

Targeting Aldosterone in the Treatment of Cardiorenal Diseases

May 2026

Forward-Looking Statements and Market Data

Mineralys Therapeutics cautions you that statements contained in this presentation regarding matters that are not historical facts are forward-looking statements. The forward-looking statements are based on our current beliefs and expectations and include, but are not limited to, statements regarding: the potential therapeutic benefits of lorundrostat; the anticipated timing of the FDA's review of our accepted NDA and any subsequent regulatory approval of lorundrostat; and the planned future clinical development of lorundrostat and the timing thereof. Actual results may differ from those set forth in this presentation due to the risks and uncertainties inherent in our business, including, without limitation: topline results that we report are based on a preliminary analysis of key efficacy and safety data, and such data may change following a more comprehensive review of the data related to the clinical trial and such topline data may not accurately reflect the complete results of a clinical trial; any delays in the FDA's review of our accepted NDA, including as a result of a government shutdown or reductions in agency funding or personnel, the results of our clinical trials, including the Advance-HTN and Launch-HTN trials, may not be deemed sufficient by the FDA to serve as the basis for regulatory approval of lorundrostat; later developments with the FDA may be inconsistent with the feedback from prior meetings, including whether the proposed pivotal program will support registration of lorundrostat following the FDA's review of our NDA submission; our future performance is dependent entirely on the success of lorundrostat; potential delays in the commencement, enrollment and completion of clinical trials and nonclinical studies; our dependence on third parties in connection with manufacturing, research and clinical and nonclinical testing; unexpected adverse side effects or inadequate efficacy of lorundrostat that may limit its development, regulatory approval and/or commercialization; unfavorable results from clinical trials and nonclinical studies; results of prior clinical trials and studies of lorundrostat are not necessarily predictive of future results; macroeconomic trends and uncertainty with regard to high interest rates, elevated inflation, tariffs and other trade policies, and the potential for a local and/or global economic recession; our ability to maintain undisrupted business operations due to any pandemic or future public health concerns; regulatory developments in the United States and foreign countries; our reliance on our exclusive license with Tanabe Pharma Corporation to provide us with intellectual property rights to develop and commercialize lorundrostat; and other risks described in our filings with the Securities and Exchange Commission (SEC), including under the heading "Risk Factors" in our annual report on Form 10-K, and any subsequent filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this presentation, and we undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date of this presentation. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.



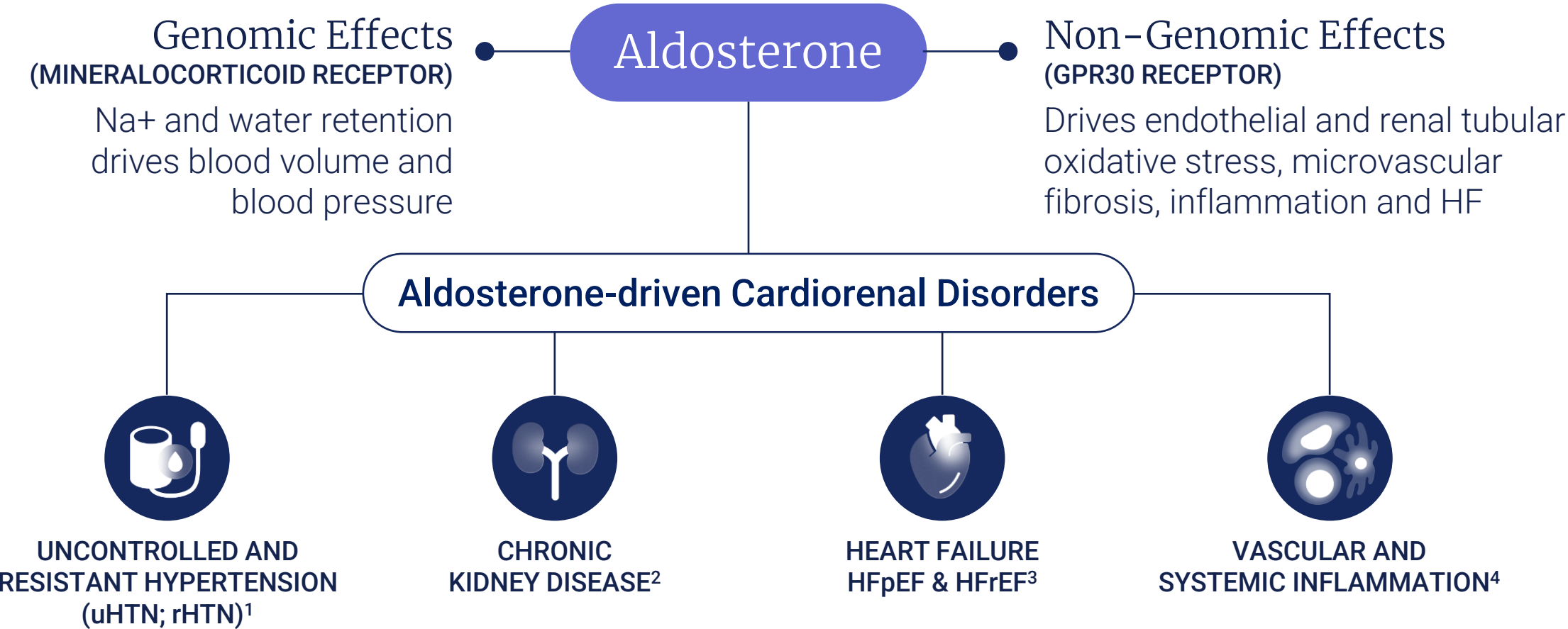
Targeting Aldosterone in the Treatment of Hypertension and Cardiorenal Diseases

Lorundrostat is a selective
aldosterone synthase
inhibitor (ASI) targeting
aldosterone

- Dysregulated aldosterone is the driver in 30% of uncontrolled and resistant hypertension (u/rHTN)
- Lorundrostat potential best-in-class ASI
 - Meaningful 24-hour BP reduction and safety of once-daily dosing of lorundrostat in u/rHTN
 - Demonstrated benefit in HTN participants with CKD
 - Demonstrated benefit in HTN participants with moderate to severe OSA
- 20M u/rHTN patients in the United States
 - Increased market opportunity in comorbid CKD or OSA
- NDA accepted; target PDUFA date Dec 22, 2026

Dysregulated Aldosterone In Hypertension and Related Comorbidities

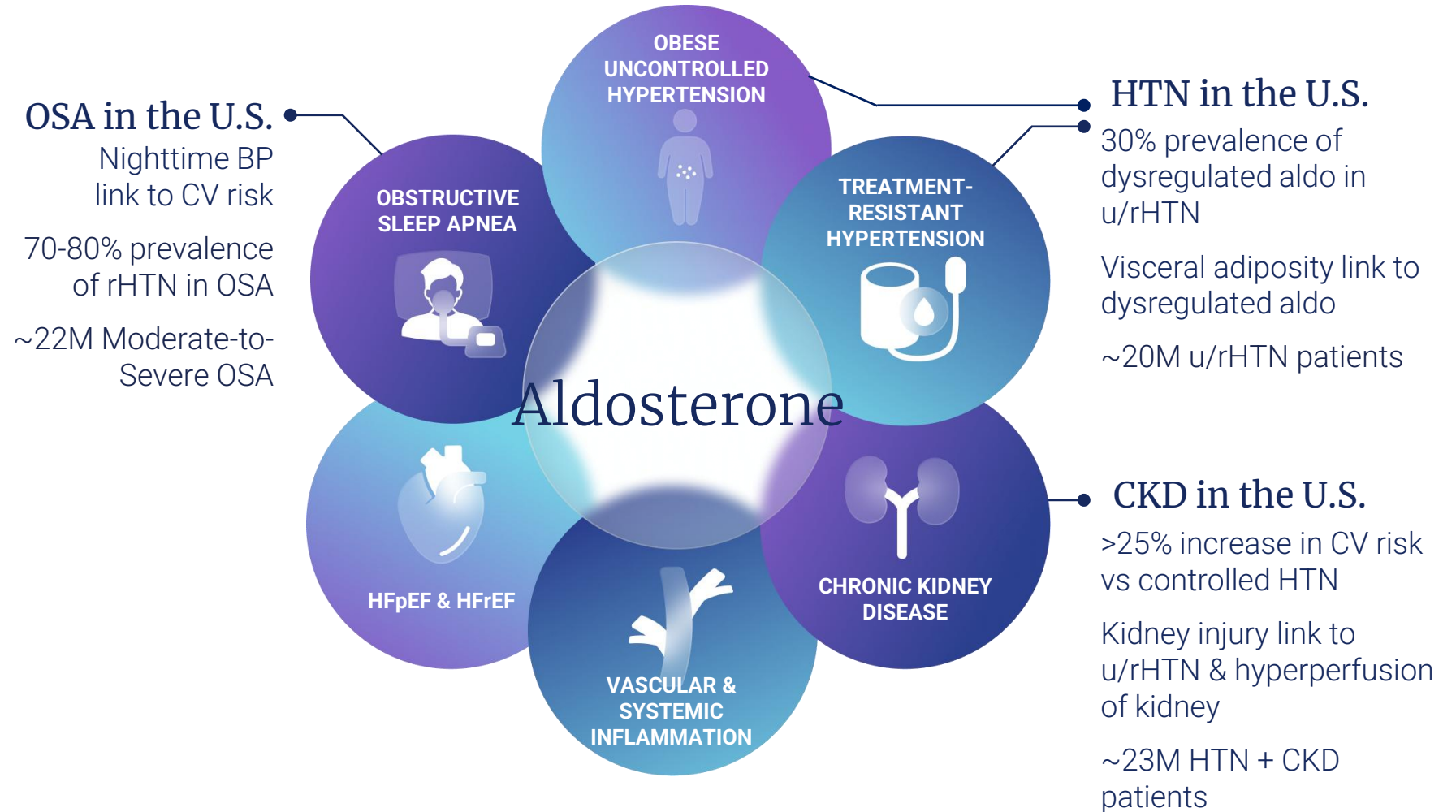
Abnormally Elevated Aldosterone Impacts Multiple Biological Pathways and is a Key Driver in Cardiorenal Diseases



1. Sim JJ, Bhandari SK, Shi J, et al. *Am J Hypertens.* 2012;25(3):379-388. 2. Hundemer GL, Curhan GC, Yozamp N, Wang M, Vaidya A. *Hypertension.* 2018;72(3):658-666. 3. Monticone S, D'Ascenzo F, Moretti C, et al. *Lancet Diabetes Endocrinol.* 2018;6(1):41-50. 4. Ferreira N, Tostes RC, Paradis P, Shiffrin E. *Am J Hypertens.* 2021, 34(1):15-27.

Lorundrostat Potential Benefit Across Spectrum of CRMS¹⁻⁵

Targeting dysregulated
aldosterone in overlapping
CRMS conditions with high
CV risk and large unmet need

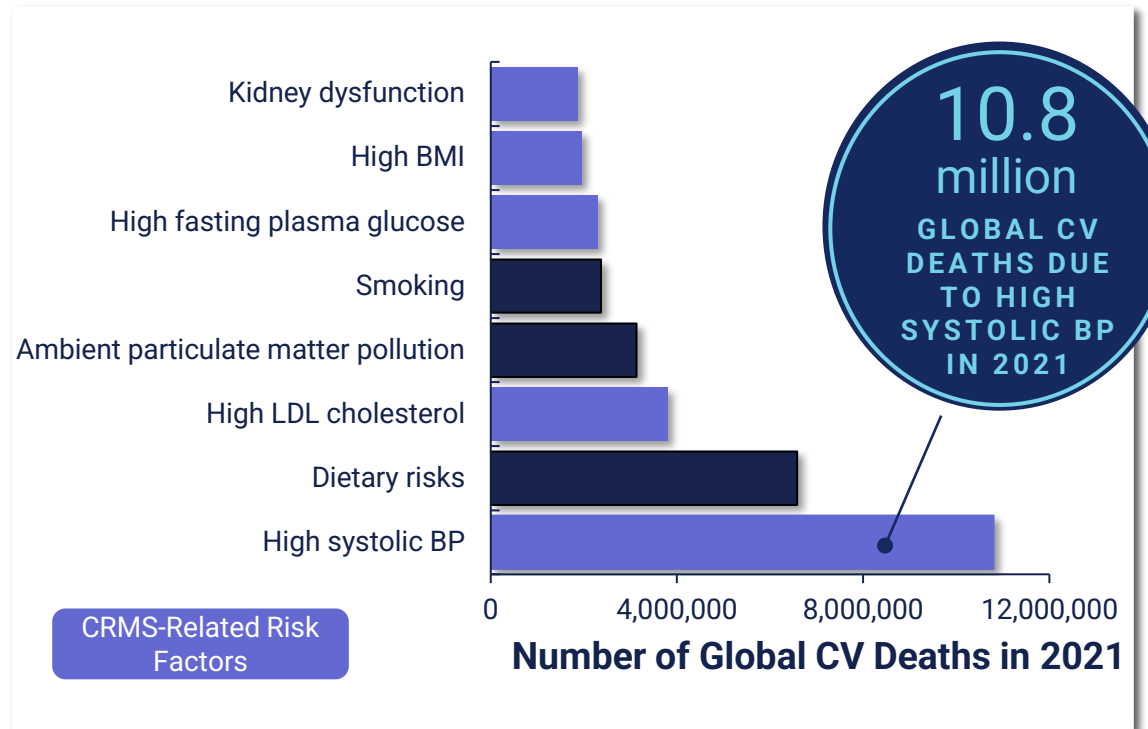


BP, blood pressure; CRMS, cardio-renal-metabolic syndrome; CKD, chronic kidney disease; CV, cardiovascular; HFpEF, heart failure with preserved ejection fraction; HFrEF, heart failure with reduced ejection fraction; HTN, hypertension.

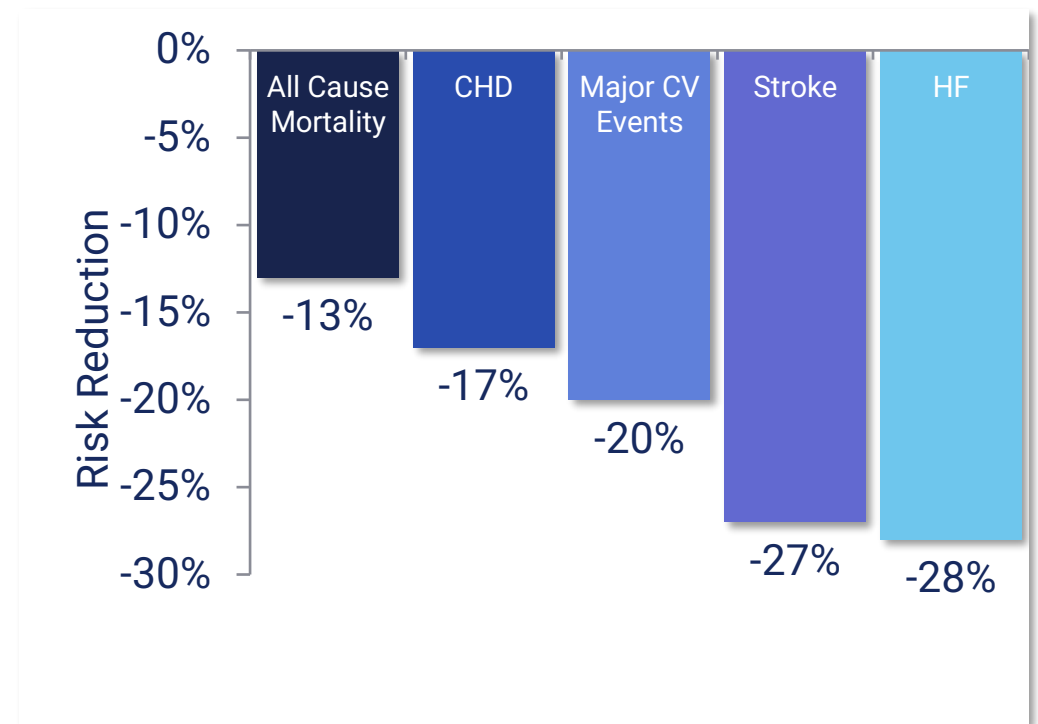
1. Ndumele CE, et al. *Circulation*. 2023;148:1606-1635. 2. Buglioni A, et al. *J Am Heart Assoc*. 2015;4:e002505. 3. Ebinger JE, et al. *Eur J Prev Cardiol*. 2023;30(10):960-968. 4. Marassi M & Fadini GP. *Cardiovasc Diabetol*. 2023;22:195. 5. Alterki A, et al. *Int J Mol Sci*. 2023;24:6807.

Uncontrolled and Resistant Hypertension Is the Leading Global Modifiable Risk Factor for Cardiovascular Death

Top 8 Global Modifiable Risk Factors
for CV Deaths in 2021¹



Risk Reduction per 10mmHg
Reduction in Systolic BP²



BMI, body mass index; BP, blood pressure; CRMS, cardio-renal-metabolic syndrome; CV, cardiovascular; LDL, low density lipoprotein.

1. Vaduganathan M, et al. *J Am Coll Cardiol.* 2022;80(25):2361-2371. 2. Ettehad D, et al. *Lancet.* 2016;387(10022):957-967.

The Unmet Need in u/rHTN is Largely Driven by Dysregulated Aldosterone

20-40% of hypertension patients have uncontrolled or resistant HTN

- Half of the treated HTN patients in the U.S. fail to achieve goal¹
- Prevalence of apparent rHTN demonstrated to be ~20%²
- In optimized background treatment trials, 30-40% of participants fail to achieve goal³
- Kaiser optimized regimen trial – 20% of patients fail to achieve goal⁴

Aldosterone the primary culprit in u/rHTN

- Approximately 30% of all HTN patients have dysregulated aldosterone⁵
- Aldosterone breakthrough demonstrated in 30-40% of ACEi or ARB treated patients
- Obesity epidemic (visceral adiposity) linked to dysregulated or elevated aldosterone

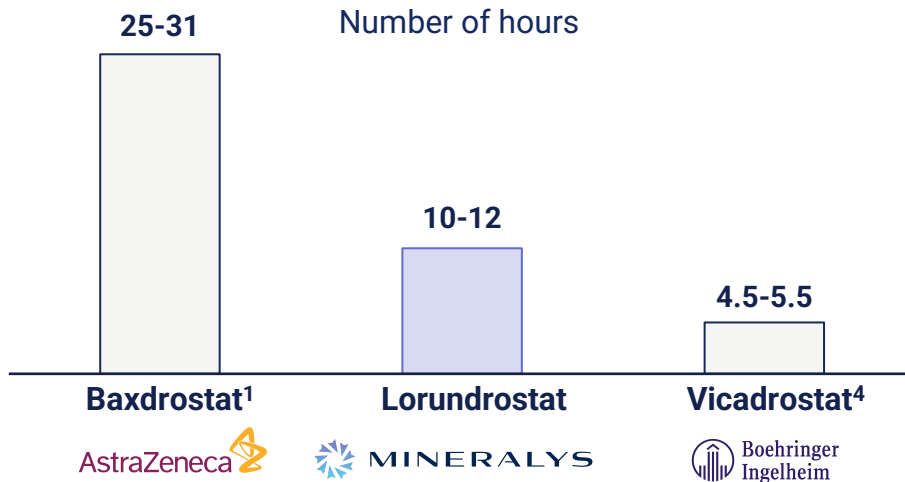
1. millionhearts.hhs.gov 2. Prevalence of Apparent Treatment-Resistant Hypertension in the United States, Hypertension. 2019;73:424-431. DOI: 10.1161/ HYPERTENSIONAHA.118.12191.3. Identifying and treating resistant hypertension in PRECISION: A randomized long-term clinical trial with aprocitentan, DOI: 10.1111/jch.14517 4. Improved Blood Pressure Control Associated With a Large-Scale Hypertension Program, JAMA. 2013 August 21; 310(7): 699–705. doi:10.1001/jama.2013.108769. 5. Primary Aldosteronism and the Pathogenesis of Hypertension, Physiol Rev. 2018;98(1):103-137



Lorundrostat Clinical Efficacy and Safety

Lorundrostat: Potential Best-in-Class Once-Daily Aldosterone Synthase Inhibitor

ASI Half-life Profiles



- **Lorundrostat 10-12 hour PK half-life profile is optimal**
 - **Long enough** to provide 1x daily dosing / 24 hour coverage
 - **Short enough** to provide sufficient “off time” for kidneys to clear potassium / sodium
 - Appropriate for **fixed dose combinations**

ASI Selectivity Profiles

	LORUNDROSTAT	BAXDROSTAT ²	VICADROSTAT ³	LORUNDROSTAT DIFFERENCE
SELECTIVITY	374X	100X	250X	Allows aldosterone inhibition, without cortisol impact
PAC REDUCTION	40 – 70%	60-65%	66%	~50% reduction achieves robust clinical benefit
ADRENAL INSUFFICIENCY OR CORTISOL DECREASE	No	No	Yes	No risk of cortisol inhibition

Information provided in the table above is for illustrative purposes only and no head-to-head clinical trials have been conducted evaluating these product candidates. Differences exist between study or trial designs and participant characteristics, and caution should be exercised when comparing data across studies.

1. Bogman K, Schwab D, Delporte ML, et al. *Hypertension*. 2017;69(1):189-196.

2. AZ ESC2025 Management Presentation

3. BI presentation at ASN 2023

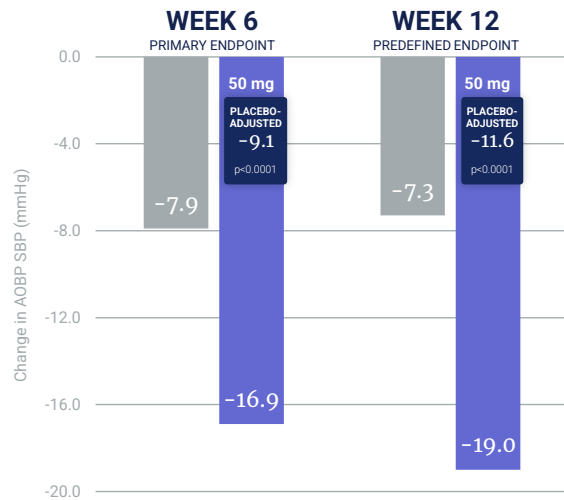
4. Schulze, Schaible, et al *Naunyn-Schmeideberg's Archives of Pharmacology*

Clinically Meaningful Efficacy across Participant Subgroups

Reductions in SBP of this magnitude have been linked to significant reduction in overall cardiovascular risk¹



u/r/HTN participants on prescribed regimen of 2-5 AHTs (n=1,083 randomized)



“Real World” - experience on 2 or more background medications

44% on lorundrostat and 24% on placebo achieved BP goal at week 6 (p=0.0033)



Change in 24hr ABPM in mmHg (n=285 randomized)

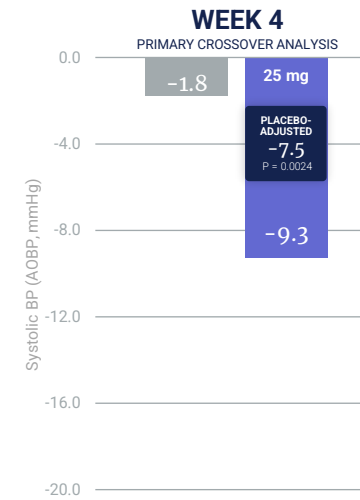


“Cardiologist” Setting for Patients with Confirmed u/rHTN

41% of lorundrostat and 18% of placebo achieved BP goal at week 4 (p<0.001)



Change in AOBP in mmHg (n=59 randomized)

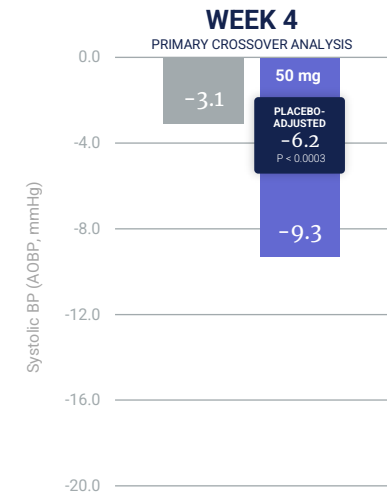


“Nephrologist” setting for u/rHTN with CKD on an SGLT2i

Lorundrostat reduced UACR by 31% at 4 weeks (p<0.0001)

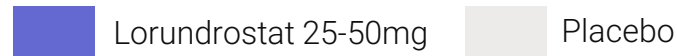


Change in AOBP in mmHg (n=48 randomized)



“Sleep Specialist” setting for u/rHTN with OSA

No evidence of benefit on AHI; clinically meaningful reduction in BP



1. Whelton PK, Carey RM, Aronow WS, et al. 2017 *Hypertension*. 2018;71(6):1269-1324.

Favorable Safety and Tolerability Profile across Patient and Prescriber Types

Very low rates of serious adverse events and treatment discontinuations



LAUNCH-HTN
("Real World")

Lorundrostat: N=538

Placebo: N=270



ADVANCE-HTN
("Specialist")

Lorundrostat: N=94

Placebo: N=95



EXPLORE-CKD
("Compromised Kidney Function")

Lorundrostat: N=58

Placebo: N=57

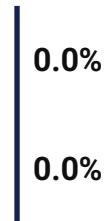
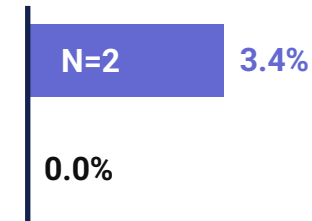
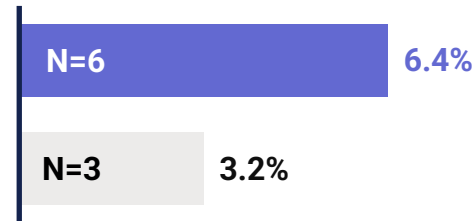
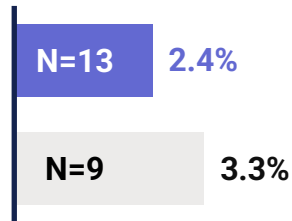


EXPLORE-OSA
("Obstructive Sleep Apnea")

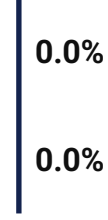
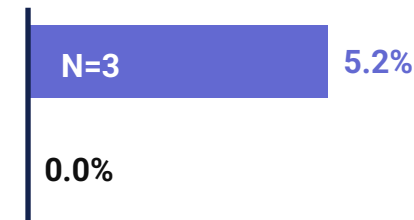
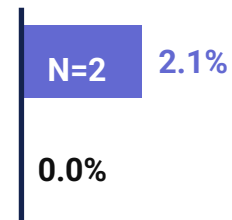
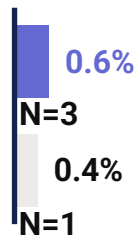
Lorundrostat: N=47

Placebo: N=47

SAEs (%)



Potassium
>6.0mmol/L*

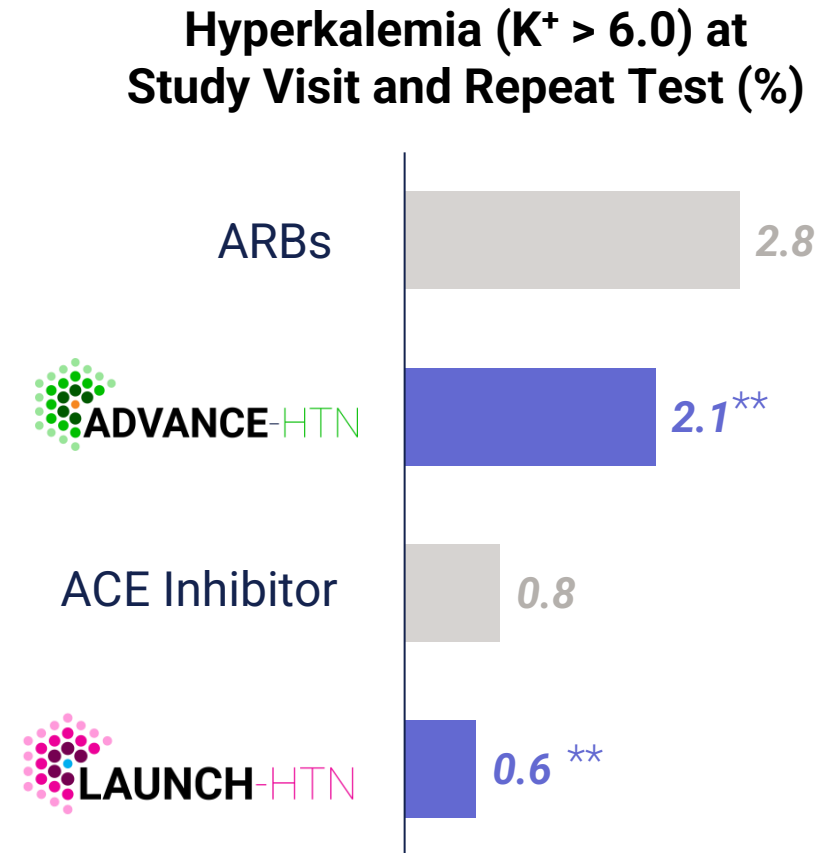


Lorundrostat 25-50mg Placebo

* Confirmed potassium readings

Lorundrostat Potassium Profile Similar to ACE Inhibitor and ARBs – Predictable and Modest

- Lorundrostat potassium levels are **very mild and consistent with observed levels of ACE inhibitors and ARBs today***
 - Potassium levels were mild even in Advance-HTN trial with high-dose ARB background
- Shorter lorundrostat half-life vs. baxdrostat allows **kidneys to clear potassium more quickly**
- Change in potassium is an on-mechanism response **for any RAAS inhibitor**



Mild Potassium Profile, Increase Typically Resolves Within Two Weeks

* Sadjadi, et al Pathology and Laboratory Medicine International 9 July 2009

** Confirmed potassium readings

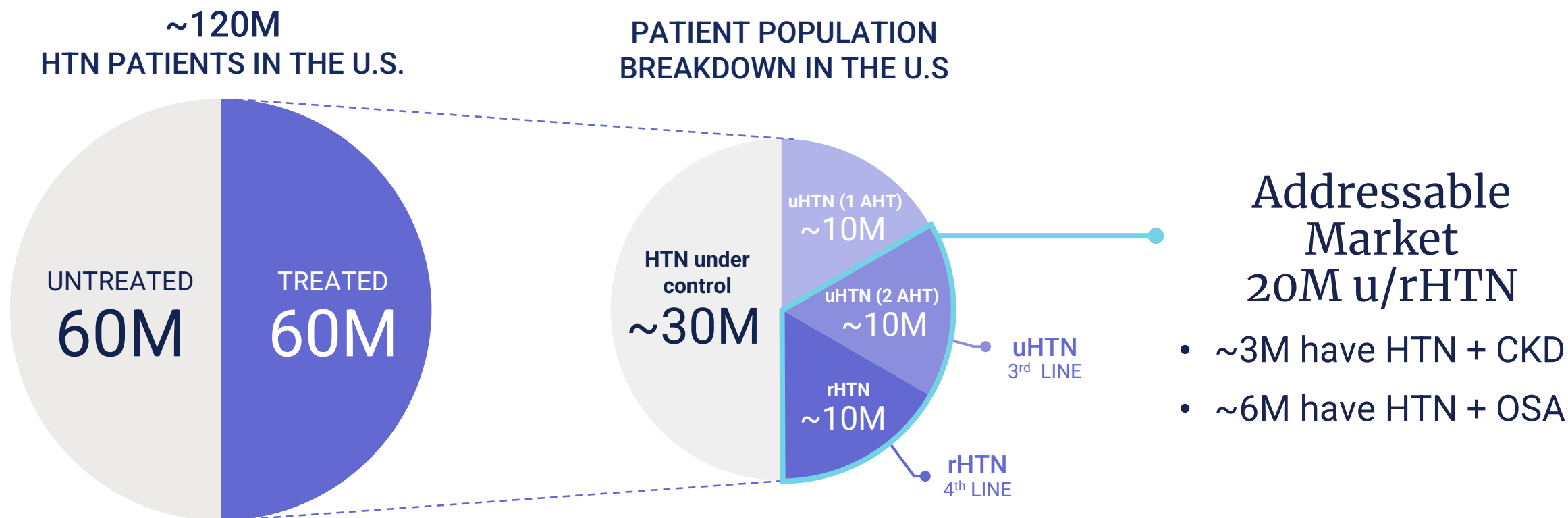
Lorundrostat Development Program with Positive Pivotal Data and Market Expansion Proof-of-Concept Trials

	Trial	Safety	Proof of Concept	Pivotal	Status
Hypertension	 TARGET-HTN	u/rHTN Existing background AHT			Completed
	 ADVANCE-HTN	u/rHTN Optimized background AHT			Completed
	 LAUNCH-HTN	u/rHTN Existing background AHT			Completed
	 TRANSFORM-HTN	Open-Label Extension*			Ongoing
Hypertension + CKD	 EXPLORE-CKD	HTN + CKD			Completed
Hypertension + OSA	 EXPLORE-OSA	HTN + OSA			Completed

*Randomized Treatment Withdrawal Substudy Completed

Significant Commercial Opportunity in CRMS

Large Total Addressable Market: 20M People in U.S. with Uncontrolled or Resistant Hypertension and Related Comorbidities

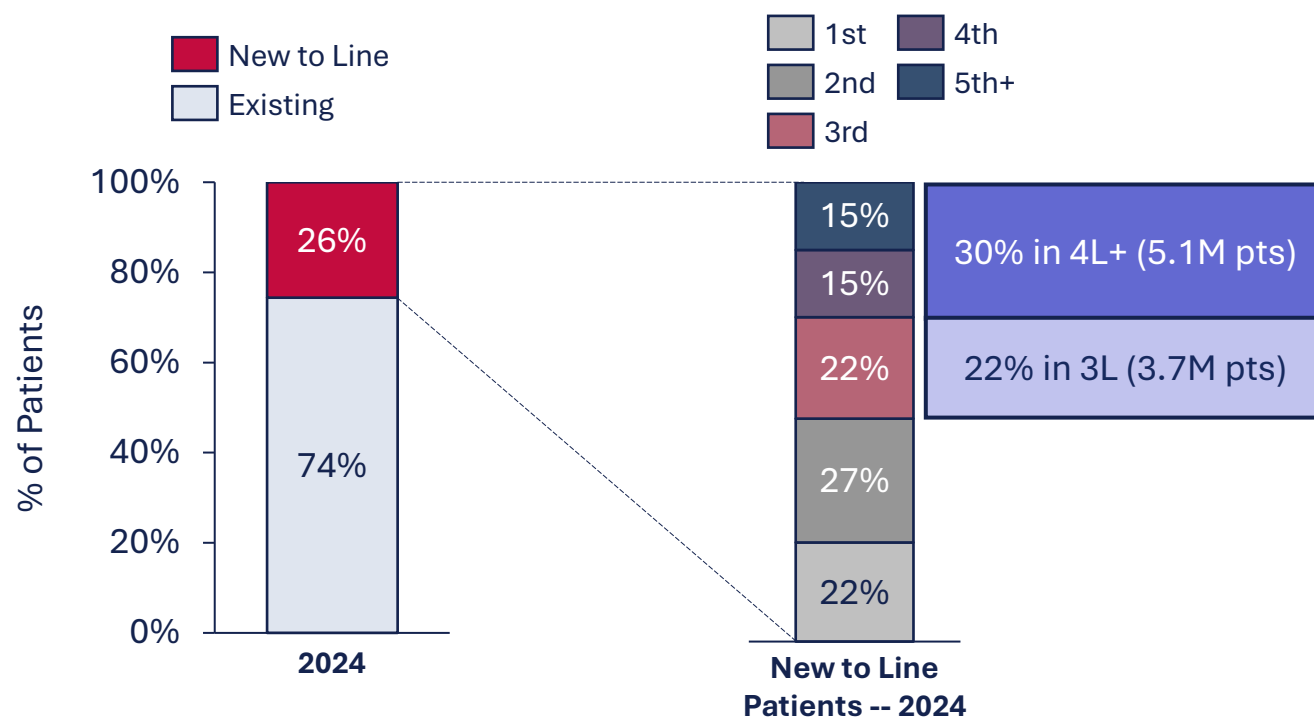


8.8 Million u/rHTN Patients per Year Try New Treatments – an Opportunity for Lorundrostat

More than half of new-to-line patients each year would be eligible for lorundrostat 3L+ treatment

New to Line vs Existing Patient Distribution

New to Line Patient Line of Therapy Distribution



Eligible New Patient Pool per year

65M

Treated HTN patients



26%

New to Line patients



52%

3rd Line+



8.8M

3L & 4L+ New to Line patients with HTN

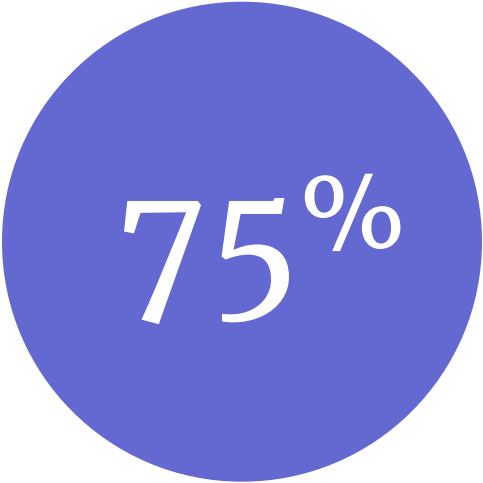
Majority of PCPs, Cardiologists and Nephrologists Are Likely to Prescribe Lorundrostat Based on Efficacy and Safety Profile

Likelihood to prescribe lorundrostat for u/rHTN



Based on Launch-HTN & Advance-HTN efficacy & safety data¹

Likelihood to prescribe lorundrostat for u/rHTN with CKD



Based on Explore-CKD efficacy & safety data in u/rHTN with CKD²

Prefer lorundrostat vs baxdrostat, based on Launch-HTN and BaxHTN efficacy & safety profiles³

67%

PCPs

66%

Cardiologists

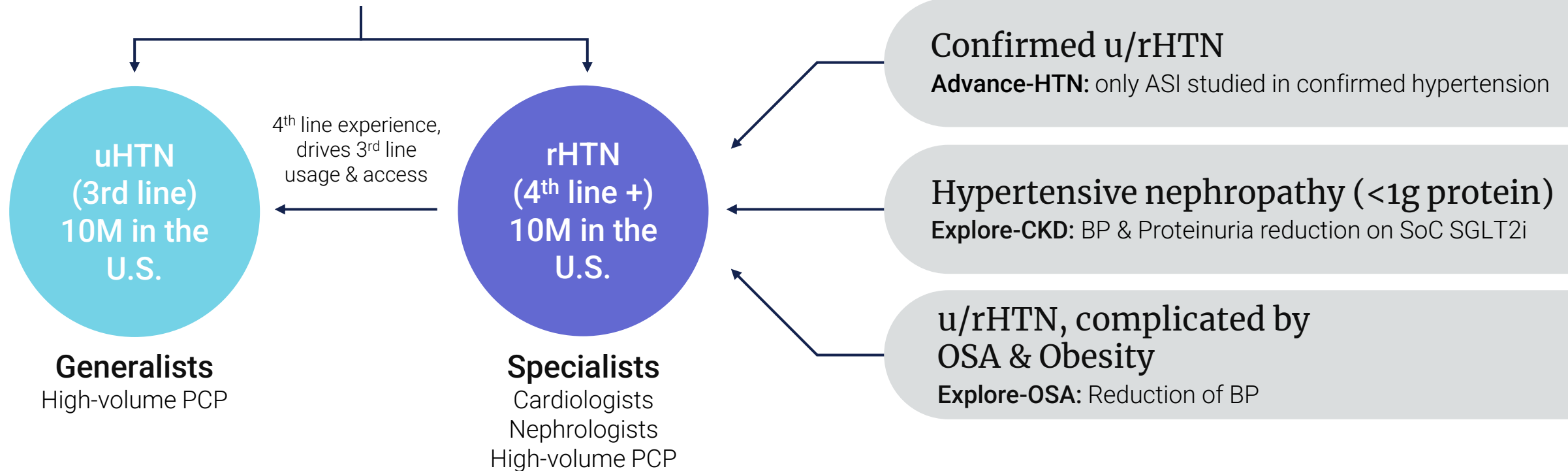
1. SERMO survey, March 2025, 212 PCPs and 101 cardiologists. 2. First Word Pharma survey, June 2025, 133 HCPs 3. SERMO survey, September 2025, 52 PCPs and 50 cardiologists

Launch Plan Builds Upon u/rHTN Opportunity and Addresses Additional Areas of Unmet Clinical Need

Inclusion of ASI in AHA hypertension treatment guidelines

Potential best-in-class SBP reductions & safety
in u/rHTN informs general prescribing

(Launch-HTN)



Financial Summary

Balance sheet supports activities to execute on upcoming milestones

Nasdaq	MLYS
Q1 2026 Cash Balance*	\$646M
Shares of common stock outstanding†	83,047,856

*Includes cash, cash equivalents, and investments.
†As of April 27, 2026 and includes 549,755 shares underlying pre-funded warrants.

Research Analyst Coverage

BofA Securities	Jason Gerberry
Evercore ISI	Umer Raffat/Mike DiFiore
Goldman Sachs	Richard Law
Stifel	Annabel Samimy
Guggenheim Securities	Seamus Fernandez
Wells Fargo Securities	Mohit Bansal
Jefferies	Dennis Ding
LifeSci Capital	Rami Katkhuda
HC Wainwright	Matthew Caufield
TD Cowen	Tara Bancroft

Mineralys Leadership Team

Agile and experienced in developing novel, leading therapies



Jon Congleton, Chief Executive Officer

30+ years of experience: Marion, HMR, Aventis, Teva, Nivalis, Impel Pharma



David Rodman, MD, Chief Medical Officer

15+ years of academic experience and 15+ years of industry experience: Novartis, Vertex, ProQR



Adam Levy, Chief Financial Officer

15+ years of banking experience: Merrill Lynch, Jefferies, BAML; and 10 years of industry experience: Miragen, Brickell, Sanifit



Eric Warren, Chief Commercial Officer

30+ years of experience: Merck, Genzyme, Pfizer, Sanofi, Nabriva, Esperion



Jessica Ibbitson, EVP Operations

20+ years of experience: ProQR, Vertex, TransTech, Nova Scotia Health Authority



Jeff Munsie, Chief Legal Officer

25+ years of experience: Orbital Therapeutics, Concert, Merrimack





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