



Shaping a near future
where today's hard-to-treat
cancers are *vincible*.

As featured in:

International
Business
Times.

USA
TODAY
(US Audiences Only)

June 2025



INVESTMENT HIGHLIGHTS

Helix BioPharma is on a mission to level the playing field against cancer’s biggest, most urgent challenges.





INNOVATING FROM STRENGTH

- 1 Assets with great potential and a head start
- 2 Management team with a track record of success
- 3 USD 140M raised to date

FOCUSED, AMBITIOUS PLAN AHEAD

- 1 Relocation to the US and NASDAQ listing
- 2 Grow world-class team
- 3 Near-term partnering/exits

PIPELINE

	LEAD INDICATION	NEXT MILESTONE	POTENTIAL
L-DOS47 Antibody-Enzyme Conjugate (AEC)	 Non-small cell lung cancer	Phase IB IND	≥30% efficacy added to checkpoint inhibitors
C6 Antibody-Drug Conjugates (ADCs)	 Solid tumors	Patent filings	Overcome resistance, maximize efficacy
LEUMUNA Small molecule, FDA Orphan status	 Leukemia relapse	Phase I/II IND	Long-term remission (2+ years) or cure
GEMCEDA First-in-class oral chemotherapy	 Advanced solid tumors	Phase I/II IND	Significant increase in progression-free survival

RAISING

USD 80 million
to reach major value inflection points and bring much-needed therapies to patients with hard-to-treat cancers.

OUR PIPELINE

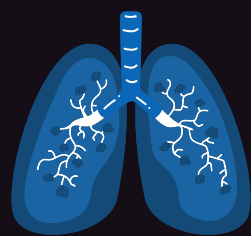
Diverse, clinical-stage pipeline of candidates with great potential and a head start, honed into first- and best-in-class oncology medicines.

PRODUCT / TYPE	DISCOVERY	PRECLINICAL	PHASE IA/B	PATENT LIFE	
L-DOS47 Tumor microenvironment (TME)-modifying AEC	Non-Small Cell Lung Cancer (NSCLC)			2036 + extensions	TECHNOLOGY PLATFORM ZEROING IN ON NOVEL TARGET, CEACAM6
C6 ADCs Bi-specific/radio-ligand	Solid tumors			2045	
LEUMUNA Oral immune checkpoint modulator	Leukemia relapse post-allogeneic stem cell transplantation (SCT)			2041	ASSET ACQUISITION, Q1 2025
GEMCEDA Oral gemcitabine + cedazuridine	Advanced solid tumors			2043	

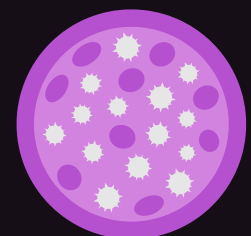
LEAD INDICATIONS

Prevalent and hard-to-treat cancers made vincible by novel therapies that rise to the challenge.

HOW WE WANT TO MOVE THE NEEDLE



ADD $\geq 30\%$ EFFICACY
to immune checkpoint inhibitors (CPIs) standard of care

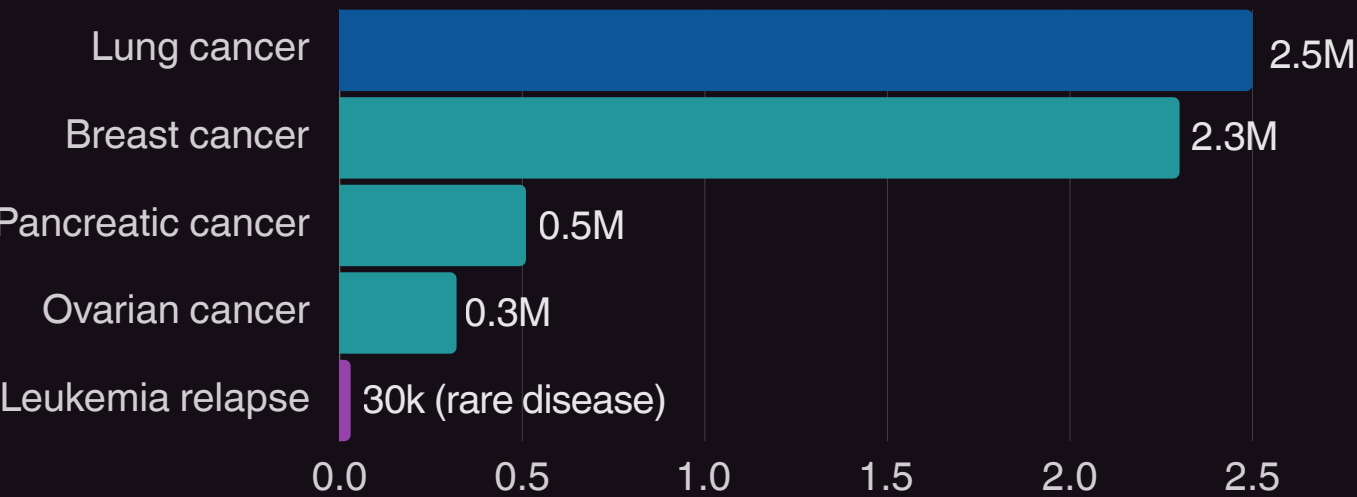


CURE OR LONG-TERM SURVIVAL
of 2+ years for patients relapsing with leukemia



REDEFINE MAINTENANCE THERAPY OUTCOMES
and significantly increase progression-free survival

LEAD INDICATIONS, GLOBAL INCIDENCE (MILLIONS)



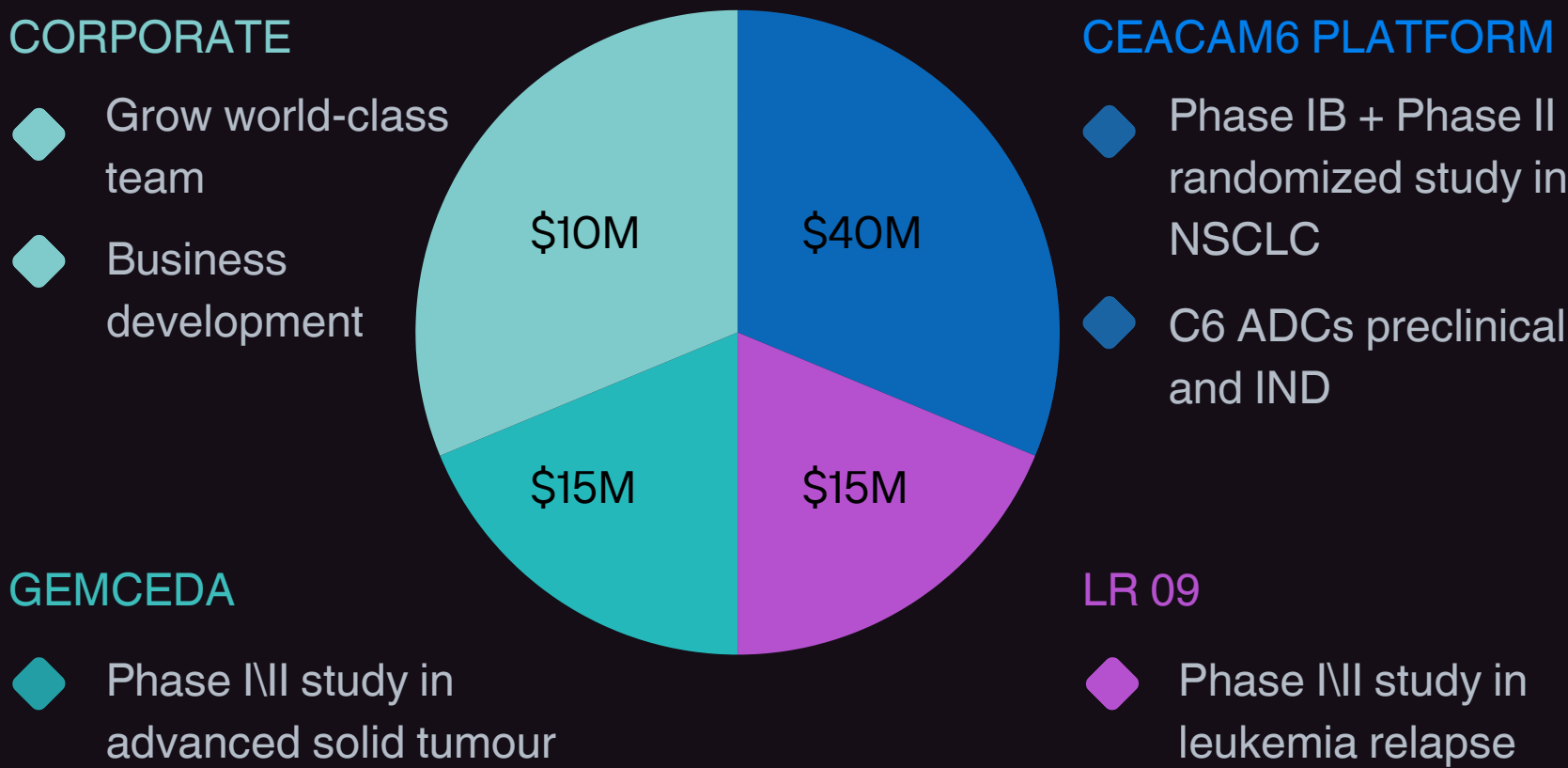
HIGH MORTALITY (5 YEARS FROM DIAGNOSIS):



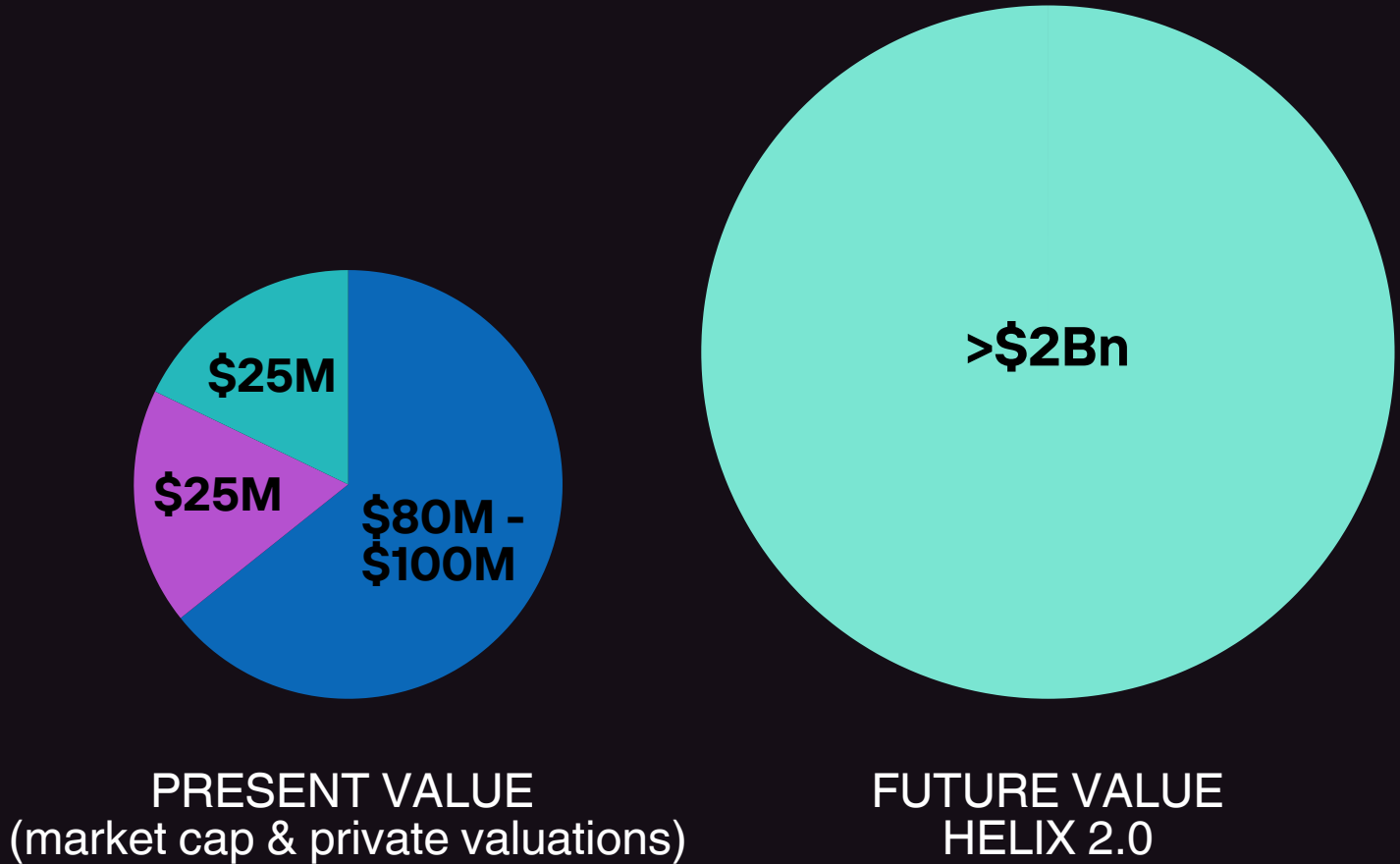
INVESTMENT & RETURN

USD 80M to achieve major project milestones and value inflection points.

USE OF PROCEEDS OVER THE NEXT 24 MONTHS



THE WHOLE IS GREATER THAN THE SUM OF ITS PARTS





OUR CORE LEADERSHIP & SCIENTIFIC TEAM



Thomas Mehrling, MD, PhD
Chief Executive Officer



Veronika Kandziora
Chief Operating Officer



Rohit Babbar, CPA, CA
Chief Financial Officer



Davide Guggi, PhD
Chief Technology Officer



Jonathan Davis, PhD
Director of ADC Discovery



Brenda Lee, PhD
Director of Clinical Ops.



Kim Gaspar,
Director of Quality Assurance



Jessica Kourniaktis, DPhil
Director of Communications



CEACAM6 PLATFORM

Bio-conjugates that score with precision
against prevalent, hard-to-treat cancers
over-expressing CEACAM6.



BIO-CONJUGATE TARGET

CEACAM6

CEACAMs (carcinoembryonic antigen-related cell adhesion molecules) are a family of 12 cell adhesion proteins found on cell surfaces.

CEACAM5 and CEACAM6 are over-expressed on tumor cell surfaces; **CEACAM6 is a very promising target** for antibody-based therapies.

[Beauchemin N, Arabzadeh A. Cancer Metastasis Rev. 2013;32\(3-4\):643-71.](#)



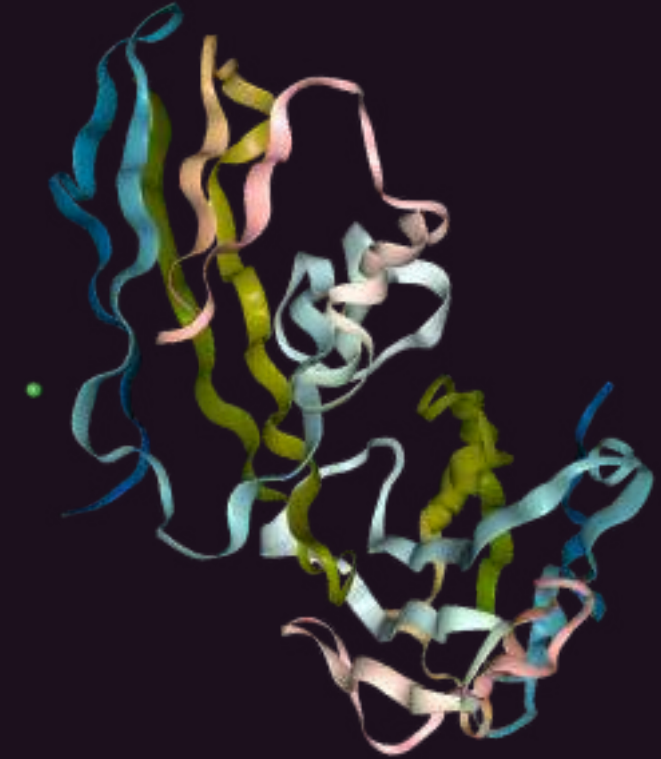
Overexpressed in major cancers

CEACAM6 is significantly low in healthy tissue.



Associated with poorer patient survival

including disease-free survival (DFS) and overall survival (OS).



Linked to malignancy progression

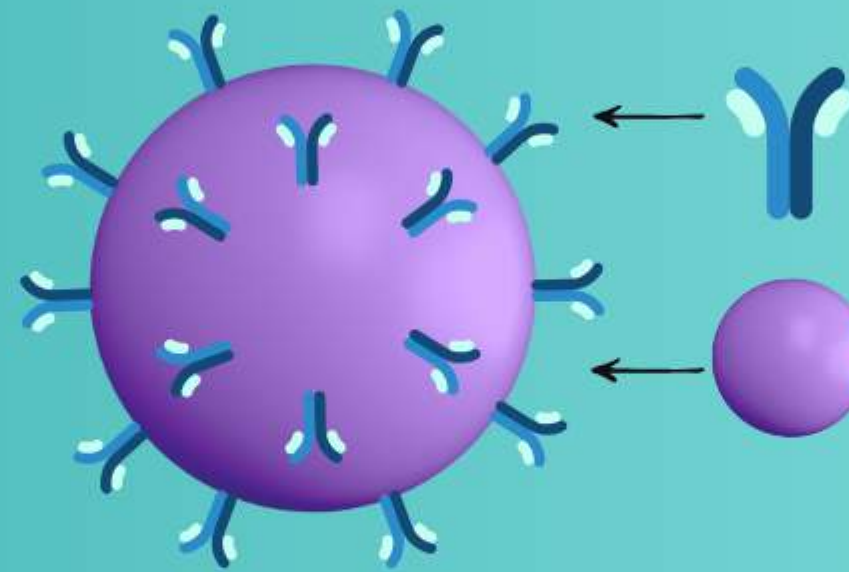
including cancer proliferation and metastasis.

[Thomas J, Klebanov A, John S, et al. Genes Cancer. 2023;14:12-29.](#)

PRODUCT 1, CEACAM6 PLATFORM

TUMOR DEFENCE BREAKER™ L-DOS47

A clinical-stage AEC that **neutralizes the acidic tumor microenvironment** (TME) of prevalent, hard-to-treat tumors.



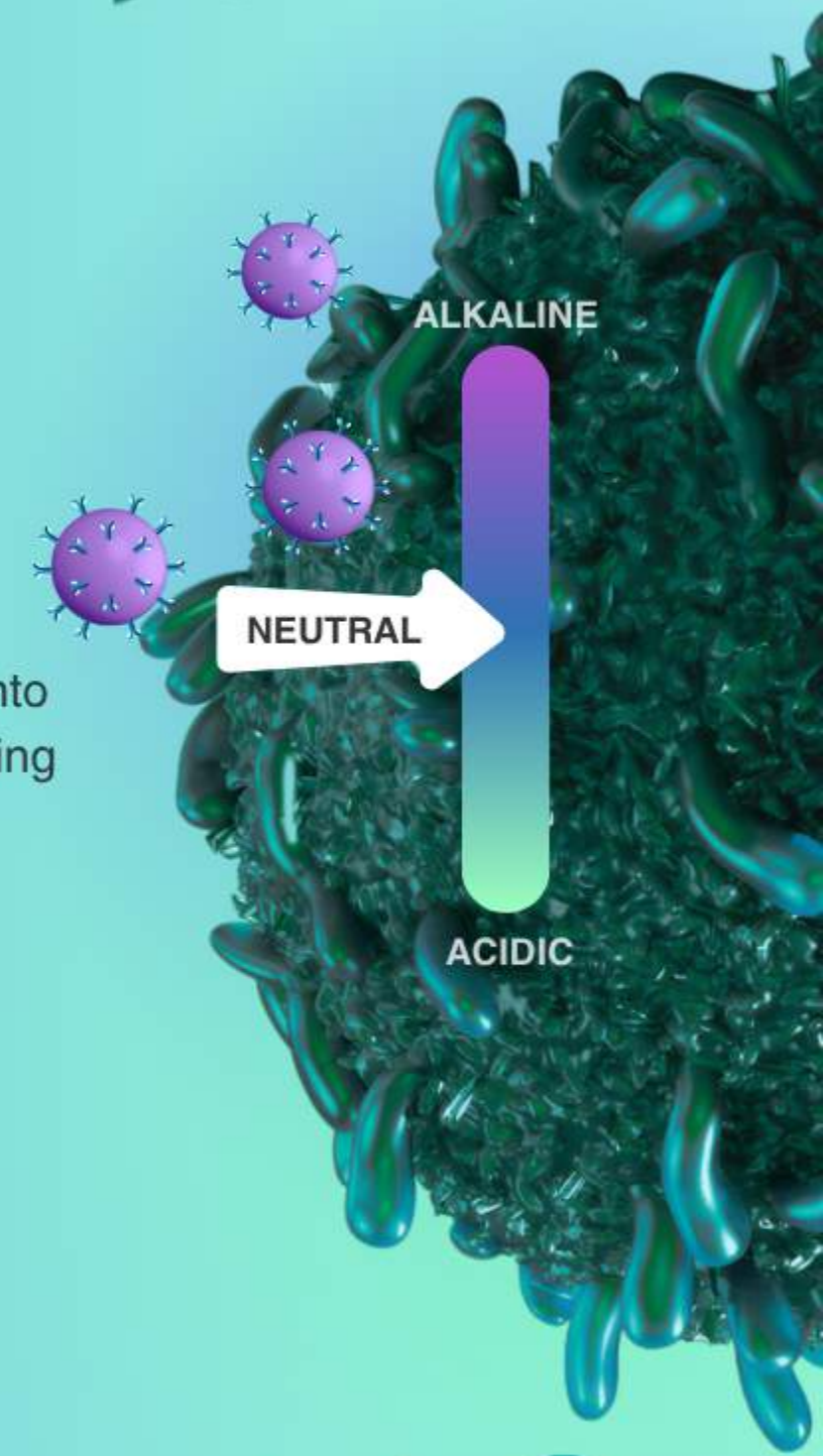
L-DOS47

Camelid nanobodies

High binding affinity to CEACAM6.

Urease

Catalyzes urea breakdown into ammonia and CO_2 , neutralizing the pH of the TME.



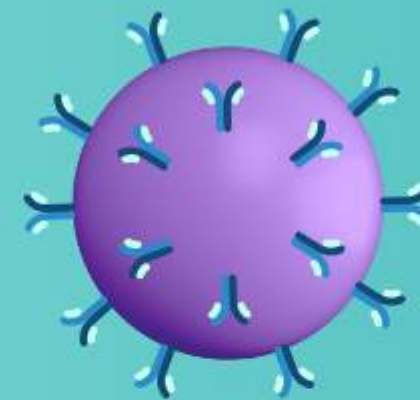
MECHANISM OF ACTION



A HALLMARK OF CANCER

TME acidity = a critical defence mechanism against immunotherapy & chemotherapy.

↑
Cancer proliferation
Metastasis
Resistance to treatment
Poor prognosis



L-DOS47

neutralizes tumor acidity,
taking the brakes off anti-tumor immunity and delivering a game-changing assist to anti-cancer therapies.

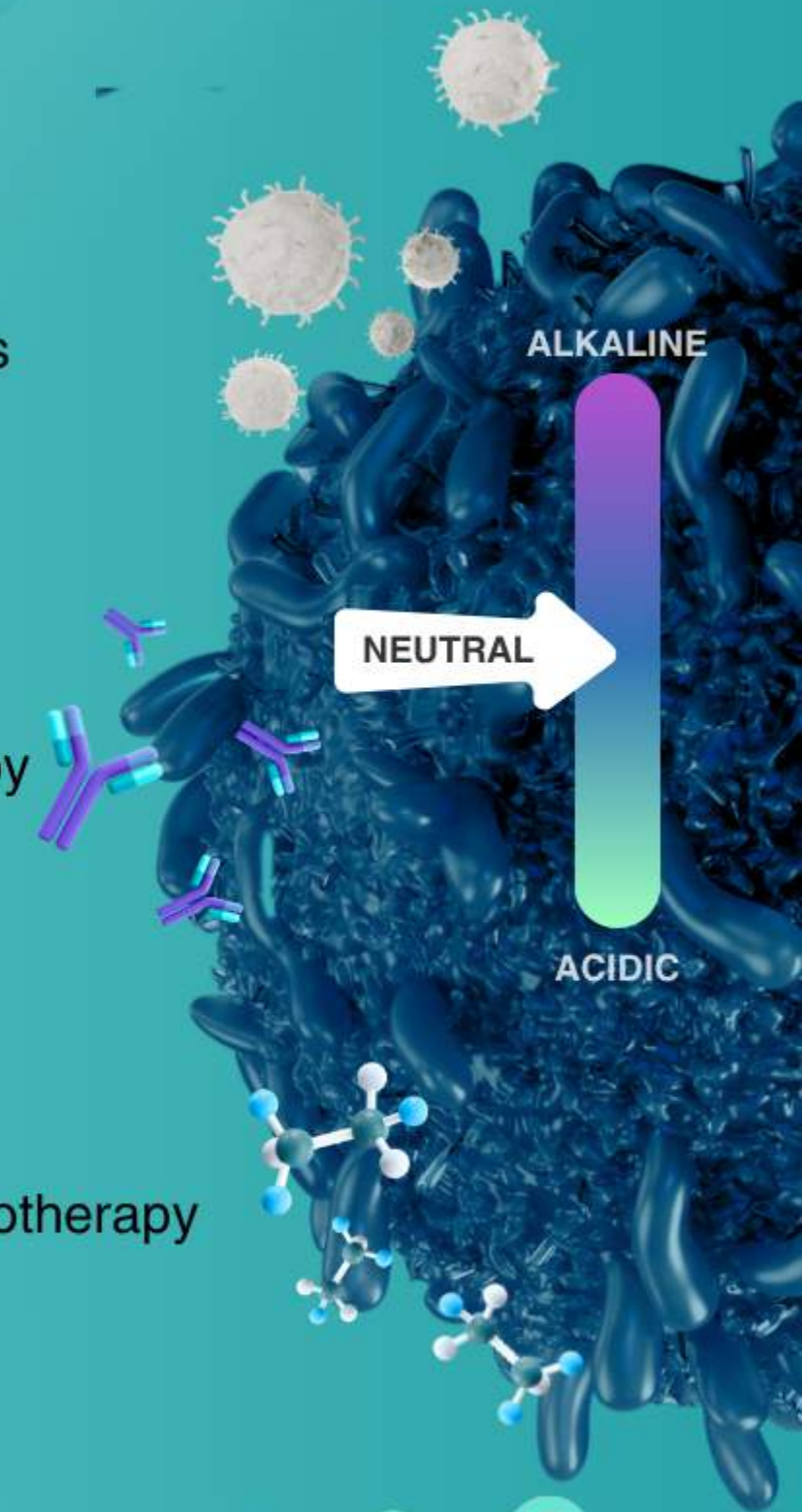
[See MoA video.](#)



T Cells

Immunotherapy

Chemotherapy



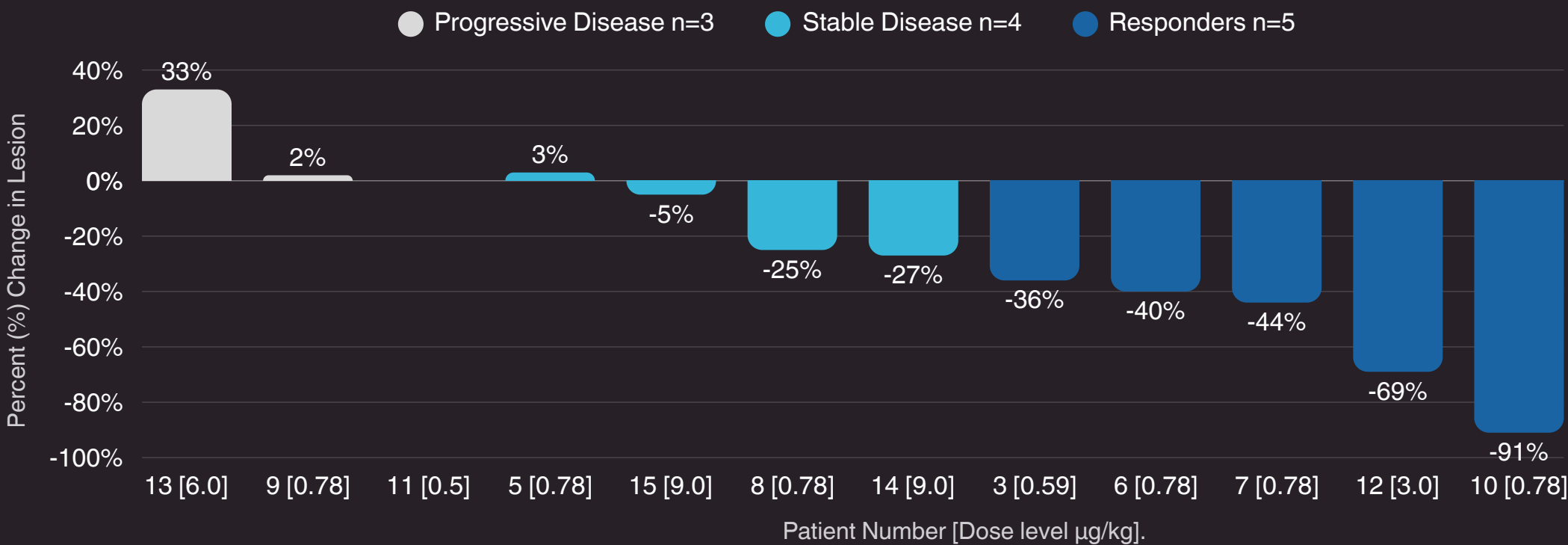
CLINICAL EVIDENCE WITH L-DOS47

Study supporting L-DOS47 as combination therapy with checkpoint inhibitors / chemotherapy in NSCLC.

Phase Ib, Open-Label Dose-Escalation Study in Stage IV NSCLC — L-DOS47 in combination with Pemetrexed + Carboplatin

EFFICACY & SAFETY

Best % Change in Lesion Size from Baseline (patients n=12)



→ No dose-limiting toxicities at doses ≤9.0 µg/kg (patients n=14).

STUDY HIGHLIGHTS

75% overall clinical benefit	141 days median duration of clinical benefit
42% overall response	187 days median duration of response
1 near complete remission	337 days maximum duration of response

4 cycles of L-DOS47 (Days 1, 8 & 15 of each cycle) in combination with pemetrexed (500 mg/m2) + carboplatin (on Day 1 of each cycle). Patients who did not experience unacceptable toxicities continued to receive L-DOS47 on the same schedule until there was no longer a clinical benefit.

Study population: Patients: n=14 Mean age: 63.5 Sex: 50% female NSC carcinoma: n=5 Adenocarcinoma, NOS: n=9

TIMELY & CLOSE TO THE FINISH LINE

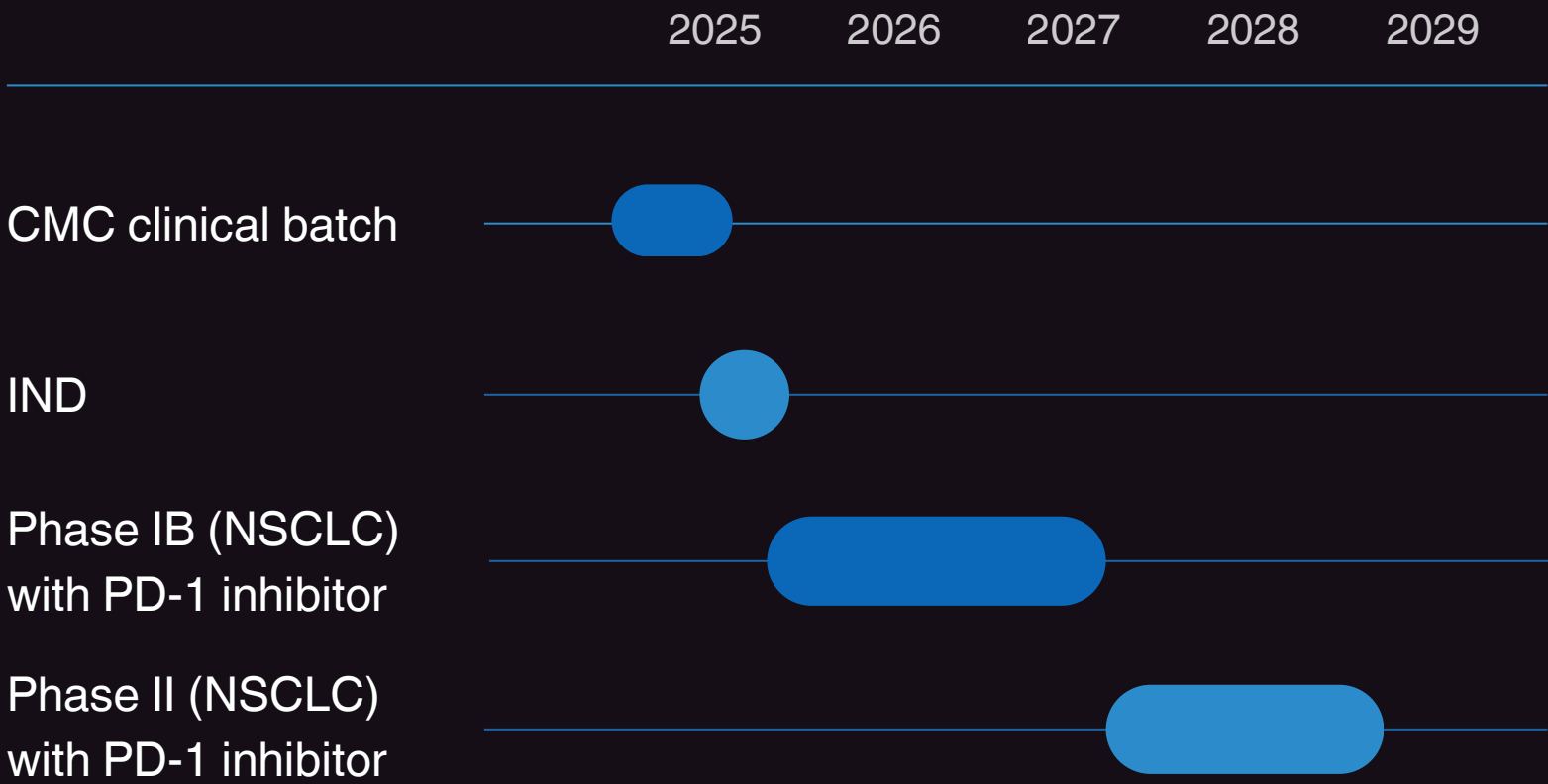
L-DOS47 STRENGTHS

- ✓ First-in-class TME AEC
- ✓ Phase Ib completed
- ✓ Results highly encouraging
- ✓ Combination therapy with CPIs
- ✓ Patents to 2036 + extensions
- ✓ NSCLC = High unmet need

L-DOS47 OPPORTUNITIES

- ✓ Significant improvement in PFS
- ✓ Significant improvement in OS
- ✓ CPI market share expansion
- ✓ Other solid tumors

L-DOS47 NEXT STEPS



CAPITAL REQUIREMENT

USD 21M
(2025–29)

PRODUCT 2, CEACAM6 PLATFORM

LEVERAGING RADIO- LIGAND TECHNOLOGY



CEACAM6 Product 2

CEACAM6-RL-ST (radio-ligand targeting CEACAM6-expressing solid tumors).



Design

Single chain camelid nanobody with CEACAM6 high binding affinity.



Radio-Isotope

Alpha emitter, carefully selected to maximise tumor penetration and efficacy.

PRODUCTS 3 & 4, CEACAM6 PLATFORM

THE PROMISE OF OUR DISCOVERY ADCs

Carefully-designed ADCs capitalising on latest, state-of-the-art technology.



CEACAM6 Products 3 & 4

CEACAM6-GIT (Gastro-intestinal)
CEACAM6-GYN (Gynaecological)



Design

Bi-specific, maximising target engagement.



Conjugation

Newest linker system, ensuring systemic stability.

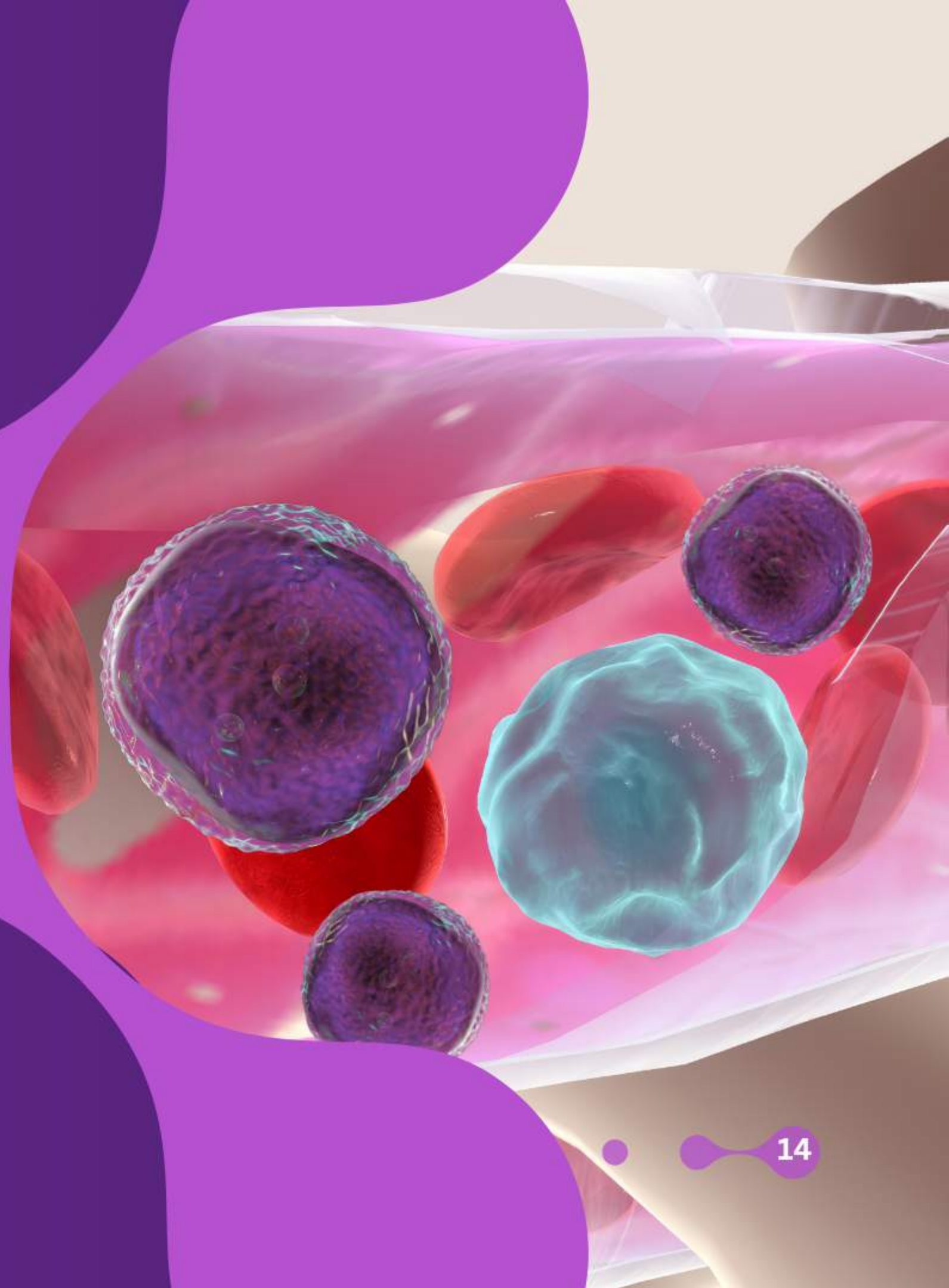


Payloads

Multi-payload - High DAR, maximising efficacy, avoiding resistance.

LEUMUNA

An oral immune checkpoint modulator to **bring long-term remission within reach** of patients relapsing with leukemia.



IMMUNE CHECKPOINT MODULATOR, LEUMUNA

LEAD INDICATION

More than 60,000 patients undergo allogeneic stem cell transplantation (SCT) each year, because it is the only treatment option for acute leukemia with viability to cure.

However, **over 50% of patients relapse**.



Allogeneic SCT

is the only chance patients have for a cure.



50% or 30,000

of SCTs fail; patients relapse and face a dismal prognosis.



Each failed SCT

Costs USD 500,000.



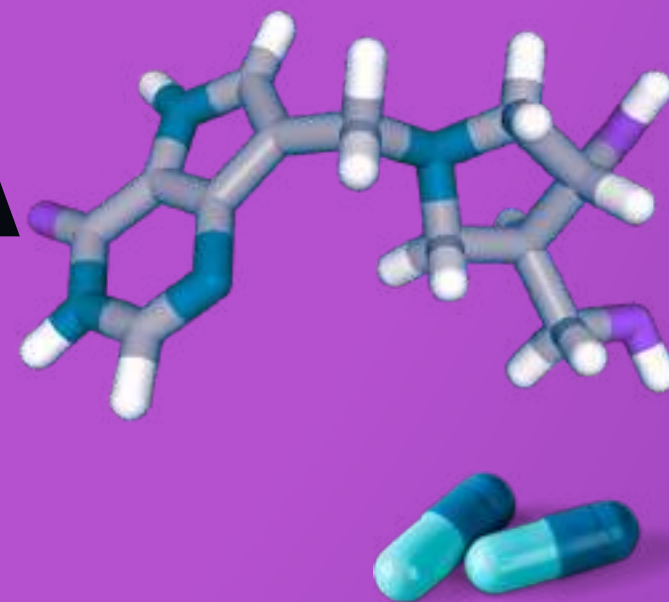
Our Solution, LEUMUNA

Efficacious, safe and potentially curative.

The relapse rate in all hematological malignancies is 30%; overall, patients face a median survival of just 4 months, with only 21% living beyond a year.
[Chen et al, World J Clin Cases. 2023;](#) [Michallet et al, Blood. 2011.](#)

IMMUNE CHECKPOINT MODULATOR, LEUMUNA

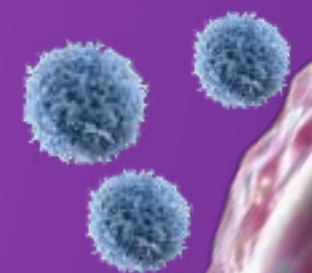
A pre-IND, first-in-class oral immune checkpoint modulator and inhibitor of PNP to initiate **graft-versus-leukemia (GvL)** effect in patients relapsing with leukemia after allogeneic SCT.



LEUMUNA

Activates transplanted
immune system to fight
resurging leukemia

Activated T-Cells



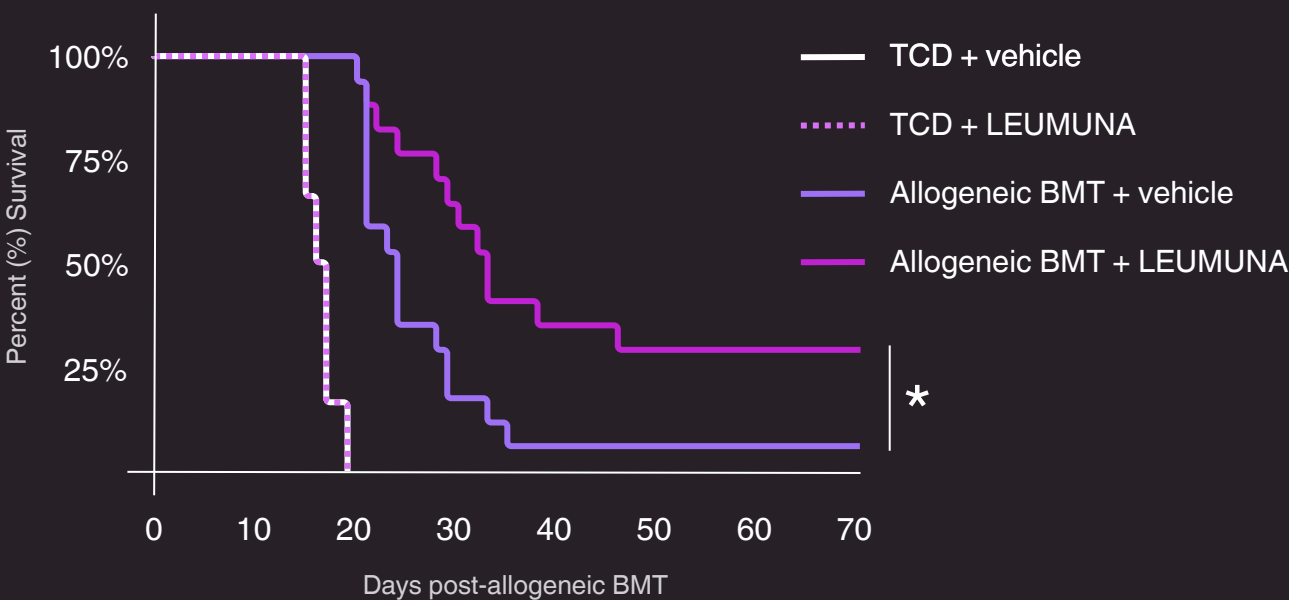
Activated B-Cells

EVIDENCE WITH LEUMUNA

LEUMUNA significantly reduces risk of relapse mortality in preclinical minor-MHC mismatch B Cell Acute leukemia model.

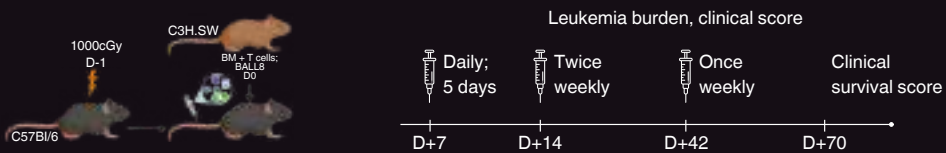
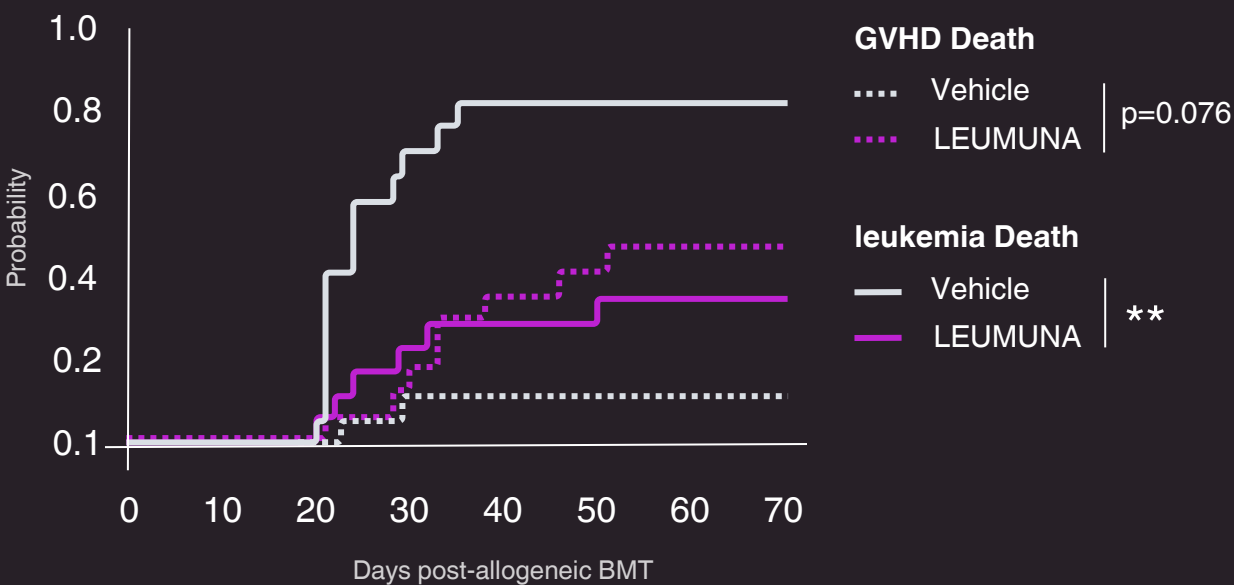
1) OVERALL SURVIVAL

Improvement in survival with LEUMUNA is **due to T-cell activation and initiation of graft-versus-leukemia (GvL) effect**.



2) COMPETING RISK ANALYSIS

Risk of graft-versus-host disease (GVHD) mortality outweighed by **statistically-significant reduction leukemic death risk with LEUMUNA**.



Unpublished data; study carried out at the Fred Hutchinson Cancer Center.

TCD: T-Cell Depleted bone marrow.

BMT: Bone Marrow Transplantation.

HISTORICAL CLINICAL DATA

Predecessor compound, Ulodesine (BCX4208), developed in gout and psoriasis, and analogue, forodesine hydrochloride.

BCX4208: OUTSTANDING SAFETY AND TOLERABILITY

Demonstrated in Phase I & II studies in 500+ volunteers.

Infectious Adverse Events (AEs)	Placebo (n=56)	5mg (n=56)	10mg (n=56)	20mg (n=56)	40mg (n=54)
Any infections AEs N(%)	11 (20%)	10 (18%)	10 (18%)	9 (16%)	11 (20%)
Typical cold symptoms	6 (11%)	7 (13%)	2 (4%)	4 (8%)	4 (7%)
Lower respiratory tract	2 (4%)	0	1 (2%)	0	1 (2%)
Bacterial/Potentially bacterial	5 (9%)	2 (14%)	9 (16%)	5 (9%)	7 (13%)
Viral/Potentially viral	10 (18%)	9 (16%)	3 (5%)	4 (8%)	6 (11%)
Fungal/Potentially fungal	1 (2%)	1 (2%)	1 (2%)	1 (2%)	1 (2%)

COMPLETE REMISSION ACHIEVED

A 3-year old pediatric patient was cured of relapsed T-Cell Acute Lymphoblastic Leukemia (T-ALL) with PNP inhibitor, Forodesine.



You can view Katie Lambertson’s patient case, titled *When a Drug Becomes a Child’s Last Hope for T-Cell Leukaemia* (Albert Einstein College of Medicine) [here](#).

Forodesine, which is scientifically and pharmacologically interchangeable with LEUMUNA, was later discontinued for commercial reasons.

Long-Term Safety: A Phase 2 BCX4208 24-Week Blinded Safety Extension and Vaccine Challenge Study. Presented at EULAR, Berlin, June 6 – 9 2012.

Gore L, et al.. Semin Oncol. 2007;34(6 Suppl 5):S35-39. doi:10.1053/j.seminoncol.2007.11.005.

LEUMUNA FACTS & PROSPECTS

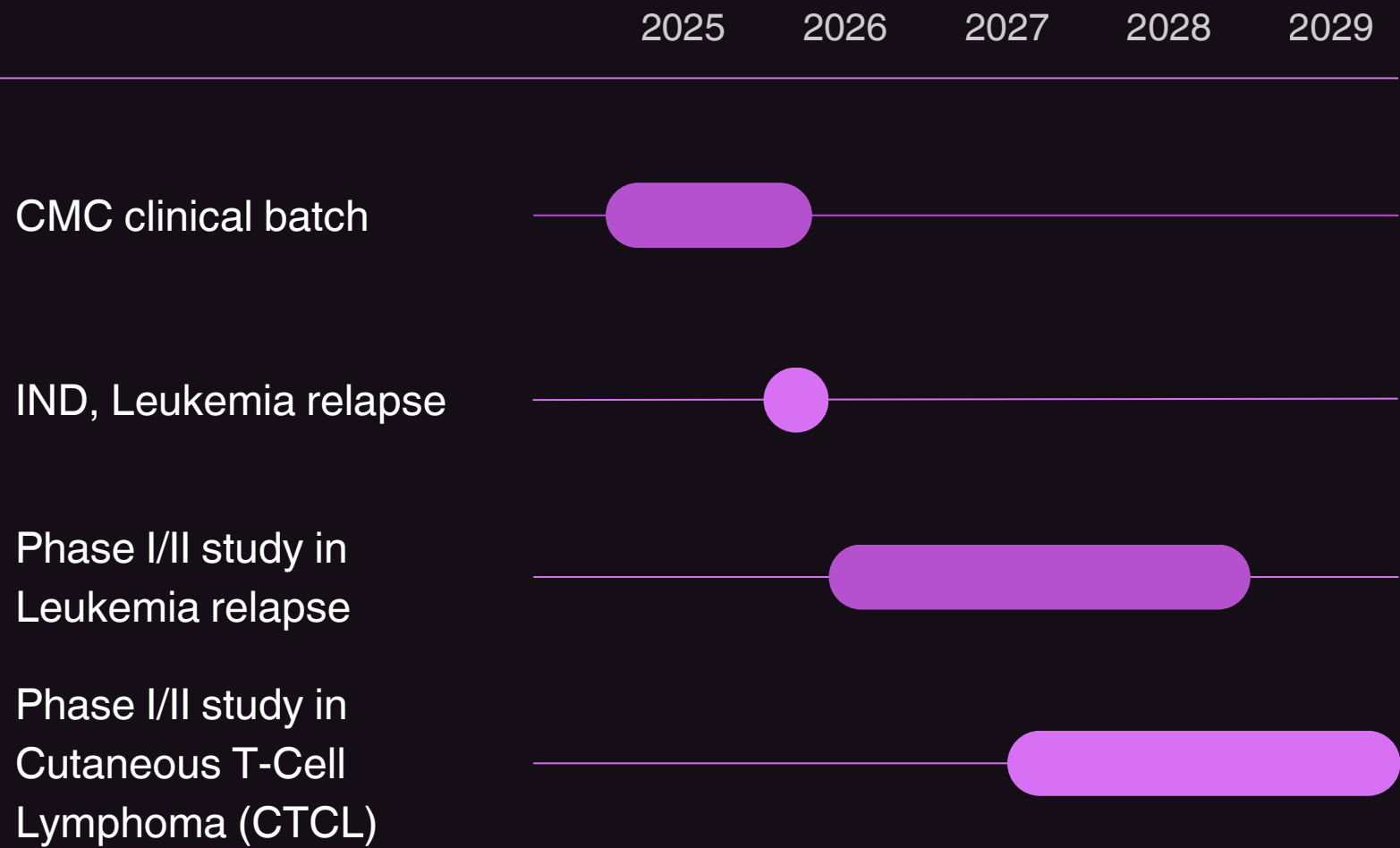
LEUMUNA STRENGTHS

- ✓ FDA Orphan status
- ✓ CoM Patent (exp. 2041)
- ✓ Supporting clinical evidence
- ✓ Established safety (n=500)
- ✓ First-in-class CP modulator
- ✓ Easy, oral administration

LEUMUNA OPPORTUNITIES

- ✓ Potential 2+ yrs. OS or cure
- ✓ Poised to become SoC
- ✓ Breakthrough potential and accelerated approval
- ✓ Upsides (other liquid tumors; licensing agreement in place)

LEUMUNA NEXT STEPS



CAPITAL REQUIREMENT

USD 28M
(2025–29)

OS: Overall Survival.

GEMCEDA

A pioneering oral chemotherapy to
enrich the spectrum of **disease-limiting
and life-enhancing outcomes** for
patients whose cancer has progressed.

GEMCEDA

ORAL PRODRUG OF A WHO ESSENTIAL MEDICINE

Gemcitabine is used to treat multiple, prevalent cancers, but is only available in IV form, today.



Rising global need

for chemotherapeutics, despite the arrival of novel cancer medicines.*



25%**

of available chemotherapies are oral agents, improving access to care.



Oral chemotherapy

creates opportunities to turn resistant into sensitive tumors (metronomic dosing).***



Our solution, GEMCEDA

The first oral gemcitabine chemotherapy with bioavailability on par with IV.

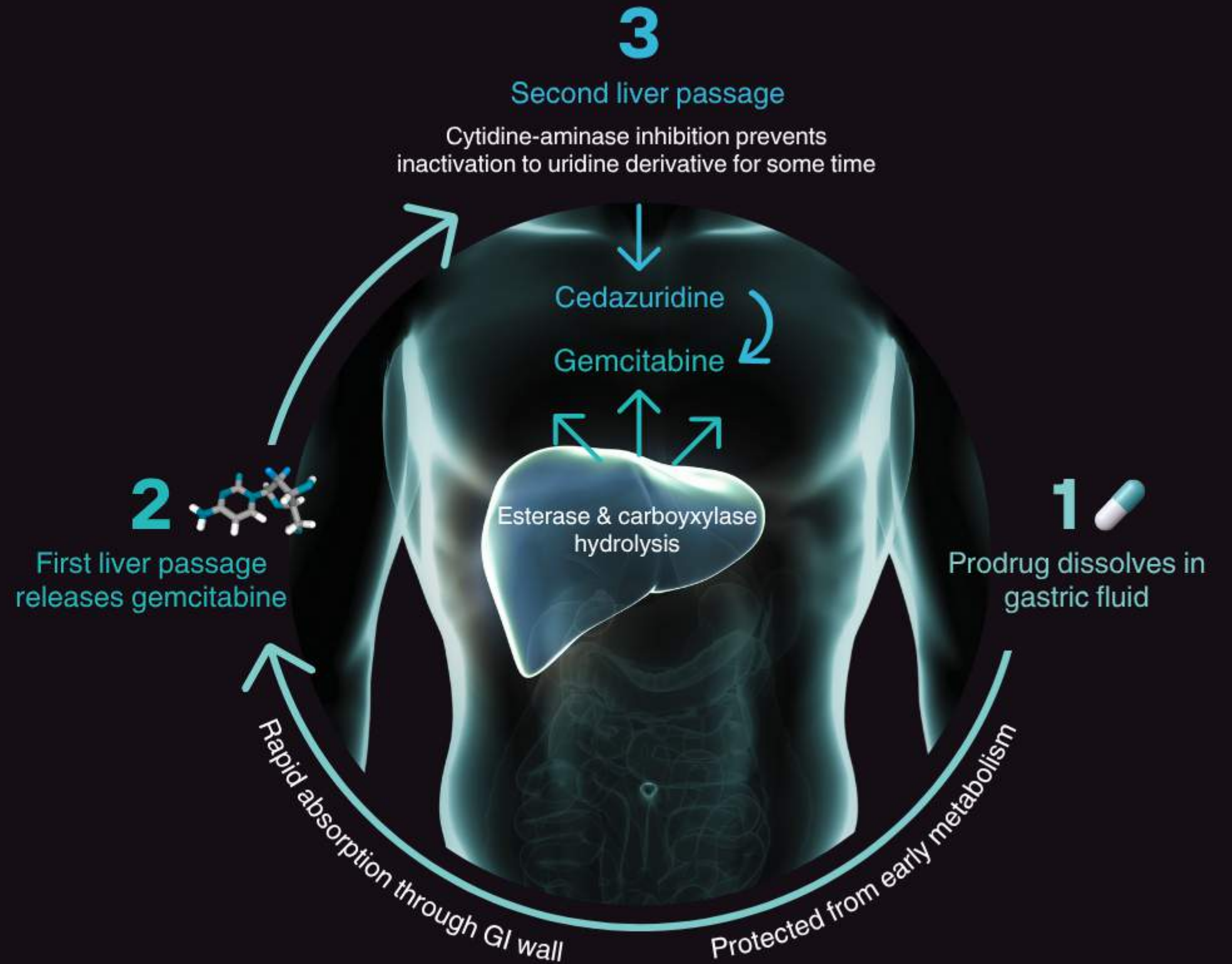
* Coherent Market Insights, 2024.

** US Pharm, 2019.

*** Zheng et al. 2023.

GEMCEDA

A pre-IND, first-in-class oral gemcitabine prodrug combined with cedazuridine, with bioavailability on par with IV, for metronomic therapy to control tumor growth and preserve quality of life.



GEMCITABINE ORAL CHEMOTHERAPY

Target indications with biomarkers predictive of gemcitabine efficacy.



High-grade Serous Ovarian Cancer*

High vs low replication stress (RB1, CDKN2A loss, or surplus of CCNE1, KRAS, MYC).

Combination with PARP or ATR inhibitor.



Pancreatic Ductal Adenocarcinoma

Use GemciTest® to predict gemcitabine response.



Non-Small Cell Lung Cancer (NSCLC)

Determine serum CDA levels for oral gemcitabine maintenance after Pt/gem induction.**

Combination with PD-1/PD-L1 inhibitor sintilimab.***

Injury signals from tumor cells more immunogenic than killing tumor cells.****

* Konstantinopoulos et al, 2021.

** Tibaldi et al, 2018.

*** ASCO Post, 2021.

**** Sriram et al, 2021.

GEMCEDA FACTS & PROSPECTS

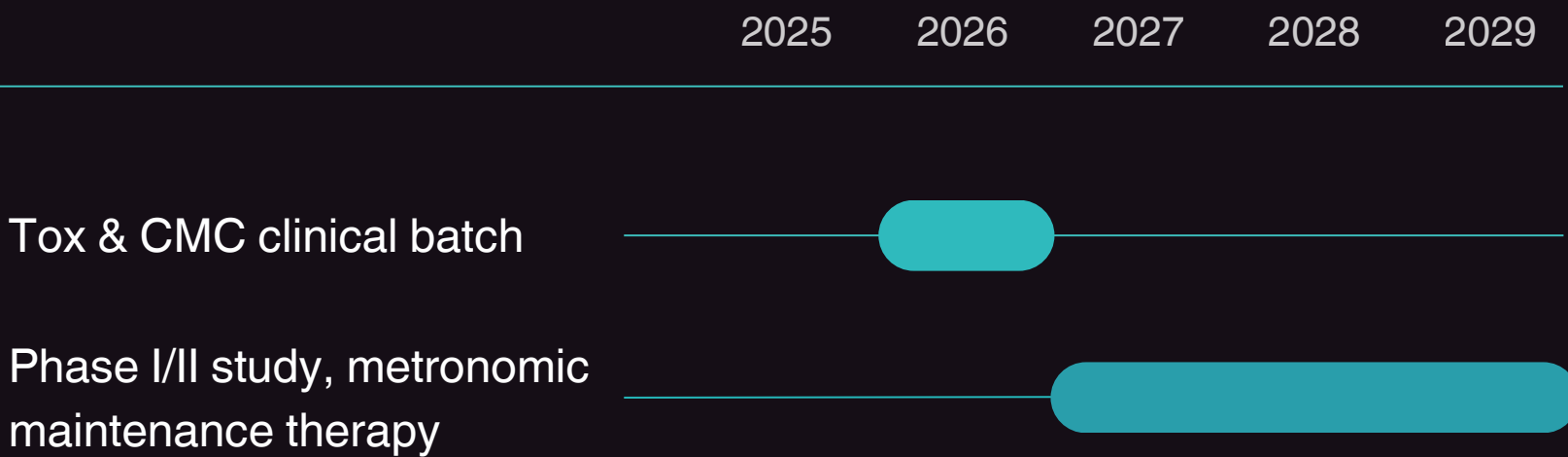
GEMCEDA STRENGTHS

- ✓ First-in-class oral gemcitabine
- ✓ Oral bioavailability = IV
- ✓ CoM Patent (exp. 2043)
- ✓ Established manufacturing
- ✓ Low COGs
- ✓ Easy, oral administration

GEMCEDA OPPORTUNITIES

- ✓ IV gem. treats 1/3 of cancers
- ✓ Regulatory 505(b)2 pathway
- ✓ Maintenance therapy
- ✓ Combination therapy

GEMCEDA NEXT STEPS



CAPITAL REQUIREMENT

USD 19M
(2025–29)

UPCOMING MILESTONES

Our ambitious plan over the next 18 months.

- Financial / Corporate Milestone
- L-DOS47 Milestone
- CEACAM6 ADCs Milestone
- LEUMUNA Milestone
- GEMCEDA Milestone



SSFA: Share Subscription Facility Agreement. FPI: First Patient In.

EXPERT COLLABORATORS' OPINIONS

on Helix BioPharma's clinical-stage and pre-IND assets.



Dr. Robert Gillies, Director of Moffitt Cancer Imaging and Technology Center of Excellence, Florida, US **on L-DOS47**

“We are extremely excited about Helix's technology because it will directly neutralize tumor acidity in a very localized fashion and thus will not have the systemic and dosing problems that we encountered with buffers. We have high expectations that this first-in-class approach to treating cancer will be successful.”



Professor Caius Radu, Departments of Molecular and Medical Pharmacology and Surgery, UCLA, California, US **on LEUMUNA**

“There is a good chance of recovery in patients. [...] It's effective in terms of inhibiting PNP, it's very effective in mice and patients, and given its mechanism of action could be used across a variety of malignancies including converting a cold tumor into one that could better respond to immunotherapy.”

FORWARD-LOOKING STATEMENTS

This presentation document contains certain forward-looking statements and information (collectively, “forward-looking statements”) within the meaning of applicable securities laws. Forward-looking statements are statements and information that are not historical facts but instead include financial projections and estimates; statements regarding plans, goals, objectives, intentions and expectations with respect to Helix’s future business, operations, research and development, including the focus of Helix on its CEACAM6 platform generally and CEACAM6-AEC in particular, the anticipated timelines for the commencement or completion of certain activities, including enrolment of patients in Helix’s clinical trials, the expansion of the CEACAM6 platform into other compounds and indications and other information in future periods. Forward-looking statements, which may be identified by words including, without limitation, “expects”, “plans”, “will”, “intends”, “may”, “pending”, “objective”, “exploring”, “potential”, “projected”, “possible” and other similar expressions, are intended to provide information about management’s current plans and expectations regarding future operations.

Although Helix believes that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties that may cause actual results or events to differ materially from those anticipated and no assurance can be given that these expectations will be realized, and undue reliance should not be placed on such statements. Risk factors that could cause actual results or events to differ materially from the forward-looking statements include, without limitation: (i) the inherent uncertainty involved in scientific research and drug development, including with respect to costs and difficulties in predicting accurate timelines for the commencement or completion of certain activities; (ii) the risks associated with delay or inability to complete clinical trials successfully and the long lead-times and high costs associated with transacting or obtaining regulatory approval to market any product which may result from successful completion of such trials; (iii) need to secure additional financing on terms satisfactory to Helix or at all, including that the additional funding required in order to complete clinical trials will be obtained on terms satisfactory to Helix or at all; (iv) clinical trials that yield negative results, or results that do not justify future clinical development; (v) Helix’s clinical development plan does not proceed in the manner or on the timelines anticipated by Helix or at all; and (vi) those risks and uncertainties affecting Helix as more fully described in Helix’s most recent Annual Information Form, including under the headings “Forward-Looking Statements” and “Risk Factors”, filed under Helix’s profile on SEDAR at www.sedar.com (together, the “Helix Risk Factors”). Certain material factors and assumptions are applied in making the forward-looking statements, including, without limitation, that the Helix Risk Factors will not cause Helix’s actual results or events to differ materially from the forward-looking statements.

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Shaping a near future
where today's hard-to-treat
cancers are *vincible*.

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