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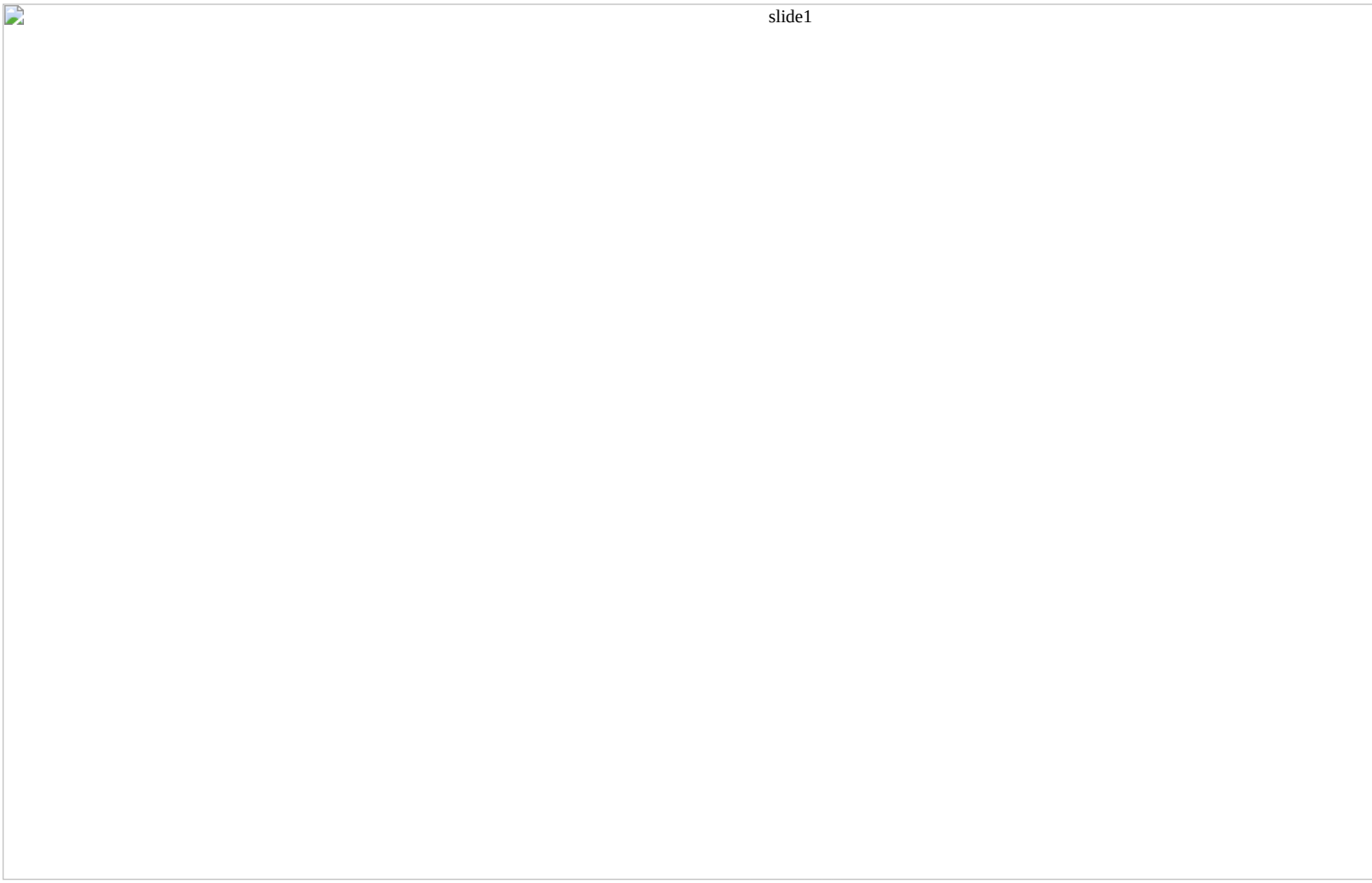


Forward-looking statements advisory

This presentation contains "forward-looking statements" that involve substantial risks and uncertainties for purposes of the safe ha
the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this
regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives
are forward-looking statements. In addition, when or if used in this communication, the words "may," "could," "should," "antici
"estimate," "expect," "intend," "plan," "predict", "target" and similar expressions and their variants, as they relate to Lisata or its m
identify forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements rela
continued listing on the Nasdaq Capital Market; expectations regarding the capitalization, resources and ownership structure of Lisa
Lisata is taking to discover, develop and commercialize novel therapeutics; the adequacy of Lisata's capital to support its future op
ability to successfully initiate and complete clinical trials; and the difficulty in predicting the time and cost of development of
candidates. Actual results could differ materially from those contained in any forward-looking statement as a result of various fa
without limitation: the safety and efficacy of Lisata's product candidates, decisions of regulatory authorities and the timing thereof,
impact of regulatory delays in Lisata's clinical programs, Lisata's ability to finance its operations, the likelihood and timing of the
milestone and licensing fees, the future success of Lisata's scientific studies, Lisata's ability to successfully develop and com
candidates, the timing for starting and completing clinical trials, rapid technological change in Lisata's markets, the ability of Lisa
intellectual property rights and legislative, regulatory, political and economic developments. The foregoing review of important fa
cause actual events to differ from expectations should not be construed as exhaustive and should be read in conjunction with stat
included herein and elsewhere, including the risk factors included in Lisata's Annual Report on Form 10-K filed with the SEC on Feb
and in other documents filed by Lisata with the Securities and Exchange Commission. Except as required by applicable law, Lisat
obligation to revise or update any forward-looking statement, or to make any other forward-looking statements, whether as
information, future events or otherwise.

Lisata at a Glance

Company Overview

Lisata Therapeutics (Nasdaq: LSTA)

OVERVIEW

Clinical stage pharmaceutical company developing innovative therapies for the treatment of cancer and other serious diseases.

MISSION

To rapidly develop and commerc
innovative treatments that imp
outcomes for patients with can
other serious diseases.

Lisata Therapeutics (Nasdaq: LSTA): Key attributes

Seasoned management with successful international drug development experience and expertise

Proprietary field-leading technology with global IP protection extending beyond 2040

Multiple product and business milestones projected over the next 12 months

Platform te
validated b
partnersh
potential f
othe

Cash runway extending into 1Q 2027 with no debt

Seasoned leadership with proven history of drug approvals wo

David J. Mazzo, PhD

President and Chief Executive Officer, Member of the Board of Directors

With >40 years of experience, Dr. Mazzo is a global pharmaceutical executive noted for his strategic prowess and his vast experience developing and launching new products across all therapeutical areas. He recently was recognized as a *2024 PharmaVoice Top 100 Standout Leader.*

RegadoBiosciences · ÆTERNA ZENTARIS · Chugai · Schering-Plough · Hoechst Marion Roussel · RHÔNE-POULENC RORER

Kristen K. Buck, MD

Executive Vice President of R&D and Chief Medical Officer

Dr. Buck is a board certified and licensed physician with >20 ye
strategic global drug development, drug/device safety/epidemiolo
and clinical practice experience.

ICON · IQVIA · FDA · OPTUMInsight · AstraZeneca · B|BRAU

Gregory Berkin
Chief Information Officer and Data Protection Officer

James Nisco
SVP of Finance and Treasury and Chief Accounting Officer

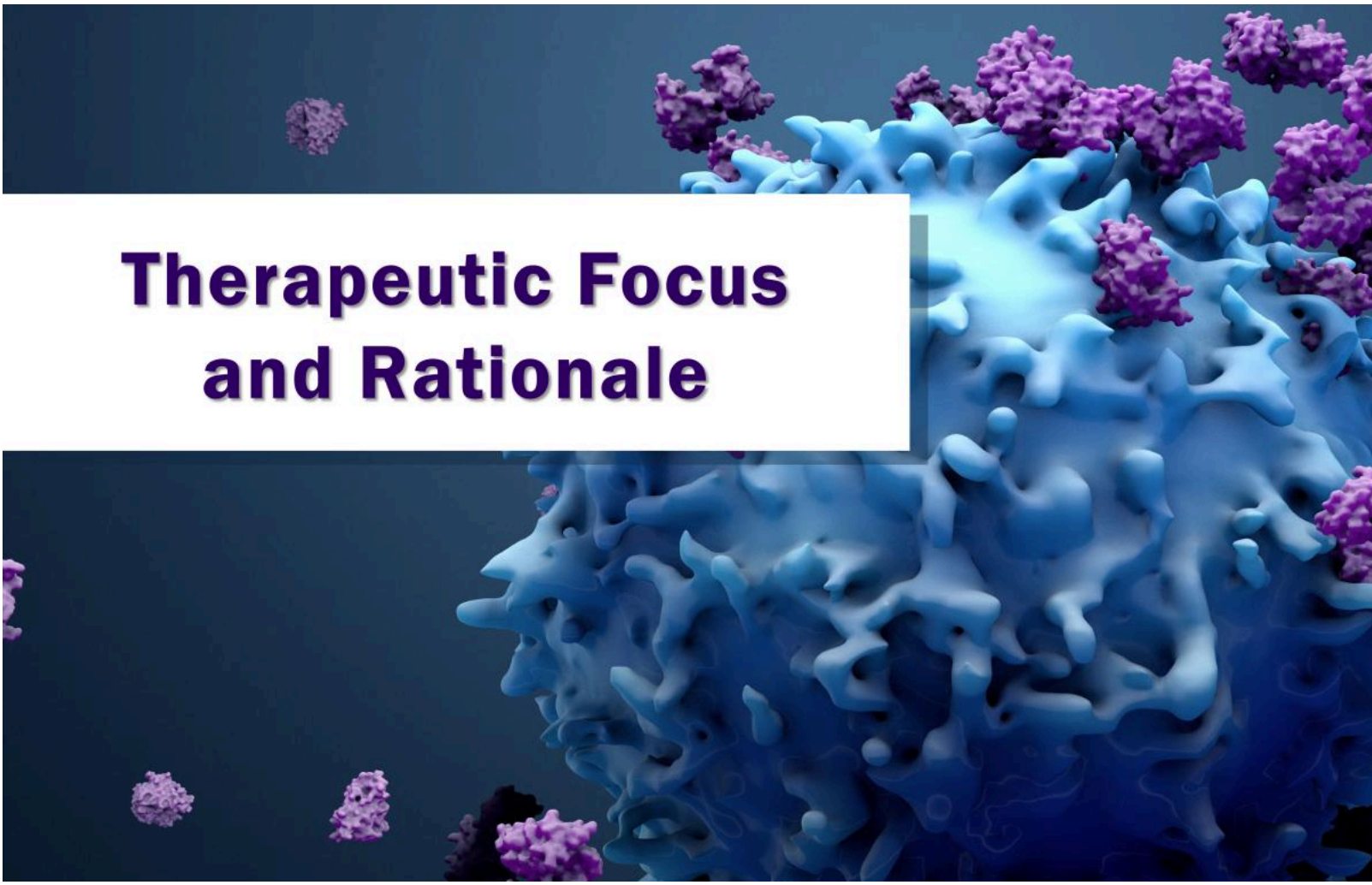
Tariq Imam
SVP of BD and Operations and General Counsel

John Menditto
VP of Investor Relations and Corporate Communications

Bill Sietsema, PhD
VP of Global Regulatory Affairs

Rya
VP of C
Manufacturi

Detailed management bios can be found at ww



Therapeutic Focus and Rationale

Improved solid tumor treatment remains a vital, growing glob

Worldwide Cancer Incidence

2022

20 million new cases with **10 million** deaths[1-2]

2050

35 million new ca
18.5 million dea

Solid tumors account for more than 90% of all diagnosed can

Pancreatic Cancer Incidence

By 2030, PDAC* is predicted to be the second most common cause of cancer mortality[4]

Immunotherapy is
ineffective in imp
outcomes

**Pancreatic ductal adenocarcinoma (PDAC)*

[1] https://gco.iarc.who.int/tomorrow/en/dataviz/tables?mode=population&years=2050&types=1&populations=903_904_905_908_909_935_900; data retrieved Feb 12, 2024.
[2] https://seer.cancer.gov/statfacts/html/common.html; data retrieved Nov 2, 2023.
[3] https://www.who.int/news/item/01-02-2024-global-cancer-burden-growing--amidst-mounting-need-for-services; data retrieved Oct 14, 2024.
[4] Europe Is Facing a Pancreatic Cancer Emergency - Medscape - January 25, 2024.

Current solid tumor treatments & patient outcomes are subop

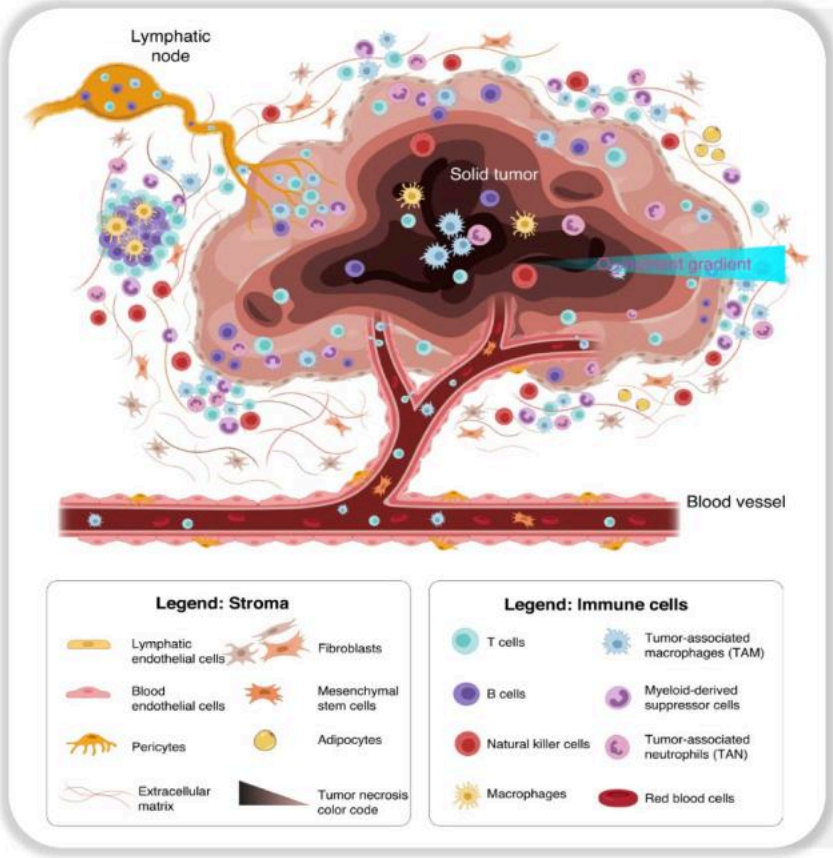


Diagram source: Abizanda-Campo, S. et al, *Microsyst Nanoeng* **9**, 154 (2023)

Challenging tumor morphology and microenvironment (TME) pose signi barriers to effective treatment and o

Tumor stroma acts as a physical barri anti-cancer agents

An immunosuppressive TME contributes t resistance and/or metastases

Prolonged or escalated dosing of non-ta anti-cancer therapies generally leads intolerable off-target side effects

Certepetide is designed to optimize solid tumor treatment

Certepetide: a proprietary internalizing RGD* (iRGD) cyclic peptide adjuvant wit specific targeting & penetration activity and tumor microenvironment modifying

- Converts tumor stroma from a barrier to a conduit for anti-cancer drugs
- Selectively reduces TME immunosuppressive T cells and recruits cytotoxic T
- Inhibits the metastatic cascade[2]
- Applicable with any modality of anti-cancer therapeutic
  - Via co-administration or molecular tethering
- Poised for Phase 3 in mPDAC**
  - In mid-stage clinical development in multiple solid tumors

**internalizing RGD: arginyl-glycyl-aspartic acid or iRGD*
***mPDAC: metastatic pancreatic ductal adenocarcinoma*

[1] Sugahara, et al. Mol Cancer Ther; 14(1) January 2015; Hamilton, et al., J MolMed. April 2015; and Miyamura, et al., bioRxiv. May 2023.
[2] Yuan, D., Duda, D., et al. CCA Foundation Conf. 2024 Poster. *Enhancing the efficacy of standard therapy in intrahepatic cholangiocarcinoma using LSTA1, a novel tumor targeting and penetration agent.*

Certepetide possesses a strong Intellectual Property portfolio

- Eight families, comprising 25 granted patents (6 U.S.), 26 pending patents, and two fam PCT phase
- Orphan Drug Designations provides for 7 and 10 years of market exclusivity post-approv U.S. and EU, respectively
- Composition of matter patent through March 2040, with subsequent opportunity for pa extension
- Claims cover composition of matter, method of use, and therapeutic combinations
- Pending claims cover methods of making certepetide (via peptide synthesis), specific combinations in the treatment of PDAC, and combinations with immunotherapies, spec durvalumab, resulting from the iLSTA study data
- Exclusive option to granted patent relating to the ability of certepetide altering the immu landscape, thus better sensitizing cancers to use of checkpoint inhibitors

Partnerships

Noteworthy existing relationships and potential for many more

Existing partnerships support certepetide's promise and broad appli

R&D alliances contribute resources with minimal commercial interest in certepetide

- *Australasian Gastro-Intestinal Trials Group* - Clinical Trialists Consortium (Australia & New Zealand) and *WARPNINE* - Foundation

Existing strategic partnerships

Catalent, Inc.

- Lisata granted Catalent a worldwide non-exclusive license to develop and commercialize antibody-drug conjugate (ADC) product certepetide and its analogs
- Catalent will evaluate certepetide as a SMARTag® payload with multiple ADCs targeting difficult-to-treat diseases
- Lisata is eligible to receive >$10 million in tiered development milestone payments, plus revenue sharing on future sales and p

GATC Health Corp.

- Lisata & GATC formed a strategic alliance to develop GATC's AI-derived drug candidates, including combinations with certepetid
- Lisata will receive an upfront payment and increasing asset equity upon development milestone achievement
- Lisata will have an option to license future AI-derived assets for a nominal fee

Kuva Labs

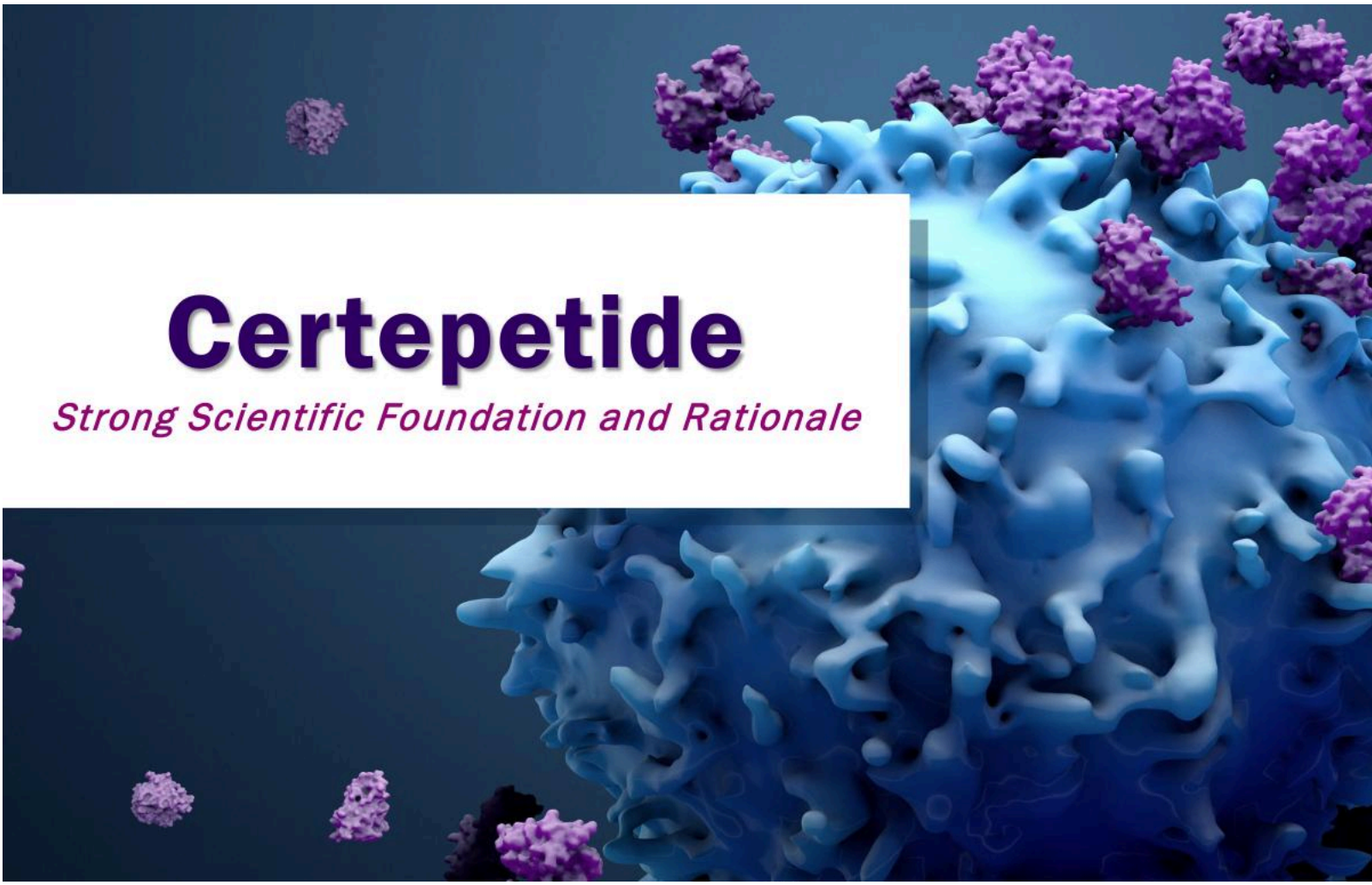
- Lisata granted Kuva exclusive worldwide rights to certepetide for use with Kuva's NanoMark technology for diagnostic tumor im
- Kuva assumes all development and commercialization responsibilities/costs
- Includes a $1 million upfront fee and potential ~$20 million in milestones plus royalties on sales

Qilu Pharmaceutical

- Lisata granted Qilu exclusive rights in China, Taiwan, Hong Kong and Macau
- Qilu assumes all development and commercialization responsibilities/costs in licensed territories
- Potential for additional $221 million in milestones plus royalties on sales ($15 million collected to date)

Additional partnership opportunities exist for many combinations with certepetide

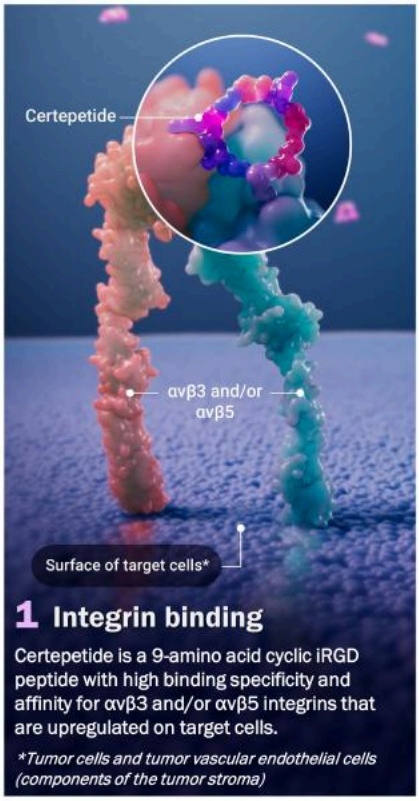
- By indication, modality of co-administered drug(s), and/or geography



Certepetide

Strong Scientific Foundation and Rationale

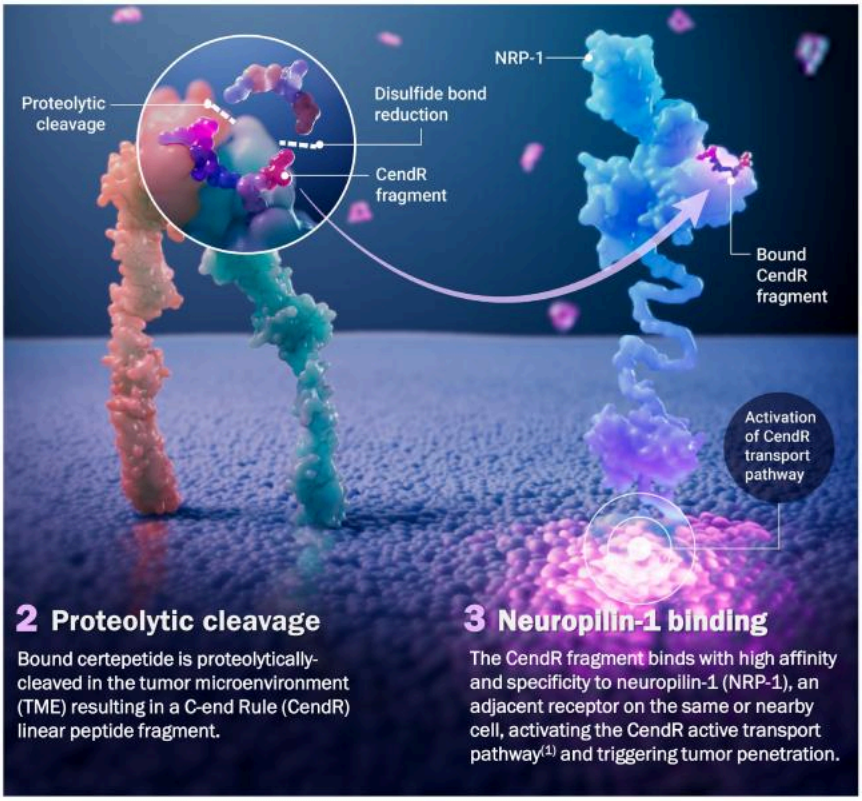
Certepetide mechanism of action: Unique, multi-step approach



1 Integrin binding

Certepetide is a 9-amino acid cyclic iRGD peptide with high binding specificity and affinity for αvβ3 and/or αvβ5 integrins that are upregulated on target cells.

**Tumor cells and tumor vascular endothelial cells (components of the tumor stroma)*

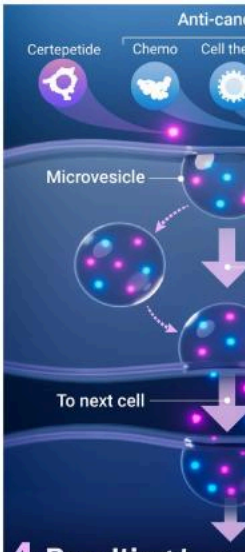


2 Proteolytic cleavage

Bound certepetide is proteolytically-cleaved in the tumor microenvironment (TME) resulting in a C-end Rule (CendR) linear peptide fragment.

3 Neuropilin-1 binding

The CendR fragment binds with high affinity and specificity to neuropilin-1 (NRP-1), an adjacent receptor on the same or nearby cell, activating the CendR active transport pathway[1] and triggering tumor penetration.



4 Resulting tumo

CendR pathway actuation tr
of circulating co-administere
ferrying them through the st
Note: *Microvesicles can fus
across single cells.*[2-6]
*[Not pictured] Certepetide
immunosuppressive T cells
cytotoxic T cells in the TME
metastases.*

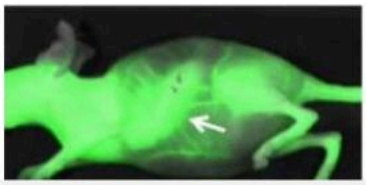
Illustration is a simplifie

[1] Ding et al., *Nature Comm*, 2019.
[2] Ruoslahti E. *The Journal of clinical investigation*. 2017;127(5), 1622–1624.
[3] Liu, X., et al. *J Clin Invest*. 2017;127(5):2007-2018.
[4] De Mendoza, T. H., Suzuki, K., et al. *Nature Comm*, 2021;12, 1541.
[5] Wang, C., et al. *International Journal of Nanomedicine*, 2024;19, 12633–12652.
[6] Saifi, M. A., et al. *Biochimica Et Biophysica Acta (BBA) - Reviews on Cancer*, 2023; 1878(3), 188895.

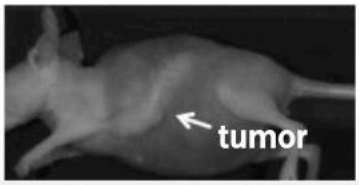
Certepetide/iRGD selectively promotes intratumoral penetrat

Whole body imaging of mice with pancreatic ductal adenocarcinoma (arrow) dosed with Fluorescent Quantum Dots (FQDs) with and without certepetide[1],[2]

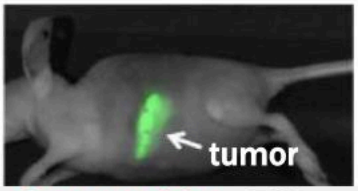
- Circulating FQDs result in whole body fluorescence
- Etching solution quenches fluorescence in circulation



FQDs

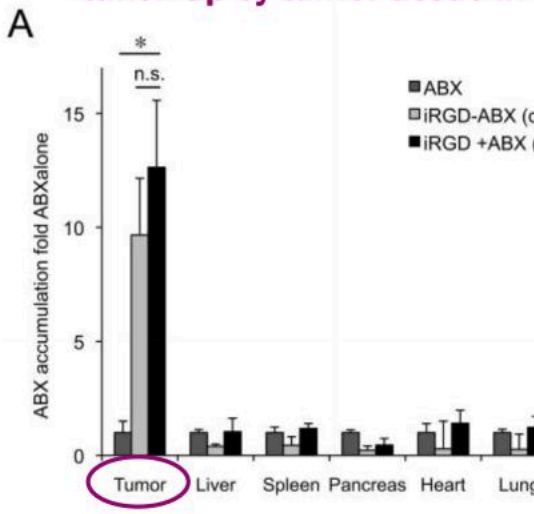


FQDs + Etching solution



Certepetide + FQDs + Etching solution

When co-administered with iR paclitaxel (Abraxane or ABX) is p taken up by tumor tissue in



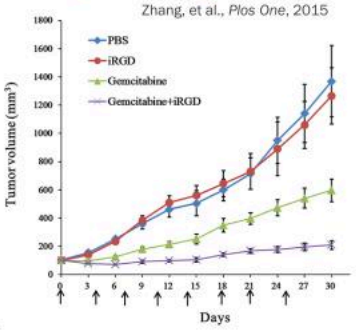
[1] Braun et al., Nature Mater. 2014.
[2] Liu, Braun et al., Nature Comm. 2017.
[3] Sugahara et al 2010.

Broad applicability & activity of certepetide/iRGD consistently demo

Sampling extensive scientific literature showing improved survival

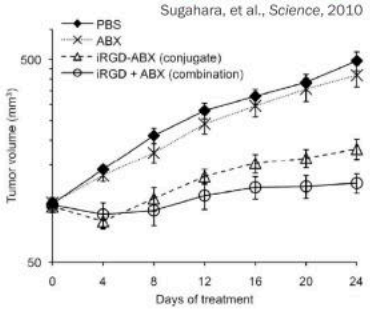
Lung cancer + gemcitabine

Zhang, et al., *Plos One*, 2015



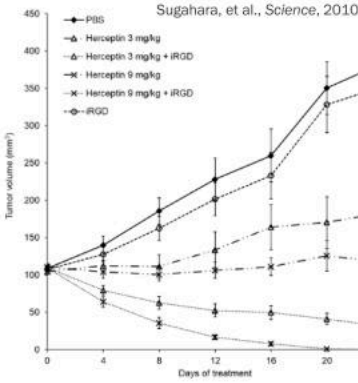
Breast cancer + nanoparticle nab-paclitaxel

Sugahara, et al., *Science*, 2010



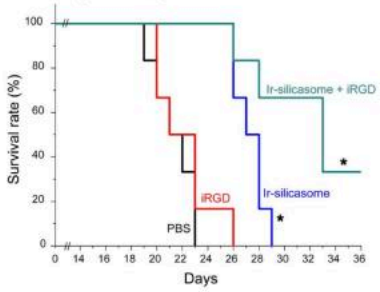
Breast cancer + Herceptin

Sugahara, et al., *Science*, 2010



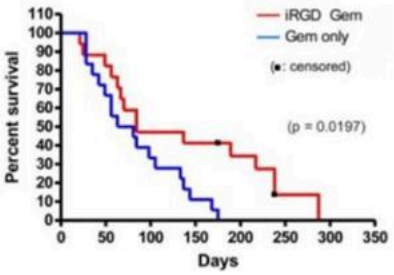
PDAC + irinotecan nanoparticles

Liu X et al., J Clin Invest, 2017



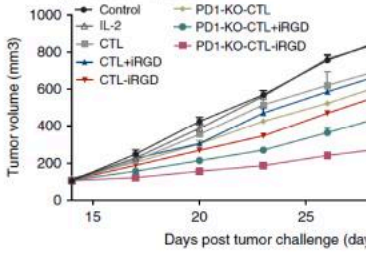
PDAC + gemcitabine

Hurtado de Mendoza et al, Nature Comms, 2021



GI cancer + adoptive cell thera

Ding, et al., *Nature*, 2019



Certepetide/iRGD consistently improves *immunotherapy* effic in multiple preclinical solid tumor models

Solid Tumor Types

- Intrahepatic cholangiocarcinoma
- Pancreatic adenocarcinoma
- Prostate cancer
- Breast cancer
- Non-Small Cell Lung Cancer
- Gastric cancer
- Hepatocellular carcinoma

Preclinical Observation

- Improved overall survival
- Reduced tumor size
- Reduced and/or inhibited metas

AACR 2025 Abstracts:

- Kim, M., Sugahara, K., et al. *iRGD peptide therapy transforms immunosuppressive microenvironment to immune-favorable state in pancreatic ductal adenocarcinoma* (https://www.abstractsonline.com/pp8/#!/20273/presentation/5422).
- Miyamura, N., Sugahara, K., et al. *A cytotoxic peptide designed for tumor-targeted delivery of co-injected molecules* (https://www.abstractsonline.com/pp8/#!/20273/presentation/3881).
- Kuroda, Y., Sugahara, K., et al. *The iRGD tumor-penetrating peptide inhibits TGF-β activation mediated by an αvβ5 integrin-rich tumor microenvironment in pancreatic cancer* (https://www.abstractsonline.com/pp8/#!/20273/presentation/5404).
- Choi, Y., Sugahara, K., et al. *Altered collagen morphology in pancreatic cancer treated with the iRGD tumor-penetrating peptide* (https://www.abstractsonline.com/pp8/#!/20273/presentation/5419).

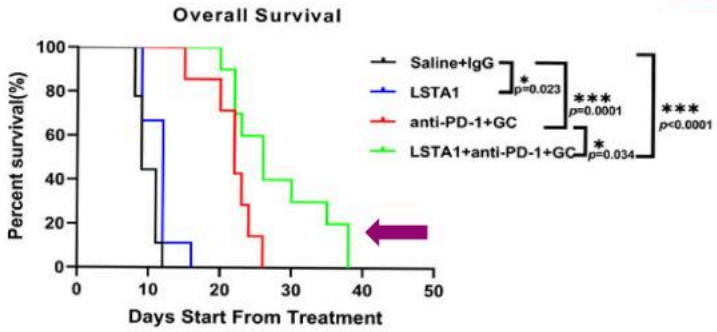
Sugahara, K., et al. bioRxiv 2023.05.24.542137; doi: https://doi.org/10.1101/2023.05.24.542137
Yuan, D., Duda, D., et al. 2024 CCA Foundation Conference. Poster: *Enhancing the efficacy of standard therapy in intrahepatic cholangiocarcinoma using LSTA1, a novel tumor targeting and penetration agent.*

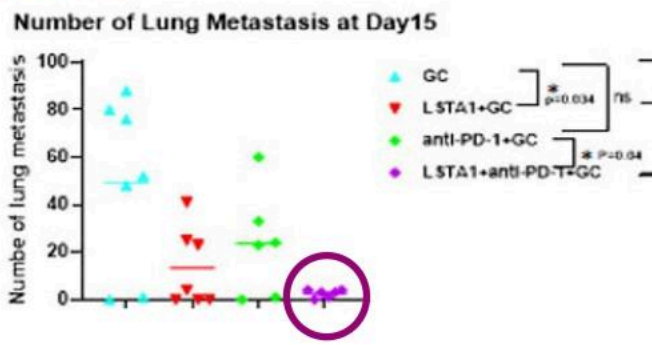
Sugahara, et al. 2015; Sugahara, et al. 2010
Yang, et al. 2019a; Yang, et al. 2019b
Zhang et al 2016b
Dong, et al. 2023

Certepetide improves immunotherapy impact in cholangiocarci

- Intrahepatic cholangiocarcinoma (ICC) has an immunosuppressive TME and a dense desmopl stroma with abnormal vasculature which together impede anti-cancer agent efficacy
- Lung metastases often lead to a significant decline in survival
- Human ICC SoC (gemcitabine/cisplatin/durvalumab) efficacy improved with certepetide in mu

ICC mouse model





**Certepetide was formerly known as LSTA1*

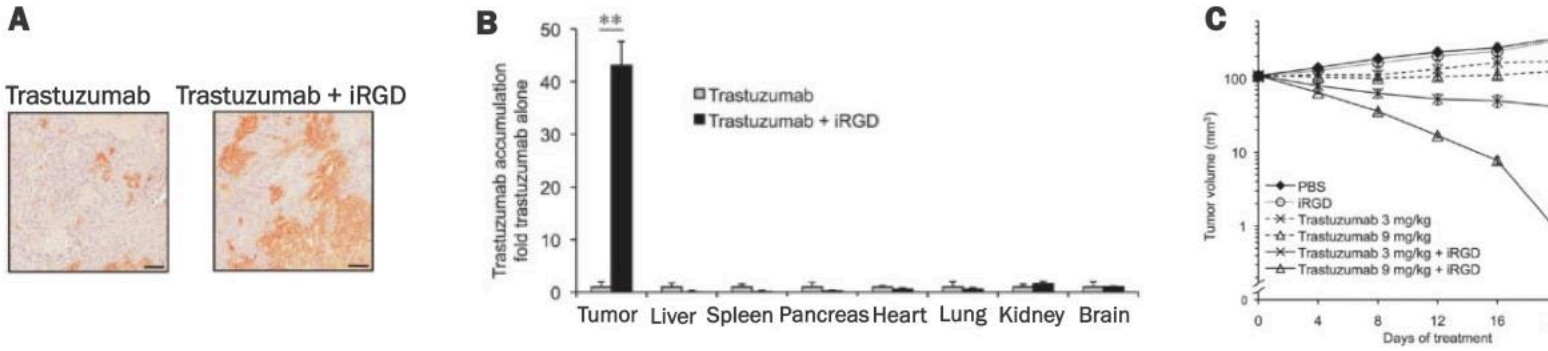
Certepetide combined with chemo- and immunotherapy improves survival, r morbidity and inhibits metastasis in cholangiocarcinoma mouse mode

Yuan, D., Duda, D., et al. CCA Foundation Conf. (2024) Poster. *Enhancing the efficacy of standard therapy in intrahepatic cholangiocarcinoma using LSTA1, a novel tumor targeting and penetration agent*

iRGD enhances selective tumor penetration of trastuzumab

Mouse model injected with human BT474 breast tumors

Trastuzumab is a monoclonal Ab that inhibits HER2



- Panel A shows greater staining for trastuzumab in breast cancer tissue with iRGD
- Panel B shows remarkable selectivity for tumor tissue with iRGD
- Panel C shows iRGD co-administered with trastuzumab leads to **tumor shrinkage**

Sugahara, et al. 2010

Certepetide is a proprietary iRGD; experiments denoting iRGD use a non-proprietary certepetide analog with differs in structure by a single acetyl gro

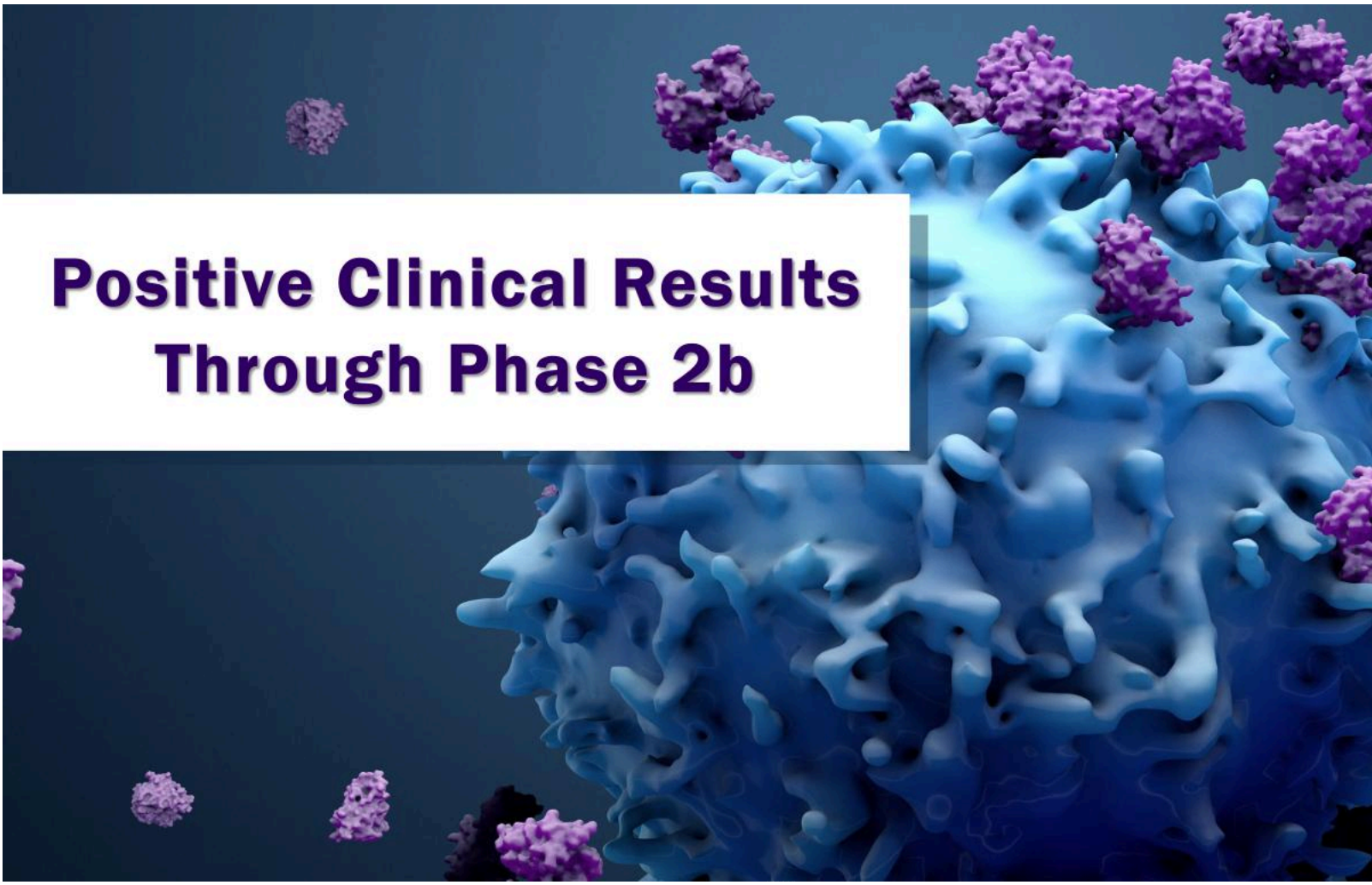
Certepetide development strategy: A two-pillar approach

Pursue rapid global registration in mPDAC, initially combined with gemcitabine/nab-paclitaxel standard-of-care (SoC)

- ***Positive ASCEND Phase 2b preliminary results***
- ***End-of-Phase 2 FDA meeting completed***
  - ***Phase 3 study protocol and development plan agreed***
- ***Phase 3 preparations underway***

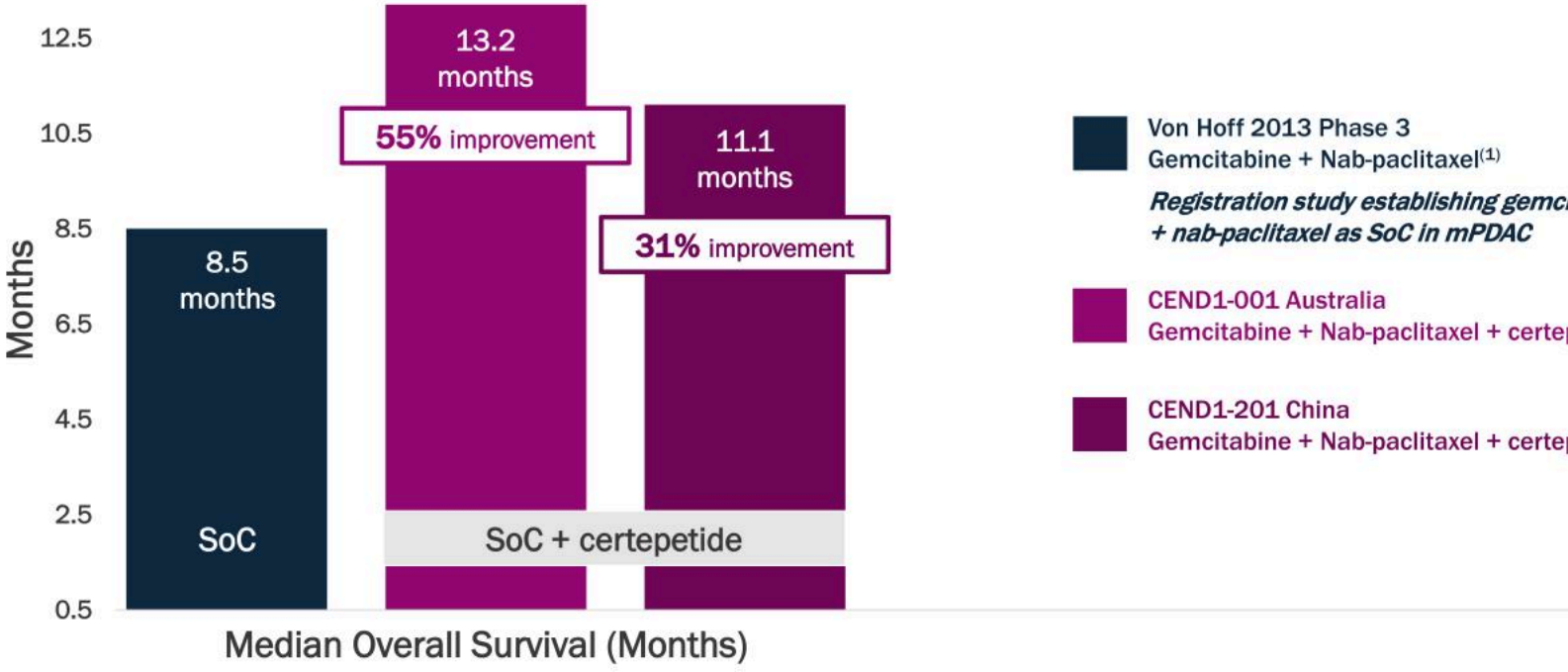
Demonstrate certepetide effectiveness when combined with a variety of other SoC regimens (e.g., chemotherapy, immunotherapy, etc.) in a variety of solid tumors

- ***Multiple Phase 2a studies underway***



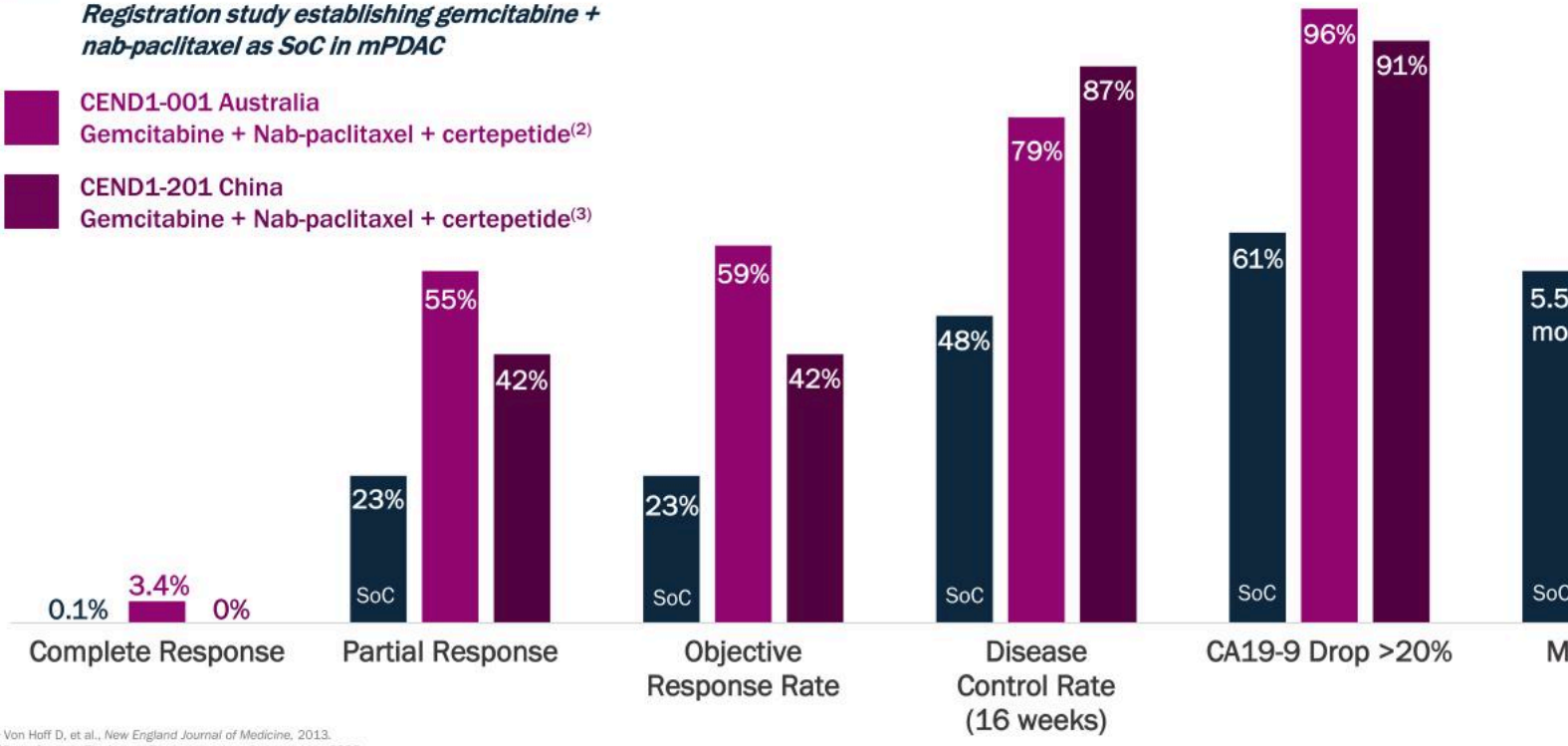
Positive Clinical Results Through Phase 2b

Certepetide improved survival in mPDAC in two independent, multicenter Phase 1b/2a trials



[1] Von Hoff D, et al., *New England Journal of Medicine*, 2013.
[2] Dean A, et al., *The Lancet Gastroenterology & Hepatology*, 2022
[3] QILU Pharmaceutical

Certepetide demonstrated internal consistency in two Phase 1b/2



[1] Von Hoff D, et al., *New England Journal of Medicine*, 2013.
[2] Dean A, et al., *The Lancet Gastroenterology & Hepatology*, 2022
[3] QILU Pharmaceutical

ASCEND: Phase 2b study of certepetide in mPDAC

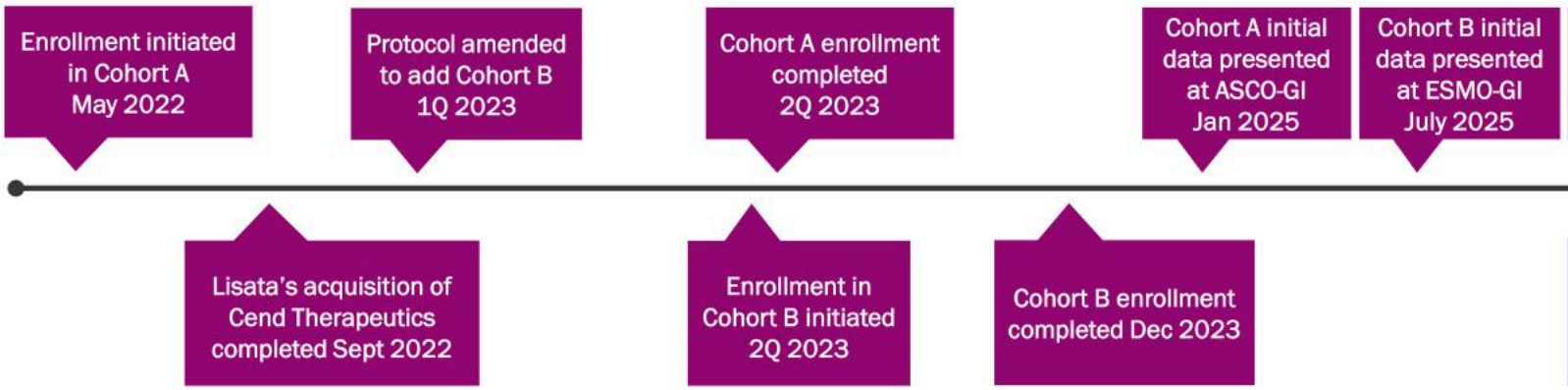
Investigator initiated trial *inherited* through acquisition of Cend Therapeutics

- **Sponsor:** Australasian Gastro-Intestinal Trials Group (AGITG) and NHMRC Clinical Trials Centre of University of Sydney (Australia)
  - Lisata-funded, data contractually sponsor-controlled
    - Restricts initial public announcement of results to scientific meetings or publications
- **'Academic design'** overlooked global regulatory standards supporting eventual approval
  - **Powered for 6-mos. PFS primary endpoint**
    - **Not a standard regulatory endpoint**
  - **Single cohort with one IV push of certepetide 3.2 mg/kg + SoC vs. SoC alone**

Lisata *amended* protocol to ensure tria support global registration strat

- **Lisata** clinical trial data rights defined/
- **'Product development design'** conside regulatory review and approval
  - **Median overall survival (preceden registration endpoint)** added for b
  - **Second cohort (Cohort B) added w pushes of certepetide 3.2 mg/kg administered 4 hours apart** to furt evaluate pharmacodynamics of ce consistent with FDA Project Optim

ASCEND: Phase 2b study chronology



ASCEND: Cohort A Progression-Free Survival data

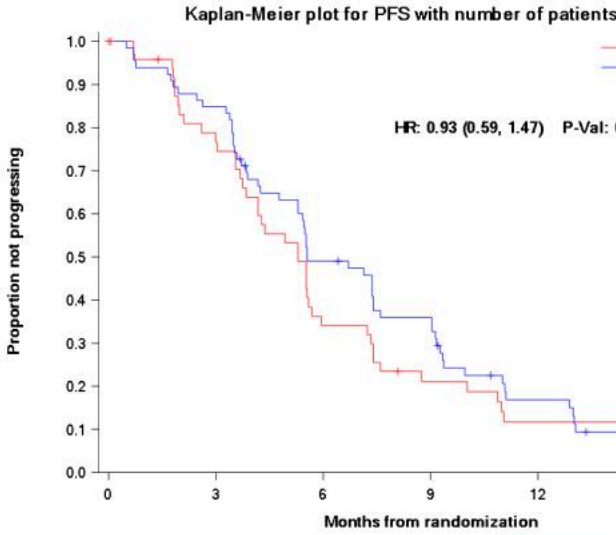
Data cut-off date: February 28, 2025

Cohort A

ONE IV PUSH OF CERTEPETIDE + SoC

- Cohort A ***powered*** for 6-month PFS
- No statistically significant improvement shown with certepetide
- *Data mature* - 91% (86 out of 95 patients with Progressive Disease or Death)

Cohort A: Progression-Free Survival (



Treatment arm	N	Medi month
Certepetide	66	5.55 (
Standard of Care*	50	5.29 (

*Combined placebo participants from both cohorts

ASCEND: Cohort A Overall Survival data

Data cut-off date: February 28, 2025

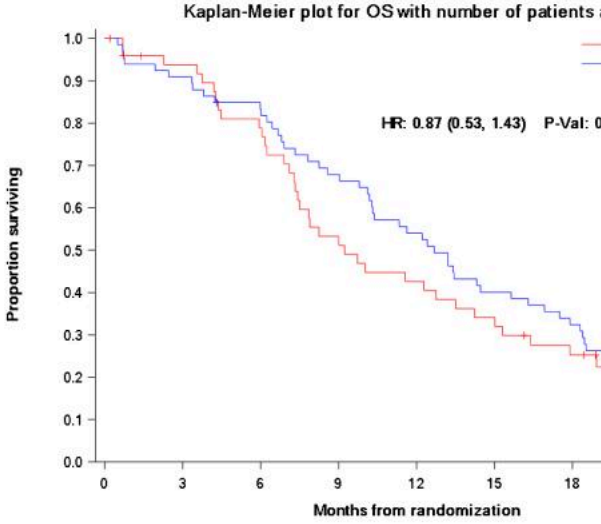
Cohort A

ONE IV PUSH OF CERTEPETIDE + SoC

- Cohort A ***not powered*** for OS
- *Data mature* - 76% (72 deaths out of 95)
- mOS numerically favors certepetide (12.68 vs. 9.23 months); separation occurs at 7 months similar to NAPOLI-3
- Cohort A ORR* data favors certepetide
  - Certepetide – 4 complete responses
  - Placebo – 0 complete responses

*ORR: Objective Response Rate

Cohort A: Overall Survival (OS)



Treatment arm	Participants	Median OS (95%
Certepetide	66	12.68 (10.1
Standard of Care*	50	9.23 (7.33

*Combined placebo participants from both cohorts

ASCEND: Cohort B Progression-Free Survival data

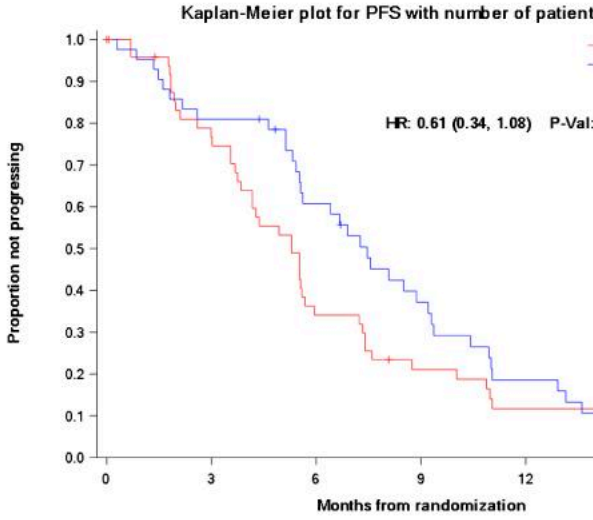
Data cut-off date: February 28, 2025

Cohort B

TWO IV PUSHES OF CERTEPETIDE 4 HOURS APART + SoC

- Cohort B ***not powered*** for PFS
- Data mature
- **Despite not being powered, mPFS in Cohort B *nears statistical significance* favoring certepetide over placebo (7.46 vs 5.29 months) HR 0.61, p=0.09**

Cohort B: Progression-Free Survival



Treatment arm	N	Medi month
Certepetide	42	7.46 (
Standard of Care*	50	5.29 (

**Combined placebo participants from both cohorts*

ASCEND: Cohort B Overall Survival data

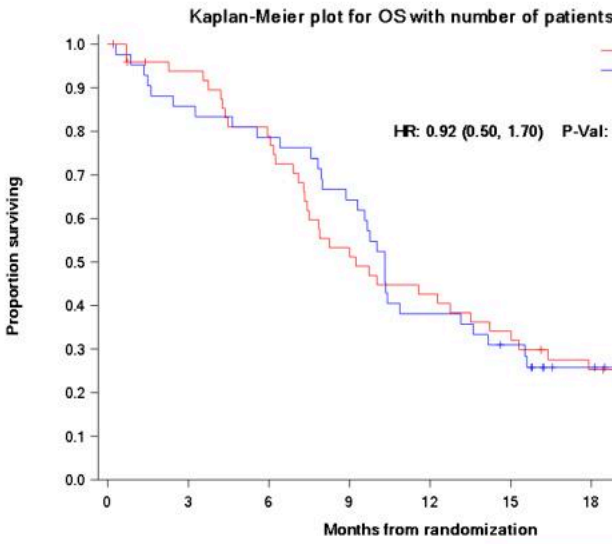
Data cut-off date: February 28, 2025

Cohort B

TWO IV PUSHES OF CERTEPETIDE 4 HOURS APART + SoC

- Cohort B ***not powered*** for OS
- *Data mature* - 71% (45 deaths out of 63)
- **mOS favors certepetide (10.32 vs. 9.23 months)**
  - Separation occurs at 7 months similar to NAPOLI-3 NALIRIFOX Phase 3 study data
- Cohort B ORR favors certepetide (see next slide)
  - (CR + PR) 45% vs 19% certepetide vs placebo; 1 CR certepetide, 0 CR placebo group

Cohort B: Overall Survival (OS)



Treatment arm	Participants	Median O (95
Certepetide	42	10.32 (8
Standard of Care*	50	9.23 (7.

**Combined placebo participants from both cohorts*

Cohort B Time to Treatment Failure (TTF) and Duration of Trea

Data cut-off date: December 30, 2024

Cohort B

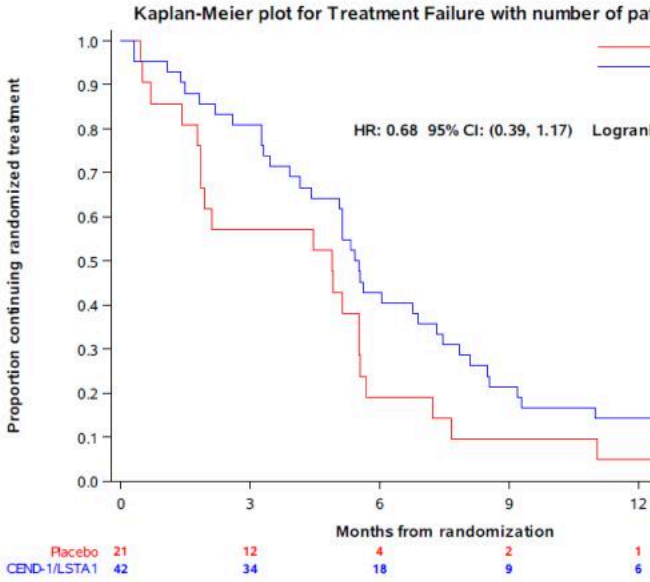
TWO IV PUSHES OF CERTEPETIDE 4 HOURS APART + SoC

- TTF and Treatment duration favor certepetide

Treatment arm	Treatment Failures	Median TTF months (95% CI)
Certepetide	40/42	5.47 (4.47, 6.90)
Standard of Care	20/21	4.90 (1.90, 5.52)

Treatment arm	Average Treatment Duration months (95% CI)
Certepetide	5.00 (3.77, 6.65)
Standard of Care	3.32 (2.09, 4.96)

Cohort B: Time To Treatment Failu Treatment Duration



ASCEND: Most Common Adverse Events (All Grades)

Adverse Event (AE)	Pooled Standard of Care n=49	Cohort A CERT n=65	Cohort B CERT n=42
Fatigue	29 (59.18%)	48 (73.85%)	34 (80.95%)
Peripheral sensory neuropathy	22 (44.90%)	35 (53.85%)	24 (57.14%)
Neutrophil count decreased	22 (44.90%)	23 (35.38%)	21 (50.00%)
Nausea	21 (42.86%)	35 (53.85%)	26 (61.90%)
Anemia	21 (42.86%)	30 (46.15%)	24 (57.14%)
Diarrhea	20 (40.82%)	25 (38.46%)	21 (50.00%)
Vomiting	18 (36.73%)	10 (15.38%)	10 (23.81%)
Constipation	17 (34.69%)	29 (44.62%)	21 (50.00%)
Alopecia	17 (34.69%)	30 (46.15%)	18 (42.86%)
Fever	15 (30.61%)	29 (44.62%)	11 (26.19%)
Edema limbs	15 (30.61%)	20 (30.77%)	16 (38.10%)
Platelet count decreased	14 (28.57%)	25 (38.46%)	21 (50.00%)
Abdominal pain	14 (28.57%)	20 (30.77%)	11 (26.19%)
ALT increased	13 (26.53%)	20 (30.77%)	14 (33.33%)
Rash maculo-papular	11 (22.45%)	18 (27.69%)	14 (33.33%)

**Top 15 AEs, greater than 30% in any column*

Certepetide improves clinical outcomes in mPDAC with benign safet

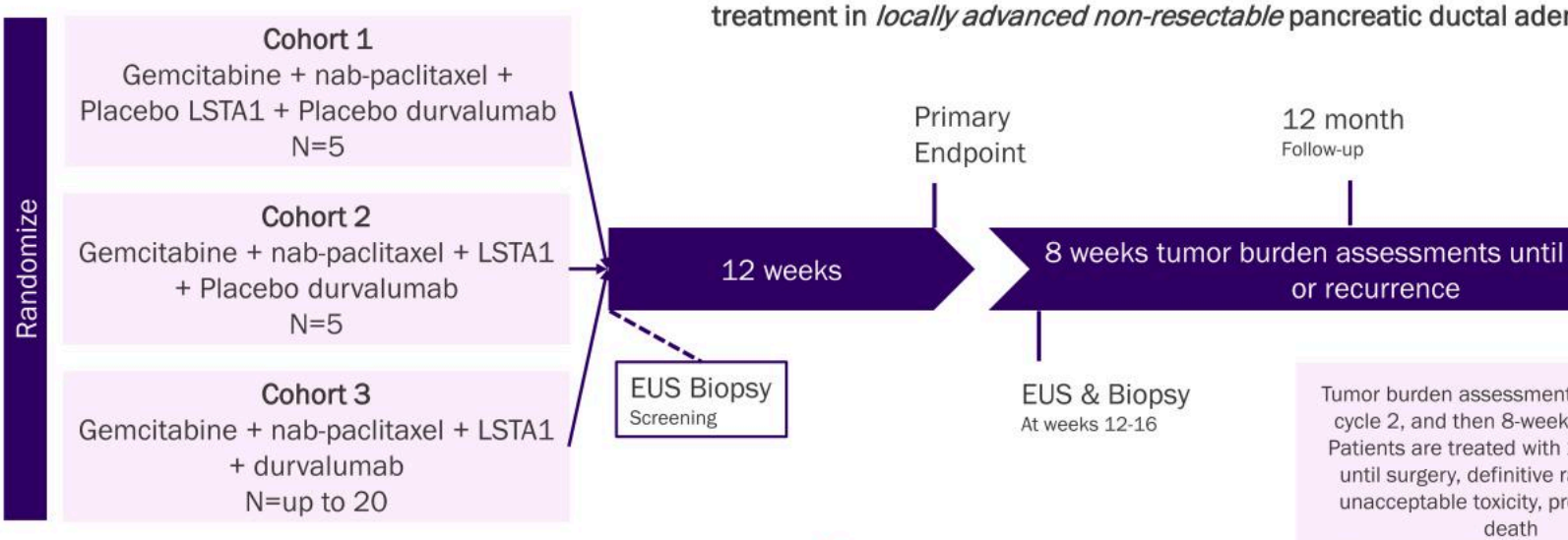
Certepetide Clinical Data Summary to Date

- Two Phase 1b/2a clinical trials (CEND1-001 in Australia and CEND1-201 in China) demonstrate that **certepetide plus SoC chemotherapy improves overall survival in *m* PDAC akin to the recently FDA approved NALIRIFOX triplet therapy**
- Certepetide is well tolerated with cumulative adverse events reflecting companion th
- mOS in Cohort A numerically favored certepetide as did ORR (4 CRs vs 0)
- mPFS in Cohort B nears statistical significance favoring certepetide over placebo 7.46 vs months) HR 0.61, p=0.09
- Cohort B mOS favored certepetide (10.32 vs 9.23 months) corroborating clinical benefit
- Cohort B ORR favored certepetide
  - Excluding unknown/early withdrawal/death, ORR *statistically significant* favoring cer
  - 50.0% certepetide treated patients had complete or partial response vs 21.1% place
  - 1 Complete Response in the certepetide group compared to zero in the placebo grou
- Certepetide treated subjects stayed on treatment longer (5.00 vs 3.22 months)

Positive Early Clinical Results in Combination with I/O

iLSTA: Phase 1b/2a trial in locally advanced PDAC with chem

Phase 1b/2a proof-of-concept safety and early efficacy study of
combination with durvalumab, gemcitabine and nab-paclitaxel, a
treatment in *locally advanced non-resectable* pancreatic ductal ade

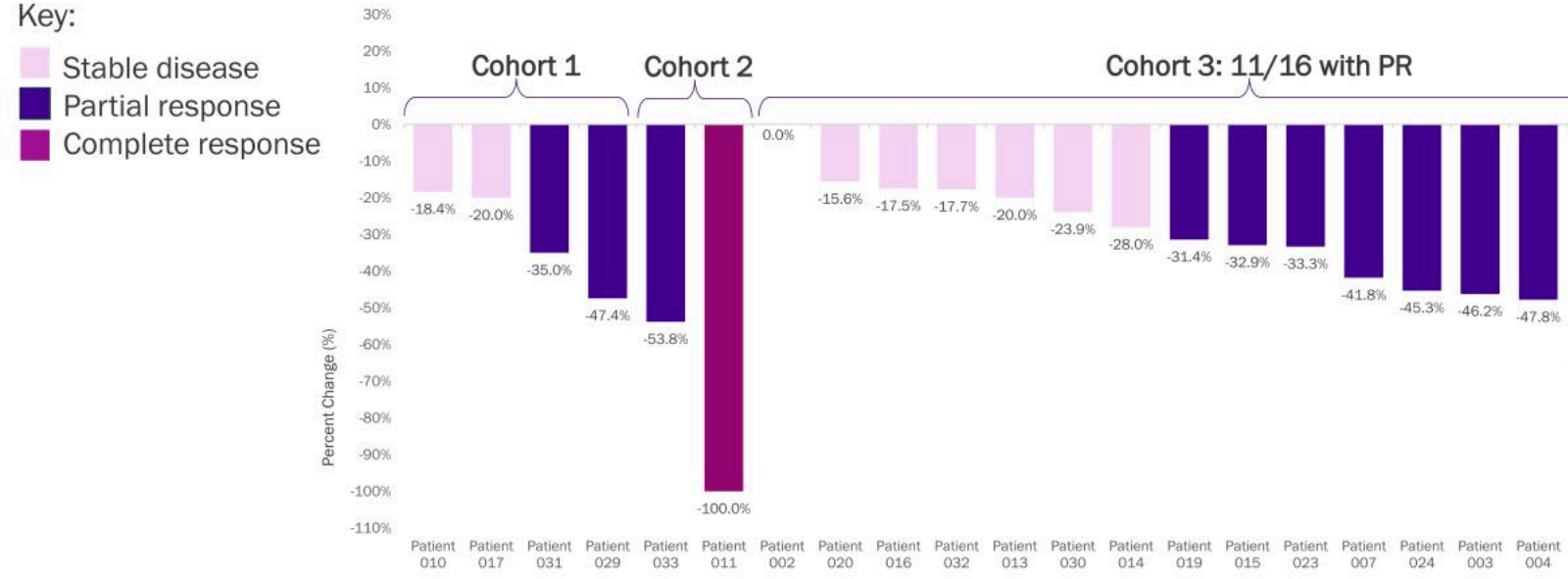


- **Sponsor:** WARPNINE, Inc. - funding trial
- **Timing:** Final 6-month PFS/OS data expected 1Q 2026

gemcitabine 1000mg/m^2 : Days 1, 8, 15 in 28-day cycles
nab-paclitaxel 125mg/m^2: Days 1, 8, 15 in 28-day cycles
durvalumab 750mg: Days 1 and 15 in 28-day cycles
certepetide 3.2 mg/kg/ Placebo: Days 1, 2, 8, 15, 16 in 28-day cycles

Preliminary Efficacy as of May 2025 – Best Overall Response

Cohort 3: Overall Response Rate 69%
Disease Control Rate 100%

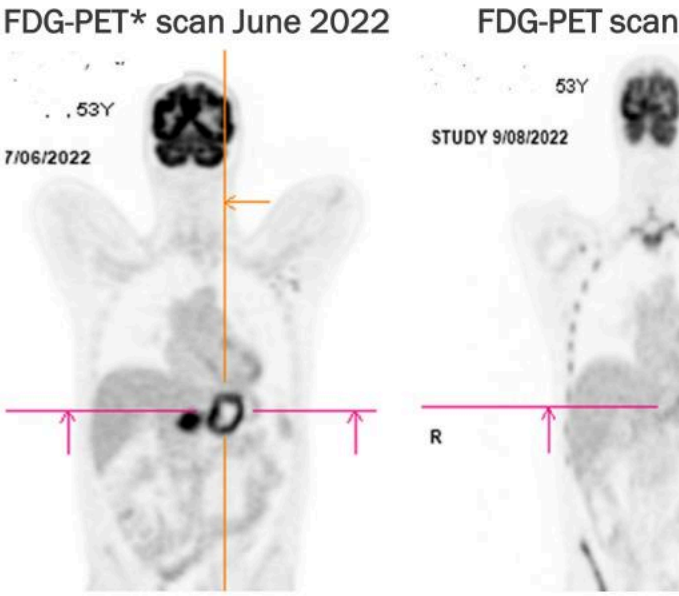


*N=20 patients treated: N=1 patient (032) without baseline

Remarkable evidence of certepetide activity in other solid tun

Certepetide potentiated a complete response in metastatic gastroesophageal adenocarcinoma (mGEAC)

- 53-year-old male with mGEAC with significant (> 5cm) nodal metastases (June 2022)
- SoC combination chemotherapy (FOLFIRINOX) and radiotherapy, with immunotherapy (pembrolizumab) later added, resulting in partial response
- Certepetide added to above regimen at cycle 7 and exploratory laparoscopy after cycle 18 (September 2022) showed **no discernable disease**
- **37+ months with sustained complete response**



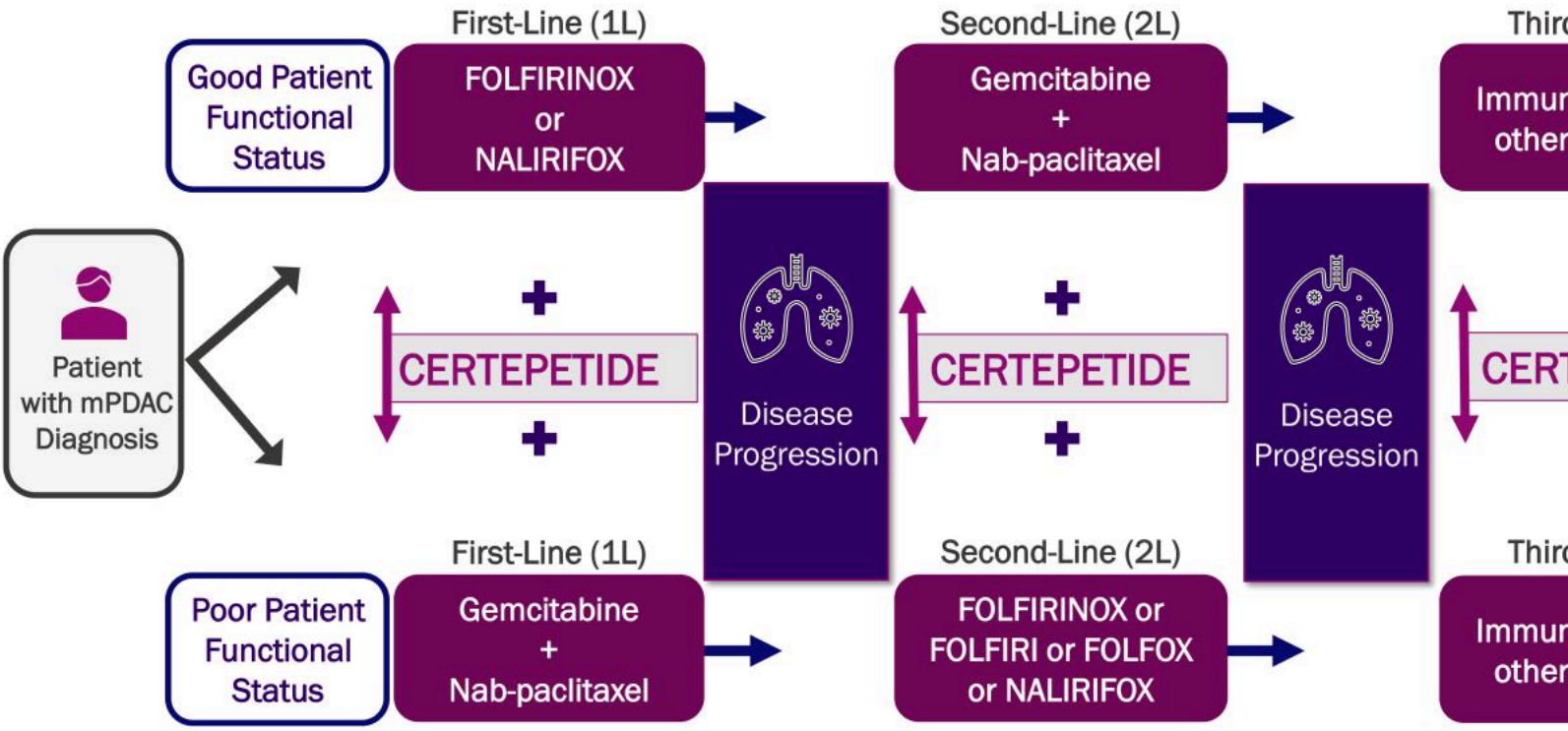
Reduction in FDG activity demonstrated

**Fluorodeoxyglucose (FDG)-positron emission tomography (PET)*

[1] Buck, K.K, Dean, A., McSweeney, T. LSTA1 Potentiates Complete Response in Metastatic Gastroesophageal Adenocarcinoma. Oncol Cancer Case Rep. 2023, 9(6), 001-003

Attractive Commercial Opportunity

Certepetide can be used throughout the mPDAC treatment pa




slide40

Certepetide special regulatory designations and benefits

FDA Fast Track Designation

- ***Pancreatic cancer (FDA)***

- Eligible for *Accelerated Approval, Priority Review and Rolling Review*
- Provides for program-specific guidance from and frequent communication with FDA

FDA Rare Pediatric Disease Designation

- ***Osteosarcoma (FDA)***

- Eligible for *Priority Review Voucher* upon approval; redeemable for a priority review for any subsequent marketing application, or may be sold or transferred
- Vouchers have sold recently for $75-$100 million and, historically, for up to $350 million

Orphan Drug Des

- ***Pancreatic cancer***
- ***Malignant glioma (***
- ***Osteosarcoma (FD***
- ***Cholangiocarcinon***

- Eligible for tax credit exclusivity, fee waive development grants
- Provides for speciali regulatory assistanc Office of Orphan Pro Development

**Priority Review Voucher program expires September 2026 and may not be renewed*

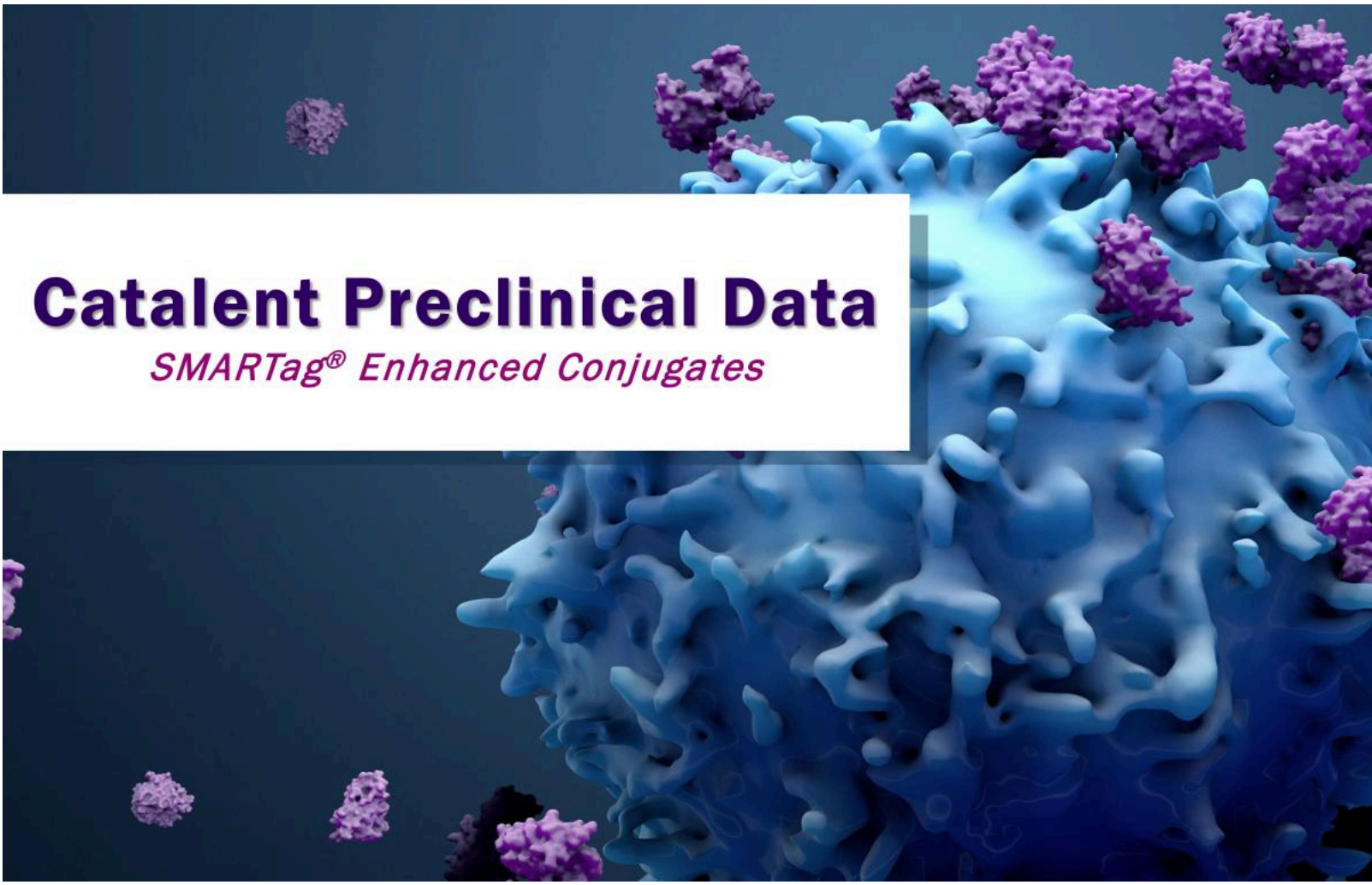
Poised for Global Phase 3 Initiation

Requisite clinical development steps completed in preparation for Pha

- ☑ Full NDA-ready preclinical toxicology package
- ☑ Phase 1 dose ranging study in 1L mPDAC
  - No DLTs observed; safety profile consistent with co-administered SoC
  - Certepetide improved all efficacy endpoints compared to SoC
- ☑ Second independent Phase 1 study in in 1L mPDAC in different geography
  - Improvement in mOS effect corroborated
- ☑ FDA end-of-Phase 1 meeting completed: agreement on tox package, comparator, endpoints, an population for NDA
- ☑ Large Phase 2b (ASCEND) study in 1L mPDAC completed
  - Effect size for Phase 3 estimated
- ☑ FDA end-of-Phase 2 meeting held; agreement reached on Phase 3 program and development p
- ☑ Clinical operations and CMC readiness for Phase 3 underway

mPDAC Phase 3 study design agreed with FDA

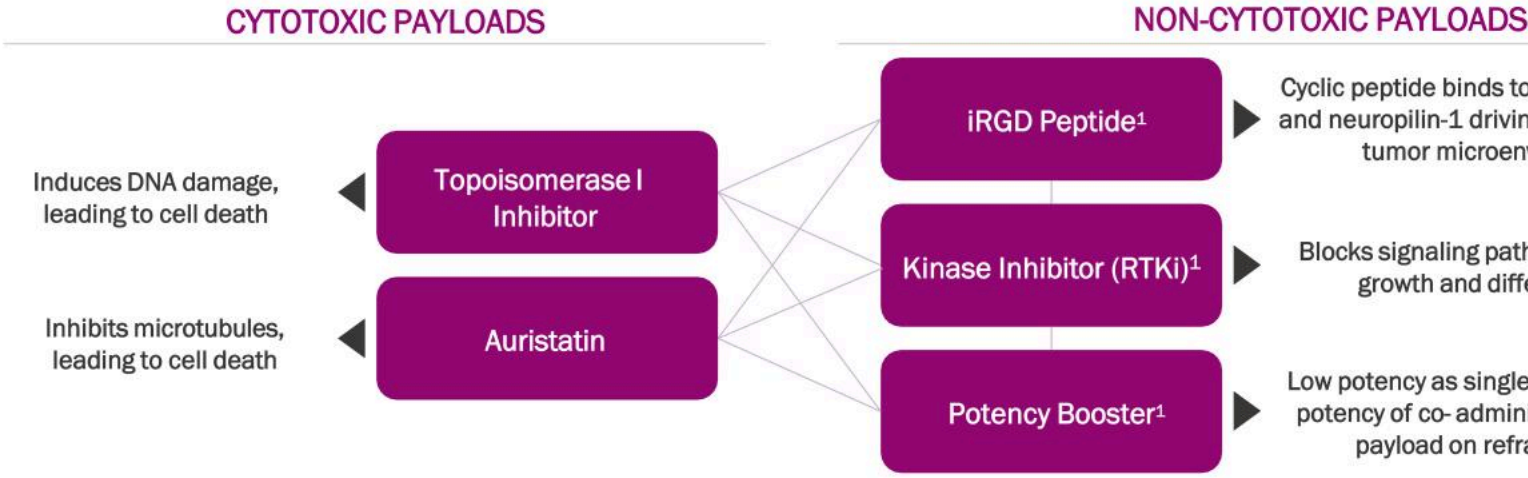
- Global Phase 3, open-label, randomized clinical trial evaluating the efficacy and safety o certepetide in combination with standard of care (gemcitabine and nab-paclitaxel) vs. s care alone in patients with 1L mPDAC
- N=657 patients (+/- 50 depending on event rate)
  - Primary endpoint: Overall Survival
  - 90% Power, HR of 0.75
  - 18 months accrual (assuming 0.2 patients/site/month), 16 months observation pe
  - 183 clinical sites in ~15 countries
- Open-label study acceptance precedent with global health authorities (e.g., NAPOLI-3)
- End-of-Phase 2 FDA meeting held May 21, 2025 – FDA agreement with study key eleme
- FDA amenable to addition of multiple dosing arms (e.g., continuous infusion)



Catalent Preclinical Data

SMARTag® Enhanced Conjugates

SMARTag® Enhanced Conjugates Feature Multiple Payload MOAs on a Si



- SMARTag platform enables the **combination of these 5 different mechanisms of action** as duets in different formats depending on the indication to generate **completely new classes of ADCs**
- SMARTag-enabled novel payload combinations **yield greater potency with a lower dose of cytotox**
- As most payload classes are compatible with the SMARTag platform, the **payload panel can be r expanded**

1. First-in-Class Payload MOA

Current ADC Delivery Challenges Relate to Limitations of Pass Antibody Tumor Penetration

CURRENT ADC DELIVERY CHALLENGE

Inherent limitations of vascular permeability and/or binding site barrier set upper limit to % of injected antibody- based drugs reaching the tumor

IRGD-CONJUGATE VALUE PROPOSITION

Increasing the % injected ADC dose delivered to the tumor would widen the therapeutic index by delivering more payload to the tumor without increasing the total ADC dose

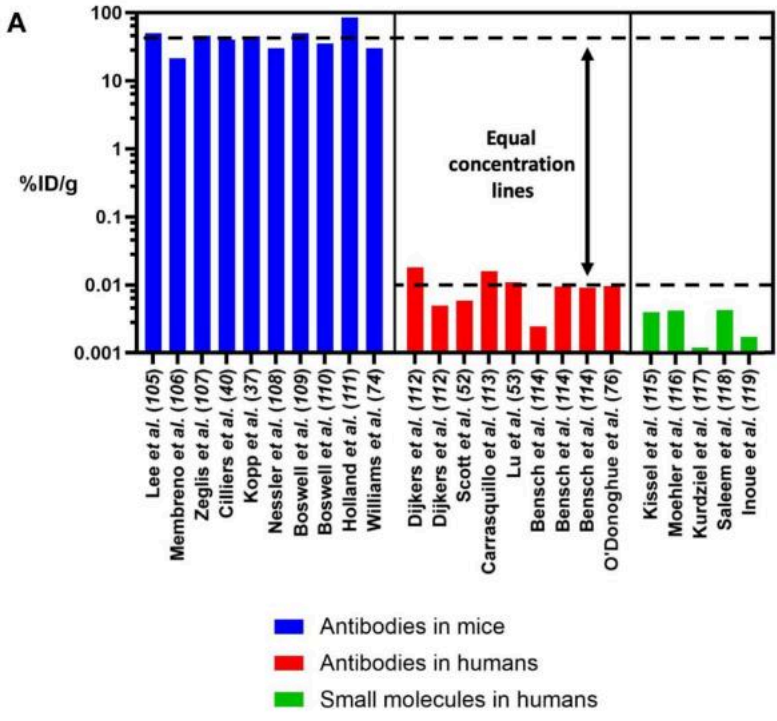
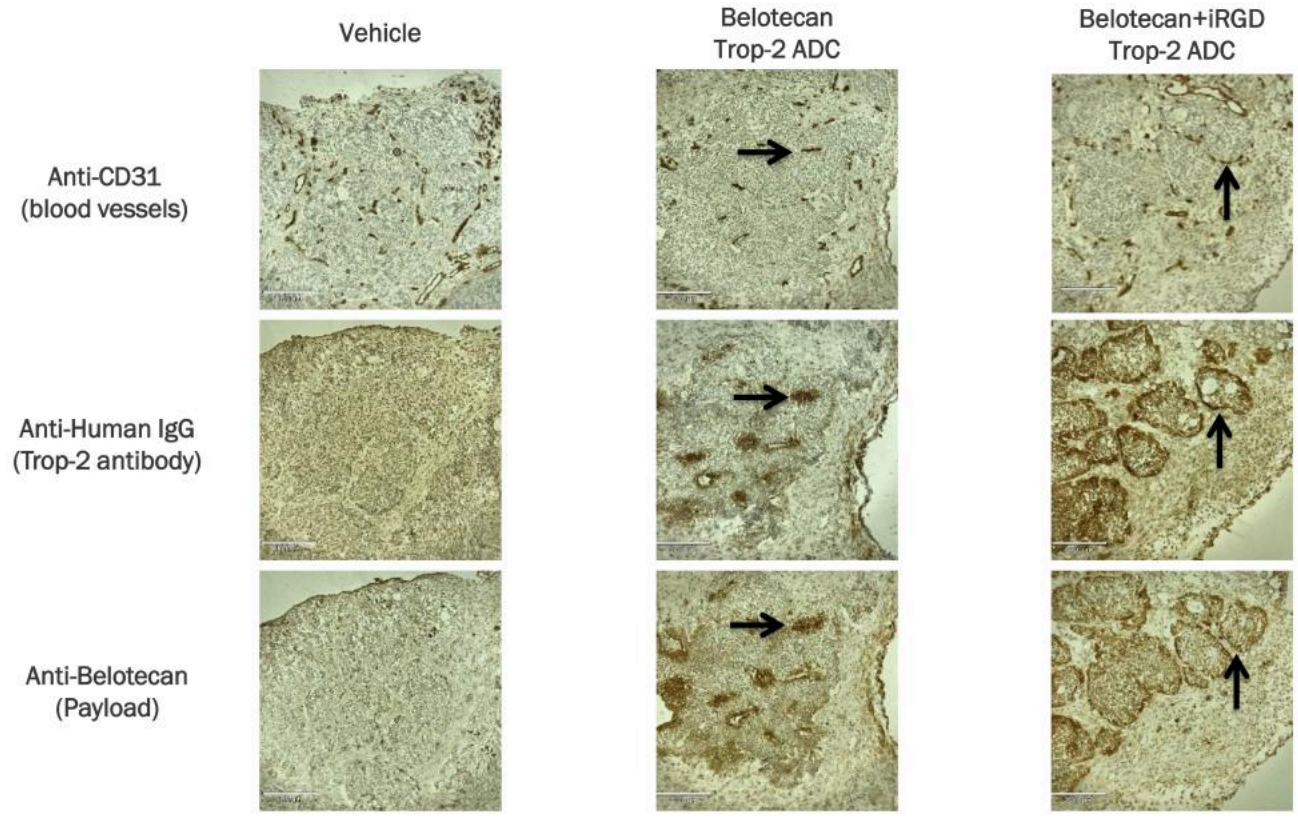


Figure from Clinical translation of antibody drug conjugate dosing in solid tumors from preclinical mouse data
Baron Rubahamya https://orcid.org/0000-0002-9116-0848, Shujun Dong, and Greg M. Thurber
Science Advances, 31 May 2024, Vol 10, Issue 22

ADC Incorporating iRGD Payloads Demonstrates Altered Intra-Tumor Dist

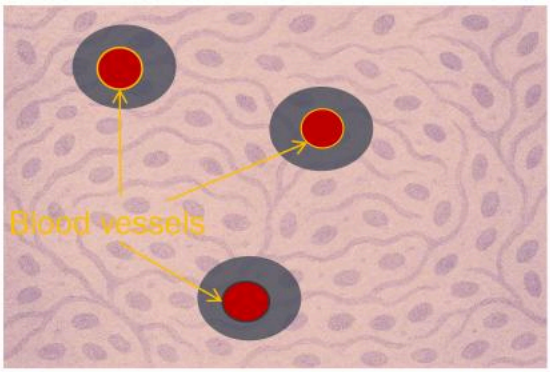


- BxPC-3 tumor
  Day 4 post-do
- ADCs dosed a
  mg/kg
- Arrows indica
  blood vessels
  same areas in
  adjacent tum
  sections

Catalent World ADC Presentation November 2025

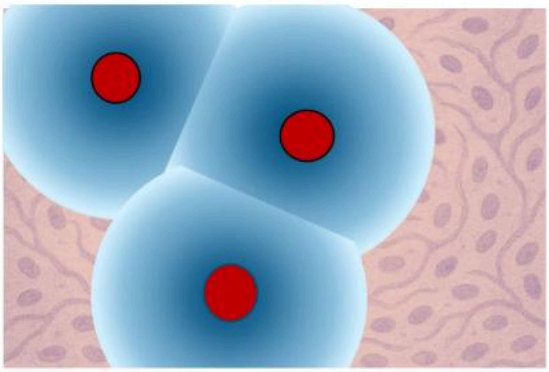
iRGD/Certepetide* can Alter the Distribution of ADC Payload Within a

Without iRGD/Certepetide

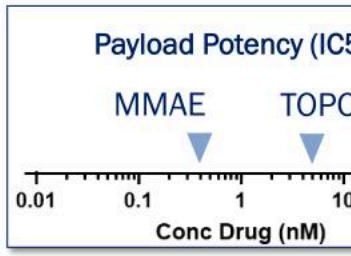


Limited ADC penetration beyond vasculature; denser payload distribution per cell

With iRGD/Certepetide



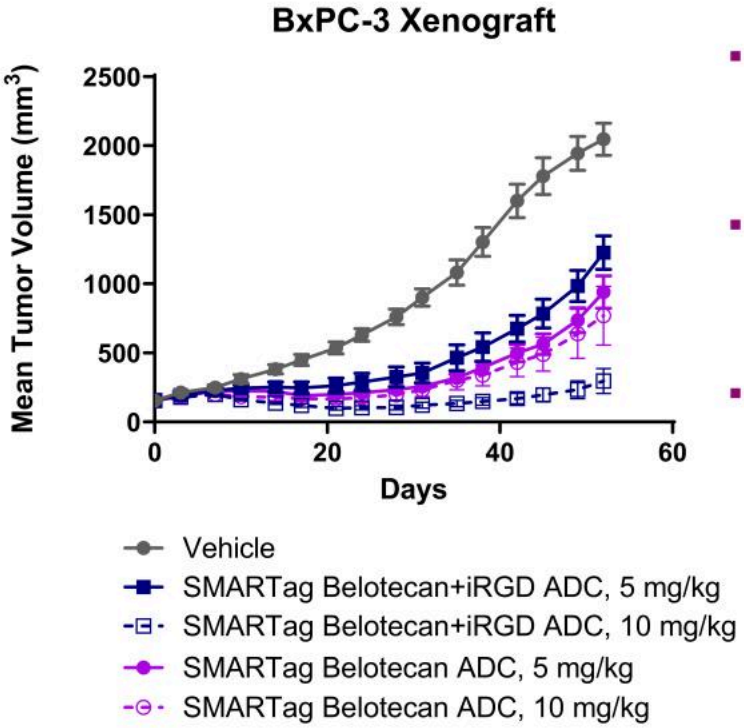
ADC penetrates deeper into the tumor; lower payload distribution per cell



- Payload potency and distribution determine
- ADC DAR and dosing c adjusted to optimize ou

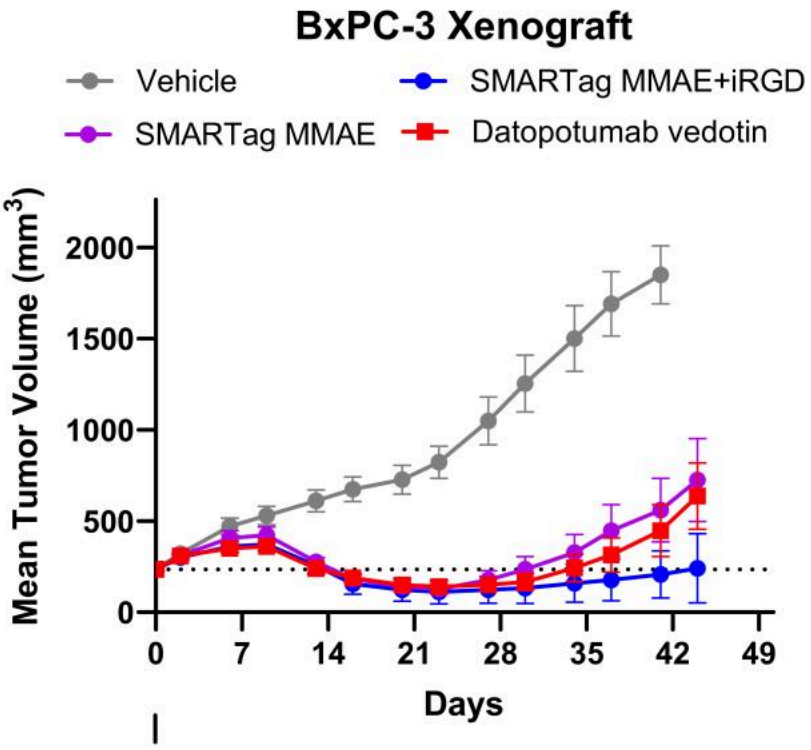
*Catalent licensed worldwide, non-exclusive rights to develop and commercialize bioconjugate products containing certepetide and its analogs from Lisata Therapeutics

TOPOi + iRGD DAR[4+4] ADC Demonstrates Dose Responsive E Not Observed With TOPOi DAR4 ADC



- Single-payload TOPOi (belotecan) ADCs (no iRGD enha show no dose response, suggesting failure to deliver payload to the tumor at higher dose
- By contrast, enhanced DAR[4+4] ADCs incorporat TOPOi and iRGD demonstrate a clear dose respo enhanced efficacy at the higher dosages
- Together, the results support iRGD as an additional m for driving TOPOi ADC payload delivery to the tumor

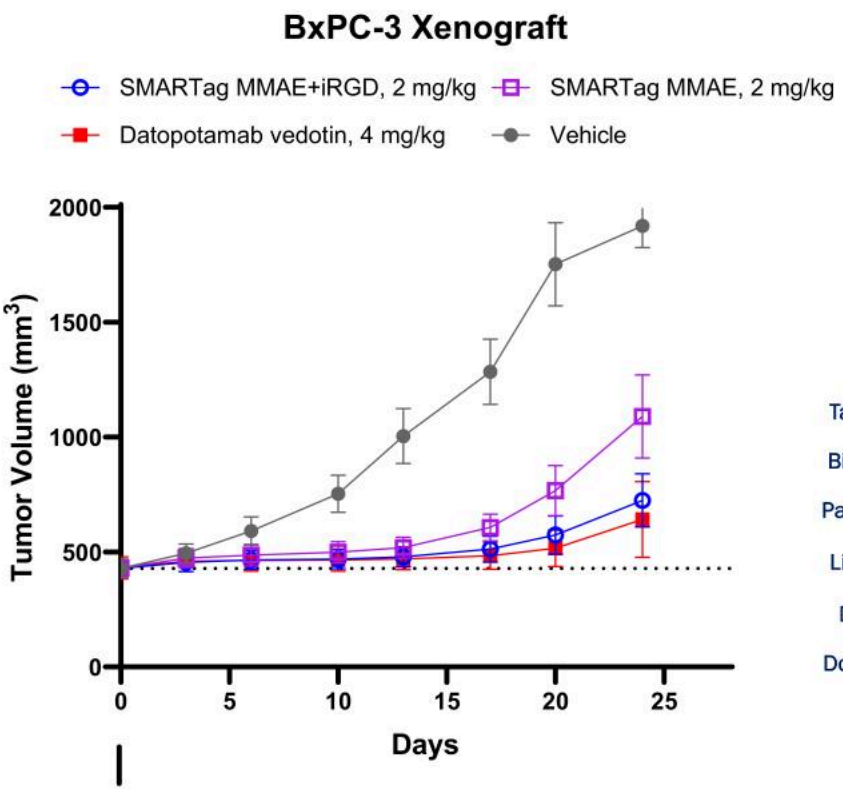
SMARTag® MMAE + iRGD DAR[2+2] ADC Demonstrates Enha Efficacy Compared to MMAE ADCs



- Enhanced ADCs feature two different MOAs: **tu and microtubule inhibition**
- **SMARTag technology enables equal efficacy MMAE DAR** compared to conventional techn **further boosts the response**

	SMARTag MMAE+iRGD ADC	SMARTag MMAE ADC
Target	Trop-2	Trop-2
Binder	1D4	1D4
Payload	MMAE+ iRGD	MMAE
Linker	HIPS-Tandem-Cleavage	HIPS-Tandem-Cleavage
DAR	[2+2]	2
Dosage	3 mg/kg	3 mg/kg

Adding iRGD Yields Equal Efficacy at a Lower ADC and Cytotoxic Paylo



- SMARTag® ADCs incorporating MMAE+iRGD enable efficacy at both a lower MMAE DAR and a lower dos to vedotin
- The SMARTag® MMAE+iRGD treatment group recei the MMAE dose contained in the vedotin treatment delivered equal efficacy

	SMARTag® MMAE+iRGD ADC	SMARTag® MMAE ADC	Datop
Target	Trop-2	Trop-2	
Binder	1D4	1D4	Da
Payload	MMAE+iRGD	MMAE	
Linker	HIPS-Tandem-Cleavage	HIPS-Tandem-Cleavage	Ma
DAR	[2+2]	2	
Dosage	2 mg/kg	2 mg/kg	

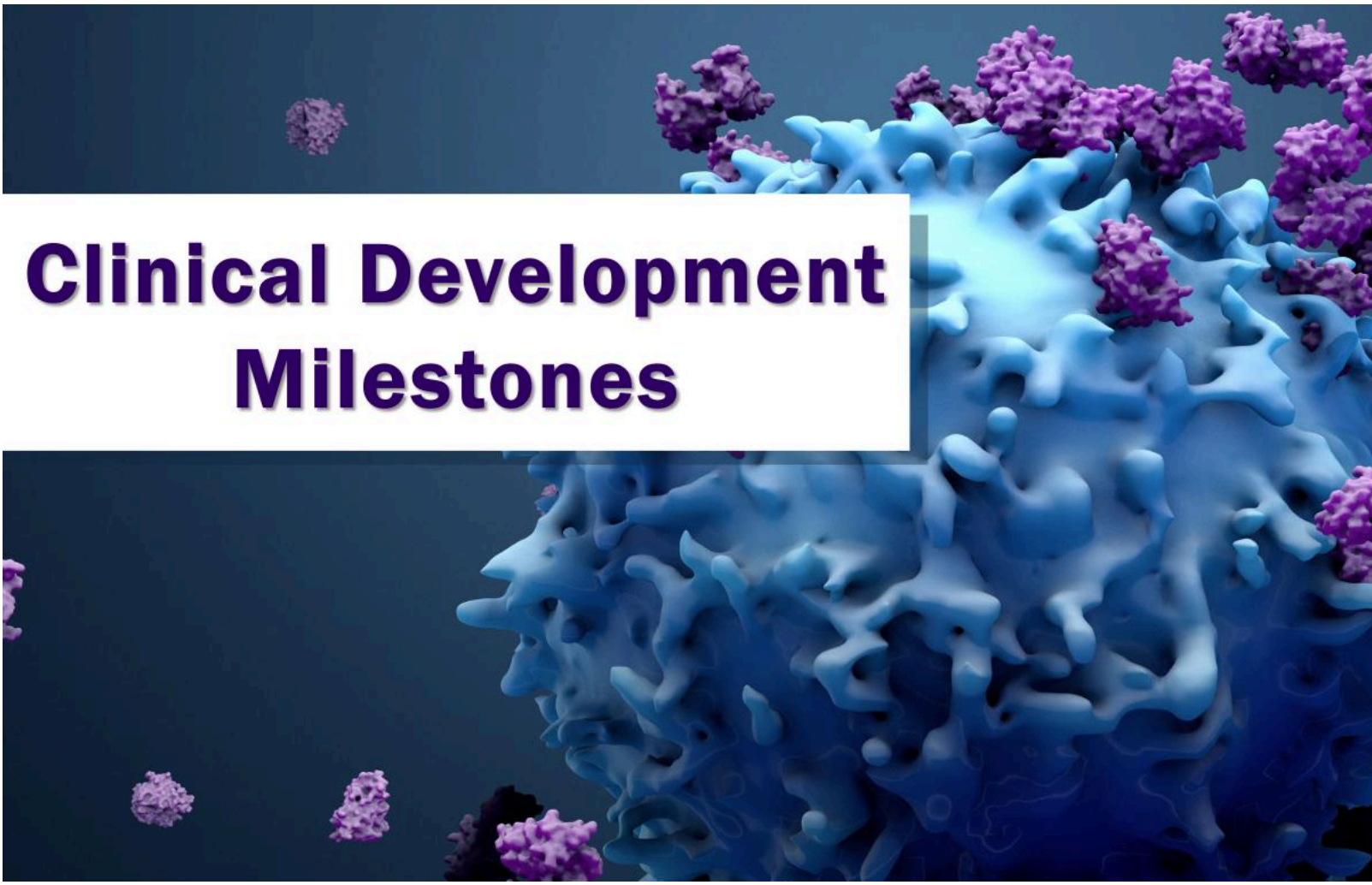
Certepetide

Development Portfolio

Certepetide capital efficient clinical development plan

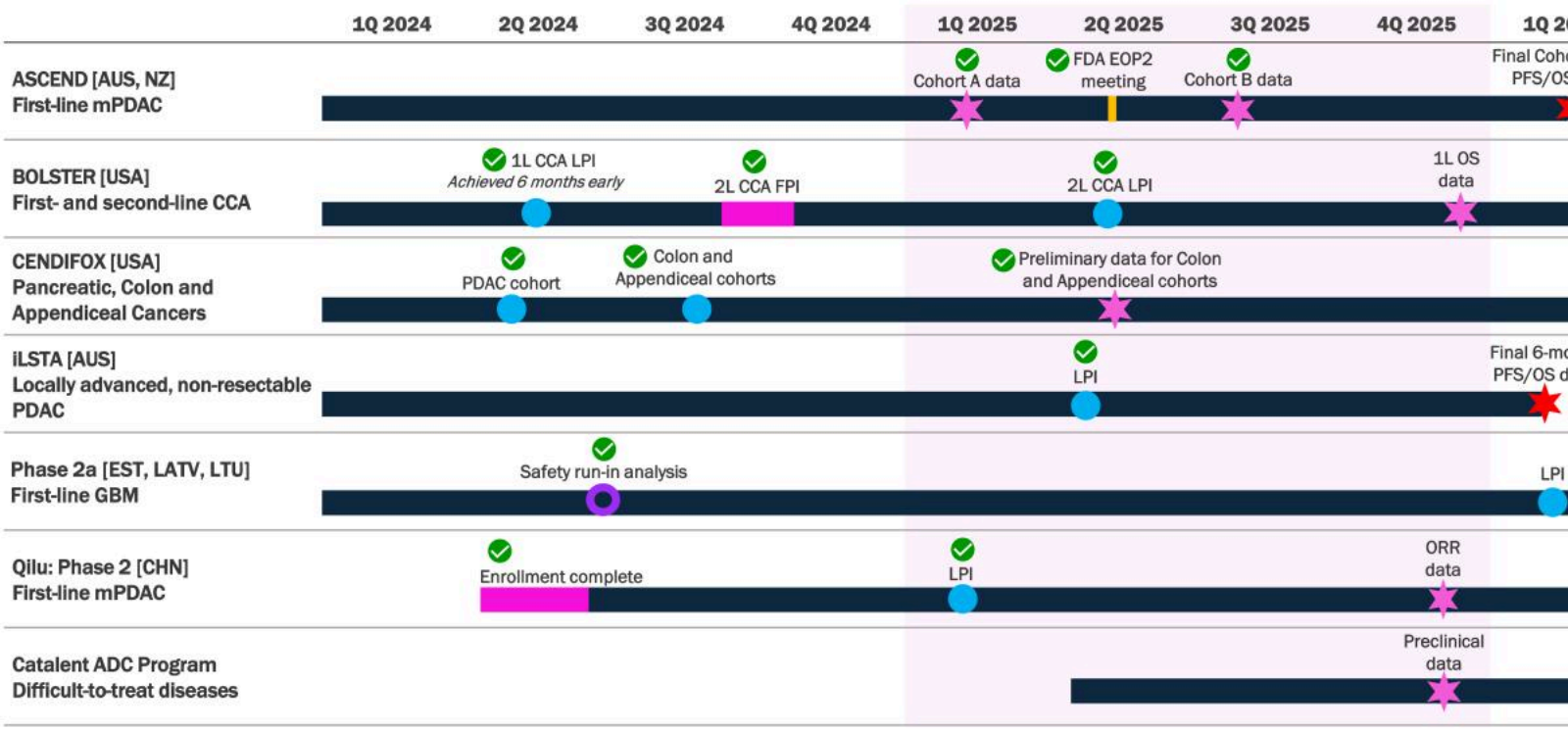
Sponsor(s)	Indication	Description	Current Ph	
			Phase 1	Phase
AGITG/Lisata	*First-line mPDAC*	▪ **ASCEND:** Phase 2b, placebo-controlled trial **(N=158)** ▪ *Gemcitabine/nab-paclitaxel + certepetide or placebo* ▪ Australia/New Zealand	Cohort A data announced Cohort B data announced	
Lisata	*First- and Second-line Cholangiocarcinoma (CCA)*	▪ **BOLSTER:** Phase 2a, placebo-controlled trial ▪ *1L: Gemcitabine/cisplatin/durvalumab + certepetide or placebo* **(N=47)** ▪ *2L: FOLFOX with certepetide or placebo* **(N=22)** ▪ United States	1L CCA Enrollment complete 2L CCA Enrollment complete	
KUCC/Lisata *Investigator-initiated trial*	*Pancreatic, Colon, and Appendiceal Cancers*	▪ **CENDIFOX:** Phase 1b/2a, open-label trial **(N=50)** ▪ *FOLFIRINOX + panitumumab** + certepetide* ▪ United States	Enrollment complete	
WARPNINE/Lisata	*Locally advanced, non-resectable PDAC*	▪ **iLSTA:** Phase 1b/2a, open-label trial **(N=30)** ▪ *Gemcitabine/nab-paclitaxel/durvalumab + certepetide* ▪ Australia	Enrollment complete	
Tartu University/Lisata *Investigator-initiated trial*	*First-line Glioblastoma Multiforme (GBM)*	▪ Phase 2a, placebo-controlled trial **(N=30)** ▪ *Temozolomide +/- certepetide* ▪ Estonia/Latvia	Enrolling	
Qilu/Lisata	*First-line mPDAC*	▪ Phase 2, placebo-controlled trial **(N=96)** ▪ *Gemcitabine/nab-paclitaxel + certepetide* ▪ China	Enrollment complete	

**Panitumumab may be added for colorectal or appendiceal patients without Ras mutation*



Clinical Development Milestones

A wealth of key certepetide clinical milestones



**Several of these studies are investigator-initiated trials. Lisata has limited control and thus, timelines and expectations may be subject to change.*

- PFS: Progression-free Survival
- OS: Overall Survival
- ORR: Objective Response Rate
- EOP2: End-of-Phase 2

Financial Summary

Capital projected to fund all clinical programs to data

Cash & Investments As of 9/30/2025	Debt	Projected Cash Runway
$19.0M	**$0**	**1Q 2027**

Common Shares Outstanding (9/30/2025):	8.8 million shares
Options Outstanding (9/30/2025): Exercise Price: $0.02 - $4.22 = 1,286,200 shares Exercise Price: > $4.22 = 216,700 shares	1.5 million shares
Warrants Outstanding (9/30/2025): Weighted Average Exercise Price: $40.52	1.5 million shares

Key factors supporting investment in Lisata Therapeutics

PEOPLE

Seasoned management with successful international drug development experience and expertise

INTELLECTUAL PROPERTY

Proprietary field-leading technology with global IP protection extending beyond 2040

MILESTONES

Multiple product and business milestones projected over the next 12 months

CAPITAL

$19.0 million cash*- no debt; Funds to support advancement of current clinical programs

PART

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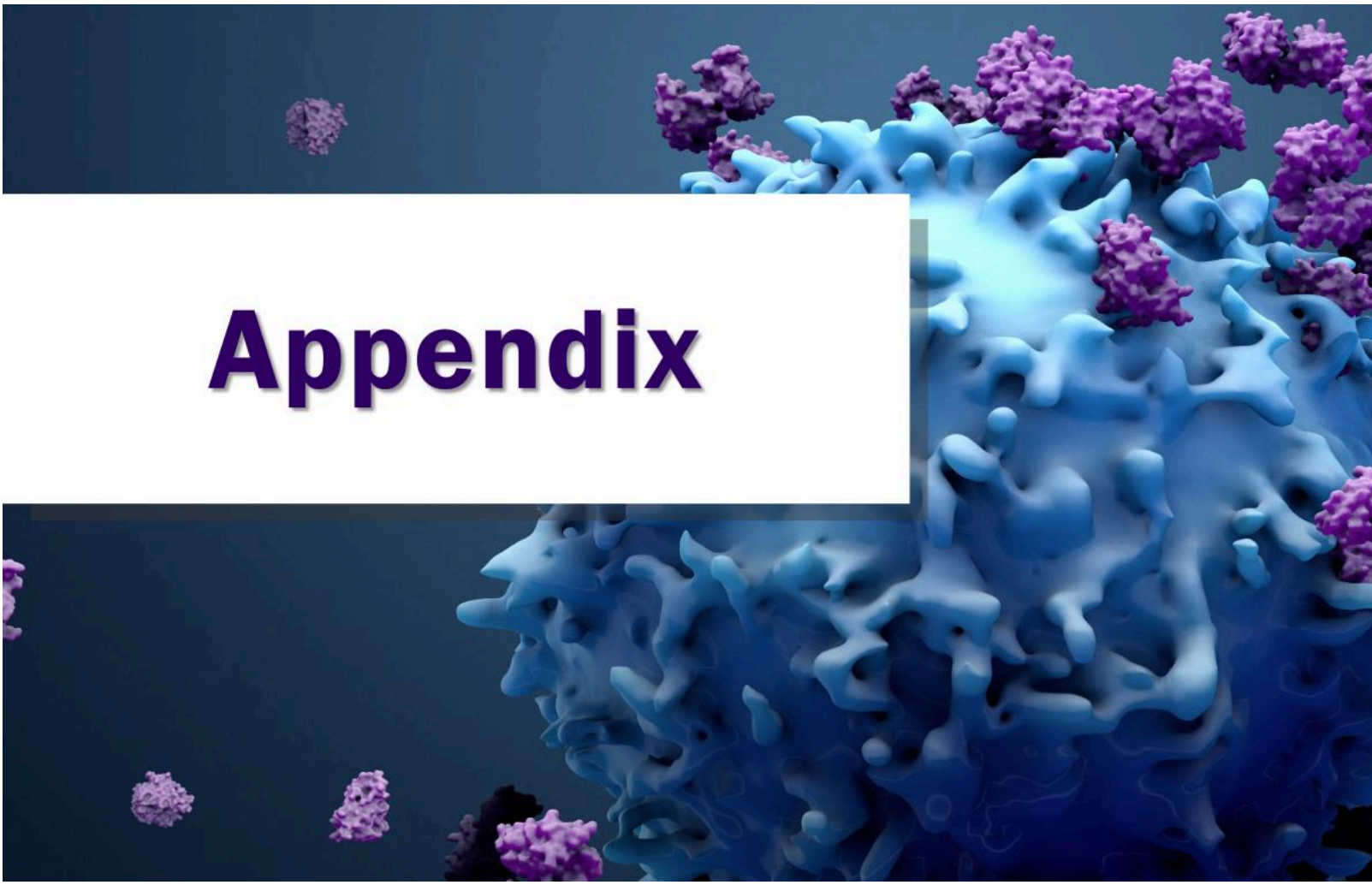
* As of 9/30/2025; includes investments

LISATA THERAPEUTICS

Targeted Therapy *Delivered*

Investor Relations Contact:
John D. Menditto
VP, IR & Corporate Communications
Tel: (908) 842-0084 | Email: jmenditto@lisata.com

Nasdaq: LSTA | *www.lisata.com*



Appendix

Certepetide capital efficient clinical development plan

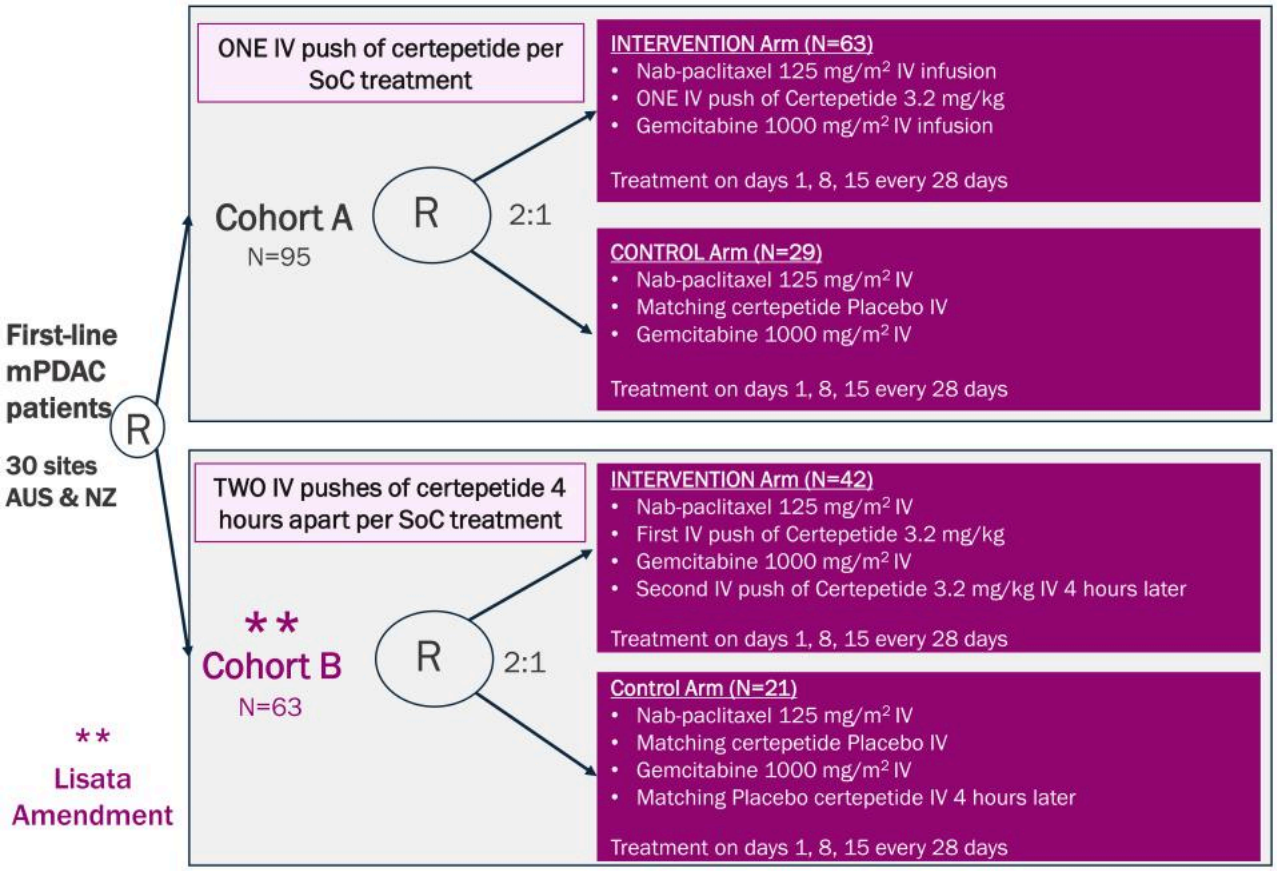
Development Partner(s) [Development Venue]	Indication and Trial Product/Comparator	Stage of Development	Strategic Rationale
Lisata/AGITG [Australia/New Zealand]	**First-line mPDAC;** Gemcitabine/nab-paclitaxel with certepetide or placebo	**Phase 2b (ASCEND)**	Corroborate Phase 1b results in a placebo- evaluate 2 dose regimens of certepetide fo
Lisata [United States]	**First- and Second-line Cholangiocarcinoma (CCA);** 1L CCA: Gemcitabine/cisplatin/durvalumab + certepetide or placebo 2L CCA: FOLFOX + certepetide or placebo	**Phase 2a (BOLSTER)**	Assess certepetide safety and effectiveness i in a placebo-controlled trial (proof-
KUCC/Lisata* [United States]	**Pancreatic, Colon & Appendiceal Cancers;** FOLFIRINOX + panitumumab** with certepetide	**Phase 1b/2a (CENDIFOX)**	Tumor immuno-profiling pre- & post- treatm effectiveness assessment in combination EGFR inhibitor (open-labe
WARPNINE/Lisata [Australia]	**Locally Advanced, Non-Resectable PDAC;** Gemcitabine/nab-paclitaxel/durvalumab + certepetide	**Phase 1b/2a (iLSTA)**	Assess certepetide safety and effectiveness i & Chemo in locally advanced PDAC; determine can become operable (open-l
Tartu University/Lisata* [Estonia/Latvia]	**First-line Glioblastoma Multiforme (GBM);** Temozolomide +/- certepetide	**Phase 2a**	Assess certepetide safety and effectiveness type (GBM) in a placebo-control
Qilu [China]	**First-line mPDAC;** Gemcitabine/Nab-paclitaxel + certepetide	**Phase 2b**	Continue development of certepeti (placebo controlled)

**Investigator-initiated trial*
***Panitumumab may be added for colorectal or appendiceal patients without Ras mutation*

ASCEND: Phase 2b, blinded, randomized trial in mPDAC

Sponsor/Partner	▪ Australasian Gastro-Intestinal Trials Group (AGITG) in collaboration with the NHMRC Trials Centre at the University of Sydney ▪ Lisata funded (LSTA eligible for ~43% rebate on all qualified R&D expenses in AUS)
Objective	▪ Corroborate Phase 1b results in a placebo-controlled study ▪ Determine if a second dose of certepetide further improves patient outcomes
Design	▪ Phase 2b randomized, double-blind study in mPDAC testing gemcitabine + nab-pac with one of two certepetide dose regimens or placebo
Study Size	▪ N=158 (~30 sites in Australia and New Zealand)
Endpoints	▪ Primary: Progression Free Survival ▪ Secondary: AEs, SAEs, Overall Survival, Objective Tumor Response Rate
Timing	▪ Enrollment completed December 2023 ▪ Preliminary Cohort A data was presented at ASCO-GI in January 2025 ▪ Preliminary Cohort B data was presented at ESMO-GI in July 2025

ASCEND Phase 2b trial design



Phase 2b randomized study in mPDAC testing nab-paclitaxel SoC wi certepetide dose regim

Endpoints

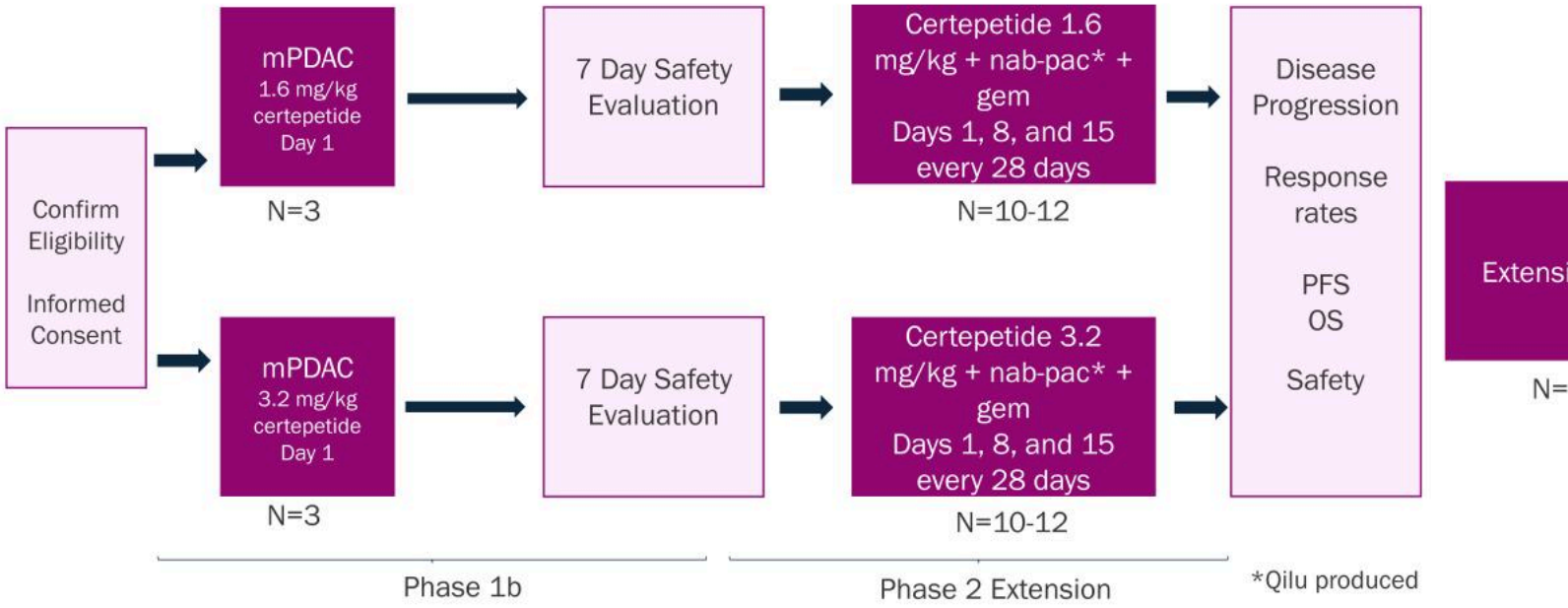
- PFS: Progression Fr
- ORR: Objective Res
- OS: Overall Surviva
- Safety (Adverse Eve
- QoL: Quality of Life
- Exploratory Endpoi

Phase 1b/2a open-label trial in mPDAC in China (CEND1-201

Sponsor/Partner	▪ Qilu Pharmaceutical (funds all development in China)
Objective	▪ Evaluate safety, pharmacokinetics and preliminary efficacy of certepetide added to Chinese patients with mPDAC
Design	▪ Phase 1b/2a open-label study in advanced mPDAC patients of Chinese ethnicity tes chemotherapy (gemcitabine + Qilu-produced nab-paclitaxel) in combination with ce
Study Size	▪ N=55 (~15 sites)
Endpoints	▪ Primary: AEs, SAEs, Objective Response Rate, Duration of Response, Disease Contr Overall Survival, and Progression Free Survival ▪ Secondary: Pharmacokinetic parameters
Timing	▪ Preliminary data was presented at the 2023 ASCO Annual Meeting

Qilu Phase 1b/2a trial design

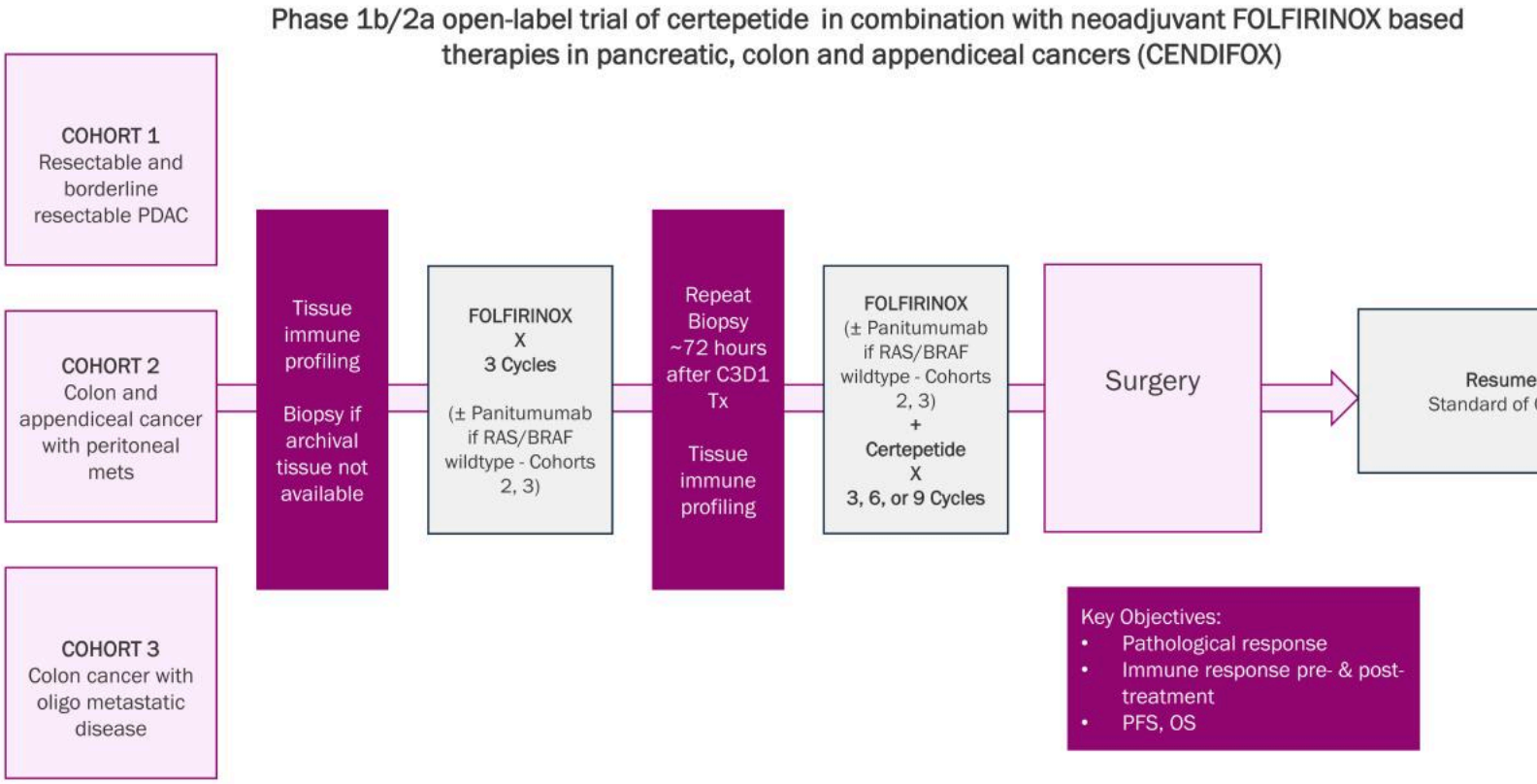
Phase 1b/2a study evaluating the safety, pharmacokinetics, and preliminary efficacy of certepetide for injection
patients with advanced metastatic pancreatic ductal adenocarcinoma



CENDIFOX: Phase 1b/2a open-label trial in PDAC and other ca

Sponsor/Partner	▪ University of Kansas Medical Center (Investigator initiated trial in U.S.) ▪ KUCC funded; Lisata provides certepetide
Objective	▪ Evaluate the safety and therapeutic effect of certepetide in combination with neoadjuvant FO based therapies and an EGFR inhibitor for the treatment of pancreatic, colon and appendicea determine immuno-profiling in tumor pre- & post- treatment
Design	▪ Phase 1b/2a open-label study in resectable pancreatic, colon with oligo metastases and appe peritoneal metastases cancers testing SoC chemotherapy (neoadjuvant FOLFIRINOX-based th certepetide ± panitumumab
Study Size	▪ N=50 (24 PDAC, 15 colon, and 11 appendiceal)
Endpoints	▪ Primary: Drug Safety ▪ Secondary: Overall Survival, Disease-free Survival, Overall Response Rate, RO Resection Rate Response Rate
Timing	▪ Enrollment completed 4Q24

CENDIFOX Phase 1b/2a trial design

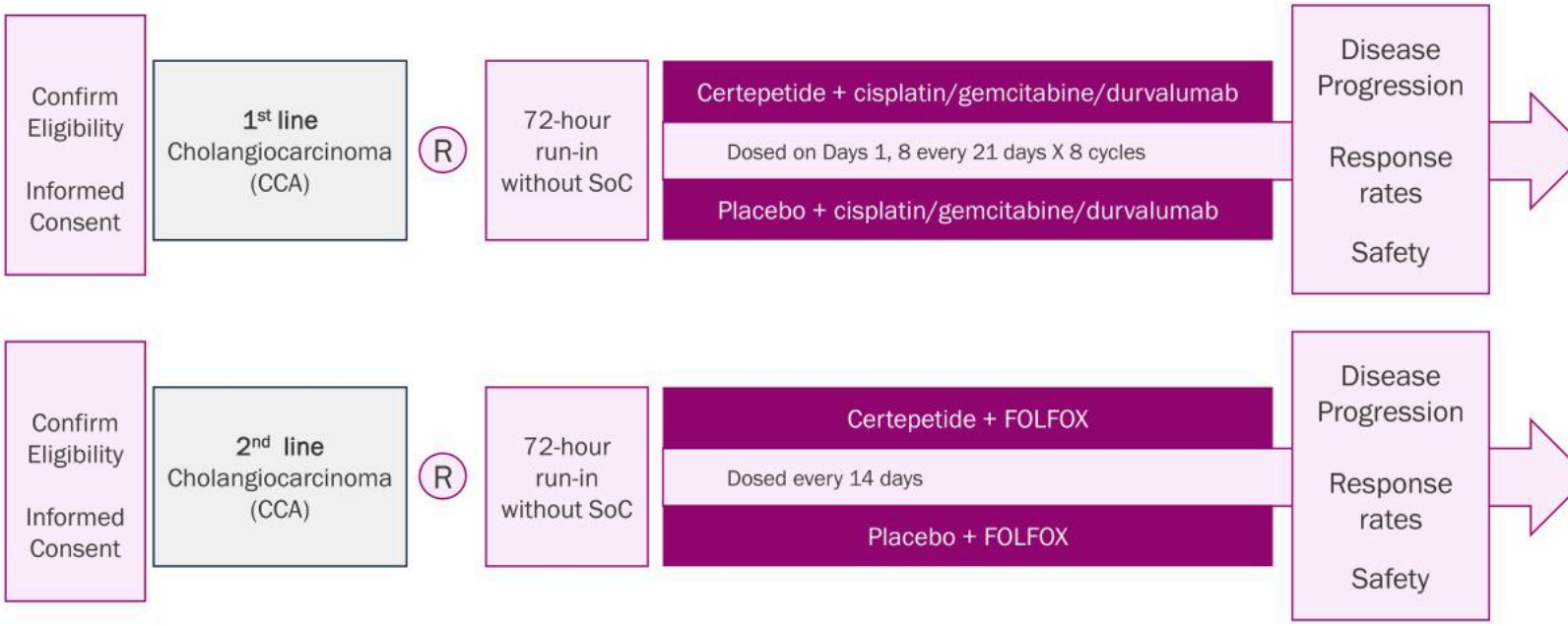


BOLSTER: Phase 2 blinded, randomized trial in cholangiocarc

Sponsor/Partner	▪ Lisata (U.S.)
Objective	▪ Evaluate the preliminary efficacy, safety and tolerability of certepetide in comb standards of care in subjects with first- and second-line cholangiocarcinoma
Design	▪ Phase 2 randomized, double-blind, placebo-controlled, proof-of-concept trial in second-line cholangiocarcinoma testing corresponding SoC with certepetide or
Study Size	▪ N=69 (1L: N=47, 2L: N=22) ▪ 1:1 SoC + certepetide or SoC + placebo
Endpoints	▪ Primary: OS ▪ Secondary: Safety, ORR, PFS
Timing	▪ Patient treatment has been completed

BOLSTER Phase 2a trial design

Phase 2a, double-blind, placebo-controlled, multi-center, randomized study evaluating certepetide when added to standar
versus standard of care alone in subjects with first- and second-line cholangiocarcinoma

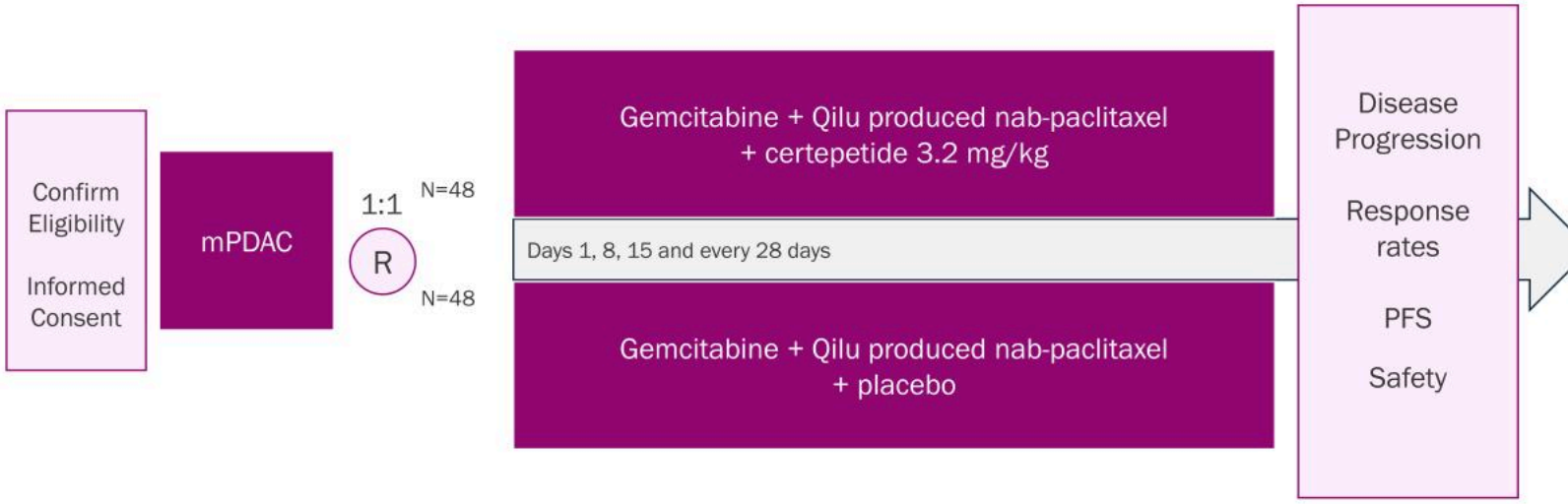


Phase 2 double-blind, placebo-controlled trial in mPDAC in Ch

Sponsor/Partner	▪ Qilu Pharmaceutical (funds all development in China)
Objective	▪ Further evaluate safety and therapeutic efficacy of certepetide when added to Chinese patients with locally advanced unresectable mPDAC
Design	▪ Phase 2b, double-blind, placebo-controlled, randomized study evaluating certe SoC (Qilu-produced nab-paclitaxel and gemcitabine) vs. placebo + SoC
Study Size	▪ N=96 (1:1 SoC + certepetide or SoC + placebo)
Endpoints	▪ Objective response rate, progression free survival, duration of response, disea rate, overall survival ▪ Safety
Timing	▪ Enrollment completed 1Q25

Qilu Phase 2b trial design

Phase 2b, double-blind, placebo-controlled, randomized, multicenter study evaluating the safety and efficacy of certep
added to standard of care (nab-paclitaxel and gemcitabine) vs. standard of care alone and placebo in Chinese subje
locally advanced unresectable mPDAC

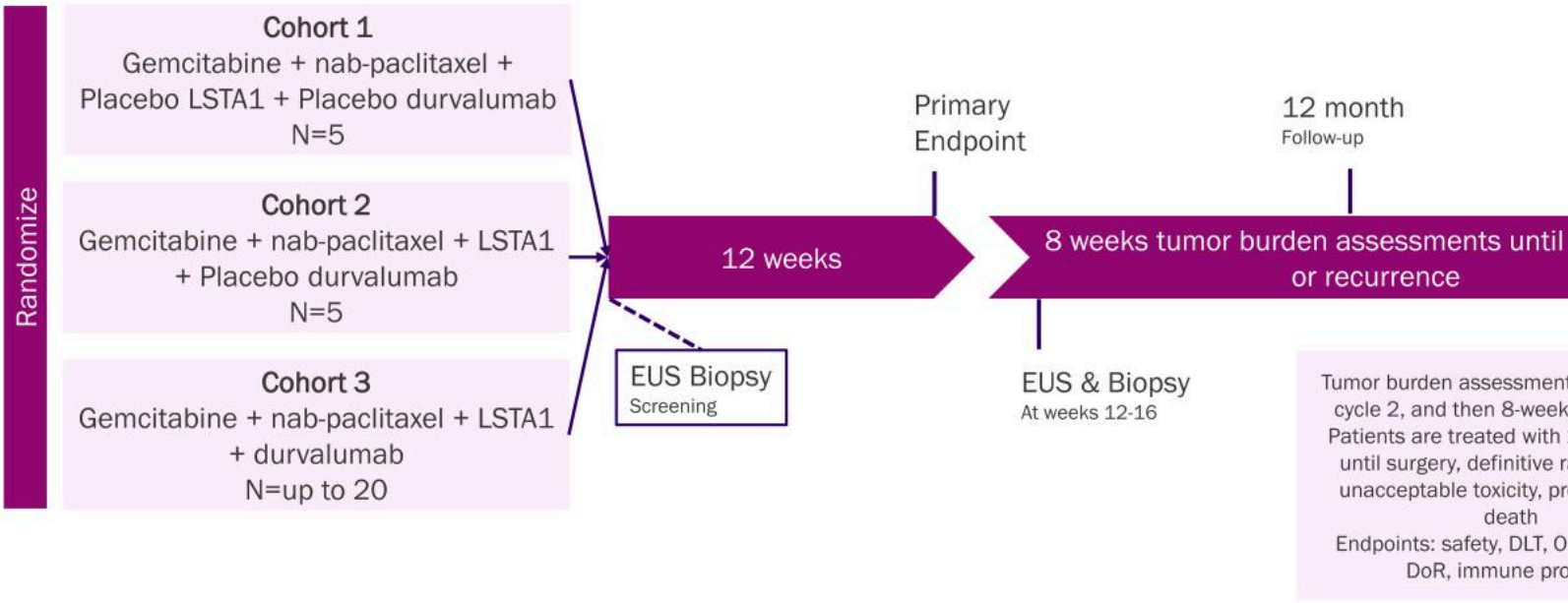


iLSTA: Phase 1b/2a trial in locally advanced PDAC with chem

Sponsor/Partner	▪ WARPNINE, Inc. (registered charity in Australia) is funding trial ▪ Lisata providing study drug
Objective	▪ Evaluate safety and therapeutic effect of LSTA1 in combination with IO & Chem advanced non-resectable pancreatic ductal adenocarcinoma (PDAC); determin inoperable tumors can become operable
Design	▪ Phase 1b/2a proof-of-concept safety and early efficacy study of LSTA1 in comb durvalumab, gemcitabine and nab-paclitaxel, as first-line treatment in *locally a* non-resectable pancreatic adenocarcinoma
Study Size	▪ N=30
Endpoints	▪ Safety and tolerability; 28-day DLTs ▪ Objective response rate, PFS, OS, duration of response, immune cell infiltratio
Timing	▪ Final 6-month PFS/OS data expected 1Q 2026 ▪ Preliminary data presented at ASCO-GI (January 2025), with updated data con previous findings presented at ESMO-GI (July 2025)

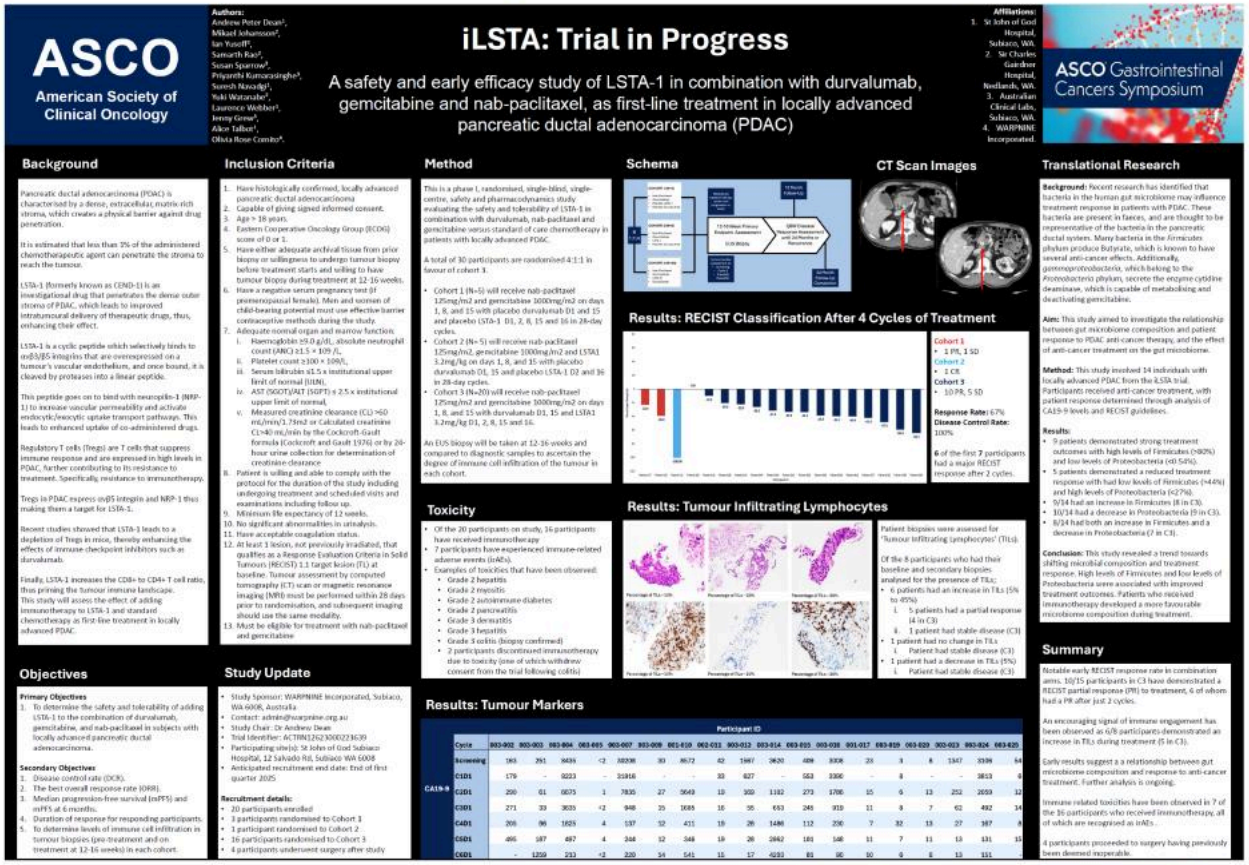
iLSTA Phase 1b/2a trial design

Phase 1b/2a proof-of-concept safety and early efficacy study of LSTA1 in combination with durvalumab, gemcita
and nab-paclitaxel, as first-line treatment in *locally advanced non-resectable* pancreatic ductal adenocarcinom



gemcitabine 1000mg/m^2 : Days 1, 8, 15 in 28-day cycles
nab-paclitaxel 125mg/m^2: Days 1, 8, 15 in 28-day cycles
durvalumab 750mg: Days 1 and 15 in 28-day cycles
certepetide 3.2 mg/kg/ Placebo: Days 1, 2, 8, 15, 16 in 28-day cycles

Preliminary iLSTA trial results poster at 2025 ASCO-GI Sympo



An abstract with a detailed summary of the poster presentation is also available on the ASCO GI website: https://meetings.asco.org/abstracts-presentations/241611

Updated preliminary iLSTA trial results poster at 2025 ESMO-

267P

ESMO

ESMO GASTROINTESTINAL CANCERS

BARCELONA SPAIN 2-5 JULY 2025

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3. Australian Clinical Labs, Subiaco, WA.
4. WARPNINE Incorporated.

iLSTA

Provisional results of immunotherapy combined with LSTA1 plus nab-paclitaxel and gemcitabine for locally advanced pancreatic ductal adenocarcinoma

Background

Pancreatic ductal adenocarcinoma (PDAC) is characterised by a dense, extracellular, matrix-rich stroma, which creates a physical barrier against drug penetration.

This leads to less than 1% of the administered chemotherapeutic agent being able to penetrate the stroma to reach the tumour.

LSTA-1 (Formerly known as CEND-1) is an investigational drug that can penetrate the dense outer stroma of PDAC tumours, which leads to improved intratumoural delivery of therapeutic drugs, thus, enhancing their effect.

LSTA-1 is a cyclic peptide that selectively binds to αvβ3/β5 integrins expressed on the tumour's vascular endothelium and intratumorally. Once bound, a protease cleavage event occurs to activate the peptide.

This peptide then goes on to bind with neuropilin-1 (NRP-1) to increase vascular permeability and activate an endocytic uptake transport pathway, known as the CENDR pathway. This leads to enhanced uptake of co-administered drugs.

Regulatory T cells (Tregs) suppress the immune response and are expressed in high levels in PDAC tumours, further contributing to resistance to anti-cancer treatment. Specifically, resistance to immunotherapy.

Tregs in PDAC tumours also express αvβ5 integrins and NRP-1, thus, making them a target for LSTA-1. Recent studies in mouse models showed that LSTA-1 leads to the depletion of Tregs, thereby enhancing the effect of immune checkpoint inhibitors such as durvalumab.

Finally, LSTA-1 increases the CD8+ to CD4+ T cell ratio, priming the tumour immune landscape.

Therefore, this study will assess the effect of adding LSTA-1 and/or immunotherapy to standard chemotherapy as first-line treatment for locally advanced PDAC.

Objectives

Primary Objectives
1. To determine the safety and tolerability of adding LSTA-1 to the combination of durvalumab, gemcitabine, and nab-paclitaxel in subjects with locally advanced pancreatic ductal adenocarcinoma.

Secondary Objectives
1. Disease control rate (DCR).
2. The best overall response rate (ORR).
3. Median progression-free survival (mPFS) and mPFS at 6 months.
4. Duration of response for responding participants.
5. To determine levels of immune cell infiltration in tumour biopsies (pre-treatment and on treatment at 12-16 weeks) in each cohort.

Inclusion Criteria

1. Histologically confirmed, locally advanced PDAC.
2. Eastern Cooperative Oncology Group (ECOG) score of 0 or 1.
3. Minimum life expectancy of 12 weeks.
4. Adequate archival tissue from prior biopsy or willingness to undergo tumour biopsy before treatment starts.
5. Willing to have tumour biopsy at 12-16 weeks.
6. Adequate normal organ and marrow function
7. No significant abnormalities in urinalysis.
8. Have acceptable coagulation status.
9. At least 1 lesion, not previously irradiated, that qualifies as a RECIST 1.1 target lesion at baseline. Tumour assessment by CT scan or MRI.
10. Must be eligible for treatment with nab-paclitaxel and gemcitabine.

Study Update

Recruitment details:
- 29 participants enrolled
- 23 currently evaluable participants
  - 4 participants randomised to Cohort 1
  - 2 participant randomised to Cohort 2
  - 17 participants randomised to Cohort 3

Method

This study was conducted as a phase I, randomised, single-blind, single-centre, safety and pharmacodynamics study evaluating the safety and tolerability of LSTA-1 in combination with durvalumab, nab-paclitaxel and gemcitabine versus standard of care chemotherapy in patients diagnosed with locally advanced PDAC.

10 participants were randomised in a 4:1:1 ratio;

- Cohort 1/C1 (N=5) received nab-paclitaxel 125mg/m2 and gemcitabine 1000mg/m2 on days 1, 8, and 15 with placebo durvalumab on D1 and 15 and placebo LSTA-1 on D1, 2, 8, 15 and 16.
- Cohort 2/C2 (N= 5) will receive nab-paclitaxel 125mg/m2, gemcitabine 1000mg/m2 and LSTA1 3.2mg/kg on D1, 8, and 15 with placebo durvalumab D1 and 15 and placebo LSTA-1 D2 and 16.
- Cohort 3/C3 (N=20) will receive nab-paclitaxel 125mg/m2 and gemcitabine 1000mg/m2 on D1, 8, and 15 with durvalumab on D1 and 15 and LSTA1 3.2mg/kg D1, 2, 8, 15 and 16.

Participants received treatment in 28-day cycles.

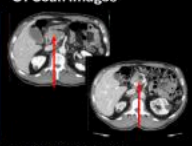
An EUS biopsy was conducted between weeks 12 and 16 and compared to the diagnostic samples to determine the degree of tumour immune cell infiltration in each cohort.

Toxicity

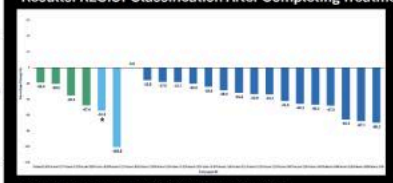
- Of the 29 participants recruited, 17 participants have received immunotherapy.
- 7 participants have experienced immune-related adverse events (irAEs).
- Examples of toxicities that have been observed: Grade 2 hepatitis, Grade 2 myositis, Grade 2 autoimmune diabetes, Grade 2 pancreatitis, Grade 3 dermatitis, Grade 3 hepatitis, Grade 3 colitis (biopsy confirmed).
- 2 participants discontinued immunotherapy due to toxicity (one of which withdrew consent from the trial following colitis).

Schema

CT Scan Images



Results: RECIST Classification After Completing Treatment



Cohort 1
- 2 PR, 2 SD

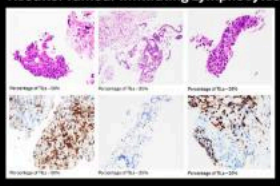
Cohort 2
- 1 CR, 1 PR

Cohort 3
- 10 PR, 7 SD

Response Rate: 61%
Disease Control Rate: 100%

* Cycle 4 Measurement

Results: Tumour Infiltrating Lymphocytes



Patient biopsies were assessed for 'Tumour Infiltrating Lymphocytes' (TILs). Of the 14 participants who had their baseline and secondary biopsies analysed for TILs;
- 8 patients had an increase in TILs (5% to 45%)
  - I. 7 patients had a partial response (6 in C3)
  - II. 1 patient had stable disease (C3)
- 4 patients showed nill (2) or minimal (2) residual adenocarcinoma (isolated tumour cells)
- 1 patient had no change in TILs
  - I. Patient had stable disease (C3)
- 1 patient had a decrease in TILs (5%)
  - I. Patient had stable disease (C3)

Translational Research

Background: Recent research has identified that bacteria in the human gut microbiome may influence treatment response in patients with PDAC. Specifically, these studies have revealed the gut microbiome may impact the tumour microenvironment, metabolism, and sensitivity to therapeutic drugs. Many bacteria in the Firmicutes phylum produce Butyrate, which is known to have several anti-cancer properties. Additionally, *gammaproteobacteria*, a class of bacteria that belongs to the *Proteobacteria* phylum, secrete the enzyme cytidine deaminase, which is capable of metabolising gemcitabine into its inactive isoform.

Aim: This study aimed to investigate the relationship between gut microbiome composition and patient treatment response, as well as the effect of treatment on microbiome composition.

Method: This study involved 14 participants with locally advanced PDAC from the iLSTA trial. Stool samples were collected from participants at baseline and 12 weeks into treatment. Patient treatment response was determined through analysis of CA19-9 levels and RECIST analysis.

Results:
- 9 patients demonstrated strong treatment outcomes with high levels of Firmicutes (>60%) and low levels of Proteobacteria (<0.54%).
- 5 patients demonstrated a reduced treatment response with low levels of Firmicutes (>44%) and high levels of Proteobacteria (<27%).
- 9/14 showed an increase in Firmicutes (8 in C3).
- 10/14 showed a decrease in Proteobacteria (9 in C3).
- 8/14 showed both an increase in Firmicutes and a decrease in Proteobacteria (7 in C3).

Conclusion: This study revealed a trend towards shifting microbial composition and treatment response. High levels of Firmicutes and low levels of Proteobacteria were associated with improved treatment outcomes. Patients who received immunotherapy developed a more favourable microbiome composition during treatment.

Results: Tumour Markers

		Participant ID																											
	Cycle	003-002	003-003	003-004	003-005	003-007	003-009	001-010	002-011	003-013	003-014	003-015	003-016	001-017	003-019	003-020	003-023	003-024	003-025	001-029	003-030	001-031	003-032	002-033
CA19-9	Screening	183	251	8435	<2	30208	30	8572	42	1567	3620	409	3068	23	3	8	1347	3108	54	329	2851	<2	424	3268
	C1D1	179	251	8223	<2	31916	30	8572	33	627	3620	553	3390	23	8	8	1347	3813	6	401	2733	<2	424	3268
	C2D1	290	61	6675	1	7835	27	5648	19	369	1102	273	1786	15	6	13	262	2359	12	411	3727	3	254	2429
	C3D1	271	33	3635	<2	948	15	1685	16	55	653	245	919	11	8	7	62	492	16	72	2789	3	138	196
	C4D1	206	98	1825	4	137	12	411	19	28	1486	112	230	7	32	13	27	167	14	31	1425	8	88	38
	C5D1	495	187	497	4	244	12	346	15	28	2892	101	148	11	7	11	13	131	8	21	659	<2	64	-
	C6D1	-	1258	213	<2	220	14	541	15	17	4203	81	80	10	6	6	13	151	15	22	560	2	-	-

Disclosure

- Sponsor: WARPNINE Inc.
- Contact: admin@warpnine.org.au
- Study Chair: Dr Andrew Doan.
- Trial Identifier: ACTRN12624000223639
- Participating site: St John of God Subiaco Hospital, 12 Salvado Rd, Subiaco WA 6008.
- DOI: Dr. Doan is on the board of WARPNINE Incorporated with no financial interests.
- Durvalumab provided by AstraZeneca.
- LSTA-1 provided by Lisata Therapeutics.

Summary

- Notable early RECIST response rate in combination arms - 12/19 participants in C2 + C3 demonstrated a RECIST partial response (PR) to treatment, 7 of whom had a PR after 2 cycles.
- An encouraging signal of immune engagement was observed as 8/14 participants demonstrated an increase in TILs during treatment (7 in C3), and 4 participants showed nil or minimal residual tumour cells.
- Early results suggest a a relationship between gut microbiome composition and response to anti-cancer treatment. Analysis is ongoing.
- Immune related toxicities have been observed in 7/17 participants who received immunotherapy. All were recognised as irAEs.
- 4 participants proceeded to surgery having previously been deemed inoperable.

Phase 2a trial of certepetide with SoC in first-line GBM

Sponsor/Partner	▪ Tartu University Hospital (Investigator initiated trial in Estonia, Latvia and Lithua ▪ Lisata providing study drug and funding trial
Objective	▪ Evaluate safety, tolerability, and therapeutic effect of certepetide in combinatio standard-of-care (temozolomide) in patients with previously untreated Glioblas Multiforme
Design	▪ Phase 2a proof-of-concept, double-blind, placebo-controlled, randomized study certepetide when added to standard of care (temozolomide) versus SoC and p subjects with newly diagnosed Glioblastoma Multiforme (GBM)
Study Size	▪ N=30 total (N=3 safety run-in, N=27 in main study schema)
Endpoints	▪ Safety, tolerability ▪ ORR, PFS, OS, disease control rate
Timing	▪ Enrollment commenced December 2023

GBM Phase 2a trial design

Phase 2a proof-of-concept double-blind, placebo-controlled, randomized, proof-of-concept study evaluating certepetide when added to standard of care (temozolomide) versus temozolomide and matching certepetide placebo in subjects with newly diagnosed GBM