment and discretion.

Communications may be forwarded to all directors if they relate to important substantive matters and include suggestions or comments that may be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances, and matters as to which we tend to receive repetitive or duplicative communications.

The audit committee oversees the procedures for the receipt, retention, and treatment of complaints received by us regarding accounting, internal accounting controls, or auditing matters, and the confidential, anonymous submission by employees of concerns regarding questionable accounting, or auditing matters. Concerns regarding questionable accounting or auditing matters or complaints regarding accounting, internal accounting controls or auditing matters may be submitted to our chief legal officer or our chief financial officer at 1540 Broadway, 24th Floor, New York, New York 10036 or via the toll-free telephone number +1 844 440-0049.

EXECUTIVE AND DIRECTOR COMPENSATION

Compensation Discussion and Analysis

Introduction

Our compensation committee is responsible for reviewing and overseeing our executive compensation policies and programs. Our compensation committee reviews and determines the compensation of our executive officers and makes recommendations to the board of directors with respect to the compensation of our chief executive officer. This section discusses the principles underlying our compensation committee's policies and decisions with respect to the compensation of our named executive officers. Our named executive officers for the fiscal year ended December 31, 2024 were:

- Ramy Farid, our president and chief executive officer;
- Geoffrey Porges, our executive vice president, chief financial officer;
- Karen Akinsanya, our president of R&D, therapeutics;
- Robert Abel, our executive vice president, chief scientific officer, platform; and
- Patrick Lorton, our executive vice president, chief operating officer, software and chief technology officer.

Executive Summary

Schrödinger's Business

We are transforming the way therapeutics and materials are discovered. Our differentiated, physics-based computational platform enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly and at a lower cost, compared to traditional methods. Our software platform is licensed by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. We are applying our computational platform to advance a broad pipeline of drug discovery programs in collaboration with leading biopharmaceutical companies. In addition, we use our computational platform to discover novel molecules for our pipeline of proprietary drug discovery programs, which we are advancing through preclinical and clinical development.

2024 Highlights and 2025 Strategic Actions and Focus

We had strong results in 2024 and look forward to carrying that momentum through 2025. Our key successes since January 2024 include:

- Generated 2024 total revenue of $207.5 million
- Generated 2024 software revenue of $180.4 million, up 13 percent over 2023
- Drove increased adoption of our software by our largest customers, as evidenced by the $73.1 million annual contract value, or ACV, of our top 10 customers, up 43 percent over 2023[1] and the increase in the number of customers with an ACV of at least $5.0 million to 8, up from 4 in 2023
- Generated 2024 drug discovery revenue of $27.2 million

[1] We track the ACV for each of our customers. With respect to contracts that have a duration of one year or less, or contracts of more than one year in duration that are billed annually, we define ACV as the contract value billed during the applicable period. For contracts with a duration of more than one year that are billed upfront, ACV in each period represents the total billed contract value divided by the term. ACV should be viewed independently of revenue and does not represent revenue calculated in accordance with GAAP on an annualized basis, as it is an operating metric that can be impacted by contract execution start and end dates and renewal rates. ACV is not intended to be a replacement for, or forecast of, revenue.

- Entered into a multi-target research collaboration and license agreement with Novartis Pharma AG, including receipt of a $150 million upfront payment and the potential to receive up to $2.272 billion in milestone payments plus royalties, as well as an expanded software licensing agreement
- Entered into expanded research collaboration agreements with Eli Lilly and Company and Otsuka Pharmaceutical Co., Ltd.
- Continued to progress a Phase 1 clinical trial of SGR-1505, our MALT1 inhibitor, in patients with relapsed or refractory B-cell malignancies
- Continued to progress a Phase 1 clinical trial of SGR-2921, our CDC7 inhibitor, in patients with relapsed or refractory acute myeloid leukemia or high-risk myelodysplastic syndrome. In January 2025, the U.S. Food and Drug Administration granted SGR-2921 Orphan Drug Designation for the treatment of acute myeloid leukemia.
- Initiated a Phase 1 clinical trial of SGR-3515, our Wee1/Myt1 inhibitor, in patients with advanced solid tumors
- Named a development candidate for our SOS1 inhibitor program, SGR-4174, as well as for our $EGFR^{C797S}$ program, both of which are in preclinical development
- Launched an initiative to expand our computational platform to predict toxicology risk early in drug discovery, which is being funded by $19.5 million in grants from the Bill & Melinda Gates Foundation
- Launched LiveDesign Biologics, an informatics solution for drug discovery teams designing biologics, which builds upon our existing, small molecule-focused, LiveDesign offering
- Published 29 peer-reviewed articles across life sciences and materials science in 2024
- Published our third annual Corporate Sustainability Report in April 2025 and continued our investment and focus on ESG matters

Stockholder Engagement and Say-on-Pay Vote Support

Our compensation committee strives to ensure that our executive compensation program aligns with the interests of our stockholders and adheres to our pay-for-performance philosophy. In June 2024, we reached out to institutional investors then-representing approximately 63% of our outstanding shares of common stock to understand any concerns about our executive compensation program, and we spoke with three institutional investors then-representing approximately 11% of our outstanding shares of common stock on a variety of executive compensation issues that may impact our business. Our executive compensation program received very strong stockholder support at our 2024 annual meeting of stockholders, including the support of over 98% of votes cast on the non-binding advisory vote on the compensation of our named executive officers, commonly referred to as a "say-on-pay" vote. While this vote is a non-binding advisory vote, our compensation committee and board of directors take the voting results into account in determining the compensation of our named executive officers. In October 2024, we reached out to institutional investors then-representing approximately 63% of our outstanding shares of common stock to understand any concerns about our executive compensation program, and from November 2024 through January 2025, we ultimately spoke with four institutional investors then-representing approximately 33% of our outstanding shares of common stock. Participants in these discussions included an independent member of our board of directors, our chief legal officer and chief people officer, our head of corporate sustainability, our senior vice president, investor relations and corporate communications, and members of our internal legal team.

Over the course of several months, senior management, our compensation committee and Aon's Human Capital Solutions practice, a division of Aon plc, or Aon, our compensation committee's independent consultant, analyzed and discussed what was learned during our stockholder outreach process. In light of the strong support that we received for our executive compensation program at the 2024 annual meeting of stockholders, we have chosen to maintain our general approach to executive compensation. Compensation-related issues discussed during our stockholder outreach process primarily related to investor preference for the continued use of performance-based equity awards. Below are selected highlights from this process:

What We Heard	What We've Done Following Outreach
Stock options with time-based vesting conditions are not sufficiently performance-driven, as stock prices may be influenced by trends within a company's given industry, and we should continue the use of performance-based equity awards for the full team of executive officers.	After discussing with our compensation consultant and our compensation committee, in March 2025, we continued our use of performance-based equity awards to our full team of executive officers to continue to adhere to our pay for-performance philosophy. Whereas in 2023, only our chief executive officer, our chief financial officer and our president of R&D, therapeutics received a portion of their annual equity-based compensation in the form of performance-based restricted stock units, or PRSUs, in March 2024 and in March 2025, each of our executive officers was granted a combination of PRSUs and option awards for his or her performance during 2023 and 2024, respectively. As with 2023 and 2024, in March 2025, a portion of the chief executive officer's option awards had an exercise price per share equal to 110% of the closing price of our common stock on the date of grant, which we refer to as premium-priced options. Such premium priced options result in a potential payout only if there is an appreciation of our stock price following the date of grant.

Stockholder Engagement and Election of Directors Vote Support

Our nominating and corporate governance committee is committed to identifying and nominating directors to serve on our board of directors who, among other things, have demonstrated business acumen, have a commitment to understanding our industry and company and to regularly attending and participating in meetings of the board of directors and its committees, and who adhere to high ethical standards. Our nominating and corporate governance committee is also committed to regularly considering governance and related matters raised by our stockholders during our engagements to determine what further actions, if any, should be taken in the best interest of our company and its stockholders.

At our 2024 annual meeting of stockholders, approximately 81% of the votes cast supported the election of Ramy Farid, approximately 81% of the votes cast supported the election of Arun Oberoi and approximately 76% of the votes cast supported the election of Gary Ginsberg as Class I directors.

In June 2024, we spoke with three institutional investors then-representing approximately 11% of our outstanding shares of common stock on a variety of corporate governance and related topics including board composition and structure and our corporate sustainability and ESG strategy. In October 2024, we reached out to institutional investors then-representing approximately 63% of our outstanding shares of common stock to understand any concerns about our corporate governance, and from November 2024 through January 2025, we ultimately spoke with four institutional investors then-representing approximately 33% of our outstanding shares of common stock. Participants in these discussions included an independent member of our board of directors, our chief legal officer and chief people officer, our head of corporate sustainability, our senior vice president, investor relations and corporate communications, and members of our internal legal team.

Over the course of several months, senior management and our nominating and corporate governance committee analyzed and discussed what was learned in this stockholder outreach process. In general, we learned that the relatively low level of

support for our election of directors proposal last year was primarily related to the classified structure of our board and the number of other public company boards on which our directors served. Below are selected highlights from this process:

What We Heard	What We've Done Following Outreach
Requests for discussion around how we consider director board commitments and potential over-boarding.	We regularly discuss our directors' board commitments with our nominating and corporate governance committee to assess whether our directors are over-boarded. At each meeting, our nominating and corporate governance committee reviews and takes into account the nature of and time involved in a director's service on other boards, as well as on our board and our committees, in evaluating the suitability of individual directors and making its recommendations to our board. Based on these discussions, we have determined that each of our directors commits a sufficient amount of his or her time to his or her role as a director.
Preference for removing the classified structure of our board of directors.	We regularly discuss our classified board structure with our nominating and corporate governance committee and our board of directors to determine whether or when we should no longer have a classified board of directors. From these discussions, we have determined that maintaining a classified board structure is reflective of peer and industry practice for relatively new public companies within five to ten years of initial public offering in order to maintain stability of the board during the first few years following the initial public offering. We will continue to discuss this topic with our nominating and corporate governance committee and our board of directors to determine whether or when a change would be in the best interest of our company and our stockholders.
Requests for updates on our Corporate Sustainability and ESG efforts, in particular, relating to climate disclosures.	We have discussed with stockholders the results of our double materiality assessment that we undertook in 2022 to determine the ESG-related topics most important to our company and our stakeholders, and which serves as the basis for our data-driven Corporate Sustainability strategy. We have provided updates to stockholders regarding our board and committee oversight of ESG matters, including the formal delegation of authority from our board to our nominating and corporate governance committee of oversight of our ESG efforts. We published our third annual Corporate Sustainability report in April 2025, which includes climate-related disclosures, in particular our Scopes 1, 2 and 3 greenhouse gas emissions data.

We intend to continue our stockholder outreach following the filing of this proxy statement with the SEC, to seek support for our annual meeting proposals and to solicit additional feedback regarding governance, compensation and other matters of importance to our stockholders. We view this outreach effort as a valuable opportunity to discuss measures that are important to our stockholders. We also intend to continue our stockholder engagement efforts following the Annual Meeting regardless of the vote results on the proposals included herein.

2024 Pay Outcomes and Decisions

The following summarizes the key decisions made with respect to compensation for our named executive officers during the 2024 fiscal year.

- Our compensation committee made adjustments, ranging from an increase of 4% to 12.2%, to base salaries based on competitiveness to the external market and individual scope of responsibility and performance.

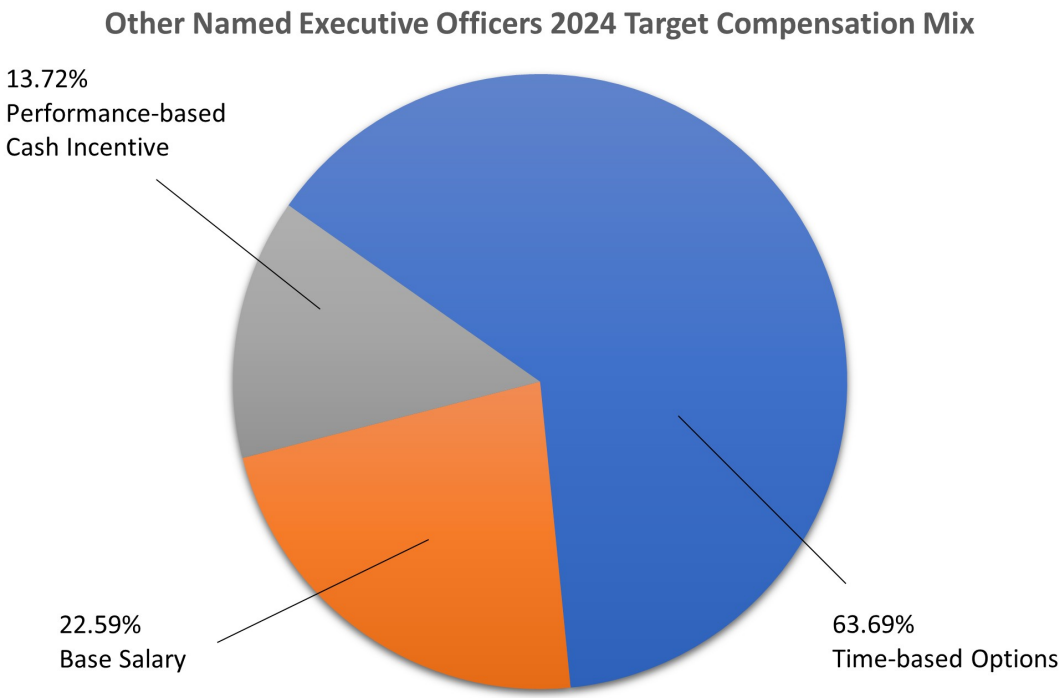
- Based on our strong performance achievement as described under "*2024 Highlights and 2025 Strategic Actions and Focus*" above, short-term annual performance-based cash incentives were paid out at 115% of target.

- To ensure alignment of the interests of our named executive officers with those of our stockholders, annual equity awards were made in the form of (i) stock options, with vesting based on continued service, the value of which depends on the performance of our common stock price and which the compensation committee considers performance-related, particularly for a relatively newly public company, and in the case of our chief executive officer, a portion of such options included premium-priced options and (ii) in the case of all of our executive officers, PRSUs, which vest only upon achievement of specified performance goals.

Compensation Objectives and Philosophy

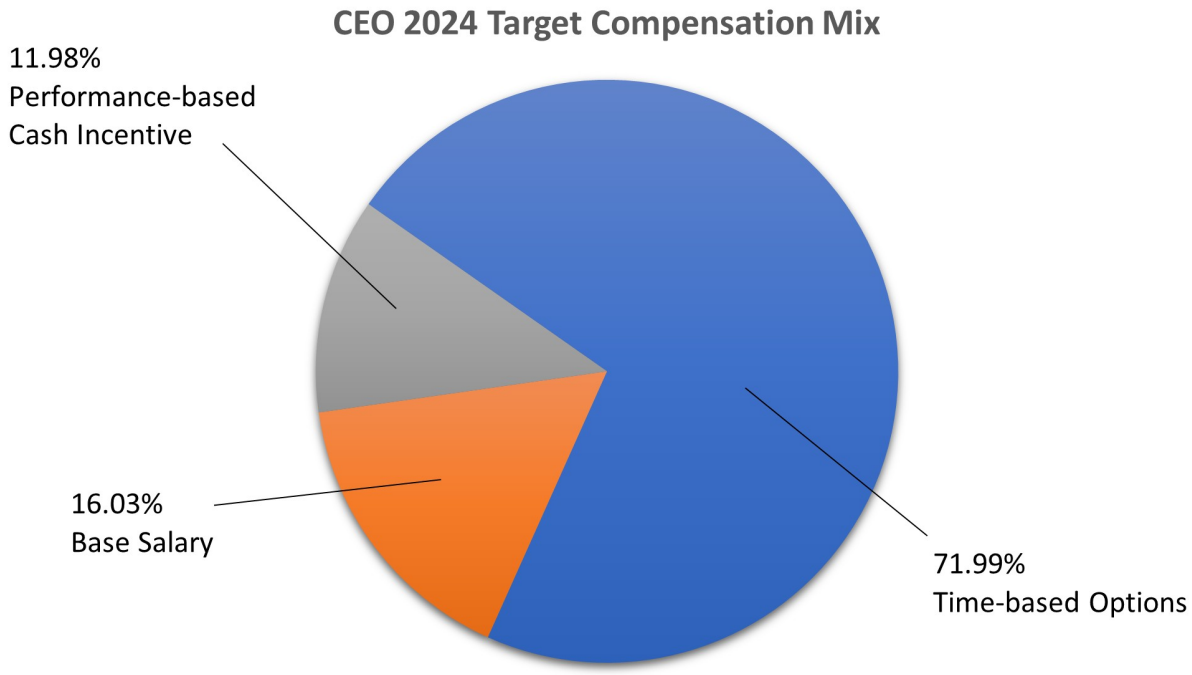
To foster the future success of the company, our compensation committee rewards our executive officers in a manner that reinforces our pay-for-performance philosophy. Our compensation committee has designed our compensation program to align executive interests with our strategic objectives for growth and with the interests of our stockholders and to attract, retain and motivate employees whose performance is expected to drive long-term stockholder value. Our compensation committee is committed to ensuring that a substantial portion of our executive compensation is "at risk" and "variable".

The graphic below illustrates the target mix of compensation elements among base salary, annual performance-based cash incentive award, and long-term equity incentive awards that vest over multiple years for our named executive officers (other than our chief executive officer) in 2024. In addition to time-based options, we granted PRSUs to each of our named executive officers, which vest upon specified performance metrics. As of the grant date, the performance conditions for the PRSUs granted to each of our named executive officers were not considered probable of occurring and, as a result, the aggregate grant date fair value of those PRSUs, for purposes of this graphic, is $0 and the PRSUs are not included in the graphic below.



We believe the target compensation mix provided to our chief executive officer in 2024 focused on our long-term success and was aligned with the long-term interests of our stockholders, in accordance with our compensation philosophy. The graphic below illustrates the target mix of compensation elements among base salary, annual performance-based cash incentive award, and long-term equity option awards that vest over multiple years for our chief executive officer in 2024. **Approximately 84.0% of the target compensation mix was at-risk**. Approximately 72.0% of the target

compensation mix consisted of long-term incentive compensation in the form of stock options that vest over multiple years. In addition to time-based options, we granted PRSUs to Dr. Farid, which vest upon specified performance metrics. As of the grant date, the performance conditions for the PRSUs granted to Dr. Farid were not considered probable of occurring and, as a result, the aggregate grant date fair value of those PRSUs, for purposes of this graphic, is $0 and the PRSUs are not included in the graphic below.



Reflecting the strong alignment between pay and performance over the last year, our chief executive officer's total realizable pay in the year ended December 31, 2024, represented by his actual salary and annual cash incentive earned, is approximately 28.0% of the total compensation disclosed in the *Summary Compensation Table* below on page 45. Approximately 72.0% of Dr. Farid's 2024 total compensation as reported in the *Summary Compensation Table* on page 45 of this proxy statement relates to stock options granted in 2024 which vest over a four-year period. **For more information on total compensation of Dr. Farid as calculated under SEC rules, see the *Summary Compensation Table* on page 45. This discussion of realizable pay is not a substitute for the total compensation of Dr. Farid as reported in the Summary Compensation Table.**

Overview of Our Compensation Programs

The key elements of our executive compensation programs include the following:

Compensation Element	Purpose	Features	Risk Level
Base salary	To attract and retain highly skilled executives	Fixed component of pay to provide financial stability, based on responsibilities, experience, skill, expertise, knowledge and individual contributions	Not at risk
Annual performance-based cash incentive	To promote and reward the achievement of our key short-term strategic and corporate performance goals; to motivate and attract executives	Variable, performance-based compensation linked to achievement of annual quantitative and qualitative company performance goals	At risk, short-term incentive
Long-term equity incentive awards	To focus executives on long-term performance and further align their interests to that of our stockholders; to promote retention; to reward outstanding company and individual performance	Stock options subject to multi-year vesting based on continued service, the value of which depends on the performance of our common stock price, in order to directly align executive interests with those of our stockholders over the longer-term In 2023, we introduced (i) PRSUs for our chief executive officer, chief financial officer and president of R&D, therapeutics, (ii) premium-priced stock options for our chief executive officer, and (iii) RSUs subject to four-year vesting based on continued service for all of our other executives. In 2024, we continued our practice of granting premium-priced options to our chief executive officer, and we broadened our use of PRSUs to our full team of executive officers. In 2025, we continued our practice of granting premium-priced options to or chief executive officer and our practice of granting PRSUs to our full team of executive officers.	At risk, long-term incentive

Salary. We consider increases in base salary based upon an assessment of each executive's performance, skill, knowledge and scope of responsibilities, and an assessment of competitive market data based on our peer group that is approved by the compensation committee.

Annual Performance-Based Cash Incentive. Focusing on pay-for-performance, our 2024 performance-based cash incentive program was designed to reward achievements for 2024 as measured against pre-established quantitative and qualitative company performance goals.

Equity Awards. We typically make equity grants to each of our executive officers upon commencement of employment and annually in conjunction with our review of their individual performance and competitive market data based on our approved peer group. We believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture, and help align the interests of our executives and our stockholders. Accordingly, we believe equity compensation is a crucial component of any competitive executive compensation package as it directly ties our executives' success to that of our stockholders.

The mix of compensation components is designed to reward annual performance against corporate goals and drive long-term company performance and create stockholder value. The compensation committee generally established overall target compensation for our executive officers near the 50th percentile of compensation paid to similarly situated executives of companies in our peer group. Competitive market positioning is only one of a multitude of factors that our compensation committee considers in making compensation decisions. As described below under "*Role of Our Compensation Committee and Management in Setting Executive Compensation*," other factors considered by our compensation committee include individual performance, potential, criticality to the business, and internal equity.

In addition to our direct compensation elements, the following features of our compensation program are designed to align the interests of our executives with those of our stockholders and to follow market best practices:

What We Do	What We Don't Do
☑ Use market data from an industry-specific peer group to set competitive compensation levels	☒ Allow hedging of equity
☑ Deliver executive compensation primarily through performance-based pay	☒ Permit re-pricing of stock options without stockholder approval
☑ Set challenging short-term incentive corporate goals	☒ Provide supplemental executive retirement plans
☑ Offer market-competitive benefits for executives that are consistent with those offered to the rest of our employees	☒ Provide tax gross-up payments for any change-of-control payments
☑ Cap payouts at 150% of target for our PRSUs	☒ Provide perquisites
☑ Maintain a clawback policy covering erroneously awarded incentive-based executive compensation	☒ Guarantee annual salary increases or annual equity grants
☑ Maintain stock ownership guidelines applicable to our senior executive officers and non-employee directors	☒ Include an evergreen provision in our 2022 Equity Incentive Plan
☑ Hold annual stockholder advisory say-on-pay votes	☒ Grant equity awards in anticipation of the release of material nonpublic information
☑ Double-trigger arrangements upon a change of control	
☑ Undertake active stockholder engagement efforts	
☑ Consult with an independent compensation consultant on compensation levels and practices	
☑ Maintain an insider trading policy	

Role of Our Compensation Committee and Management in Setting Executive Compensation

Our compensation committee reviews and oversees our executive compensation policies and programs. Our compensation committee reviews and determines the compensation of our executive officers, including the named executive officers, and makes recommendations to the board of directors with respect to the compensation of our chief executive officer. In connection with this process, the compensation committee evaluates the total mix of compensation vehicles to align each with our business goals and strategy. Our compensation committee believes that executive pay decisions require consideration of a multitude of relevant factors that may vary from year to year. In making executive compensation decisions, our compensation committee generally takes into consideration the factors listed below:

- corporate performance, business needs and business impact;

- each named executive officer's individual performance, experience, job function, change in position or responsibilities, and expected future roles, responsibilities and contributions to our company;
- internal pay equity among named executive officers and positions;
- the need to attract new talent to our executive team and retain existing talent in a highly competitive industry and geographic region;
- a range of market data reference points as described below under "*Defining and Comparing Compensation to Market Benchmarks*";
- the total compensation cost and stockholder dilution from executive compensation actions;
- trends and compensation paid to similarly situated officers within our market;
- recommendations of the outside, independent compensation consultant;
- a review of a named executive officer's total targeted and historical compensation and equity ownership;
- our chief executive officer's recommendations (with respect to executive officers other than himself), based on his direct knowledge of the performance by our named executive officers; and
- evolving best practices in compensation and governance.

The evaluation of our executive officers is based in part on our overall corporate performance against annual corporate performance goals, which are related to financial and operational measures and objectives. The annual corporate performance goals are proposed by our executive team, discussed with the board of directors and approved by the compensation committee early each year, as discussed in more detail below. These annual corporate performance goals are designed to tie to the company's overall corporate objectives. After the end of each year, our compensation committee determines overall corporate performance against these predetermined corporate performance goals.

As a part of determining our executive officers' compensation, our compensation committee receives recommendations from our chief executive officer (except with respect to his own performance and compensation). In making his recommendations for executive officers other than himself, the chief executive officer receives input from our human resources department and has access to various third-party compensation surveys and compensation data provided by the independent compensation consultant to the compensation committee, as described below. While the chief executive officer discusses his recommendations for the other executive officers with the compensation committee, he does not participate in the deliberations concerning his own compensation.

Our chief executive officer's annual base salary and his annual performance-based cash incentive award is approved by our board of directors, based upon the recommendation of our compensation committee. Either our compensation committee or our board of directors approves annual equity awards to our executive officers, including our chief executive officer.

Annual base salaries, annual performance-based cash incentive awards for prior year performance and annual equity awards are generally determined in the first quarter of each year.

Our compensation committee may also review the compensation of our executive officers throughout the course of the year, including in connection with promotions or other special circumstances that our compensation committee determines to be appropriate.

Role of the Independent Compensation Consultant

Since 2018, our compensation committee has retained Aon as its independent compensation consultant, to provide comparative data on executive compensation and director compensation practices in our industry and to advise on our executive compensation program generally. The compensation committee annually evaluates its engagement of compensation consultants, and selected Aon to advise with respect to compensation matters based on Aon's industry

experience and reputation, which our compensation committee concluded gave Aon useful context and knowledge to advise it.

During 2024, our compensation committee directly retained Aon to advise the compensation committee on our compensation program for executive officers and directors. As part of its services, Aon provided the compensation committee with publicly available compensation data from a peer group of similarly situated publicly traded companies. Aon provided guidance to the compensation committee with respect to the amount and form of executive and director compensation, design of the global long-term incentive program, including the use of PRSUs for our executive officers, and an overview of the latest trends in executive compensation. Following our stockholder engagement, which took place in June 2024 and between November 2024 and January 2025, Aon discussed with our compensation committee and our senior management the results of our stockholder outreach process and made recommendations as to the compensation program features that should be maintained based on prior improvements made to our executive compensation program, taken in response to the concerns previously raised and discussed during more recent meetings. Although our compensation committee considers the advice and guidance of Aon as to our executive compensation program and our director compensation program, our compensation committee ultimately makes its own determinations about these matters. In the future, we expect that our compensation committee will continue to engage independent compensation consultants to provide additional guidance on our executive compensation programs and to conduct further competitive benchmarking against a peer group of publicly traded companies.

Aon was retained exclusively by the compensation committee and has not been retained by management to perform any work for the company other than projects performed at the direction of the compensation committee.

The compensation committee reviewed information regarding the independence and potential conflicts of interest of Aon, taking into account, among other things, the factors set forth in the Nasdaq listing standards. Based on such review, the compensation committee concluded that the engagement of Aon did not raise any conflict of interest.

Defining and Comparing Compensation to Market Benchmarks

The compensation committee uses competitive compensation data from an annual total compensation study of peer companies, compiled by Aon, to help inform its decisions about overall compensation opportunities and specific compensation elements.

In evaluating the total compensation of our named executive officers, our compensation committee, using information provided by Aon, establishes a peer group of publicly traded companies in the life sciences and software industries.

For purposes of executive and director compensation decisions for 2024, in August 2023, our compensation committee, with the advice of Aon, selected our peer group for 2024, or our 2024 peer group, seeking to have an equal balance of smaller and larger companies by market capitalization and size. The selection criteria for inclusion in the 2024 peer group included:

- A majority of biotechnology companies (including biopharmaceuticals, medical devices and diagnostics companies), supplemented by software technology peers, with additional focuses on platform technology and drug discovery, that had:
    - Annual revenues of $100 million to $600 million (to exclude mature, commercial companies);
    - A market capitalization of approximately one-third to three times our market capitalization at the time of review;
    - Headcount of one-third to three times our projected headcount for the end of 2023, which resulted in a range of approximately 300 to 2,400 employees in size; and
    - An initial public offering within the last five years.

In addition, in establishing the peer group for the following compensation cycle, the compensation committee reviews the current peer group with a view to preserve continuity in peer group from year to year, despite the inherent volatility in market capitalization and size of companies in our industries, and to address acquisition activity. For the purposes of determining the 2025 peer group, which the compensation committee used to inform, in part, executive and director compensation levels for 2025, the selection criteria were substantially the same as the criteria for the 2024 peer group, however the market capitalization range was adjusted upward to reflect our higher market capitalization at the time of review in September 2024.

With reference to these metrics, the compensation committee established the following peer groups for 2024 and 2025 as set forth in the following table:

Peer Group Company	2024 Peer Group	2025 Peer Group
Life Sciences Peers		
10x Genomics	X	X
Adaptive Biotechnologies Corp.	X	X
Blueprint Medicines Corp.	X	X
BridgeBio Pharma, Inc.	X	X
CRISPR Therapeutics AG	X	X
Denali Therapeutics Inc.	X	X
Doximity	X	X
ForgeRock	X*	
Ginkgo Bioworks Holdings, Inc.	X	X
Halozyme Therapeutics, Inc.	X	X
Inspire Medical Systems, Inc.	X	X
Ionis Pharmaeuticals	X	X
Pacific Biosciences of California	X	X
Quanterix Corporation		X
Recursion Pharmaceuticals, Inc.	X	X
Twist Bioscience Corp.	X	X
Software Peers		
Appian Corporation		X
Certara, Inc.	X	X
Yext, Inc.	X	X
Zuora Inc.	X	X

* ForgeRock was not part of the 2025 peer group because it was acquired by Thoma Bravo in August 2023. All additions to the 2025 peer group were to maintain a balance of selection criteria while maintaining a robust sample size of companies.

This market data was used as a reference point, in addition to other factors, in setting our named executive officer's compensation in 2024. Since we operate in a technically advanced environment, the competition for experienced and talented executives is high. Our compensation committee's general aim is for compensation to remain competitive with the market. In 2024, our compensation committee generally targeted total compensation for our executive officers at approximately the 50th percentile of the market data.

Competitive market positioning is only one of a multitude of factors, as described above under "*Role of Our Compensation Committee and Management in Setting Executive Compensation*," that our compensation committee considers in making compensation decisions, including individual performance and potential, criticality to the business, and internal equity.

Base Salary

We provide base salaries to our named executive officers to compensate them with a fair and competitive base level of compensation for services rendered during the year. None of our named executive officers is party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary. On an annual basis, our compensation committee determines (or recommends, in the case of the chief executive officer) the base salary for each executive officer, including our named executive officers, based on the executive officer's performance, skills, knowledge and the responsibilities required of our executive officers. In addition, our compensation committee reviews and considers the level of base salary paid by companies in our peer group for similar positions. Any changes in base salary made as part of the annual review process are typically effective at the beginning of the fiscal year.

Our compensation committee's annual assessment of our named executive officers' base salaries takes into consideration our objective to retain highly qualified executives, to motivate them to achieve our business goals, and to reward them for the achievement of short- and long-term performance.

At the beginning of 2024, our compensation committee reviewed the compensation of our chief executive officer and each of our other named executive officers. With respect to Dr. Farid, our compensation committee recommended, and our board of directors approved, an increase in his annual base salary from $677,000 to $704,080 for 2024. This determination was based on his critical role at our company and overall company performance.

The compensation committee also approved merit increases in base salary for each of our other named executive officers serving at that time, based on overall company performance (with the input of our chief executive officer), expected roles and responsibilities for 2024, the market conditions and a comparison of their base salaries to the market median base salaries of similarly situated executive officers in our 2024 peer group.

The table below sets forth the adjustments to the base salary for 2024, in dollars and as a percentage, for each of our named executive officers.

Name	2023 Base Salary	2024 Base Salary	Increase (%)	
Ramy Farid	$677,000	$704,080	4.0%	
Geoffrey Porges	$603,000	$627,120	4.0%	
Karen Akinsanya	$541,000	$562,640	4.0%	
Robert Abel	$410,000	$460,020	12.2%	(1)
Patrick Lorton	$410,000	$460,020	12.2%	(1)

(1) Salary increase reflects merit and market-based adjustments.

Annual Performance-based Cash Incentive. In August 2019, our board of directors adopted our Senior Executive Incentive Compensation Plan. The Senior Executive Incentive Compensation Plan provides for cash incentive payments to be made to certain eligible executive officers, including our named executive officers, based upon the attainment of performance targets established by our compensation committee, which are related to financial and operational measures or objectives with respect to our company. Each executive officer who is selected to participate in the plan has an annual targeted bonus opportunity based on a percentage of salary, but payments under this plan may be higher or lower than the executive's target bonus opportunity, depending upon our performance. This plan is designed to motivate our executive officers to achieve annual goals based on financial and operating performance objectives.

Our compensation committee administers the Senior Executive Incentive Compensation Plan, selects the eligible executive officers, and selects the corporate performance goals.

Cash awards paid under the Senior Executive Incentive Compensation Plan are based upon formulas that tie such cash awards to performance targets under the corporate performance goals. The formulas are adopted annually by the compensation committee and communicated to each executive officer at the beginning of each year. The level of achievement of the corporate performance goals will be determined by the compensation committee. If the corporate performance goals are met, payments are made as soon as practicable following the determination by the compensation committee (or the board of directors, upon the recommendation of the compensation committee, in the case of the chief executive officer) of the cash award payable to each executive officer. Subject to the compensation committee's discretion to pay a pro-rated cash award under limited circumstances, each executive officer must be employed by us on the date the cash award is payable in order to be eligible to receive the cash payment. Our board of directors or the compensation committee may amend or terminate the Senior Executive Incentive Compensation Plan at any time for any reason.

The table below summarizes the predetermined 2024 corporate performance goals, the weighting for each target or stretch corporate performance goal and level of performance achievement for each such goal as approved by the compensation committee.

Certain of these corporate performance goals include highly sensitive and competitive data, including preclinical, clinical, regulatory, technical, operational and financial targets. We do not disclose the specific portions of these goals because we believe that such disclosure would result in competitive harm to us. Revealing certain elements of these goals could

potentially reveal insights about our preclinical, clinical, regulatory, financial and strategic plans or objectives that our competitors or potential collaborators could use against us.

Based on the assessments and calculations described below, our compensation committee determined that the 2024 corporate performance goals were achieved at an overall level of 115% of target.

	Weighting of Goals		Percentage of Achievement		
2024 Corporate Goals Achievement	**Target**	**Stretch**	**Target**	**Stretch**	**Weighted Performance**
Financial and Operational Goals					
Achieve software revenue growth target	50.0%	8.0%	100.0%	—%	50.0%
Achieve drug discovery revenue target	3.0%	N/A	—%	N/A	—%
Reduce the annual increase in operating expenses	5.0%	5.0%	100.0%	100.0%	10.0%
Subtotals	**58%**	**13%**			**60%**
Drug Discovery and Development Goals					
Generate data to inform and support further clinical development plans for SGR-1505 and SGR-2921	24.0%	N/A	112.5%	N/A	27.0%
Initiate a Phase 1 clinical trial for SGR-3515	9.0%	N/A	100.0%	N/A	9.0%
Achieve development goals for early drug discovery programs	4.0%	2.0%	100.0%	—%	4.0%
Achieve external business initiatives and goals	5.0%	10.0%	100.0%	100.0%	15.0%
Subtotals	**42%**	**12%**			**55%**
Approved 2024 Corporate Performance Goal Achievement Level	**100%**	**25%**			**115%**

In order to arrive at the overall level of 2024 corporate performance goal achievement, our compensation committee determined the percentage of performance achievement for each target goal and each stretch goal and then multiplied that percentage of achievement by such goal's weighting and summed the results to arrive at the weighted performance for each goal. Our compensation committee then added the weighted performance percentages together to determine our overall 2024 corporate performance goal achievement level of 115% of target. The maximum potential 2024 corporate performance goal achievement level was 125% after including potential achievement for stretch goals.

In determining the overall level of achievement, our compensation committee made the following assessments:

- *Achieve financial and operational goals* – Assessment of 60% achievement, out of a weighting at target of 58%, was based on achievement at target for software revenue growth as compared to software revenue achieved in 2023 and achievement above target with respect to reducing the annual increase in operating expenses, which was partially offset by performance below target with respect to achieving drug discovery revenue goals.
- *Achieve drug discovery and development goals* – Assessment of 55% achievement out of a weighting at target of 42%, was based on achievement at or above target with respect to our ability to meet specified development goals for our proprietary drug discovery programs, including our clinical programs, as well as achievement above target with respect to our external business initiatives and goals for our proprietary drug discovery programs.

The table below shows each named executive officer's target cash incentive award under the Senior Executive Incentive Compensation Plan as a percentage of the named executive officer's annual base salary in 2024, the cash target incentive award opportunity in dollars for 2024 and the actual cash incentive awards paid to our named executive

officers for 2024 performance, which were paid in February 2025, as well as the actual 2024 cash incentive award payment as a percentage of the 2024 target cash incentive award opportunity.

Name	2024 Target Incentive Award (% of 2024 Base Salary)(1)	2024 Target Incentive Award Opportunity ($)	2024 Actual Incentive Award ($)(2)	2024 Actual Incentive Award (% of 2024 Target Incentive Award Opportunity)
Ramy Farid	65%	$457,652	$526,300	115%
Geoffrey Porges	55%	$344,916	$396,653	115%
Karen Akinsanya	55%	$309,452	$355,870	115%
Robert Abel	50%	$230,010	$264,512	115%
Patrick Lorton	50%	$230,010	$264,512	115%

(1) Target incentive awards for 2024 increased over target incentive awards for 2023 based on competitive market study and benchmarking across industry peers.

(2) Under the Senior Executive Incentive Compensation Plan, the actual cash incentive awards were determined for 2024 by multiplying the target incentive award opportunity for each named executive officer by 115%, which is the overall achievement level of the corporate performance goals as determined by our compensation committee.

In April 2025, the compensation committee determined the performance goals that will be used to assess corporate performance in 2025. Cash incentive awards under the 2025 annual incentive program will be determined in substantially the same manner as under the 2024 annual incentive program.

Equity Incentives

Although we do not have a formal policy with respect to the grant of equity incentive awards to our named executive officers, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture, help to align the interests of our named executive officers and our stockholders and provide competitive levels of executive compensation. We believe that equity grants with a time-based vesting feature promote executive retention because this feature incentivizes our named executive officers to remain in our employment during the vesting period. We also believe that equity awards with performance-based vesting conditions further align executive interests with those of our stockholders. The market for qualified and talented executives in the industry in which we operate is highly competitive, and we compete for talent with many companies that have greater resources than we do. As such, we believe equity compensation is a crucial component of any competitive executive compensation package we offer.

Our compensation committee or our board of directors typically makes equity grants to our named executive officers upon commencement of employment and annually in the first quarter of the year in conjunction with our review of their individual performance and competitive market data based on our approved peer group. The size of equity awards varies among our executive officers based on their positions, competitive market data, and annual performance assessments. None of our executive officers is party to an employment agreement that provides for the automatic grant of equity awards.

We have historically provided a significant portion of our executive compensation in the form of stock options, including in 2024. In 2024 and 2025, we also provided a significant portion of our annual executive compensation in the form of PRSUs to our executive officers. Additionally, in 2023 and 2025, we also provided a portion of our executive compensation in RSUs.

The options that we grant to our named executive officers typically vest and become exercisable as to 25% of the shares underlying the option on the first anniversary of the vesting commencement date and as to an additional 2.0833% of the original number of shares underlying the option monthly thereafter. Vesting rights cease upon termination of employment and exercise rights for previously vested stock options cease shortly after termination of employment, though exercisability is extended in the case of death or disability. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including no voting rights and no right to receive dividends or dividend equivalents. The term of the options is ten years.

The RSUs vest in equal annual installments over a period of four years, subject to continued service to the company.

The PRSUs vest only upon the achievement of specified performance goals. Vesting rights cease upon termination of service. Prior to the vesting of PRSUs, the holder has no rights as a stockholder with respect to the shares subject to such PRSU, including no voting rights and no right to receive dividends or dividend equivalents.

All stock options granted (other than the premium-priced stock options granted to our chief executive officer in 2023, 2024 and 2025) have exercise prices equal to the fair market value of our common stock on the date of grant, which is typically the date that either our compensation committee or our board of directors approves such award. The exercise prices are determined by reference to the closing market price of our common stock on the Nasdaq Global Select Market on the date of grant, so that the recipient will not realize any value from his or her options unless our stock price increases above the stock price on the date of grant. Accordingly, the equity compensation portion of our named executive officers' compensation is at risk and is directly aligned with stockholder value creation.

As part of the ongoing review of our compensation strategy and practices, the compensation committee determines the appropriate mix of the type of equity awards and the size of the award, based in part on recommendations from Aon. The compensation committee may approve different award types in the future as part of the overall compensation strategy.

2024 Annual Equity Awards

In connection with the annual review of our named executive officers' compensation and consistent with our compensation philosophy, in March 2024, our compensation committee granted to our named executive officers options to purchase shares of our common stock in the amounts set forth in the table below, each at an exercise price of $25.24 per share, unless otherwise indicated in the table below, and PRSUs. These option and PRSU grants were based on the named executive officer's level of responsibility within our company, equity ownership in relation to the peer group benchmark data, and the compensation committee's assessment of the named executive officer's individual performance (with input from our board of directors, in the case of our chief executive officer) and our overall company performance, in each case without reference to any specific metric.

Name	2024 Option Awards (#)		2024 RSU Awards (#)	2024 PRSU Awards (#)	
Ramy Farid	213,271	(1)(2)	—	35,000	(3)
Geoffrey Porges	90,000	(1)	—	15,000	(3)
Karen Akinsanya	120,000	(1)	—	20,000	(3)
Robert Abel	90,000	(1)(4)	—	15,000	(3)(5)
Patrick Lorton	90,000	(1)(4)	—	15,000	(3)(5)

(1) These options vested as to 25% of the original number of shares underlying the options on March 4, 2025, and vest in equal monthly installments for the remaining shares through March 4, 2028.

(2) Includes (i) an option to purchase 126,000 shares of common stock, with an exercise price of $25.24 per share, the closing price on the date of grant and (ii) a premium-priced option to purchase 87,271 shares of common stock at an exercise price per share of $27.76, equal to 110% of the closing price on the date of grant.

(3) These PRSUs vest as to the percentage assigned to each of three performance metrics relating to software performance, Schrödinger therapeutics group performance and operating performance, as measured at the end of the measurement period ending on December 31, 2025, upon certification by our compensation committee of achievement of the applicable performance metrics, and which will vest, assuming performance metrics are met, following the filing of our annual report on Form 10-K for the fiscal year ending December 31, 2026. The level of achievement of the PRSUs provide for a threshold (50%) payout, a target (100%) payout, and a maximum (150%) payout. The amounts in the table above are shown at target.

(4) Consists of (i) an option to purchase 60,000 shares of common stock that was approved by our compensation committee on March 4, 2024 and (ii) an option to purchase 30,000 shares of common stock that was approved by our compensation committee on March 21, 2024. The options granted on March 21, 2024 have an exercise price of $27.51 per share. The options vest as described above in footnote 1. Our compensation committee approved the grant of the additional option grant on March 21, 2024 in order to increase the annual equity award granted to Dr. Abel to

reflect his critical role in developing our computational platform and to Mr. Lorton to reflect his critical role in growing our software business, each to accomplish our strategic business priorities.

(5) Consists of (i) a grant of 10,000 PRSUs that was approved by our compensation committee on March 4, 2024 and (ii) a grant of 5,000 PRSUs that was approved by our compensation committee on March 21, 2024. The PRSUs vest as described above in footnote 3. The amount in the table above is shown at target. Our compensation committee approved the grant of the additional PRSUs on March 21, 2024 in order to increase the annual equity award granted to Dr. Abel to reflect his critical role in developing our computational platform and to Mr. Lorton to reflect his critical role in growing our software business, each to accomplish our strategic business priorities.

The grant date fair values of the equity awards granted to our named executive officers in 2024 and shown in the *Summary Compensation Table* and the *Grants of Plan-Based Awards for 2024* table below were determined in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718. The compensation committee's overall philosophy is to award equity that takes into account individual performance, potential, criticality to the business, internal equity and relative alignment to the peer group median. The equity awards granted are reflective of that philosophy and our strong performance for 2023.

2025 Executive Compensation Decisions

In 2023, we initially restructured our executive compensation program to introduce PRSUs for certain of our named executive officers to further adhere to our pay for performance philosophy. In 2024, we broadened our executive compensation program by introducing PRSUs for all of our executive officers to further adhere to our pay for performance philosophy. In 2025, we continued our practice of granting PRSUs to all of our executive officers, and we also granted RSUs to all of our executive officers, which vest in equal annual installments over a period of four years, subject to continued service to the company. We also granted options with time-based vesting conditions to our named executive officers, which for our chief executive officer included a premium-priced option with an exercise price equal to 110% of the closing price of our common stock on the date of grant. The target aggregate grant value for the PRSUs and the premium-priced options granted to our chief executive officer in 2025 is expected to equal at least 50% of the total value of the long-term equity incentive award granted to Dr. Farid.

In January 2025, our compensation committee (or our board of directors, in the case of our chief executive officer) approved 2025 base salaries and target cash incentive percentages for 2025, and in March 2025, our compensation committee approved (with input from our board of directors, in the case of our chief executive officer) annual equity awards for our named executive officers. The table below sets forth the 2025 compensation levels for each of our named executive officers.

Name	2025 Base Salary (1)	Base Salary Increase over 2024 (%)	2025 Target Cash Incentive Award (% of 2025 Base Salary)	Increase in Target Cash Incentive Award from 2024	Options Awards (#)	RSU Awards (#)	PRSU Awards (#)
Ramy Farid	$730,000	3.7%	85% (2)	20%	150,000 (3)(4)	37,500 (5)	37,500 (6)
Geoffrey Porges	$650,000	3.6%	55%	—%	50,000 (4)	12,500 (5)	12,500 (6)
Karen Akinsanya	$600,000	6.6%	60%	5%	62,500 (4)	15,625 (5)	15,625 (6)
Robert Abel	$500,000	8.7%	50%	—%	50,000 (4)	12,500 (5)	12,500 (6)
Patrick Lorton	$500,000	8.7%	50%	—%	50,000 (4)	12,500 (5)	12,500 (6)

(1) The base salaries were effective as of January 1, 2025. The salary increases reflect merit and market-based adjustments.

(2) Dr. Farid's target cash incentive award increase reflects market-based adjustments to align with our highly competitive industry peers.

(3) Includes an option to purchase 60,000 shares of common stock, with the exercise price and vesting schedule described below in footnote 3 and a premium-priced option to purchase 90,000 shares of common stock at an exercise price per share of $23.36, equal to 110% of the closing price on the date of grant.

(4) On March 3, 2025, our compensation committee approved the grant of these stock option awards at an exercise price of $21.24 per share, the closing price on the date of grant. The options are subject to time-based vesting,

with 25% of the shares underlying the option vesting on the first anniversary of the grant date and an additional 2.0833% of the original number of shares underlying the option vesting monthly thereafter.

(5) On March 3, 2025, our compensation committee approved the grant of these RSUs, which vest in equal annual installments over a period of four years, subject to continued service to the company.

(6) On March 3, 2025, our compensation committee approved the grant of these PRSUs. The PRSUs vest as to the percentage assigned to each of three performance metrics relating to software performance, Schrödinger therapeutics group performance and operating performance, as measured at the end of the measurement period ending on December 31, 2026, upon certification by our compensation committee of achievement of the applicable performance metrics, and which will vest, assuming performance metrics are met, following the filing of our annual report on Form 10-K for the fiscal year ending December 31, 2027. The level of achievement of the PRSUs provide for a threshold (50%) payout, a target (100%) payout, and a maximum (150%) payout. The amounts in the table above are shown at target.

Severance and Change in Control Benefits

Our Executive Severance and Change in Control Benefits Plan, which we refer to as the Severance Plan, which initially became effective following the closing of our initial public offering and was most recently amended in August 2022, provides severance benefits to certain of our executives, including our named executive officers, if their employment is terminated by us without "cause" or, only in connection with a "change in control" of our company, they terminate employment with us for "good reason" (as each of those terms is defined in the Severance Plan).

We believe that providing these benefits helps us compete for executive talent. These benefits are designed to promote stability and continuity of our executives and are intended to preserve employee morale and productivity and encourage retention in the face of the disruptive impact of an actual, threatened, or rumored change in control of the company. We prefer to have certainty regarding the potential severance amounts payable to named executive officers, rather than negotiating severance at the time that a named executive officer's employment terminates.

Please refer to "*—Executive Severance and Change in Control Benefits Plan*" below for a more detailed discussion of severance and change in control benefits for our named executive officers. We also have provided estimates of the value of the severance payments made and other benefits provided to our named executive officers under specified termination circumstances under the caption "*—Potential Payments Upon Termination or Change in Control*" below.

Benefits and Other Compensation

Other compensation to our executives consists primarily of the broad-based benefits we provide to all full-time employees in the United States, including medical, dental and vision insurance, group life and disability insurance. We also maintain a defined contribution employee retirement plan for our employees, including our named executive officers. The plan is intended to qualify as a tax-qualified 401(k) plan so that contributions to the 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan (except in the case of contributions under the 401(k) plan designated as Roth contributions). Under the 401(k) plan, each employee is fully vested in his or her deferred contributions. Vesting in our discretionary matching contributions is based on years of service to us, with 25% vesting per year of service to us and 100% vesting at the end of the fourth year of service to us. Employee contributions are held and invested by the plan's trustee as directed by participants. Our 401(k) plan provides that each participant can contribute up to 75% of such participant's eligible compensation (pre-tax or post-tax Roth contributions), up to the statutory limit, which was $22,500 for 2023 and $23,000 for 2024. Participants who are at least 50 years old are also eligible to make "catch-up" contributions of up to an additional $7,500 above the statutory limit in each of 2023 and 2024. The 401(k) plan provides us with the discretion to match participant contributions up to certain specified amounts. Effective January 1, 2019, we began making discretionary matching contributions to participants under our 401(k) plan equal to 50% of the participant's contribution to the 401(k) plan up to a maximum participant contribution of 8% of participant's eligible compensation.

Currently, we do not view perquisites or other personal benefits as a significant component of our executive compensation program. Accordingly, we do not provide perquisites to our named executive officers. All future practices with respect to perquisites or other personal benefits will be approved and subject to periodic review by our compensation committee.

Clawback Policy

Effective October 2, 2023, we adopted a compensation recovery policy, or a "clawback policy," relating to our right to recover compensation previously paid to specified executive officers in certain circumstances, including the recovery of erroneously awarded incentive-based compensation (as defined in the policy) in accordance with Nasdaq Listing Rule 5608, which implements Rule 10D-1 under the Exchange Act. The policy is administered by the compensation committee.

The policy provides that, in the event that we are required to prepare an accounting restatement due to our material noncompliance with any financial reporting requirement under U.S. federal securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period, we will attempt to recover, reasonably promptly from each covered executive, any erroneously awarded incentive-based compensation received by our covered executives during the recovery period under the policy. In addition, if the compensation committee determines that a covered executive's acts or omissions that contributed to the circumstances requiring an accounting restatement subject to the policy involved either (i) intentional misconduct or an intentional violation of any of our rules or any applicable legal or regulatory requirements in the course of the covered executive's employment by us or (ii) fraud in the course of the covered executive's employment by us, then in each such case, we may attempt to recover from such covered executive up to 100% of the covered executive's compensation other than base salary received by such covered executive since the beginning of the recovery period under the policy.

For purposes of this policy, covered executives means any executive officer (as defined in Rule 16a-1(f) under the Exchange Act) who served at any time during the performance period for the applicable incentive-based compensation. Incentive-based compensation means any compensation that is granted, earned or vested based wholly or in part upon the attainment of (i) any measures that are determined and presented in accordance with the accounting principles used in preparing our financial statements, and any measures that are derived wholly or in part from such measures, (ii) stock price and (iii) total stockholder return. Erroneously awarded incentive-based compensation means the amount of incentive-based compensation that was received that exceeds the amount of incentive-based compensation that otherwise would have been received had it been determined based on the restated amounts, computed without regard to any taxes paid by the covered executives (or by us on their behalf). If the incentive-based compensation is based on our stock price or total stockholder return and the amount of the erroneously awarded incentive-based compensation is not subject to recalculation directly from the information in an accounting restatement, the amount to be recovered shall be based on a reasonable estimate by the compensation committee of the effect of the accounting restatement on the stock price or total stockholder return upon which the incentive-based compensation was received. The policy does not apply to compensation received prior to October 2, 2023 or to compensation that was received by a covered executive before beginning service as an executive officer.

Equity Ownership Guidelines for Directors and Executives

In 2021, our board of directors adopted equity ownership guidelines applicable to our directors and executives who are required to make filings under Section 16 of the Exchange Act or have the title of executive vice president or senior vice president. To further align the interests of our directors and executives with the interests of our stockholders, our board of directors determined that such directors and executives should hold shares of our common stock and other equity rights that have a fair market value commensurate with their respective roles with us. The board or the compensation committee has the full power to administer and interpret the equity ownership guidelines.

The ownership requirement applicable to our directors and executives will be equal to the following multiple of the individual's base salary or cash retainer, as applicable:

Title	Dollar value of equity
Chief Executive Officer	3.0x base salary
Executive Vice President	2.0x base salary
Senior Vice President	1.0x annual base salary
Non-employee directors	3.0x annual cash retainer

The ownership requirement will be measured as to each director and executive as of June 30 of each year. All directors and officers who were serving in such capacity on the date of adoption of the equity ownership guidelines in 2021 are required to achieve the applicable ownership requirement by June 30, 2026. Newly hired and newly promoted executives

and newly elected directors, in each case, not previously subject to these guidelines are expected to achieve the applicable ownership requirement within five years from the date of hire, promotion, or initial election, as applicable. As of April 21, 2025, each of our directors and executive officers, other than Drs. Porges and Dugan, whose employment commenced in August 2022 and July 2023, respectively, and Ms. van Kralingen, who was appointed to our board of directors in March 2025, meets the applicable ownership requirement.

In calculating equity ownership level, the following shares and equity rights shall be included: outstanding shares of common stock that are not pledged, vested RSUs and PRSUs, unvested RSUs and PRSUs that remain subject only to time-based vesting, unexercised, vested in-the-money stock options, and any other vested grants or account balances under share-based company compensation plans. Unvested RSUs and PRSUs subject to performance conditions, unvested stock options, and pledged shares of common stock shall not be included in calculating any individual's equity ownership level. Following the conclusion of any applicable phase-in period applicable to a director or executive, in the event that such individual does not satisfy the ownership requirement as of any measurement date, then we may implement such conditions, restrictions or limitations on such individual as we determine to be necessary or appropriate in order to achieve the purposes of our equity ownership guidelines.

Policies and Practices Related to the Grant of Certain Equity Awards

Equity awards for our employees are generally approved on dates the compensation committee meets or on the date of approval of unanimous written consents by the compensation committee, and vesting dates are determined by the compensation committee. Committee meetings are normally scheduled well in advance and are not scheduled with an eye to announcements of material nonpublic information regarding the company. The compensation committee may make an award with an effective date in the future, including awards contingent on commencement of employment, execution of a new employment agreement or some other subsequent event, or may act by unanimous written consent on the date of such an event when the proposed issuances have been reviewed by the compensation committee prior to the date of the event.

We typically make equity grants to each of our executive officers upon commencement of employment and annually in the first quarter of the year in conjunction with our review of their individual performance and competitive market data based on our approved peer group. Equity grants to non-executive employee new-hires are typically made mid-month on a monthly basis. Under our non-employee director compensation policy, the grants of annual stock options and RSUs to non-employee directors serving at the time of our annual meeting of stockholders are effective on the date of such annual meeting. Under our non-employee director compensation policy, our board of directors grants stock options and RSUs to new non-employee directors effective upon the director's initial election to our board of directors.

During 2024, neither the board nor the compensation committee took material nonpublic information into account when determining the timing or terms of stock options, nor did we time the disclosure of material nonpublic information for the purpose of affecting the value of executive compensation. We did not grant equity awards to any named executive officer during any period beginning four business days before and ending one business day after the filing of any of our quarterly reports on Form 10-Q or our annual report on Form 10-K, or the filing or furnishing of any of our current reports on Form 8-K that disclosed any material nonpublic information.

Tax and Accounting Considerations

Deductibility of Executive Compensation

We are generally entitled to a U.S. federal income tax deduction with respect to compensation income paid to our service providers. However, section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, generally disallows a tax deduction to public companies for compensation in excess of $1 million paid in any one year to each of certain of the company's current and former executive officers. While the compensation committee generally considers the tax implications to us of its executive compensation decisions, such implications were not a material consideration in the compensation awarded to our named executive officers in 2024.

Accounting for Stock-Based Compensation

We follow FASB ASC Topic 718 for our stock-based compensation awards. FASB ASC Topic 718 requires us to measure the compensation expense for all share-based payment awards made to our employees and non-employee directors, including options to purchase shares of our common stock and other stock awards, based on the grant date "fair value" of these awards. This calculation is performed for accounting purposes and reported in the executive compensation

tables required by the federal securities laws, even though the recipient of the awards may never realize any value from their awards.

Compensation Risk Assessment

We believe that our executive compensation program does not encourage excessive or unnecessary risk taking. As described more fully above, we structure our pay to consist of both fixed and variable compensation, particularly in connection with our pay-for-performance compensation philosophy. We believe this structure motivates our executives to produce short- and long-term results that are in the best interests of our company and our stockholders in order to attain our ultimate objective of increasing stockholder value, and we have established, and our compensation committee endorses, several controls to address and mitigate compensation-related risk. These include equity ownership guidelines for our executive officers and our directors and an anti-hedging policy. As a result, we do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

Compensation Committee Report

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on this review and discussion, the compensation committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this proxy statement.

This report of the compensation committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

Respectfully submitted,

The Compensation Committee of the Board of Directors

Gary Sender, Chair
Gary Ginsberg
Rosana Kapeller-Libermann

EXECUTIVE COMPENSATION TABLES

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by or paid to each of our named executive officers for the periods presented.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)(2)	All Other Compensation ($)	Total ($)
Ramy Farid *President and Chief Executive Officer*	2024	704,080	—	— (3)	3,162,113	526,300	14,607 (4)	4,407,100
	2023	677,000	—	— (3)	2,067,787	365,580	13,798	3,124,165
	2022	651,000	—	—	2,877,355	374,976	12,701	3,916,032
Geoffrey Porges *Chief Financial Officer*	2024	627,120	—	— (3)	1,353,981	396,653	14,607 (4)	2,392,361
	2023	603,000	—	— (3)	763,594	271,350	13,798	1,651,742
	2022 (5)	213,474	230,000 (6)	— (3)	2,698,806	102,970	8,625	3,253,875
Karen Akinsanya *President of R&D, Therapeutics*	2024	562,640	—	— (3)	1,805,307	355,870	12,901 (4)	2,736,718
	2023	541,000	—	— (3)	882,663	243,450	13,287	1,680,400
	2022	515,375	—	—	1,070,644	249,600	12,701	1,848,320
Robert Abel *Chief Scientific Officer, Platform*	2024	460,020	—	— (3)	1,395,052	264,512	12,307 (4)	2,131,891
	2023	410,000	—	245,593 (7)	882,663	147,600	11,848	1,697,704
	2022	374,000	—	—	936,813	143,616	10,751	1,465,180
Patrick Lorton *Chief Operating Officer, Software and Chief Technology Officer*	2024	460,020	—	— (3)	1,395,052	264,512	12,307 (4)	2,131,891
	2023	410,000	—	190,279 (7)	683,586	147,600	11,880	1,443,345
	2022	370,000	—	—	936,813	142,080	10,751	1,459,644

(1) The amounts reported in the "Option Awards" column reflect the aggregate grant date fair value of stock options awarded during the year computed in accordance with FASB ASC, Topic 718. See Note 9 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 26, 2025, regarding assumptions underlying the valuation of stock options. These amounts reflect the accounting cost for these stock options and do not reflect the actual economic value that may be realized by the named executive officer upon the vesting of the stock options, the exercise of the stock options or the sale of the common stock underlying such stock options.

(2) The amounts reported in the "Non-Equity Incentive Plan Compensation" column reflect annual cash incentive payments earned by our named executive officers for their performance in 2024, 2023 and 2022, respectively, under the Senior Executive Incentive Compensation Plan. For a description of the plan, see "*—Annual Performance-based Cash Incentive*" above.

(3) The amounts reflect the respective aggregate grant date fair values of the PRSUs granted calculated in accordance with FASB ASC Topic 718 based upon the probable outcome of the applicable performance conditions. As of the respective grant dates, the performance conditions for the PRSUs were not considered probable of occurring and, as a result, the fair value of those PRSUs, for purposes of this table, was $0. See Note 9 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 26, 2025, Note 10 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2023, which was filed with the SEC on February 28, 2024 and Note 10 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2022, which was filed with the SEC on February 28, 2023. Assuming that the highest level of performance vesting conditions of the PRSUs were achieved as of the grant date, the grant date fair values of PRSUs granted in 2024 would have been $1,325,100 for Dr. Farid, $567,900 for Dr. Porges, $757,200 for Dr. Akinsanya, $584,925 for Dr. Abel, and $584,925 for Mr. Lorton, and the grant date fair values of PRSUs granted in 2023 would have been $796,518 for Dr. Farid, $307,777 for Dr. Porges, and $355,801 for Dr. Akinsanya. Assuming the highest level of performance

vesting conditions of the PRSUs were achieved as of the grant date, the grant date fair value of PRSUs granted to Dr. Porges in 2022 would have been $2,569,500.

(4) Represents (i) premiums of $807 paid by us during 2024 with respect to group life, accidental death and dismemberment and long-term disability insurance policies consistent with those provided to all of our employees, including each of our named executive officers and (ii) matching contributions of $13,800 to Dr. Farid and Dr. Porges, $12,094 to Dr. Akinsanya and $11,500 to Dr. Abel and Mr. Lorton, respectively, made by us under our 401(k) plan.

(5) Dr. Porges was appointed as our chief financial officer, effective as of August 18, 2022. His annual base salary for 2022 was $580,000. The amounts reported in the "Salary" column and the "Non-Equity Incentive Plan Compensation" column for 2022 are prorated to reflect his start date.

(6) Reflects a sign-on bonus of $230,000 in connection with the commencement of his employment as our chief financial officer.

(7) The amounts reflect the aggregate grant date fair value of the RSUs awarded during the year computed in accordance with FASB ASC Topic 718. See Note 9 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 26, 2025, regarding assumptions underlying the valuation of the RSUs.

Chief Executive Officer Pay Ratio

Our compensation and benefits philosophy and the overall structure of our compensation and benefit programs are broadly similar across the organization to encourage and reward all employees who contribute to our success. We strive to ensure that the compensation of every Schrödinger employee reflects the level of their job impact and their responsibilities and is competitive within our peer group. Compensation rates are benchmarked and are generally set to be market-competitive in the country in which the jobs are performed. Our ongoing commitment to pay equity is critical to our success in supporting a diverse workforce with opportunities for all employees to grow, develop, and contribute.

Under rules adopted pursuant to the Dodd-Frank Act and Item 402(u) of Regulation S-K, we are required to calculate and disclose the annual total compensation paid to our median employee, as well as the ratio of the total annual compensation paid to the median employee as compared to the total annual compensation paid to our chief executive officer, which we refer to as the CEO Pay Ratio. The paragraphs that follow describe our methodology and the resulting CEO Pay Ratio.

Measurement Date

We previously identified our median employee as of October 10, 2022. There has been no change in our employee population or employee compensation arrangements during 2024 that we believe would significantly impact the pay ratio disclosure and require us to identify a new median employee for 2024. Accordingly, as permitted by SEC rules, we used the same median employee identified in 2022 for purposes of our 2024 pay ratio disclosure. The "consistently applied compensation measure" we used to identify our median employee is described in our definitive proxy statement filed with the SEC on April 27, 2023.

We then estimated the annual total compensation for that employee by applying the same rules as used for determining total compensation for our chief executive officer in the Summary Compensation Table. The total annual compensation for our median employee for 2024 was $171,183. The total annual compensation for our chief executive officer, Dr. Farid, as reported in the Summary Compensation Table above for 2024, was $4,407,100. Therefore, our CEO Pay Ratio is approximately 26:1.

This information is being provided for compliance purposes and is a reasonable estimate calculated in a manner consistent with SEC rules, based on our internal records and the methodology described above. The SEC rules for identifying the median compensated employee allow companies to adopt a variety of methodologies, to apply certain exclusions and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. Accordingly, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies have different employee populations and compensation practices and may use different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios. None of the board of directors, the compensation committee or our management used the CEO Pay Ratio measure in making compensation decisions.

Pay Versus Performance

The following tables and related disclosures provide information about (i) the "total compensation" of our principal executive officer, or our PEO, and our other named executive officers, or the Non-PEO named executive officers, as presented in the Summary Compensation Table on page 45, (ii) the "compensation actually paid" to our PEO and to our Non-PEO named executive officers, as calculated pursuant to the SEC's pay-versus-performance rules, (iii) certain financial performance measures, and (iv) the relationship of the compensation actually paid amounts to those financial performance measures.

This disclosure has been prepared in accordance with Item 402(v) of Regulation S-K under the Exchange Act and does not necessarily reflect value actually realized by the executives or how our compensation committee evaluates compensation decisions in light of company or individual performance. For a discussion of our compensation philosophy and how our compensation committee seeks to align pay with performance when making compensation decisions, please see "*Compensation Discussion and Analysis*" beginning on page 25.

					Value of Initial Fixed $100 Investment Based on:			
Year	Summary Compensation Table Total for PEO ($)(1)	Compensation Actually Paid to PEO ($)(2)	Average Summary Compensation Table Total for Non-PEO Named Executive Officers ($)(1)	Average Compensation Actually Paid to Non-PEO Named Executive Officers ($)(2)	Total Shareholder Return ($)	Peer Group Total Shareholder Return ($)(3)	Net (Loss) Income (in thousands) ($)(4)	Total Revenue (in thousands) ($)(5)
2024	4,407,100	667,050	2,348,215	713,977	60.43	117.30	(187,123)	207,539
2023	3,124,165	9,660,192	2,045,115	3,676,741	112.16	113.76	40,720	216,666
2022	3,916,032	(3,046,539)	1,568,352	187,840	58.55	109.79	(149,189)	180,955
2021	8,493,477	(21,063,411)	4,057,728	(2,628,730)	109.12	112.62	(101,219)	137,931
2020	8,510,593	72,690,646	2,353,326	16,840,839	248.06	116.12	(26,637)	108,095

(1) Our PEO was Ramy Farid for all years in the table. Our Non-PEO named executive officers were: (i) for 2024, Geoffrey Porges, Karen Akinsanya, Robert Abel and Patrick Lorton; (ii) for 2023, Geoffrey Porges, Karen Akinsanya, Robert Abel and Margaret Dugan; (iii) for 2022, Geoffrey Porges, Jenny Herman, Joel Lebowitz, Karen Akinsanya, Robert Abel, and Yvonne Tran; (iv) for 2021, Joel Lebowitz, Karen Akinsanya, Robert Abel, and Patrick Lorton; and (v) for 2020, Karen Akinsanya and Yvonne Tran.

(2) The dollar amounts reported in this column represent the amount of "compensation actually paid" to Dr. Farid and average "compensation actually paid" to our Non-PEO named executive officers, computed in accordance with Item 402(v) of Regulation S-K. In accordance with the requirements of Item 402(v) of Regulation S-K, the following prescribed adjustments were made to Dr. Farid's and to our Non-PEO named executive officers' total compensation as reported in the Summary Compensation Table for each year, to determine the amount of compensation actually paid. The Summary Compensation Table amounts and the "compensation actually paid" amounts do not reflect the actual amount of compensation earned by or paid to our executives during the applicable years, but rather are amounts determined in accordance with Item 402 of Regulation S-K under the Exchange Act.

	2024		2023		2022		2021		2020	
	PEO	Average Non-PEO Named Executive Officers*	PEO	Average Non-PEO Named Executive Officers*	PEO	Average Non-PEO Named Executive Officers*	PEO	Average Non-PEO Named Executive Officers*	PEO	Average Non-PEO Named Executive Officers*
Total Compensation from Summary Compensation Table	$ 4,407,100	$ 2,348,215	$3,124,165	$2,045,115	$3,916,032	$ 1,568,352	$ 8,493,477	$4,057,728	$ 8,510,593	$ 2,353,326
Adjustments for Equity Awards										
Subtract grant date fair value of equity awards reported in the Summary Compensation Table	(3,162,113)	(1,487,348)	(2,067,787	(1,380,940	(2,877,355	(985,122)	(7,470,776)	(3,486,362	(7,499,672)	(1,679,025)
Add year-end fair value of awards granted in the covered year that are outstanding and unvested at covered year-end	2,784,677	1,351,001	3,378,111	1,802,671	1,995,200	674,500	1,843,500	860,300	57,702,506	12,918,426
Add year-over-year change in year-end fair values for awards granted in prior years that were outstanding and unvested at covered year-end	(1,736,649)	(859,205)	2,160,032	707,069	(3,800,546	(464,474)	(24,233,997)	(3,857,422	11,068,483	2,646,935
Add fair value at vest date for awards granted and vested in covered year	—	—	—	—	—	—	—	—	—	—
Add change in fair values between prior year-end fair values and vest date fair values for awards granted in prior years for which vesting conditions were satisfied during covered year	(1,625,965)	(638,686)	3,065,671	502,826	(2,279,870	(302,116)	304,385	(202,974)	2,908,736	601,177
Subtract fair value at end of the prior year of awards granted in any prior year that failed to meet applicable vesting conditions in covered year	—	—	—	—	—	(303,300)	—	—	—	—
Add dividends or other earnings paid on stock or option awards in the covered year prior to vesting if not otherwise included in the total compensation for the covered year	—	—	—	—	—	—	—	—	—	—
Total Adjustments for Equity Awards	$ (3,740,050)	$ (1,634,238)	$6,536,027	$1,631,626	$(6,962,57	$ (1,380,512)	$ (29,556,888)	$(6,686,45	$64,180,053	$ 14,487,513
Total "Compensation Actually Paid"	$ 667,050	$ 713,977	$9,660,192	$3,676,741	$(3,046,53	$ 187,840	$ (21,063,411)	$(2,628,73	$72,690,646	$ 16,840,839

* Amounts presented are averages for the entire group of Non-PEO named executive officers.

For the stock options values included in the table above, the valuation assumptions used to calculate fair value were materially different from those used to calculate grant date fair value. The assumptions used in determining fair value of the

stock options that vested during 2020, 2021, 2022, 2023 and 2024 or that were outstanding as of December 31, 2020, December 31, 2021, December 31, 2022, December 31, 2023 or December 31, 2024, as applicable, were as follows:

	Options Vested During Year or Outstanding on December 31 of:				
	2024	2023	2022	2021	2020
Expected Volatility	64% - 68%	56% - 74%	57% - 71%	56% - 62%	46% - 63%
Risk-Free Interest Rate	3.46% - 4.65%	3.54% - 4.88%	0.81% - 4.56%	0.13% - 1.46%	0.11% - 1.51%
Expected Dividend Yield	—%	—%	—%	—%	—%
Expected Term (in years)	2.37 - 6.54	2.21 - 7.39	2.07 - 7.88	1.99 - 7.89	1.82 - 6.26

(3) Reflects cumulative total shareholder return on the Nasdaq Biotechnology Index. The Nasdaq Biotechnology Index is used by us for purposes of Item 201(e) of Regulation S-K under the Exchange Act in our Annual Report on Form 10-K for the year ended December 31, 2024. The 2020-2023 peer group total shareholder return previously reported had errors in calculation which have been corrected in this proxy statement. The values in the table above and in the CAP vs TSR, Peer Group TSR, Net (Loss) Income and Total Revenue chart below correct the peer group total shareholder return for all years presented.

(4) The dollar amounts reported represent the amount of net (loss) income reflected in the Company's audited financial statements for the applicable year.

(5) In the Company's assessment, total revenue is the financial performance measure that is the most important financial performance measure used by the Company for the most recently completed fiscal year, to link compensation actually paid to performance.

Tabular List of Most Important Financial and Non-Financial Performance Measures

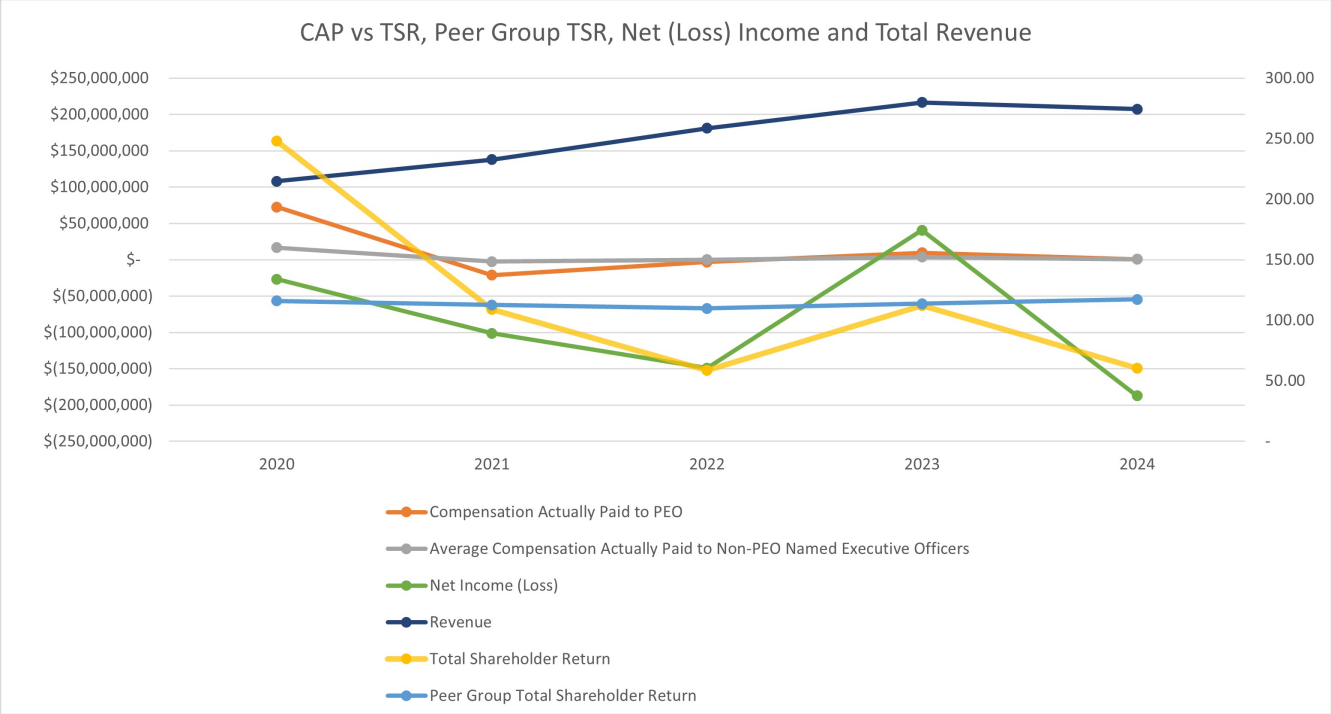
The following table presents the financial and non-financial performance measures that we consider to have been the most important in linking compensation actually paid to our PEO and Non-PEO named executive officers for 2024 to company performance. The measures in this table are not ranked. Of these measures, as noted above, we have identified total revenue as the most important of our financial performance measures (that is not otherwise required to be disclosed in the table) used by us to link compensation actually paid to our PEOs and Non-PEO named executive officers for 2024 to company performance.

Total revenue
Progress of our collaborative and proprietary drug discovery programs
Advancements in the science and technology underlying our platform

Relationship Between Financial Performance Measures and Executive Compensation

The following line chart presents a graphical comparison of executive compensation actually paid to our PEO and the average executive compensation actually paid to the Non-PEO named executive officers set forth in the Pay Versus Performance table above, as compared against the following performance measures: the Company's (1) cumulative total shareholder return, (2) peer group total shareholder return, (3) net income (loss), and (4) total revenue. For purposes of comparison, the Company's cumulative total shareholder return and peer group total shareholder return in the following chart has been presented on a scaled basis, assuming an initial starting value of $100 in each instance.

When reviewing the relationship between pay versus performance in the chart below, it is important to note that a substantial portion of our PEO and non-PEO named executive officers' compensation consisted of stock options and/or RSUs with time-based vesting and PRSUs with performance-based vesting. As the compensation actually paid as calculated pursuant to Item 402(v) of Regulation S-K is based on the accounting changes in the fair value of such options, the value varies significantly with the performance of our common stock. Therefore, notwithstanding the increase in the Company's total revenue (our most important financial performance measure that is not otherwise required to be disclosed in the table), the compensation actually paid to our PEO and the average compensation actually paid to our non-PEO named executive officers were heavily impacted by the Company's total shareholder return.



Grants of Plan-Based Awards for 2024

The following table sets forth information concerning each grant of an award made to a named executive officer during the fiscal year ended December 31, 2024 under any plan, contract, authorization or arrangement pursuant to which cash, securities, similar instruments or other property may be received. The cash awards were made under our Senior Executive Incentive Compensation Plan and the equity awards were made under our 2022 Plan. Each cash award or equity grant was

authorized by our compensation committee, or board of directors, as applicable. For more information on equity acceleration benefits under specified circumstances, see "—Employment, Severance and Change in Control Arrangements."

Name	Type of Award	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			Estimated Future Payouts Under Equity Incentive Plan Awards(2)			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)(3)	Exercise or Base Price of Option Awards ($)(4)	Grant Date Fair Value of Stock and Option Awards ($)	
			Threshold ($)	Target ($)	Maximum ($)	Threshold (#)	Target (#)	Maximum (#)					
Ramy Farid	Cash	—	—	457,652	—	—	—	—	—	—	—	—	
	Options	3/4/2024	—	—	—	—	—	—	—	126,000	25.24	1,895,573	(5)
	Options	3/4/2024	—	—	—	—	—	—	—	87,271	27.76	1,266,540	(5)
	PRSUs	3/4/2024	—	—	—	17,500	35,000	52,500	—	—	—	—	(6)
Geoffrey Porges	Cash	—	—	344,916	—	—	—	—	—	—	—	—	
	Options	3/4/2024	—	—	—	—	—	—	—	90,000	25.24	1,353,981	(5)
	PRSUs	3/4/2024	—	—	—	7,500	15,000	22,500	—	—	—	—	(6)
Karen Akinsanya	Cash	—	—	309,452	—	—	—	—	—	—	—	—	
	Options	3/4/2024	—	—	—	—	—	—	—	120,000	25.24	1,805,307	(5)
	PRSUs	3/4/2024	—	—	—	10,000	20,000	30,000	—	—	—	—	(6)
Robert Abel	Cash	—	—	230,010	—	—	—	—	—	—	—	—	
	Options	3/4/2024	—	—	—	—	—	—	—	60,000	25.24	902,654	(5)
	Options	3/21/2024	—	—	—	—	—	—	—	30,000	27.51	492,398	(5)
	PRSUs	3/4/2024	—	—	—	5,000	10,000	15,000	—	—	—	—	(6)
	PRSUs	3/21/2024	—	—	—	2,500	5,000	7,500	—	—	—	—	(6)
Patrick Lorton	Cash	—	—	230,010	—	—	—	—	—	—	—	—	
	Options	3/4/2024	—	—	—	—	—	—	—	60,000	25.24	902,654	(5)
	Options	3/21/2024	—	—	—	—	—	—	—	30,000	27.51	492,398	(5)
	PRSUs	3/4/2024	—	—	—	5,000	10,000	15,000	—	—	—	—	(6)
	PRSUs	3/21/2024	—	—	—	2,500	5,000	7,500	—	—	—	—	(6)

(1) Amounts shown in the target column reflect the target amounts, payable under our Senior Executive Incentive Compensation Plan as described above under "*Annual Performance-based Cash Incentives*." There is no threshold or maximum payout. Actual amounts paid for 2024 performance are presented in the Summary Compensation Table above.

(2) Each PRSU represents a contingent right to receive one share of common stock upon the achievement of specified performance goals. These PRSUs vest as to the percentage assigned to each of three performance metrics relating to software performance, Schrödinger therapeutics group performance and operating performance, as measured at the end of the measurement period ending on December 31, 2025, upon certification by our compensation committee of achievement of the applicable performance metrics. With respect to the software and operating metrics, if the level of achievement falls between threshold and target or target and maximum, the payout factor shall be adjusted based on linear interpolation between threshold and target or target and maximum, respectively. With respect to the Schrödinger therapeutics group metric, subject to certain specified exceptions, if the level of achievement falls between threshold and target or target and maximum, the payout factor shall be adjusted based on linear interpolation between threshold and target or target and maximum, respectively.

(3) Stock options subject to time-based vesting criteria established by the compensation committee and described in the footnotes to the "Outstanding Equity Awards at December 31, 2024" table below.

(4) The exercise price per share of these stock options is equal to the closing price of our common stock on the grant date, as indicated in the table, except for the premium priced options granted to Dr. Farid on March 4, 2024, which has an exercise price per share equal to 110% of the closing price of our common stock on the date of grant.

(5) The amounts listed represent the aggregate grant date fair values computed in accordance with FASB ASC Topic 718. See Note 9 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 26, 2025, regarding assumptions underlying the valuation of the option awards and the RSUs.

(6) The amounts listed represent the aggregate grant date fair values of the PRSUs granted to each of Drs. Farid, Porges, Akinsanya, and Abel and Mr. Lorton, respectively, calculated in accordance with FASB ASC Topic 718

based upon the probable outcome of the applicable performance conditions. As of the grant date, the performance conditions for the PRSUs granted to each of Drs. Farid, Porges, Akinsanya, and Abel and Mr. Lorton were not considered probable of occurring and, as a result, the fair value of those PRSUs, for purposes of this table, was $0. See Note 9 to our consolidated financial statements in our annual report on Form 10-K for the year ended December 31, 2024, which was filed with the SEC on February 26, 2025, regarding assumptions underlying the valuation of the PRSUs.

Outstanding Equity Awards at December 31, 2024

The following table sets forth information regarding all outstanding stock options, RSUs and PRSUs held by each of our named executive officers as of December 31, 2024. For more information on equity acceleration benefits under specified circumstances, see "*—Employment, Severance and Change in Control Arrangements*."

	Option Awards				Stock Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares of Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Ramy Farid	160,527	— (1)	3.07	5/10/2026	—	—	—	—
	334,432	— (1)	4.34	11/29/2028	—	—	—	—
	896,280	— (1)	17.00	2/5/2030	—	—	—	—
	143,750	6,250 (2)	102.48	2/27/2031	—	—	—	—
	152,291	62,709 (3)	27.76	2/9/2032	—	—	—	—
	38,940	46,020 (4)	23.29	2/9/2033	—	—	—	—
	30,032	35,493 (4)	25.62	2/9/2033	—	—	11,400 (8)	219,906 (11)
	—	126,000 (5)	25.24	3/4/2034	—	—	17,500 (9)	337,575 (11)
	—	87,271 (5)	27.76	3/4/2034	—	—	—	—
Geoffrey Porges	105,000	75,000 (6)	28.55	8/18/2032	—	—	54,000 (10)	1,041,660 (11)
	25,086	29,649 (4)	23.29	2/9/2033	—	—	4,405 (8)	84,972 (11)
	—	90,000 (5)	25.24	3/4/2034	—	—	7,500 (9)	144,675 (11)
Karen Akinsanya	3,345	— (1)	2.92	10/10/2027	—	—	—	—
	13,378	— (1)	3.22	8/3/2028	—	—	—	—
	43,198	— (1)	4.34	11/29/2028	—	—	—	—
	180,478	— (1)	17.00	2/5/2030	—	—	—	—
	76,666	3,334 (2)	102.48	2/27/2031	—	—	—	—
	56,666	23,334 (3)	27.76	2/9/2032	—	—	—	—
	28,998	34,272 (4)	23.29	2/9/2033	—	—	5,093 (8)	98,244 (11)
	—	120,000 (5)	25.24	3/4/2034	—	—	10,000 (9)	192,900 (11)
Robert Abel	11,148	— (1)	4.34	11/29/2028	—	—	—	—
	94,756	— (1)	17.00	2/5/2030	—	—	—	—
	76,666	3,334 (2)	102.48	2/27/2031	—	—	—	—
	49,583	20,417 (3)	27.76	2/9/2032	—	—	—	—
	28,998	34,272 (4)	23.29	2/9/2033	7,909 (7)	152,565 (11)	—	—
	—	60,000 (5)	25.24	3/4/2034	—	—	5,000 (9)	96,450 (11)
	—	30,000 (5)	27.51	3/21/2034	—	—	2,500 (9)	48,225 (11)
Patrick Lorton	87,199	— (1)	17.00	2/5/2030	—	—	—	—
	76,666	3,334 (2)	102.48	2/27/2031	—	—	—	—
	49,583	20,417 (3)	27.76	2/9/2032	—	—	—	—
	22,458	26,542 (4)	23.29	2/9/2033	6,128 (7)	118,209 (11)	—	—
	—	60,000 (5)	25.24	3/4/2034	—	—	5,000 (9)	96,450 (11)
	—	30,000 (5)	27.51	3/21/2034	—	—	2,500 (9)	48,225 (11)

(1) This option is fully vested.

(2) This option vests over four years, with 25% of the original number of shares underlying such option having vested on February 27, 2022, and 2.0833% of the original number of shares underlying such option vesting thereafter in equal monthly installments through February 27, 2025, subject to continued service.

(3) This option vests over four years, with 25% of the original number of shares underlying such option having vested on February 9, 2023, and 2.0833% of the original number of shares underlying such option vesting thereafter in equal monthly installments through February 9, 2026, subject to continued service.

(4) This option vests over four years, with 25% of the original number of shares underlying such option having vested on February 9, 2024, and 2.0833% of the original number of shares underlying such option vesting thereafter in equal monthly installments through February 9, 2027, subject to continued service.

(5) This option vests over four years, with 25% of the original number of shares underlying such option having vested on March 4, 2025, and 2.0833% of the original number of shares underlying such option vesting thereafter in equal monthly installments through March 4, 2028, subject to continued service.

(6) This option vests over four years, with 25% of the original number of shares underlying such option having vested on August 18, 2023, and 2.0833% of the original number of shares underlying such option vesting thereafter in equal monthly installments through August 18, 2026, subject to continued service.

(7) Each RSU represents a contingent right to receive one share of common stock. These RSUs vest in equal annual installments over a period of four years from the vesting commencement date of February 9, 2023, subject to continued service.

(8) Each PRSU represents a contingent right to receive one share of common stock upon the achievement of specified performance goals. The PRSUs vest as to the percentage assigned to each three evenly weighted financial, business and software performance metrics, as measured at the end of the measurement period ending on December 31, 2025, upon certification by our compensation committee of achievement of the applicable performance metrics. The number of PRSUs in the table is the threshold amount; the target number of PRSUs subject to the award for each of Dr. Farid, Dr. Porges and Dr. Akinsanya is 22,800, 8,810, and 10,185, respectively, and the maximum number of PRSUs subject to the award for each of Dr. Farid, Dr. Porges and Dr. Akinsanya is 34,200, 13,215 and 15,278, respectively. The measurement period for the PRSUs is ongoing. None of the performance goals have been certified by our compensation committee as achieved as of December 31, 2024.

(9) Each PRSU represents a contingent right to receive one share of common stock upon the achievement of specified performance goals. The PRSUs vest as to the percentage assigned to each three evenly weighted software performance, Schrödinger therapeutics group performance and operating performance metrics, as measured at the end of the measurement period ending on December 31, 2025, upon certification by our compensation committee of achievement of the applicable performance metrics. The number of PRSUs in the table is the threshold amount; the target number of PRSUs subject to the award for each of Dr. Farid, Dr. Porges, Dr. Akinsanya, Dr. Abel and Mr, Lorton is 35,000, 15,000, 20,000, 10,000 and 10,000, respectively, and the maximum number of PRSUs subject to the award for each of Dr. Farid, Dr. Porges, Dr. Akinsanya, Dr. Abel and Mr, Lorton is 52,500, 22,500, 30,000, 15,000 and 15,000, respectively. The measurement period for the PRSUs is ongoing. None of the performance goals have been certified by our compensation committee as achieved as of December 31, 2024.

(10) Each PRSU represents a contingent right to receive one share of common stock upon the achievement of specified performance goals related to financial performance, investor engagement and business development and subject to continued service, upon certification by our compensation committee of achievement of the applicable performance metrics. The number of PRSUs in the table is the target amount. In March 2024, our compensation committee certified the level of achievement of certain performance goals underlying the PRSUs having a performance date of February 28, 2024. Of the 36,000 PRSUs that were eligible to vest, 9,000 PRSUs vested and 27,000 PRSUs were forfeited upon certification of the compensation committee. In March 2025, our compensation committee certified the level of achievement of certain performance goals underlying the PRSUs having a performance date of February 28, 2025. Of the 27,000 PRSUs that were eligible to vest, 14,850 PRSUs vested and 12,150 PRSUs were forfeited upon certification of the compensation committee. In addition, the remaining 27,000 PRSUs that were eligible to vest on December 31, 2025 based on certain cumulative performance metrics were forfeited upon certification of the compensation committee, as the conditions to vesting cannot be achieved for such PRSUs.

(11) For purposes of this table, we have calculated the market value of the RSUs and PRSUs using the closing price of our common stock on December 31, 2024, or $19.29 per share.

Option Exercises and Stock Vested in 2024

The following table sets forth information concerning option exercises and stock award vesting for each of our named executive officers during the fiscal year ended December 31, 2024:

	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise($)(1)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)
Ramy Farid	—	—	—	—
Geoffrey Porges	—	—	9,000	241,290
Karen Akinsanya	—	—	—	—
Robert Abel	—	—	2,636	71,699
Patrick Lorton	5,574	113,710	2,042	55,542

(1) The value realized when the stock options were exercised represents the excess of the fair market value of the shares at the time of exercise over the exercise price of the stock options.

Employment, Severance and Change in Control Arrangements

Employment Agreements and Other Arrangements

We have entered into employment agreements with each of our named executive officers. These agreements set forth the terms of employment with us, including initial base salary and benefits.

Employment Agreement with Ramy Farid. We entered into an employment agreement with Ramy Farid, dated May 11, 2010. Under the employment agreement, Dr. Farid is an at-will employee and his employment may be terminated by us or by him at any time, for any reason, upon 30 days' written or verbal notice. In the event we elect to terminate Dr. Farid's employment immediately without 30 days' notice, he is entitled to continued payment of his then-current base salary and continued benefit coverage for a period of 30 days following such termination. The employment agreement provides that Dr. Farid's salary may be increased or decreased in our sole discretion. Dr. Farid's current base salary is $730,000.

Employment Agreement with Geoffrey Porges. We entered into an employment agreement with Geoffrey Porges, dated August 16, 2022. Under the employment agreement, Dr. Porges is an at-will employee and his employment may be terminated by us or by him at any time, for any reason. The employment agreement provides that Dr. Porges' salary may be increased or decreased in our sole discretion. Dr. Porges' current base salary is $650,000. Pursuant to the terms of his employment agreement, Dr. Porges received a sign-on bonus of $230,000, the terms of which are more fully described above under "*Summary Compensation Table.*" Pursuant to the terms of his employment agreement, upon the commencement of his employment, Dr. Porges was granted options and PRSUs under our 2021 Inducement Equity Incentive Plan, as amended, as an inducement material to Dr. Porges' acceptance of employment with us in accordance with Nasdaq Listing Rule 5635(c)(4). Dr. Porges is also entitled to severance benefits under our Severance Plan and additional severance benefits pursuant to the terms of his employment agreement which are more fully described below under "*Executive Severance and Change in Control Benefits Plan*" and "*Additional Severance Benefits.*"

Employment Agreement with Karen Akinsanya. We entered into an employment agreement with Karen Akinsanya, dated May 14, 2018. Under the employment agreement, Dr. Akinsanya is an at-will employee and her employment may be terminated by us or by her at any time, for any reason, upon 30 days' written or verbal notice. In the event we elect to terminate Dr. Akinsanya's employment immediately without 30 days' notice, she is entitled to continued payment of her then-current base salary for a period of 30 days following such termination. The employment agreement provides that Dr. Akinsanya's salary may be increased or decreased thereafter in our sole discretion. Dr. Akinsanya's current base salary is $600,000.

Employment Agreement with Robert Abel. We entered into an employment agreement with Robert Abel, dated March 9, 2009. Under the employment agreement, Dr. Abel is an at-will employee and his employment may be terminated by us or by him at any time, for any reason, upon 30 days' written or verbal notice. In the event we elect to terminate Dr. Abel's employment immediately without 30 days' notice, he is entitled to continued payment of his then-current base salary and

continued benefit coverage for a period of 30 days following such termination. The employment agreement provides that Dr. Abel's salary may be increased or decreased in our sole discretion. Dr. Abel's current base salary is $500,000.

Employment Agreement with Patrick Lorton. We entered into an employment agreement with Patrick Lorton, dated September 11, 2006. Under the employment agreement, Mr. Lorton is an at-will employee and his employment may be terminated by us or by him at any time, for any reason, upon 30 days' written or verbal notice. In the event we elect to terminate Mr. Lorton's employment immediately without 30 days' notice, he is entitled to continued payment of his then-current base salary and continued benefit coverage for a period of 30 days following such termination. The employment agreement provides that Mr. Lorton's salary may be increased or decreased in our sole discretion. Mr. Lorton's current base salary is $500,000.

Employee Non-Competition, Non-Solicitation, Confidentiality, and Assignment of Inventions

As part of their employment agreements, each of our named executive officers has agreed to certain standard non-competition, non-solicitation, confidential information, and assignment of invention restrictions. Pursuant to their employment agreements, each of our named executive officers has agreed that we own all developments that are made, created, developed, conceived or reduced to practice by such officer, alone or with others, (i) in the course of employment with us, whether during regular working hours or other hours, or (ii) during the period of employment with us, whether or not in the course of such employment, to the extent the same is related to our business or actual or demonstrably anticipated research or development or is made, created, developed, conceived or first reduced to practice with the time, private or proprietary information, or facilities of our company, our subsidiaries or our other affiliates, which we refer to collectively as the Schrödinger Companies. In addition, each of our named executive officers has agreed not to, during his or her employment and for a period of one year thereafter, (i) solicit or encourage any customers, prospective customers, vendors, strategic partners or business associates of the Schrödinger Companies to cease or reduce their relationship with the Schrödinger Companies or to refrain from establishing or expanding a relationship with Schrödinger Companies, (ii) solicit or induce any employees, consultants, sales agents, contract researchers, contract programmers or other independent agents of the Schrödinger Companies or of certain D. E. Shaw group entities (except in the case of our chief financial officer) to cease employment or retention with the Schrödinger Companies or such D. E. Shaw group entities (except in the case of our chief financial officer), or (iii) hire or engage any employee of the Schrödinger Companies or of certain D. E. Shaw group entities (except in the case of our chief financial officer). Each of our named executive officers has agreed not to, during the term of his or her employment, knowingly engage in any activity or business which is the same nature as, or substantively similar to, our business or an activity or business which a Schrödinger Company is developing and of which such named executive officer has knowledge, and to protect our confidential and proprietary information indefinitely.

Executive Severance and Change in Control Benefits Plan

The Amended and Restated Executive Severance and Change in Control Benefits Plan, as amended, which we refer to as the Severance Plan, initially became effective following the closing of our initial public offering and was amended and restated in April 2021 and was subsequently amended in August 2022. The Severance Plan provides severance benefits to certain of our executives, including our named executive officers, if their employment is terminated by us without "cause" or, only in connection with a "change in control" of our company, they terminate employment with us for "good reason" (as each of those terms is defined in the Severance Plan).

Under the Severance Plan, if we terminate an eligible executive's employment without cause prior to or more than 12 months following the closing of a change in control of our company, the executive is entitled to (i) continue receiving his or her base salary for a specified period (in the case of Dr. Farid, for 12 months, and in the case of each of the other named executive officers, for nine months) following the date of termination, (ii) company contributions to the cost of health care continuation under COBRA for up to 12 months following the date of termination, and (iii) the amount of any unpaid annual bonus determined by our board of directors in its discretion to be payable to the executive for any completed bonus period which ended prior to the date of such executive's termination.

The Severance Plan also provides that, if, within 12 months following the closing of a change in control of our company, we terminate an eligible executive's employment without cause or such executive terminates his or her employment with us for good reason, the executive is entitled to (i) a single lump-sum payment equal to a percentage of his or her annual base salary (in the case of Dr. Farid, 150%, and in the case of each of the other named executive officers, 100%), (ii) a single lump sum payment in an amount equal to a percentage of his or her target annual bonus for the year in which the termination of employment occurs or for the year in which the change in control occurs, if greater (in the case of Dr. Farid, 150%, and in the case of each of the other named executive officers, 100%), (iii) company contributions to the cost of health care

continuation under COBRA for up to 12 months following the date of termination of employment (18 months in the case of Dr. Farid), and (iv) the amount of any unpaid annual bonus determined by our board of directors to be payable to the executive for any completed bonus period which ended prior to the date of such executive's termination. In addition, all of the executive's outstanding unvested equity awards that vest solely based on the passage of time will vest and become fully exercisable or non-forfeitable on the date of such termination.

To the extent that any severance or other compensation payment to any of our executives pursuant to the Severance Plan, any employment agreement or any other agreement constitutes an "excess parachute payment" within the meaning of Sections 280G and 4999 of the Internal Revenue Code of 1986, as amended, then such executive will receive the full amount of such severance and other payments, or a reduced amount intended to avoid the application of Sections 280G and 4999, whichever provides the executive with the highest amount on an after-tax basis.

All payments and benefits provided under the Severance Plan are contingent upon the execution and effectiveness of a release of claims by the executive in our favor and continued compliance by the executive with any proprietary information and inventions, nondisclosure, non-competition, non-solicitation (or similar) agreement to which we and the executive are party.

Additional Severance Benefits

In addition to being entitled to participate in the Severance Plan, Dr. Porges is also entitled to the following additional severance benefits pursuant to his employment agreement. If Dr. Porges resigns for good reason prior to or more than 12 months after the closing of a change in control (as such term is defined in the Severance Plan), he will be entitled to (i) continue receiving his base salary for nine months, (ii) company contributions to the cost of health care continuation under Consolidated Omnibus Budget Reconciliation Act, or COBRA, for up to 12 months following the date of resignation, and (iii) the amount of any unpaid annual bonus determined by the board of directors in its discretion to be payable to Dr. Porges for any completed bonus period which ended prior to the date of such resignation. If Dr. Porges is terminated by us without cause or resigns for good reason prior to or more than 12 months after the closing of a change in control, the option and the PRSUs granted to Dr. Porges on August 18, 2022 will vest and become fully exercisable and/or non-forfeitable as of the date of such termination or resignation. If Dr. Porges is terminated by us without cause or resigns for good reason within 12 months after the closing of a change in control, all of Dr. Porges' equity awards that vest solely based on the passage of time and that are outstanding and unvested as of such termination or resignation and the PRSUs granted to Dr. Porges on August 18, 2022 will vest and become fully exercisable and/or non-forfeitable on the date of such termination or resignation.

Potential Payments Upon Termination or Change in Control

The following table sets forth potential payments upon termination and change in control that would be made to our named executive officers, assuming that such termination or change in control occurred on December 31, 2024, after giving effect to the Severance Plan, and in the case of Dr. Porges, the additional severance benefits he is entitled to under his employment agreement. In addition to the amounts shown in the table below, each named executive officer would be entitled to receive payments for base salary through the date of termination, payment for any reimbursable business expenses incurred, and the amount of any unpaid annual cash incentive payment determined by our board of directors in its discretion to be payable to the executive for any completed bonus period which ended prior to the date of such executive's termination or resignation.

Name	Benefit	Change in Control (Without Termination of Employment) ($)	Resignation For Good Reason or Termination Without Cause Within 12 Months Following a Change in Control ($)	Termination Without Cause Prior to or More than 12 Months Following a Change in Control ($)	Termination for Good Reason Prior to or More than 12 Months Following a Change in Control ($)
Ramy Farid	Severance Payments	—	1,056,120 (1)	704,080 (2)	—
	Bonus Payment	—	686,478 (3)	—	—
	Continuation of Benefits	—	15,647 (4)	10,431 (5)	—
	Market Value of Stock Vesting	—	— (6)	—	—
	Total	**—**	**1,758,245**	**714,511**	—
Geoffrey Porges	Severance Payments	—	627,120 (7)	470,340 (8)	470,340 (8)
	Bonus Payment	—	344,916 (9)	—	—
	Continuation of Benefits	—	31,471 (5)	31,471 (5)	31,471 (5)
	Market Value of Stock Vesting	—	1,041,660 (6)	1,041,660 (10)	1,041,660 (10)
	Total	**—**	**2,045,167**	**1,543,471**	**1,543,471**
Karen Akinsanya	Severance Payments	—	562,640 (7)	421,980 (8)	—
	Bonus Payment	—	309,452 (9)	—	—
	Continuation of Benefits	—	31,471 (5)	31,471 (5)	—
	Market Value of Stock Vesting	—	— (6)	—	—
	Total	**—**	**903,563**	**453,451**	—
Robert Abel	Severance Payments	—	460,020 (7)	345,015 (8)	—
	Bonus Payment	—	230,010 (9)	—	—
	Continuation of Benefits	—	19,048 (5)	19,048 (5)	—
	Market Value of Stock Vesting	—	152,565 (6)	—	—
	Total	**—**	**861,643**	**364,063**	—
Patrick Lorton	Severance Payments	—	460,020 (7)	345,015 (8)	—
	Bonus Payment	—	230,010 (9)	—	—
	Continuation of Benefits	—	19,528 (5)	19,528 (5)	—
	Market Value of Stock Vesting	—	118,209 (6)	—	—
	Total	**—**	**827,767**	**364,543**	—

(1) Represents a lump sum payment equal to 150% of executive's annual base salary.

(2) Represents 12 monthly payments of executive's monthly base salary from the time of termination.

(3) Represents a lump sum payment equal to 150% of the executive's target annual cash incentive bonus.

(4) Represents the cost of continued health and dental benefits under COBRA. These benefits are payable until 18 months following termination.

(5) Represents the cost of continued health and dental benefits under COBRA. These benefits are payable until 12 months following termination.

(6) Represents the acceleration of vesting of 100% of the unvested stock options and RSUs held by the named executive officer that vest solely based on the passage of time, and, for Dr. Porges only, also includes the acceleration of vesting of 100% of the unvested PRSUs that were granted to him on August 18, 2022. The value of accelerated unvested stock options is calculated by taking the difference between the closing price of our common stock on the last trading day of 2024 and the exercise price per share and multiplying it by the number of shares of common stock underlying the unvested stock options as of December 31, 2024. Any option with an exercise price per share of greater than $19.29 was assumed to be canceled for no consideration and, therefore, had no intrinsic value. The value of the accelerated unvested RSUs and PRSUs is equal to the number of unvested RSUs or PRSUs,

as applicable, as of December 31, 2024, multiplied by the closing price of our common stock on the last trading day of 2024. The closing price of our common stock on December 31, 2024, the last trading day of the year, was $19.29 per share.

(7) Represents a lump sum payment equal to 100% of the executive's annual base salary.

(8) Represents 9 monthly payments of executive's monthly base salary from the time of termination.

(9) Represents a lump sum payment equal to 100% of the executive's target annual cash incentive bonus.

(10) Represents the acceleration of vesting of 100% of the unvested options and PRSUs that were granted to Dr. Porges on August 18, 2022. The value of accelerated unvested stock options is calculated by taking the difference between the closing price of our common stock on the last trading day of 2024 and the exercise price per share and multiplying it by the number of shares common stock underlying the unvested stock options. The value of the accelerated unvested PRSUs is equal to the number of unvested PRSUs multiplied by the closing price of our common stock on the last trading day of 2024. The closing price of our common stock on December 31, 2024, the last trading day of the year, was $19.29 per share.

Rule 10b5-1 Sales Plans

Our directors and executive officers have adopted and may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from the director or officer. A Rule 10b5-1 plan may be amended or terminated in some circumstances. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information or restricted under our insider trading policy.

Director Compensation

Non-Employee Director Compensation Policy

Our board of directors has adopted a non-employee director compensation policy that is designed to provide a total compensation package that enables us to attract and retain, on a long-term basis, high caliber non-employee directors.

Under our non-employee director compensation policy in effect during 2024, the fees payable to non-employee directors for service on the board of directors and for service on each committee of the board of directors on which the director is a member were as follows:

	Member Annual Fee	Chair Supplemental Annual Fee
Board of Directors	$ 45,000	$ 40,000
Audit Committee	$ 10,000	$ 10,000
Compensation Committee	$ 7,500	$ 7,500
Nominating and Corporate Governance Committee	$ 5,000	$ 5,000
Drug Discovery Committee	$ 7,500	$ 7,500

Under our policy in effect during 2024, each non-employee director was entitled to receive, upon his or her initial election or appointment to our board of directors, (i) an option to purchase a number of shares of our common stock having an aggregate value of $237,500 as of the grant date, determined using a Black-Scholes valuation model; provided that in no event shall the number of shares underlying such option exceed 17,050 shares and (ii) RSUs for a number of shares of our common stock having an aggregate value of $237,500 as of the grant date, determined using the closing price of our common stock on the Nasdaq Global Select Market on the grant date; provided that in no event shall the number of shares underlying such RSUs exceed 10,000 shares. Each of these options and RSUs will vest as to one-third of the shares of our common stock underlying such award on each of the first, second and third anniversaries of the grant, subject to the director's continued service to the company through the applicable vesting date. Further, on the date of our annual meeting of stockholders held during 2024, each then-serving non-employee director was granted, automatically and without the need for any further action by the board, (i) an option to purchase a number of shares of our common stock having an aggregate value of $118,750 as of the date of such annual meeting of stockholders, determined using a Black-Scholes valuation model; provided that in no event shall the number of shares of common stock underlying such option exceed 8,550 shares and (ii)

RSUs for a number of shares of our common stock having an aggregate value of $118,750 as of the date of such annual meeting of stockholders, determined using the closing price of our common stock on the Nasdaq Global Select Market on the date of such annual meeting; provided that in no event could the number of shares underlying such RSUs exceed 5,000 shares. The option and the RSUs shall vest on the twelve-month anniversary of the date of grant of the awards (or, if earlier, the date of the next annual meeting of stockholders following the date of grant of the awards), subject to the director's continued service to the company through the applicable vesting date.

Changes to our Non-Employee Director Compensation Policy for 2025

On April 19, 2025, our board of directors adopted the sixth amended and restated director compensation policy. Under this amended policy, the fees payable to non-employee directors for service on the board of directors and for service on each committee of the board of directors on which the director is a member is as follows, effective as of January 1, 2025:

	Member Annual Fee	Chair Supplemental Annual Fee
Board of Directors	$ 50,000	$ 40,000
Audit Committee	$ 10,000	$ 10,000
Compensation Committee	$ 7,500	$ 7,500
Nominating and Corporate Governance Committee	$ 5,000	$ 5,000
Drug Discovery Committee	$ 7,500	$ 7,500

In addition, beginning on April 19, 2025, each non-employee director is entitled to receive, upon his or her initial election or appointment to our board of directors, (i) an option to purchase a number of shares of our common stock having an aggregate value of $252,500 as of the grant date, determined using a Black-Scholes valuation model; provided that in no event shall the number of shares underlying such option exceed 25,480 shares and (ii) RSUs for a number of shares of our common stock having an aggregate value of $252,500 as of the grant date, determined using the closing price of our common stock on the Nasdaq Global Select Market on the grant date; provided that in no event shall the number of shares underlying such RSUs exceed 15,190 shares. Each of these options and RSUs will vest as to one-third of the shares of our common stock underlying such award on each of the first, second and third anniversaries of the grant, subject to the director's continued service to the company through the applicable vesting date. Further, on the date of our annual meeting of stockholders, each then-serving non-employee director will be granted, automatically and without the need for any further action by the board, (i) an option to purchase a number of shares of our common stock having an aggregate value of $126,250 as of the date of such annual meeting of stockholders, determined using a Black-Scholes valuation model; provided that in no event shall the number of shares of common stock underlying such option exceed 12,740 shares and (ii) RSUs for a number of shares of our common stock having an aggregate value of $126,250 as of the date of such annual meeting of stockholders, determined using the closing price of our common stock on the Nasdaq Global Select Market on the date of such annual meeting; provided that in no event could the number of shares underlying such RSUs exceed 7,595 shares. The option and the RSUs shall vest on the twelve-month anniversary of the date of grant of the awards (or, if earlier, the date of the next annual meeting of stockholders following the date of grant of the awards), subject to the director's continued service to the company through the applicable vesting date.

Under our 2022 Equity Incentive Plan, the maximum aggregate amount of cash and value of equity awards (calculated based on grant date fair value for financial reporting purposes) granted in any calendar year to any non-employee director cannot exceed $750,000 in the case of an incumbent director; except that such maximum aggregate amount cannot exceed $1,000,000 in any calendar year for such non-employee director's initial year of election. The equity awards granted under our director compensation policy are subject to such limitations and no cash shall be paid nor awards shall be granted pursuant to our director compensation policy that would cause such limitations to be exceeded (with, as needed, the cash, and equity awards being proportionately reduced such that the aggregate cash and value of equity awards does not exceed such limit). The limitations do not apply to cash or equity awards granted to a non-employee director in his or her capacity as an advisor or consultant to the company.

We also reimburse our non-employee directors for reasonable travel and other expenses incurred in connection with attending meetings of our board of directors and any committee of our board of directors on which he or she serves.

Director Compensation Table

The table below shows all compensation awarded to, earned by or paid to our non-employee directors during the year ended December 31, 2024.

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)(1)(2)	Stock Awards ($)(3)(4)	All Other Compensation ($)	Total ($)
Michael Lynton	105,000	98,825	96,600	—	300,425
Jeffrey Chodakewitz, M.D.	65,000	98,825	96,600	—	260,425
Richard A. Friesner, Ph.D.	45,000	98,825	96,600	428,400 (5)	668,825
Gary Ginsberg	62,500	98,825	96,600	—	257,925
Rosana Kapeller-Libermann, M.D., Ph.D.	60,000	98,825	96,600	—	255,425
Arun Oberoi	55,000	98,825	96,600	—	250,425
Gary Sender	80,000	98,825	96,600	—	275,425
Nancy A. Thornberry	57,500	98,825	96,600	—	252,925

(1) The amounts reported in the "Option Awards" column reflect the aggregate grant date fair value of options awarded during the year computed in accordance with the provisions of FASB ASC Topic 718. The amounts reported reflect the aggregate grant date fair value with respect to options to purchase 8,550 shares of our common stock granted to each of our non-employee directors on the date of the 2024 annual meeting of stockholders for their service on the board of directors. See Note 9 to our consolidated financial statements appearing in our annual report on Form 10-K, which was filed with the SEC on February 26, 2025, regarding assumptions underlying the valuation of option awards. These amounts reflect the accounting cost for these stock options and do not reflect the actual economic value that may be realized by the directors upon the vesting of the stock options, the exercise of the stock options or the sale of the common stock underlying such stock options.

(2) As of December 31, 2024, the aggregate number of shares of our common stock subject to outstanding option awards for each non-employee director serving during 2024 was as follows: Mr. Lynton, 112,865 shares; Dr. Chodakewitz, 69,909 shares; Dr. Friesner, 753,221 shares; Mr. Ginsberg, 69,909 shares; Dr. Kapeller-Libermann, 110,111 shares; Mr. Oberoi, 51,273 shares; Mr. Sender, 68,958 shares; and Ms. Thornberry, 84,622 shares.

(3) The amounts reported in the "Stock Awards" column reflect the aggregate grant date fair value of RSUs awarded during the year computed in accordance with the provisions of FASB ASC Topic 718. The amounts reported reflect the aggregate grant date fair value with respect to RSUs for 5,000 shares of our common stock granted to each of our non-employee directors on the date of the 2024 annual meeting of stockholders for their service on the board of directors.

(4) As of December 31, 2024, the aggregate number of shares of our common stock subject to unvested RSUs outstanding for each non-employee director serving during 2024 was as follows: Mr. Lynton, 5,000 shares; Dr. Chodakewitz, 5,000 shares; Dr. Friesner, 5,000 shares; Mr. Ginsberg, 5,000 shares; Dr. Kapeller-Libermann, 5,000 shares; Mr. Oberoi, 5,000 shares; Mr. Sender, 5,000 shares; and Ms. Thornberry, 5,000 shares.

(5) Represents consulting fees paid to Dr. Friesner in connection with his consulting agreement. For further information about our consulting agreement with Dr. Friesner, as well our transactions with Dr. Friesner and his employer, Columbia University, see "*Transactions with Related Persons*" below.

Bridget van Kralingen joined our board of directors in 2025. Dr. Farid, one of our directors who also serves as our president and chief executive officer, does not receive any additional compensation for his service as a director. Dr. Farid is one of our named executive officers and, accordingly, the compensation that we pay to Dr. Farid as our president and chief executive officer is discussed above under "*—Summary Compensation Table*" and "*Executive and Director Compensation—Compensation Discussion and Analysis*."

Securities Authorized for Issuance Under Equity Compensation Plans

Equity Compensation Plan Information

The following table contains information about our 2010 Stock Plan, our 2020 Equity Incentive Plan, or 2020 Plan, our 2020 Employee Stock Purchase Plan, as amended, or the 2020 ESPP, our 2021 Inducement Equity Incentive Plan, as amended, and our 2022 Plan, as of December 31, 2024. Upon adoption of the 2022 Plan, we ceased making awards under the 2020 Plan.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available For Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders			
2010 Stock Plan	1,655,087	$ 3.98	—
2020 Plan	6,745,472	$ 36.54 (6)	—
2020 ESPP(1)	—	—	586,845
2022 Plan(2)	4,363,477 (4)	$ 25.68 (7)	6,261,045
Equity compensation plans not approved by security holders			
2021 Inducement Equity Incentive Plan, as amended(3)	1,055,460 (5)	$ 35.24 (8)	103,179
Total	13,819,496	$ 29.49 (6)(7)(8)	6,951,069

(1) As of December 31, 2024, 586,845 shares of our common stock were reserved for issuance under the 2020 ESPP.

(2) As of December 31, 2024, 6,261,045 shares of our common stock were available for issuance under the 2022 Plan. The number of shares of our common stock reserved for issuance under the 2022 Plan increases from time to time by the number of shares of common stock subject to awards granted under the 2020 Plan that are outstanding as of such date and which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the registrant at their original issuance price pursuant to a contractual repurchase right.

(3) Under our 2021 Inducement Equity Incentive Plan, as amended, we may grant stock options, restricted stock, restricted stock units and other stock-based awards to persons who (a) were not previously an employee or director or (b) are commencing employment with us following a bona fide period of non-employment, in either case, as an inducement material to such person's entry into employment with us and in accordance with the requirements of the Nasdaq Stock Market Rule 5635(c)(4). Neither consultants nor advisors shall be eligible to participate in the plan. Such plan was not adopted by our stockholders. The plan is administered by our board of directors, with authority delegated by our board of directors to our compensation committee. As of December 31, 2024, 103,179 shares of our common stock were available for issuance under the 2021 Inducement Equity Incentive Plan, as amended. In April 2025, our board of directors amended the 2021 Inducement Equity Incentive Plan to increase the number of shares reserved and authorized for issuance under the plan by 100,000 shares.

(4) Includes 1,507,345 shares of common stock subject to outstanding RSUs and 242,693 shares of our common stock subject to outstanding PRSUs (assuming the highest level of performance conditions are achieved). Each PRSU represents a contingent right to receive one share of our common stock upon the achievement of specified performance goals.

(5) Includes (i) options to purchase 180,000 shares of our common stock, at an exercise price per share of $28.55, the closing price on the date of grant, and (ii) PRSUs for up to 54,000 shares of our common stock, in each case,

granted to Dr. Porges in connection with the commencement of his employment on August 18, 2022 (assuming the highest level of performance conditions are achieved for such outstanding PRSUs). The option vested as to 25% of the shares underlying the option on August 18, 2023 and, as to the remaining shares, monthly thereafter until August 18, 2026, subject to continued service. Each PRSU represents a contingent right to receive one share of our common stock upon the achievement of specified performance goals related to financial performance, investor engagement and business development and subject to continued service.

(6) Represents the weighted average exercise price of outstanding options under the 2020 Plan and does not take into account the 15,550 shares of common stock subject to outstanding RSUs under the 2020 Plan, since RSUs have no exercise price.

(7) Represents the weighted average exercise price of outstanding stock options under the 2022 Plan and does not take into account the 1,507,345 shares of common stock subject to outstanding RSUs and 242,693 shares of common stock subject to outstanding PRSUs under the 2022 Plan, since RSUs and PRSUs have no exercise price.

(8) Represents the weighted average exercise price of outstanding stock options under the 2021 Inducement Equity Incentive Plan, as amended and does not take into account the 159,653 shares of common stock subject to outstanding RSUs and the 54,000 shares of common stock subject to outstanding PRSUs, since RSUs and PRSUs have no exercise price.

TRANSACTIONS WITH RELATED PERSONS

Since January 1, 2024, we have engaged in the following transactions in which (i) the amounts involved exceeded $120,000 and (ii) any of our directors, executive officers or holders of more than 5% of our voting securities, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest, other than the compensation arrangements with our directors and named executive officers described elsewhere in this proxy statement.

Share Exchange Agreement with Bill & Melinda Gates Foundation Trust

On January 24, 2020, we entered into an amended and restated share exchange agreement, or the Share Exchange Agreement, with the Bill & Melinda Gates Foundation Trust, a holder of more than 5% of our voting securities, pursuant to which the Bill & Melinda Gates Foundation Trust has the right to exchange any of their shares of common stock for limited common stock. The Bill & Melinda Gates Foundation Trust has not exchanged any shares of common stock for limited common stock pursuant to the Share Exchange Agreement in 2024 or 2025.

Relationship with Richard Friesner

Consulting Agreement with Richard Friesner

We are party to a consulting agreement with Richard Friesner dated July 1, 1999, as amended, pursuant to which Dr. Friesner provides certain services related to enhancing, improving and further developing of our molecular modeling software. Dr. Friesner is one of our co-founders and has been a member of our board of directors since 1990. Under the consulting agreement, we paid Dr. Friesner $428,400 for consulting services during 2024. Under his consulting agreement, we have agreed to pay Dr. Friesner a monthly consulting fee of $36,400 from January 1, 2025 through June 30, 2025, of which $145,600 was paid as of the date hereof.

Columbia License Agreements and Royalty Payments to Columbia University and Richard Friesner

We have entered into various license agreements with the Trustees of Columbia University, or Columbia University, pursuant to which we license software and code from Columbia University in exchange for our obligation to make specified royalty payments to Columbia University. For a description of certain of our license agreements with Columbia University, see "*Item 1. Business—License Agreements with Columbia University*" in our annual report on Form 10-K for the year ended December 31, 2024. Dr. Friesner, the William P. Schweitzer Professor of Chemistry at Columbia University and the principal investigator of the Friesner Research Group, a research laboratory within the Department of Chemistry at Columbia University, and one of our co-founders and a member of our board of directors, was the inventor of certain of the technologies licensed to us pursuant to certain of our license agreements with Columbia University. Columbia University distributes a portion of the royalties we pay to it pursuant to such license agreements to Dr. Friesner and to Dr. Friesner's laboratory at Columbia University. Columbia University distributed $91,067 to Dr. Friesner on account of royalties we paid to Columbia University in 2024. Columbia University distributed $164,891 to Dr. Friesner's laboratory on account of royalties we paid to Columbia University in 2024.

Relationship with Gates Ventures, LLC

We entered into an agreement with Gates Ventures, LLC, effective as of June 23, 2020, in connection with a research project to develop an atomistic simulation platform that is capable of modeling key chemical processes controlling the performance of active materials in an operating battery. As of the date hereof, we have received $3,000,000 pursuant to the agreement ($1,000,000 of which was received in 2021 upon entry into the agreement and $1,000,000 of which was received in each of 2022 and 2023 upon the second and third anniversaries of the agreement). The agreement initially covered the period from June 23, 2020 to June 22, 2023. In August 2023, we extended the agreement with Gates Ventures until August 2026 and the extended agreement provides for total additional consideration of up to $6,000,000. As of the date hereof, we have received $3,800,000 pursuant to the extended agreement. Gates Ventures, LLC is controlled by William H. Gates III, who may be deemed to be the beneficial owner of more than 5% of our voting securities.

Registration Rights

We are a party to an investor rights agreement with certain holders of our voting securities, including some of our 5% stockholders and their affiliates. This investor rights agreement provides these holders the right, subject to certain

conditions, to demand that we file a registration statement or to request that their shares be covered by a registration statement that we are otherwise filing.

Indemnification Agreements

Our certificate of incorporation provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with all of our directors and executive officers. These indemnification agreements may require us, among other things, to indemnify each such director or executive officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or executive officers.

Policies and Procedures for Related Person Transactions

Our board of directors has adopted written policies and procedures for the review of any transaction, arrangement, or relationship in which our company is a participant, the amount involved exceeds $120,000 and one of our executive officers, directors, director nominees, or 5% stockholders, or their immediate family members, each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement, or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our chief legal officer. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the audit committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, the audit committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

Our audit committee may approve or ratify the transaction only if it determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. Our audit committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our board of directors has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity, whether or not the person is also a director of the entity, that is a participant in the transaction where the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction and the amount involved in the transaction is less than the greater of $200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction; and

- a transaction that is specifically contemplated by provisions of our certificate of incorporation or bylaws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by our compensation committee in the manner specified in the compensation committee's charter.

We did not have a written policy regarding the review and approval of related person transactions prior to our initial public offering in February 2020. Nevertheless, with respect to such transactions, it was the practice of our board of directors to consider the nature of and business reasons for such transactions, how the terms of such transactions compared to those which might be obtained from unaffiliated third parties and whether such transactions were otherwise fair to and in the best interests of, or not contrary to, our best interests.

PRINCIPAL STOCKHOLDERS

Unless otherwise provided below, the following table sets forth information with respect to the beneficial ownership of our capital stock as of April 1, 2025 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known to us to be the beneficial owner of 5% or more of our capital stock.

The column entitled "Percentage of Shares Beneficially Owned" is based on a total of 64,179,002 shares of our common stock and 9,164,193 shares of our limited common stock outstanding as of April 1, 2025.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock and limited common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days after April 1, 2025, are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock and limited common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise set forth below, the address of the beneficial owner is c/o Schrödinger, Inc., 1540 Broadway, 24th Floor, New York, New York 10036.

	Number of Shares Beneficially Owned		Percentage of Shares Beneficially Owned	
Name of Beneficial Owner	Common Stock	Limited Common Stock	Common Stock	Limited Common Stock
5% Stockholders				
Blackrock, Inc.[1]	8,763,505	—	13.7 %	—
Bill & Melinda Gates Foundation Trust[2]	6,981,664	9,164,193	10.9	100.0 %
The Vanguard Group[3]	6,776,631	—	10.6	—
Rubric Capital Management LP[4]	5,000,000	—	7.8	—
Sumitomo Mitsui Trust Group, Inc.[5]	3,510,518	—	5.5	—
Directors and Named Executive Officers				
Ramy Farid[6]	2,047,209	—	3.2 %	—
Geoffrey Porges[7]	195,832	—	*	—
Karen Akinsanya[8]	455,988	—	*	—
Robert Abel[9]	307,460	—	*	—
Patrick Lorton[10]	314,877	—	*	—
Michael Lynton[11]	110,565	—	*	—
Jeffrey Chodakewitz[12]	67,609	—	*	—
Richard A. Friesner [13]	1,978,624	—	3.1	—
Gary Ginsberg[14]	67,609	—	*	—
Rosana Kapeller-Libermann[15]	107,811	—	*	—
Arun Oberoi[16]	48,973	—	*	—
Gary Sender[17]	66,658	—	*	—
Nancy A. Thornberry[18]	82,322	—	*	—
Bridget van Kralingen	—	—	—	—
All current executive officers and directors as a group (16 persons)[19]	6,240,322	—	9.7 %	—

* Less than 1%

(1) Based solely on a Schedule 13G/A filed by Blackrock, Inc., or Blackrock, on January 23, 2024. Blackrock is deemed to be the beneficial owner of 8,763,505 shares of common stock, with respect to which it reported sole voting power over 8,655,249 shares, shared voting and dispositive power over no shares and sole dispositive power over 8,763,505 shares. The principal business address of Blackrock is 50 Hudson Yards, New York, New York 10001.

(2) Based solely on a Schedule 13G filed by the Bill & Melinda Gates Foundation Trust, or the Trust, on February 12, 2021. Consists of (i) 6,981,664 shares of common stock held by the Trust, and (ii) 9,164,193 shares of limited common stock held by the Trust. For purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended, all shares beneficially owned by the Trust may be deemed to be beneficially owned by William H. Gates III and Melinda French Gates, as Co-Trustees of the Trust. The address of the Trust is 2365 Carillon Point, Kirkland, Washington 98033.

(3) Based solely on a Schedule 13G/A filed by The Vanguard Group, or Vanguard, on February 13, 2024. Vanguard is deemed to be the beneficial owner of 6,776,631 shares of common stock, with respect to which it reported sole voting power over no shares, shared voting power over 101,940 shares, sole dispositive power over 6,611,504 shares and shared dispositive power over 165,127 shares. The principal business address of Vanguard is 100 Vanguard Blvd., Malvern, Pennsylvania 19355.

(4) Based solely on a Schedule 13G/A filed by Rubric Capital Management LP, or Rubric, on February 13, 2025. Rubric is deemed to be the beneficial owner of 5,000,000 shares of common stock, with respect to which it reported sole voting power over no shares, shared voting power over 5,000,000 shares, sole dispositive power over no shares and shared dispositive power over 5,000,000 shares. The principal business address of Rubric is 155 East 44th St, Suite 1630, New York, New York 10017. Rubric is the investment adviser to certain investment funds and/or accounts that hold the shares of common stock reported on the Schedule 13G/A.

(5) Based solely on a Schedule 13G jointly filed by Sumitomo Mitsui Trust Group, Inc., or Sumitomo, and Nikko Asset Management Co., Ltd., or Nikko Asset Management, on February 4, 2025. Each of Sumitomo and Nikko Asset Management is deemed to be the beneficial owner of 3,510,518 shares of common stock, with respect to which it reported sole voting power over no shares, shared voting power over 3,510,518 shares, sole dispositive power over no shares and shared dispositive power over 3,510,518 shares. The principal business address of Sumitomo is 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan. The principal business address of Nikko Asset Management is Midtown Tower, 9-7-1 Akasaka, Minato-ku, Tokyo 107-6242, Japan.

(6) Consists of (i) 184,432 shares of common stock held by Dr. Farid and (ii) 1,862,777 shares of common stock underlying options held by Dr. Farid that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(7) Consists of (i) 15,044 shares of common stock held by Dr. Porges and (ii) 180,788 shares of common stock underlying options held by Dr. Porges that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(8) Consists of 455,988 shares of common stock underlying options held by Dr. Akinsanya that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(9) Consists of (i) 2,842 shares of common stock held by Dr. Abel and (ii) 304,618 shares of common stock underlying options held by Dr. Abel that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(10) Consists of (i) 36,991 shares of common stock held by Mr. Lorton and (ii) 277,886 shares of common stock underlying options held by Mr. Lorton that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(11) Consists of (i) 6,250 shares of common stock held by Mr. Lynton and (ii) 104,315 shares of common stock underlying options held by Mr. Lynton that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(12) Consists of (i) 6,250 shares of common stock held by Dr. Chodakewitz and (ii) 61,359 shares of common stock underlying options held by Dr. Chodakewitz that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(13) Consists of (i) 510,700 shares of common stock held by Dr. Friesner, (ii) 694,925 shares of common stock held by RF 2018 GRAT, of which Dr. Friesner is trustee, (iii) 744,671 shares of common stock underlying options held by Dr. Friesner that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date, and (iv) 28,328 shares held by Dr. Friesner's spouse. Dr. Friesner has pledged 331,778 of the shares held by him as collateral for a loan.

(14) Consists of (i) 6,250 shares of common stock held by Mr. Ginsberg and (ii) 61,359 shares of common stock underlying options held by Mr. Ginsberg that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(15) Consists of (i) 6,250 shares of common stock held by Dr. Kapeller-Libermann and (ii) 101,561 shares of common stock underlying options held by Dr. Kapeller-Libermann that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(16) Consists of (i) 6,250 shares of common stock held by Mr. Oberoi and (ii) 42,723 shares of common stock underlying options held by Mr. Oberoi that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(17) Consists of (i) 6,250 shares of common stock held by Mr. Sender and (ii) 60,408 shares of common stock underlying options held by Mr. Sender that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(18) Consists of (i) 6,250 shares of common stock held by Ms. Thornberry and (ii) 76,072 shares of common stock underlying options held by Ms. Thornberry that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

(19) Consists of (i) 1,526,571 shares of common stock and (ii) 4,713,751 shares of common stock underlying options that are exercisable as of April 1, 2025 or will become exercisable within 60 days after such date.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The audit committee has reviewed our audited consolidated financial statements for the fiscal year ended December 31, 2024 and our internal control over financial reporting as of December 31, 2024 and has discussed them with the Company's management and KPMG LLP, the Company's independent registered public accounting firm.

The audit committee has also received from, and discussed with, KPMG LLP various communications that KPMG LLP is required to provide to the audit committee, including the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the SEC.

In addition, KPMG LLP provided the audit committee with the written disclosures and the letter required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and we have discussed with the Company's independent registered public accounting firm their independence.

Based on the review and discussions referred to above, the audit committee recommended to the board of directors that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2024.

This report of the audit committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

By the audit committee of the board of directors of Schrödinger, Inc.

Gary Sender, Chair
Gary Ginsberg
Michael Lynton
Arun Oberoi

STOCKHOLDER PROPOSALS FOR OUR 2026 ANNUAL MEETING OF STOCKHOLDERS

A stockholder who would like to have a proposal considered for inclusion in our 2026 proxy statement must submit the proposal in accordance with the procedures outlined in Rule 14a-8 of the Exchange Act so that it is received by us no later than December 25, 2025. However, if the date of the 2026 annual meeting of stockholders is changed by more than 30 days from the date of the previous year's meeting, then the deadline is a reasonable time before we begin to print and send our proxy materials for the 2026 annual meeting of stockholders. SEC rules set standards for eligibility and specify the types of stockholder proposals that may be excluded from a proxy statement. Stockholder proposals should be addressed to Schrödinger, Inc., 1540 Broadway, 24th Floor, New York, New York 10036, Attention: Corporate Secretary.

If a stockholder wishes to propose a nomination of persons for election to our board of directors or present a proposal at an annual meeting but does not wish to have the proposal considered for inclusion in our proxy statement and proxy card, our amended and restated bylaws establish an advance notice procedure for such nominations and proposals. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely notice in proper form to our corporate secretary of the stockholder's intention to bring such business before the meeting. The required notice must meet the requirements set forth in our amended and restated bylaws (including providing the information required by Rule 14a-19 under the Exchange Act if the stockholder intends to comply with the SEC's universal proxy rules and to solicit proxies in support of director nominees other than the company's nominees).

Under the advance notice provisions, the required notice must be in writing and received by our corporate secretary at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. However, in the event that the date of the annual meeting is advanced by more than 30 days, or delayed by more than 60 days, from the first anniversary of the preceding year's annual meeting, or if no annual meeting was held in the preceding year, a stockholder's notice must be so received no earlier than the 120th day prior to such annual meeting and not later than the close of business on the later of (A) the 90th day prior to such annual meeting and (B) the tenth day following the day on which notice of the date of such annual meeting was given or public disclosure of the date of such annual meeting was made, whichever first occurs. For stockholder proposals to be brought before the 2026 annual meeting of stockholders in accordance with our advance notice provisions, the required notice must be received by our corporate secretary at our principal executive offices no earlier than February 18, 2026, and no later than March 20, 2026.

STOCKHOLDERS SHARING THE SAME ADDRESS

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for notices and, if applicable, our annual report and other proxy materials, with respect to two or more stockholders sharing the same address by delivering a single notice and, if applicable, a single set of our annual report and proxy materials, addressed to those stockholders. This practice, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are our stockholders will be "householding" our Notice of Availability, and if applicable, our proxy materials. A single Notice of Availability and, if applicable, a single copy of our annual report and our proxy materials, will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent.

If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Notice of Availability and, if applicable, a separate set of our annual report and proxy materials in the future, please notify your broker or contact us. If you wish to receive a separate set of our annual report and proxy materials for this year's Annual Meeting, we will deliver them promptly upon written or oral request. Stockholders who currently receive multiple copies of the Notice of Availability, and, if applicable, our annual report and other proxy materials at their addresses and would like to request "householding" of their communications should contact their brokers or us. To contact us, direct your written or oral request to: Schrödinger, Inc., 1540 Broadway, 24th Floor, New York, New York 10036, Attention: Corporate Secretary, (212) 295-5800 or contact Investor Relations at (212) 295-5800.

OTHER MATTERS

Our board of directors does not know of any other matters to be brought before the Annual Meeting. If any other matters not mentioned in this proxy statement are properly brought before the meeting, the individuals named in the proxy intend to use their discretionary voting authority under the proxy to vote the proxy in accordance with their best judgment on those matters.

Schrödinger

SCHRÖDINGER, INC.
1540 BROADWAY, 24TH FLOOR
NEW YORK, NY 10036

SCAN TO VIEW MATERIALS & VOTE

VOTE BY INTERNET
Before The Meeting - Go to **www.proxyvote.com or scan the QR Barcode above**

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you access the website and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to **www.virtualshareholdermeeting.com/SDGR2025**

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions. There will be no physical location at which stockholders may attend the meeting.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V71141-P30199

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

SCHRÖDINGER, INC.

The Board of Directors recommends you vote FOR the election of each of the following Class II directors to serve until the 2028 Annual Meeting of Stockholders:

1. Election of Class II Directors to serve until the 2028 Annual Meeting of Stockholders.

Nominees:	For	Against	Abstain
1a. Jeffrey Chodakewitz	☐	☐	☐
1b. Michael Lynton	☐	☐	☐
1c. Nancy A. Thornberry	☐	☐	☐
1d. Bridget van Kralingen	☐	☐	☐

The Board of Directors recommends you vote FOR the following proposal:	For	Against	Abstain
2. Approval of an advisory vote on executive compensation.	☐	☐	☐

The Board of Directors recommends you vote FOR the following proposal:	For	Against	Abstain
3. Ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025.	☐	☐	☐

NOTE: Such other business as may properly come before the meeting or any adjournment or postponement thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX] Date

Signature (Joint Owners) Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice, Proxy Statement and Annual Report are available at www.proxyvote.com.

V71142-P30199

SCHRÖDINGER, INC.
Annual Meeting of Stockholders
June 18, 2025 12:00 PM Eastern Time
This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Ramy Farid, Geoffrey Porges and Yvonne Tran, or any of them, as proxies, each with the power to appoint his or her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of SCHRÖDINGER, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 12:00 PM, Eastern Time on June 18, 2025, virtually at www.virtualshareholdermeeting.com/SDGR2025, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations and in the discretion of the proxyholders on any other matter that properly comes before the meeting or any adjournment or postponement thereof.

Continued and to be signed on reverse side

Schrödinger

SCHRÖDINGER, INC.
1540 BROADWAY, 24TH FLOOR
NEW YORK, NY 10036



SCAN TO VIEW MATERIALS & VOTE

VOTE BY INTERNET
Before The Meeting - Go to **www.proxyvote.com or scan the QR Barcode above**

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you access the website and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to **www.virtualshareholdermeeting.com/SDGR2025**

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions. There will be no physical location at which stockholders may attend the meeting.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V71143-P30199 KEEP THIS PORTION FOR YOUR RECORDS

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED. DETACH AND RETURN THIS PORTION ONLY

SCHRÖDINGER, INC.

	For	Against	Abstain
The Board of Directors recommends you vote FOR the following proposal:			
2. Approval of an advisory vote on executive compensation.	☐	☐	☐
The Board of Directors recommends you vote FOR the following proposal:	**For**	**Against**	**Abstain**
3. Ratification of the appointment of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2025.	☐	☐	☐

NOTE: Such other business as may properly come before the meeting or any adjournment or postponement thereof.

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

Signature [PLEASE SIGN WITHIN BOX]	Date	Signature (Joint Owners)	Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice, Proxy Statement and Annual Report are available at www.proxyvote.com.

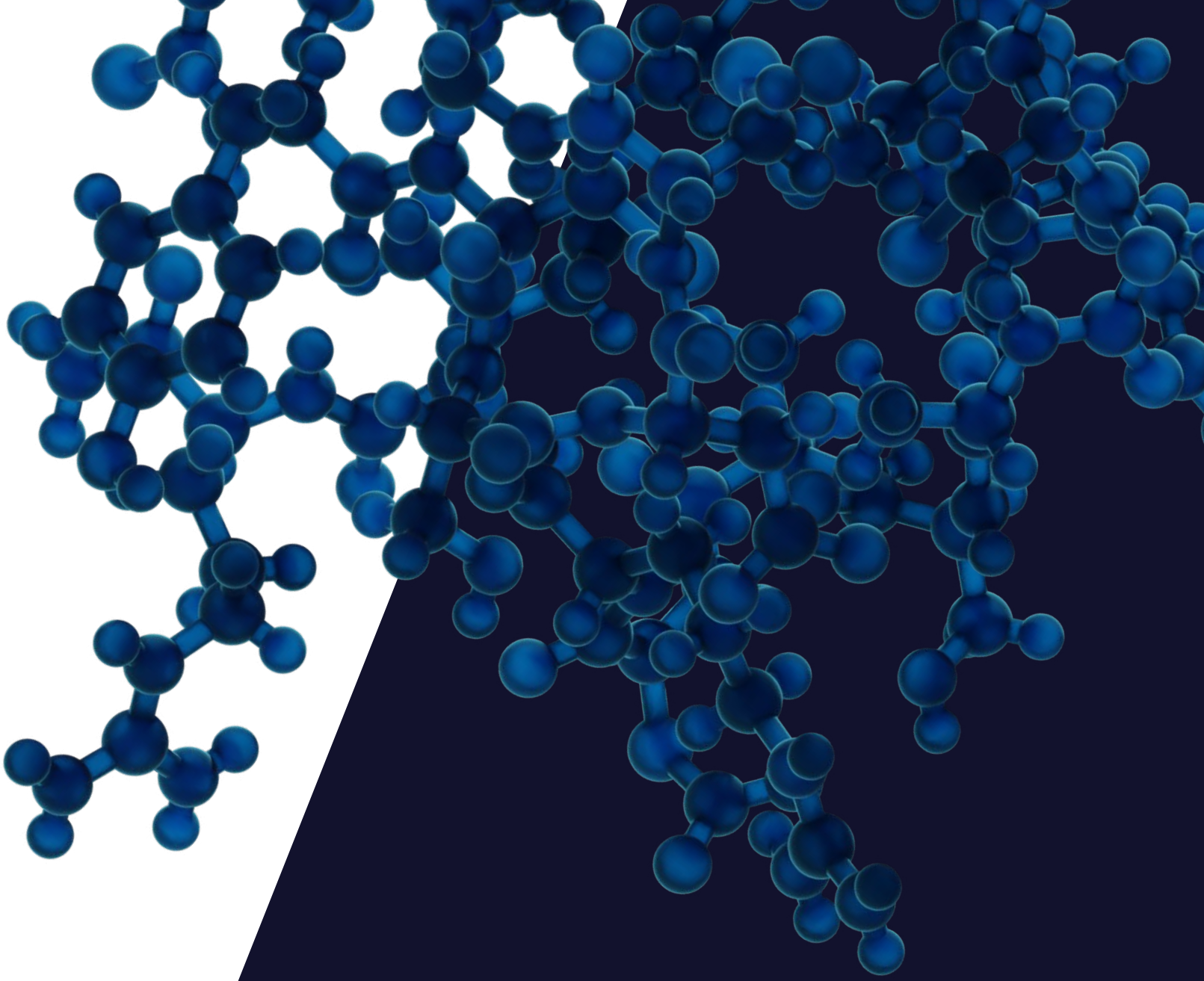
V71144-P30199

SCHRÖDINGER, INC.
Annual Meeting of Stockholders
June 18, 2025 12:00 PM Eastern Time
This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Ramy Farid, Geoffrey Porges and Yvonne Tran, or any of them, as proxies, each with the power to appoint his or her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of capital stock of SCHRÖDINGER, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 12:00 PM, Eastern Time on June 18, 2025, virtually at www.virtualshareholdermeeting.com/SDGR2025, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations and in the discretion of the proxyholders on any other matter that properly comes before the meeting or any adjournment or postponement thereof.

Continued and to be signed on reverse side



1540 Broadway
24th Floor
New York, NY 10036

(212) 295-5800

www.schrodinger.com

Schrödinger

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