



NextCure

Corporate Presentation

NASDAQ: NXTC

Forward-Looking Statement

To the extent that statements contained in this presentation are not descriptions of historical facts, they may be deemed to be forward-looking statements under the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations, forecasts, assumptions and other information available to NextCure as of the date hereof. Forward-looking statements include statements regarding NextCure's expectations, beliefs, intentions or strategies regarding the future and can be identified by forward-looking words such as "may," "will," "potential," "expects," "believes," "intends," "hope," "towards," "forward," "later" and similar expressions. Examples of forward-looking statements in this presentation include, among others, statements about the development plans for our products, statements about the progress and evaluation and expected timing of results of NextCure's ongoing or planned clinical trials, expectations regarding the potential benefits, activity, effectiveness and safety of our research stage, preclinical stage, and clinical stage therapeutic candidates, NextCure's financial guidance, expected upcoming milestones, and NextCure's plans, objectives and intentions with respect to the discovery and development of therapeutic products. Forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from those projected in any forward-looking statement. Such risks and uncertainties include, among others: the impacts of the COVID-19 pandemic on NextCure's business, including NextCure's clinical trials, third parties on which NextCure relies and NextCure's operations; positive results in preclinical studies may not be predictive of the results of clinical trials; NextCure's limited operating history and no products approved for commercial sale; NextCure's history of significant losses; NextCure's need to obtain additional financing; risks related to clinical development, marketing approval and commercialization; the unproven approach to the discovery and development of product candidates based on NextCure's discovery platform; and dependence on key personnel. More detailed information on these and additional factors that could affect NextCure's actual results are described in NextCure's filings with the Securities and Exchange Commission (the "SEC"), including in Item 1A of NextCure's most recent Form 10-K, subsequent Form 10-Q and elsewhere in the Company's filings with the SEC. You should not place undue reliance on any forward-looking statements. Forward-looking statements speak only as of the date of this press release, and NextCure assumes no obligation to update any forward-looking statements, except as required by law, even if expectations change.

Focus on Two Promising Programs

NC410 COMBO


- Early Clinical Responses in Ovarian & CRC
- Additional Clinical Data Expected 2024

LNCB74

- Differentiated B7-H4 ADC
- Collaboration with LigaChem Biosciences
- IND 2024

~\$86 M - RUNWAY THROUGH 2H 2026

Advancing Our Prioritized Programs

PROGRAMS	TARGET	CELLS	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	NEXT MILESTONE
NC410 COMBO (Pembro)	LAIR-2	Extracellular Matrix	Ovarian					Ph1b Data 4Q 2024
			Colorectal (CRC)					Ph1b Update 4Q 2024
LNCB74 (ADC) Co-development with 	B7-H4	Tumor Cells	Breast, Ovarian, Endometrial					IND 4Q 2024



PH1B DATA 4Q 2024



PH1B UPDATE 4Q 2024

NC410 COMBO

BUILDING ON CLINICAL RESPONSES & BIOMARKER OBSERVATIONS

DIFFERENTIATED APPROACH

Remodeling tumor architecture
removing physical barrier and allowing
T cells to kill tumors

LARGE UNMET NEEDS

Ovarian cancer
Colorectal cancer

LAIR-2 FUSION

NextCure

NC410 COMBO

Addressing Unmet Needs
for Non-Responders



DEEP EXPERTISE

Extracellular matrix collagen drives
tumor resistance

POTENTIALLY FIRST-IN-CLASS

Improved safety profile
Addresses tumor resistance

Leader in Understanding *LAIR & Extracellular Matrix (ECM) Biology*



Regulation of tumor immunity and immunotherapy by the tumor collagen extracellular matrix



Cancer immunotherapy by NC410, a LAIR-2 Fc protein blocking human LAIR-collagen interaction



Collagen Fragments Produced in Cancer Mediate T Cell Suppression Through Leukocyte-Associated Immunoglobulin-Like Receptor 1



A Phase 1b/2, open-label, safety, tolerability and efficacy study of NC410 plus pembrolizumab for participants with immune checkpoint inhibitor (ICI) refractory or MSS/MSI-low ICI naïve advanced or metastatic solid tumors



NC410 (LAIR-2-Fc Fusion Protein): Overcoming Clinical Limitations to Immunotherapy Through Targeting and Remodeling Tumor ECM



Targeting LAIR-1 abrogates neutrophil-mediated suppression of T cell responses in ovarian cancer microenvironment



Remodeling the tumor microenvironment via blockade of LAIR-1 and TGF- β signaling enables PD-L1-mediated tumor eradication

An Emerging Area of Interest for New Therapies

NC410 Combo

Overcoming tumor resistance by remodeling ECM to remove physical barrier and enhance T cell tumor killing



COMPLETED

- ✓ Safe & well tolerated
- ✓ No dose limiting toxicities
- ✓ Evidence of clinical activity in ovarian & colorectal

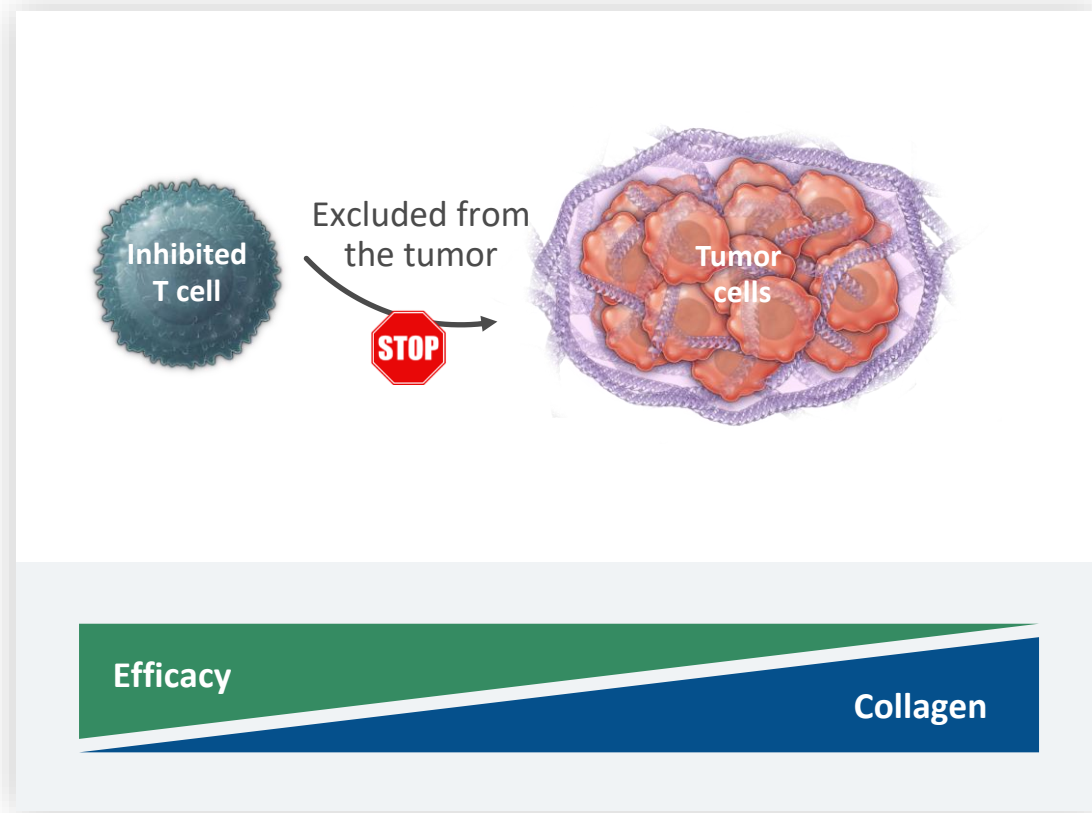
ONGOING

- Expansion of ovarian cohort
- 2024 anticipated data (ovarian n=~25)



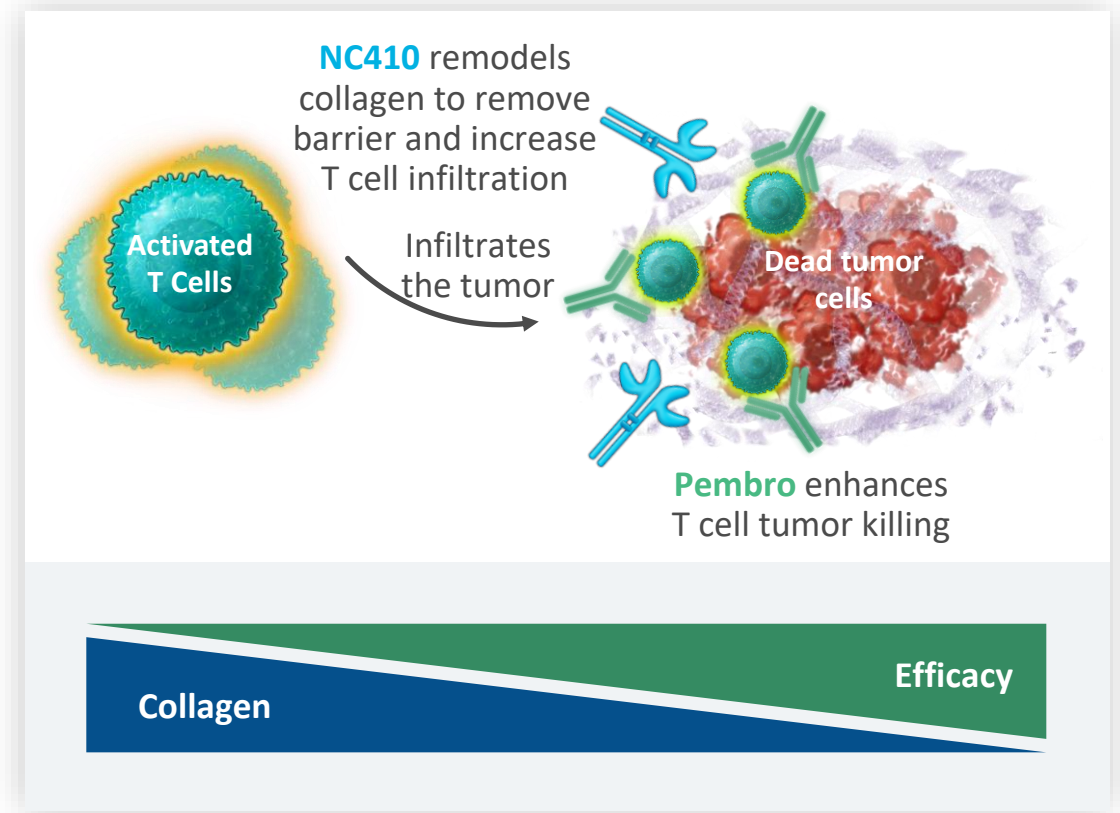
NC410 Combo: A Synergistic Approach to Breaking the Collagen Barrier and Enhancing Anti-Tumor Activity

COLLAGEN BUILDUP AND DENSITY LEAD TO RESISTANCE



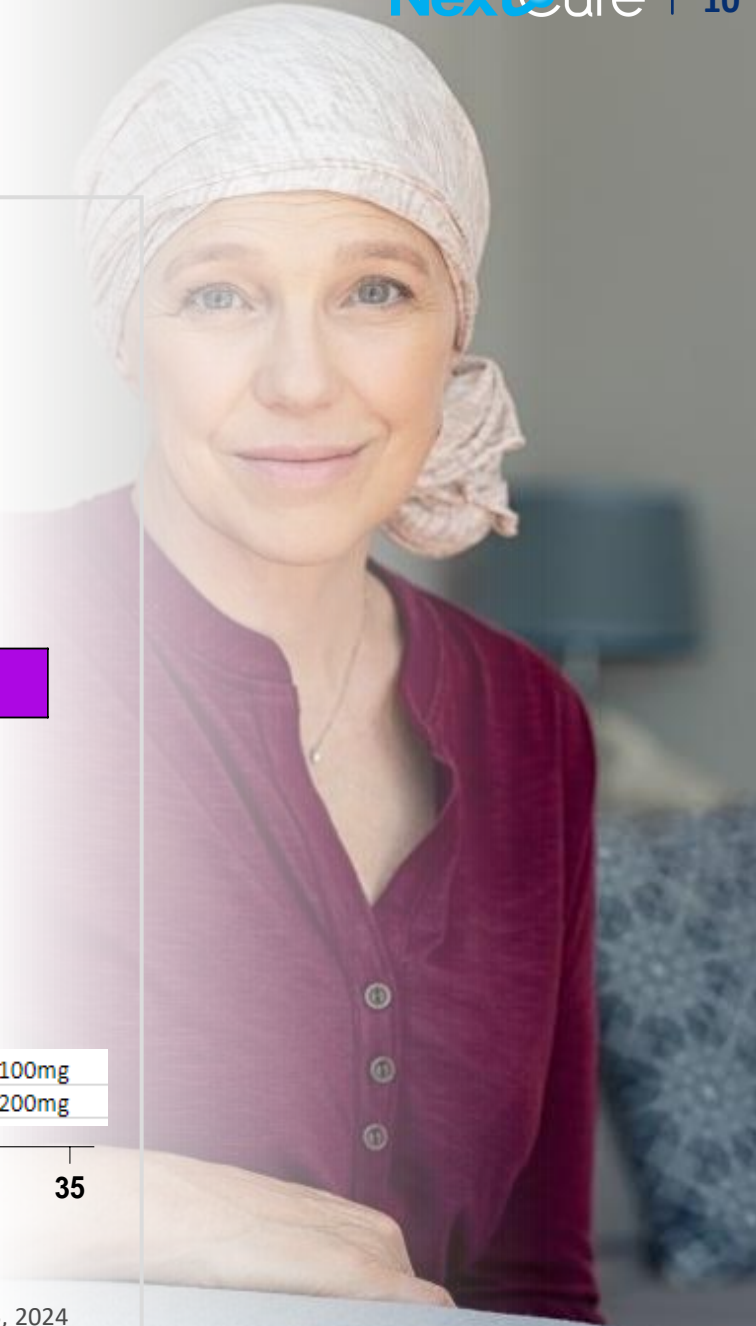
Tumor cells proliferate and become resistant

ECM REMODELING LEADS TO GREATER ANTI-TUMOR FUNCTION



T cells kill the tumor

NC410 Combo Phase 1 Study



POPULATION

PD-(L)1 Naïve

DOSE & REGIMEN

100 mg NC410 Q2W | 200 mg NC410 Q2W
400 mg pembro Q6W | 400 mg pembro Q6W

FINDINGS TO DATE

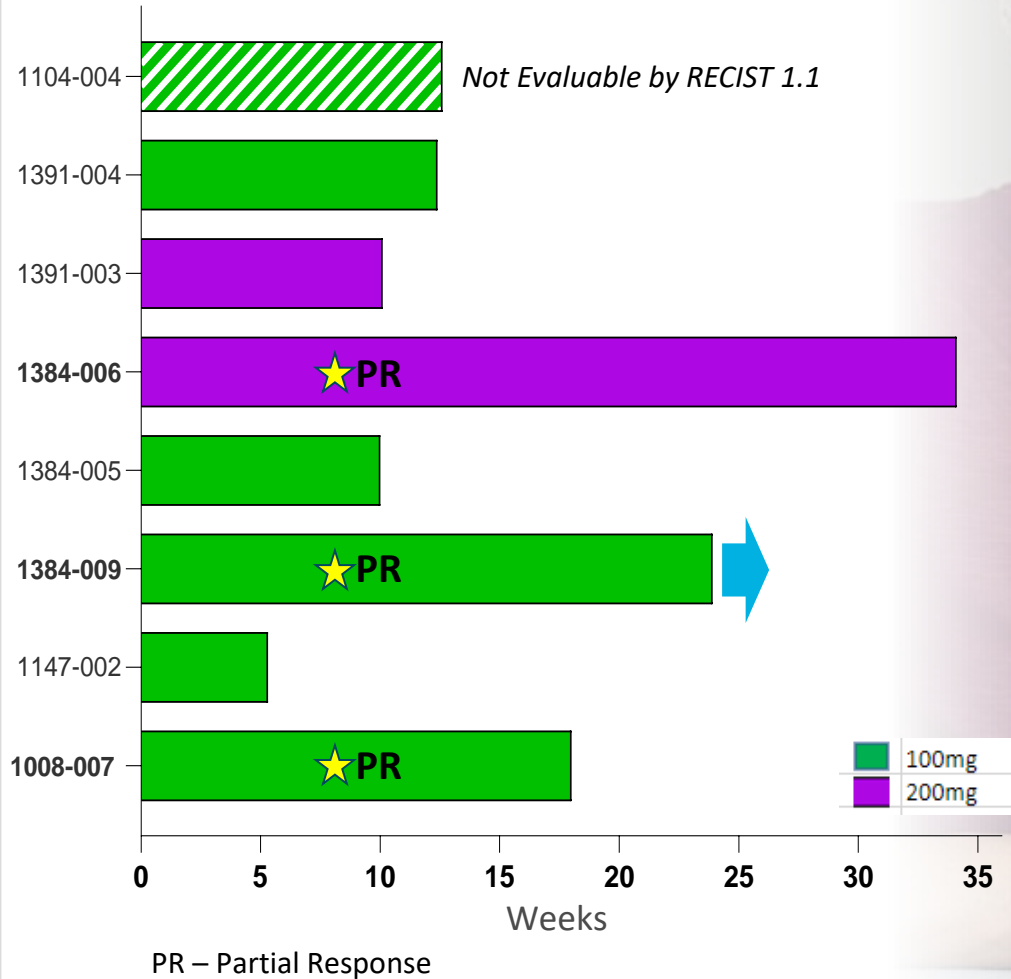
ORR 42.8% (3/7)
DCR 42.8% (3/7)
Biomarker evidence supporting mechanism of action

NEXT STEPS

Follow additional 14 patients to confirm clinical activity

DATA EXPECTED

4Q 2024

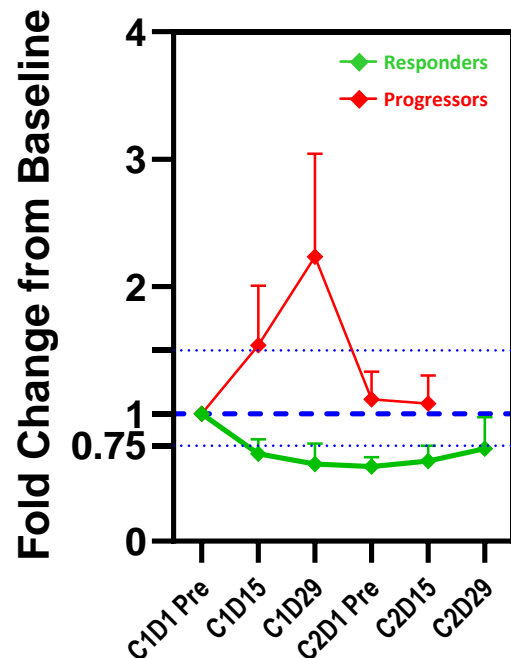


Data as of May 15, 2024

Evidence of Peripheral Immune Modulation and TME Infiltration in Responders from Ovarian Cohort

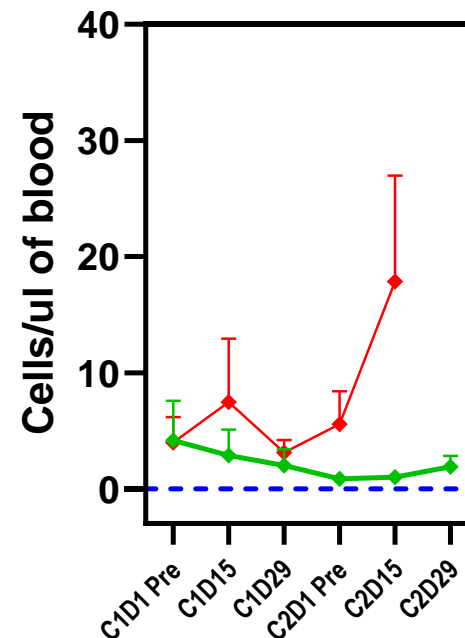
Decrease *Granzyme B*-expressing *CD8+* T cells

- Remodels ECM allowing effector immune cell infiltration into TME from periphery



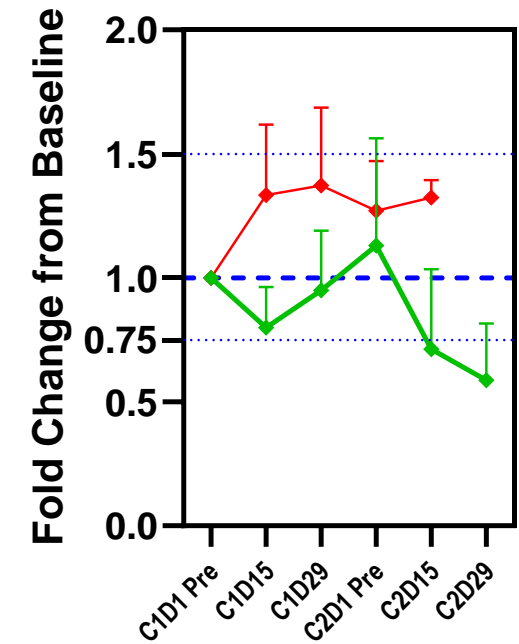
Decrease *suppressive MDSCs*

- Reduces suppressive effects
- Enhances activation of immune cells and anti-tumor activity



Decrease *CCR7+* *CD4+* T cells

- Induces chemokine guided migration of immune cells to TME



NC410 Combo Phase 1 Study

Colorectal CANCER

POPULATION

PD-(L)1 Naïve, MSS/MSI-L*, without Liver Metastasis

DOSE & REGIMEN

100 mg NC410 Q2W
400 mg pembro Q6W

FINDINGS TO DATE

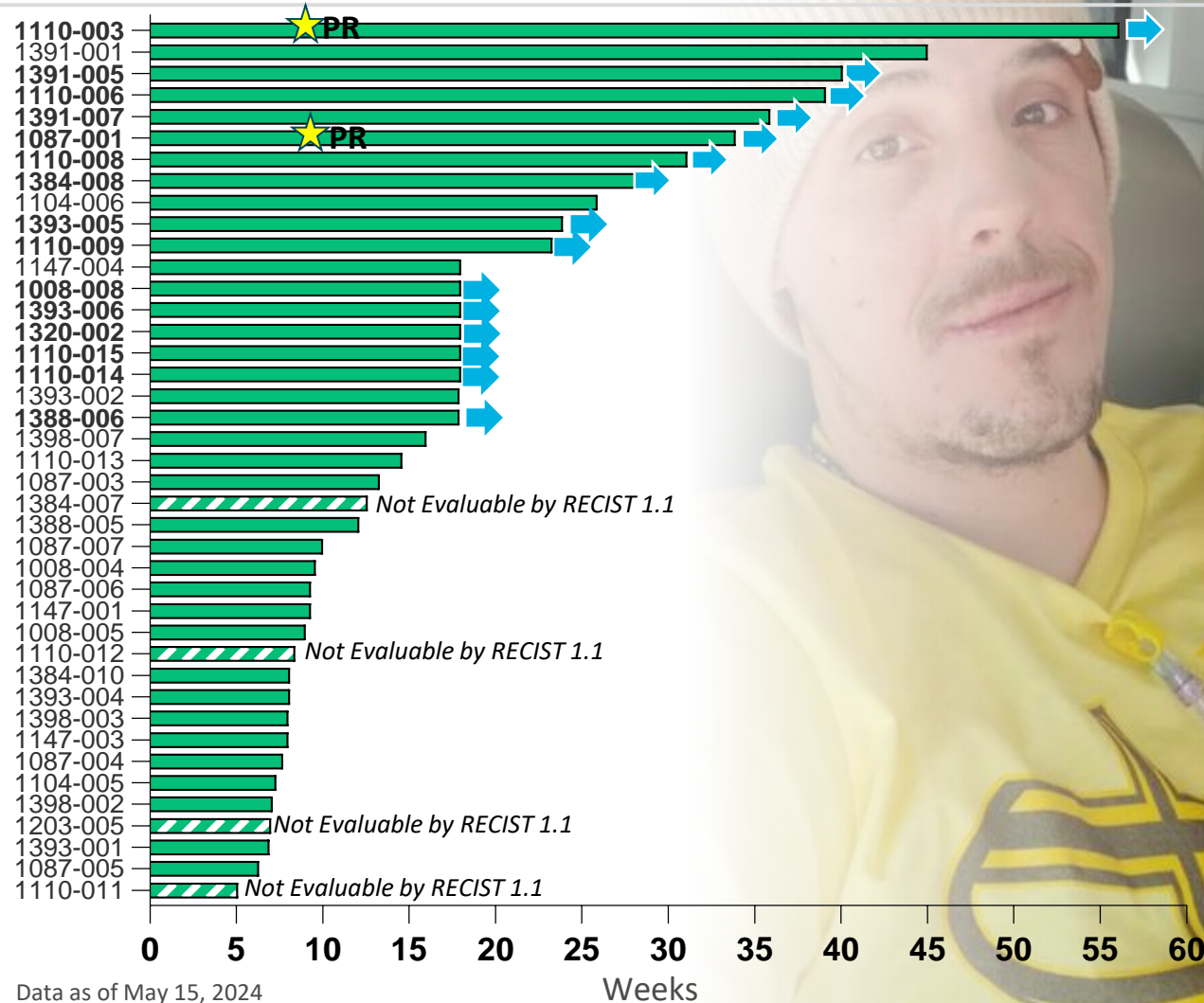
ORR 5.4% (2/37)
DCR 51.3% (19/37)
mPFS 5.5 months

NEXT STEPS

Continue to follow patients on study

UPDATE EXPECTED

4Q 2024

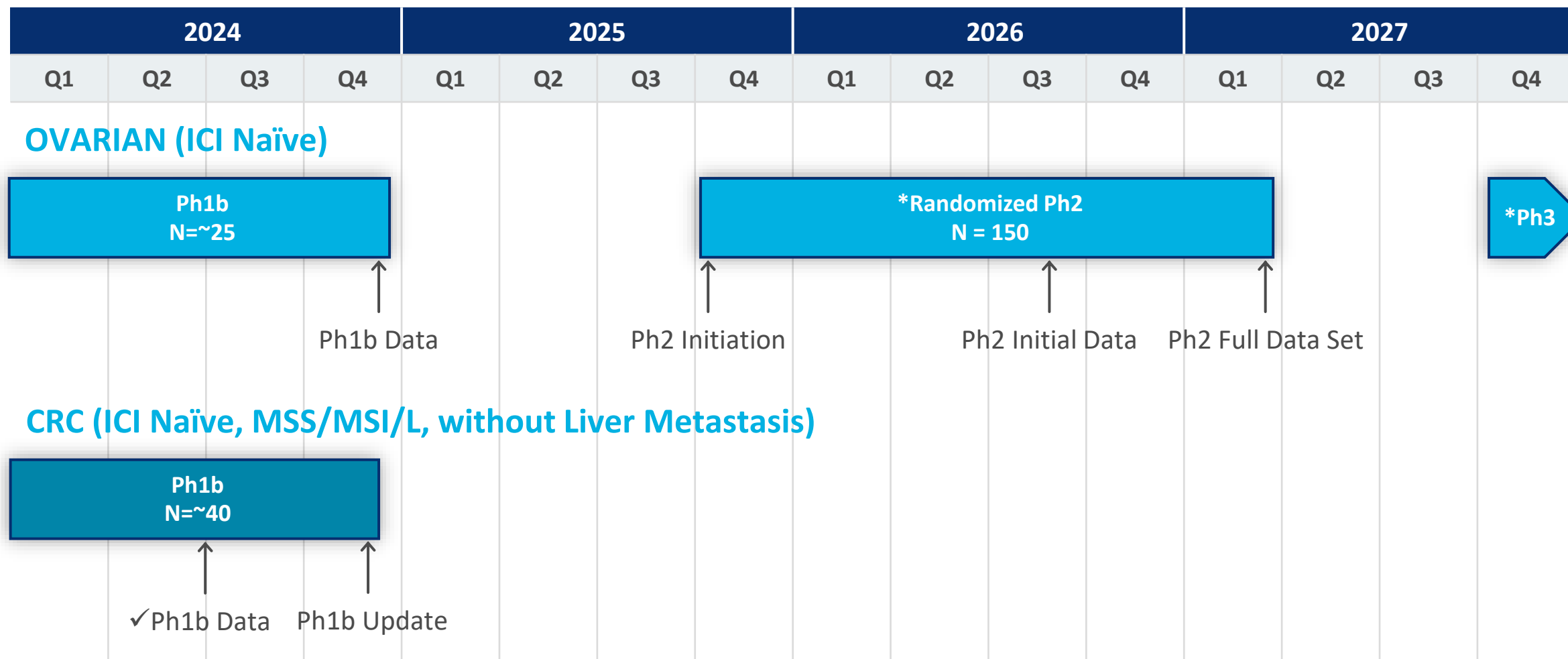


Data as of May 15, 2024

PR – Partial Response
SD – Stable Disease ≥16 weeks

*Microsatellite stable/microsatellite instability-low

NC410 Combo Timeline and Potential Catalysts



*Pending partnership or financing

Opportunity to Treat Large Unmet Needs



EARLY CLINICAL
ACTIVITY

ADDITIONAL CLINICAL DATA 2024



Breast
CANCER



Ovarian
CANCER



Endometrial
CANCER

LNCB74

**LEVERAGING OUR DEEP EXPERTISE IN B7-H4 AND COLLABORATION
WITH LCB TO DEVELOP A DIFFERENTIATED THERAPEUTIC**

IND 4Q 2024

NOVEL APPROACH

Unique antibody linker strategy

Co-development partnership
with LCB

PATIENT SELECTION STRATEGY

CLIA validated IHC
biomarker assays

B7-H4 ADC

NextCure

LNCB74

Differentiated ADC



DEEP EXPERTISE

Significant B7-H4 experience
LCB's substantial ADC know-how

THERAPEUTIC POSITIONING

Improved safety and efficacy

B7-H4 is the Next Target of Interest in Women's Cancer



NextCure, LegoChem* join big-league rivals in antibody-drug conjugate race

*Currently known as LigaChemBio

Journal of
Clinical
Oncology®

Phase 1 study of SGN-B7H4V, a novel, investigational vedotin antibody–drug conjugate directed to B7-H4, in patients with advanced solid tumors (SGNB7H4V-001, trial in progress).

ANNALS OF
ONCOLOGY
driving innovation in oncology

3810 First-in-human/phase I trial of HS-20089, a B7-H4 ADC, in patients with advanced solid tumors

Journal of
Clinical
Oncology®

XMT-1660: A phase 1b trial of a B7-H4 targeted antibody drug conjugate (ADC) in breast, endometrial, and ovarian cancers.

ApexOnco
OncologyPipeline

Pfizer shuffles its deck post-Seagen

The group's B7-H4-targeting bispecific is out, in favour of Seagen's ADC.

AACR
American Association
for Cancer Research

Abstract 2947: Preclinical evaluation of a novel B7-H4 targeted antibody-drug conjugate AZD8205 as a single agent and in combination with novel PARP inhibitor and checkpoint blockade



In 2nd big deal of the day, GSK inks \$1.4B pacy for Hansoh gynecology cancer asset

Deep Expertise in B7-H4



- Extensive publications
- Expertise in expression
- Repertoire of models
- Top-tier KOL collaborative network
- Validated patient selection assay

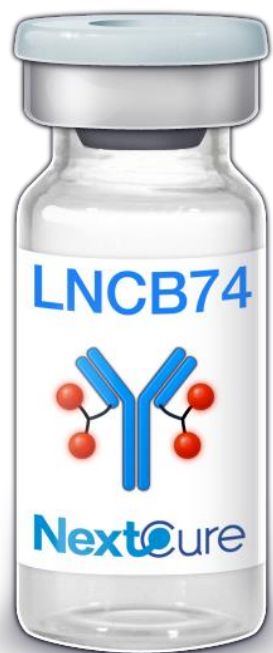


- Co-development partner since 2022
- Significant success advancing ADCs
- Differentiated linker technology

Option to Develop Additional Targets

LNCB74

On Track for an IND Year-End 2024



COMPLETED

- ✓ Potent pre-clinical activity *in vitro* and *in vivo*
- ✓ DRF & GLP tox studies – safe and tolerable
- ✓ Favorable pre-IND feedback from FDA

ONGOING

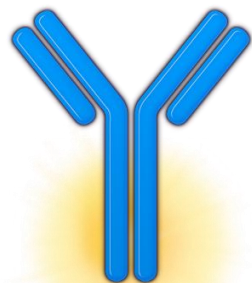
- GMP manufacturing
- Planning for Ph1



LNCB74 Is an Anti-B7-H4 MMAE ADC

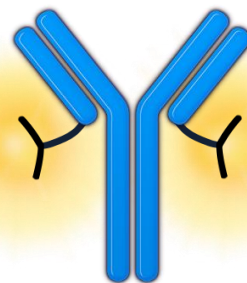
STRUCTURAL DIFFERENTIATION

Antibody



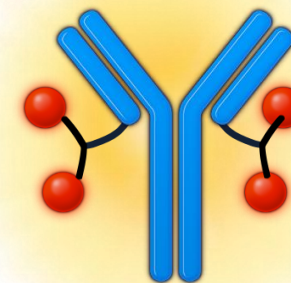
Fc Modification
Protects immune cells

Linker



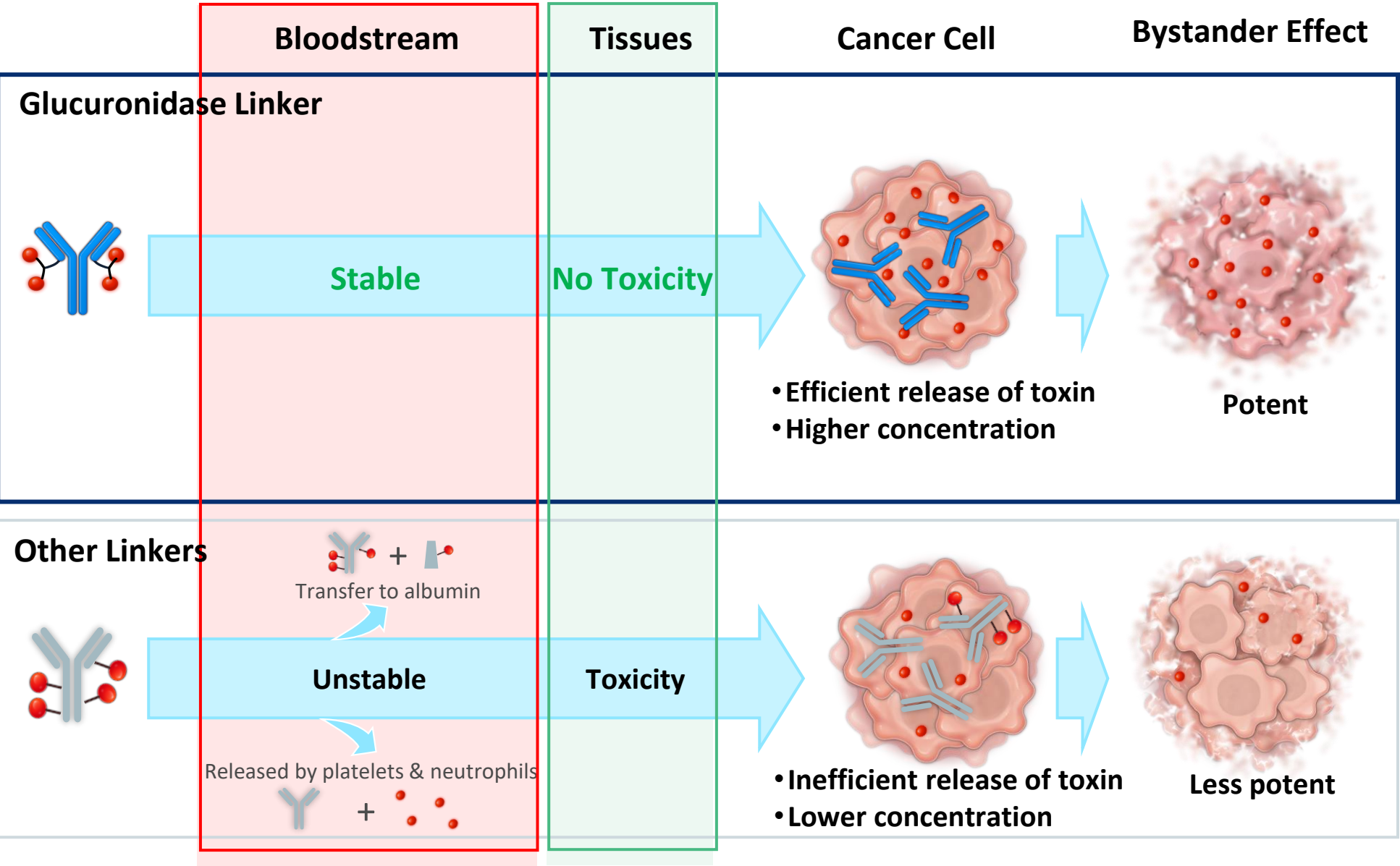
Tumor Selectivity
Glucuronidase cleavable linker
provides greater selectivity
and specificity

Payload



MMAE DAR 4
Improves safety and control
over how the payload
is dispersed

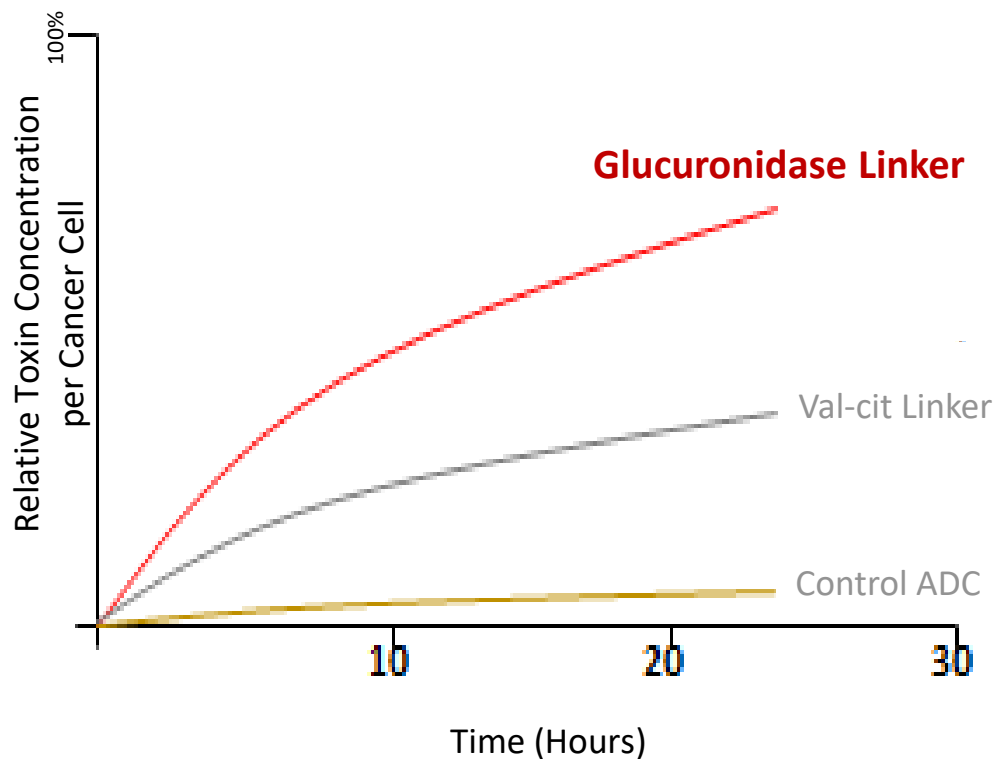
Differentiating Glucuronidase & Other Linkers



Linker	Glucuronidase cleavable
Payload	Tubulin inhibitor
Conjugation	Site Specific
DAR	4

Linker	Protease or esterase cleavable
Payload	Tubulin or Topo-1 inhibitors
Conjugation	Site Specific or cysteine
DAR	~4, 6, 8

Key Differentiating Features of Glucuronidase Linkers



Glucuronidase Linker

- Site specific attachment to mAb
- Highly stable linkage
- Specifically cleaved in cancer cells
- Efficient release of payload
- Higher concentration of toxin per cancer cell

Val-Cit Linker

- Non-specific attachment to mAb
- Unstable linkage
 - Prone to transferring to albumin
 - Increases toxicity
- Susceptible to cleavage by platelets and neutrophils, increasing toxicity
- Less efficient release of payload
- Lower concentration of toxin per cancer cell

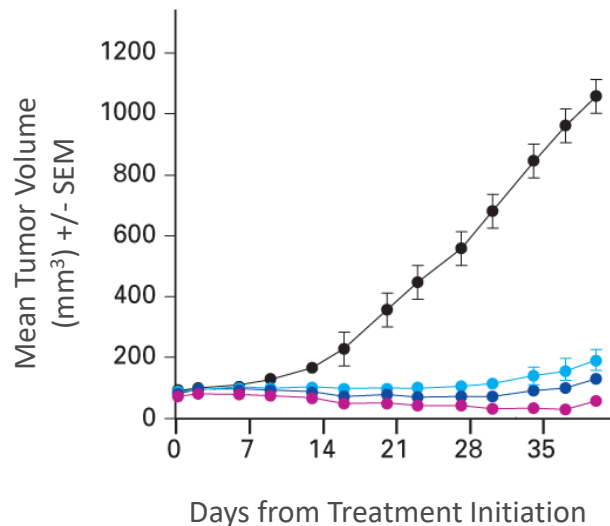
- Improved therapeutic index
- Higher efficacy
- Lower toxicity
- Less frequent dosing

LNCB74 Shows Potent Anti-Tumor Activity in CDX and PDX Models

CDX

BREAST (ZR-75-1)

- Vehicle
- LNCB74 (3 mg/kg)
- LNCB74 (1 mg/kg)
- LNCB74 (6 mg/kg)

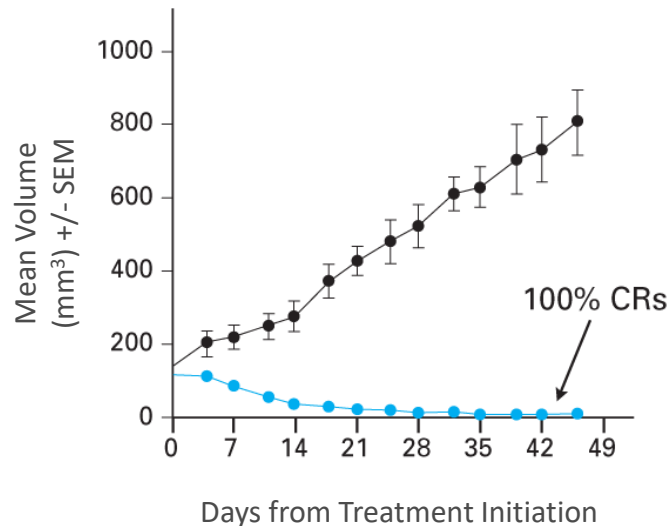


Dosing

Q7D x 3

OVARIAN (OVCAR-3-B7-H4-OE)

- No Treatment
- LNCB74 (6 mg/kg = 0.114 MMAE)

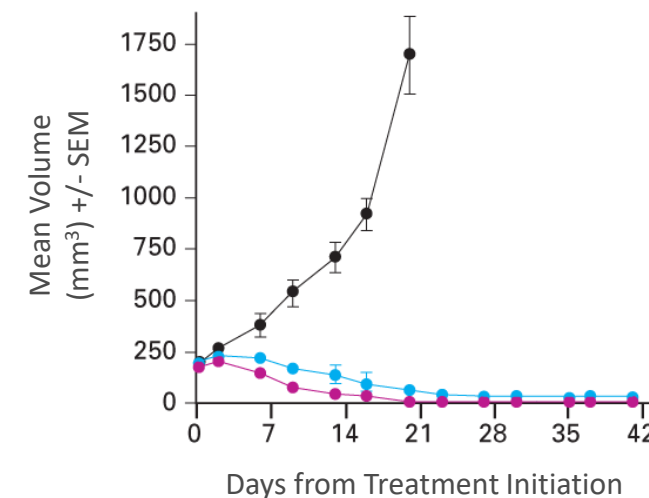


Single dose

PDX

TNBC (CTG-0012)

- No Treatment
- LNCB74 (1.5 mg/kg = 0.0275 MMAE)
- LNCB74 (4.5 mg/kg = 0.08 MMAE)



1.5 mg/kg: Q7D x 3
4.5 mg/kg: single dose

B7-H4 is a Validated ADC Target



Key Features	HS-20089	SGN-B7H4V	LNCB74
ADC Design	<ul style="list-style-type: none"> B7-H4 mAb Protease cleavable linker Exatecan (TOPO1 inhibitor) DAR 6 	<ul style="list-style-type: none"> B7-H4 mAb Val-Cit cleavable linker MMAE DAR ~4 	<ul style="list-style-type: none"> B7-H4 mAb Glucuronidase cleavable linker MMAE DAR 4
DLT	7.2 mg/kg (N=2)	1.25 (N=1) or 1.5 mg/kg (N=2)	Safe and tolerable up to 10 mg/kg*
Common AEs	Leukopenia, neutropenia, nausea, anemia, vomiting, fatigue, thrombocytopenia, increased ALT and AST, anorexia, and hyponatremia	Neutropenia, peripheral sensory neuropathy, nausea, fatigue, anemia, dyspnea, hypotension, and pneumonia	No major toxicity observed
RESPONSES	<ul style="list-style-type: none"> TNBC: 6 PR (N=16) Ovarian: 2 PR (N=3) 	<ul style="list-style-type: none"> Breast: 7 PR (N=25) Ovarian: 2 PR (N=15) Endometrial: 1 CR (N=16) 	<ul style="list-style-type: none"> IND 4Q 2024
Data Source	ESMO 2023	ESMO 2023	AACR2024

*Cyno tox study

LNCB74 on Track for 4Q 2024 IND

TOX STUDY

Species	Cynomolgus
Dose Range	4, 7 & 10 mg/kg Q3W, i.v.
Evaluation	Toxicology profiling, pathology, hematology, immunotoxicology
Status	Complete

GMP MANUFACTURING

- Master cell bank generated
- Process development complete
- Antibody being manufactured
- Drug conjugation

LNCB74 Ph1 Monotherapy Study Plans



DOSE ESCALATION

- 5 dose cohorts
- Regimen Q3W
- N=65 subjects



Readout: Scans every 6 weeks
Endpoint: Safety

DOSE EXPANSION

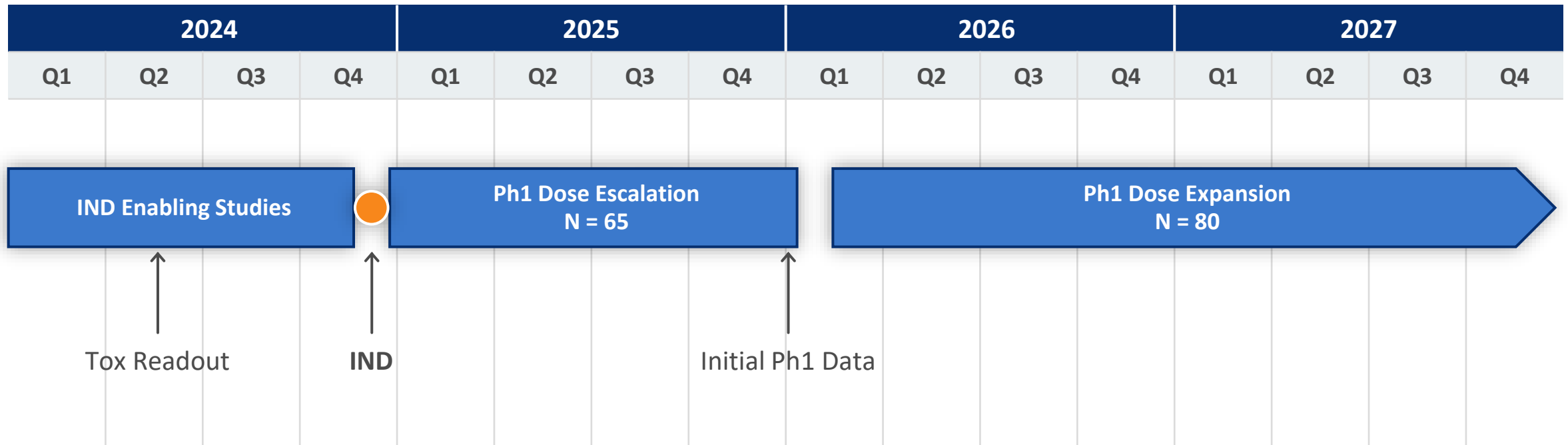
- 2 dose cohorts
- 2 tumor types
- N=80 subjects
- Pre-treatment & on study biopsies



Readouts: Scans every 6 weeks
Endpoints: Safety and ORR



LNCB74 Timeline and Potential Catalysts



Opportunity to Develop Differentiated B7-H4 ADC Therapeutic



B7-H4 ADC



IND

PH1 INITIATION

Programs Available for Partnering

PROGRAMS	TARGET	CELLS	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	NEXT MILESTONE
NC525	LAIR-1	Leukemia	Acute Myeloid Leukemia					Ph1a Data 4Q 2024
NC605	S15	Osteoclasts	Osteogenesis Imperfecta					Tox Studies
NC181	APOE4	Microglia & Neurons	Alzheimer's Disease					Master Cell Bank
FIND-ADC	New Targets	Tumor Cells	Oncology					Lead Selection

Anticipated 2024 Milestones

	Q1	Q2	Q3	Q4
NC410 Combo Ovarian				Ph1b Data
CRC		✓ Ph1b Data		Ph1b Update
LNCB74				IND Filing

NextCure

Advancing Innovative Medicines for Cancer



Differentiated
Programs

ADCs

Treatments for
Non-Responders

The logo for NextCure, featuring the word "Next" in blue and "Cure" in white, with a blue circle around the letter "C".

NextCure

APPENDIX

1087-001 CRC: Partial Response

71% Reduction in Sum of Target Lesions

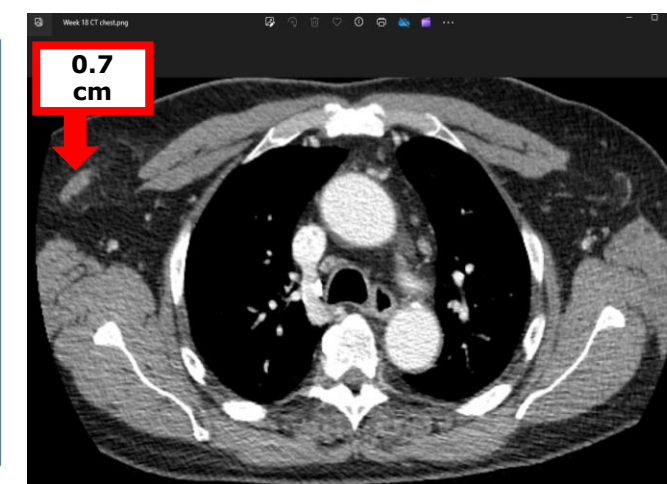
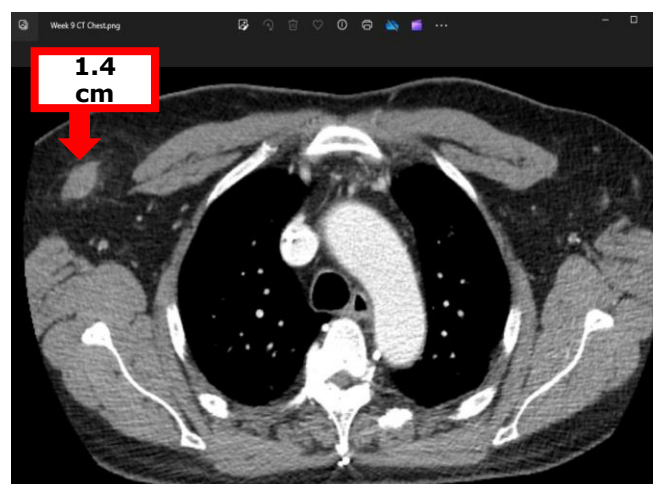
BASELINE – 9.15.2023

WEEK 9 – 11.20.2023

WEEK 18 – 1.19.2024

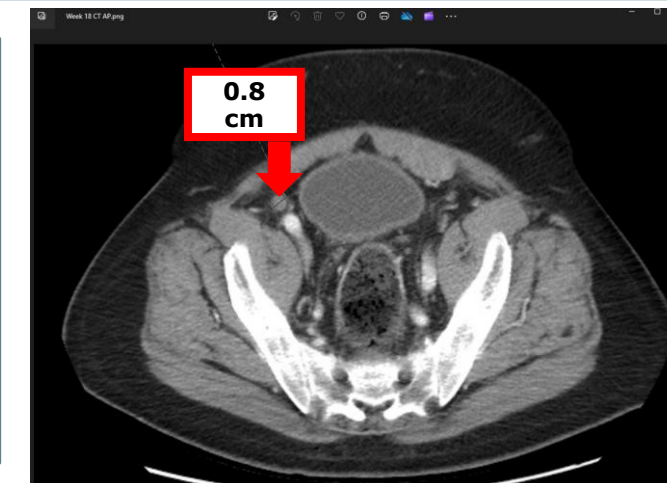
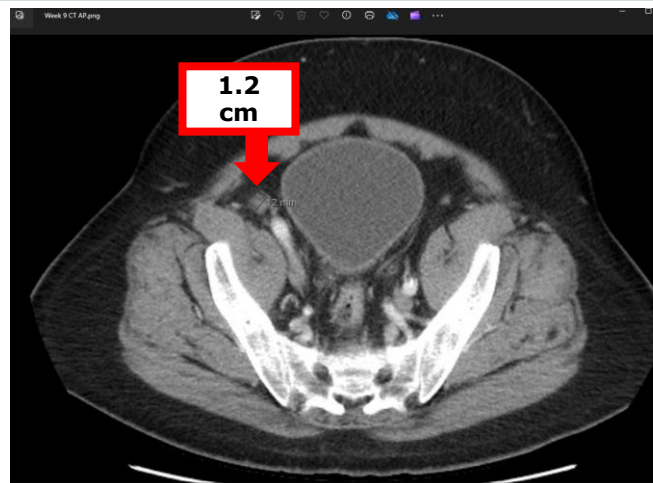
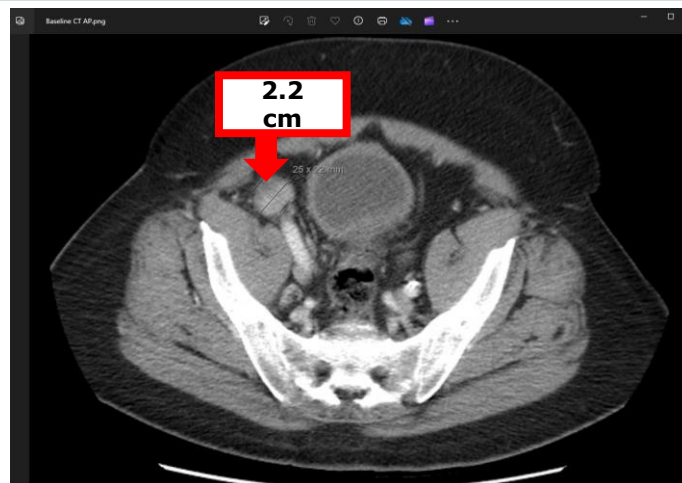
TARGET LESION 1

Right Axillary lymph node



TARGET LESION 2

Right Pelvic lymph node



1110-003 CRC: Partial Response

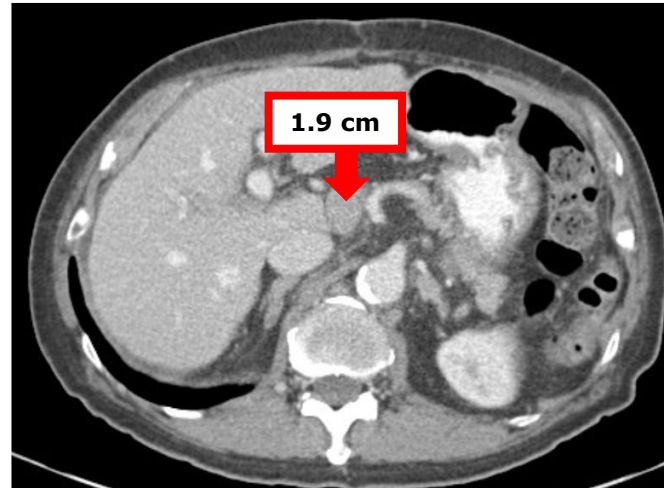
59% Reduction in Sum of Target Lesions

BASELINE – 4.8.2023

WEEK 9 – 6.20.2023

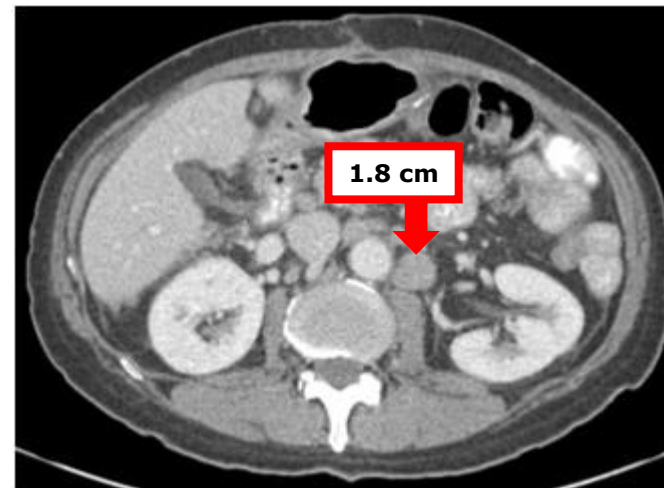
TARGET
LESION 1

Gastrohepatic lymph node



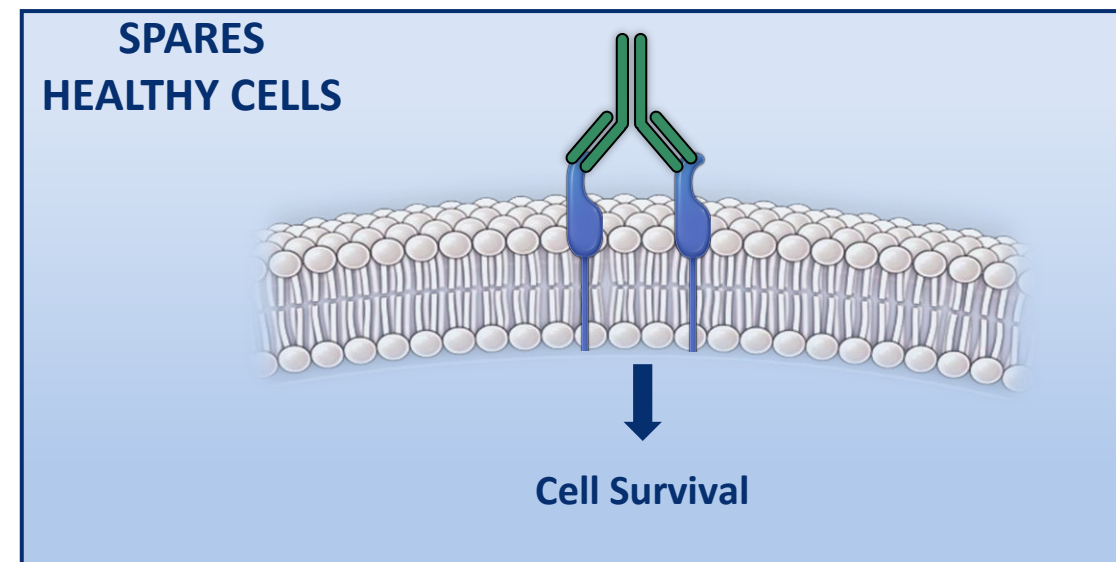
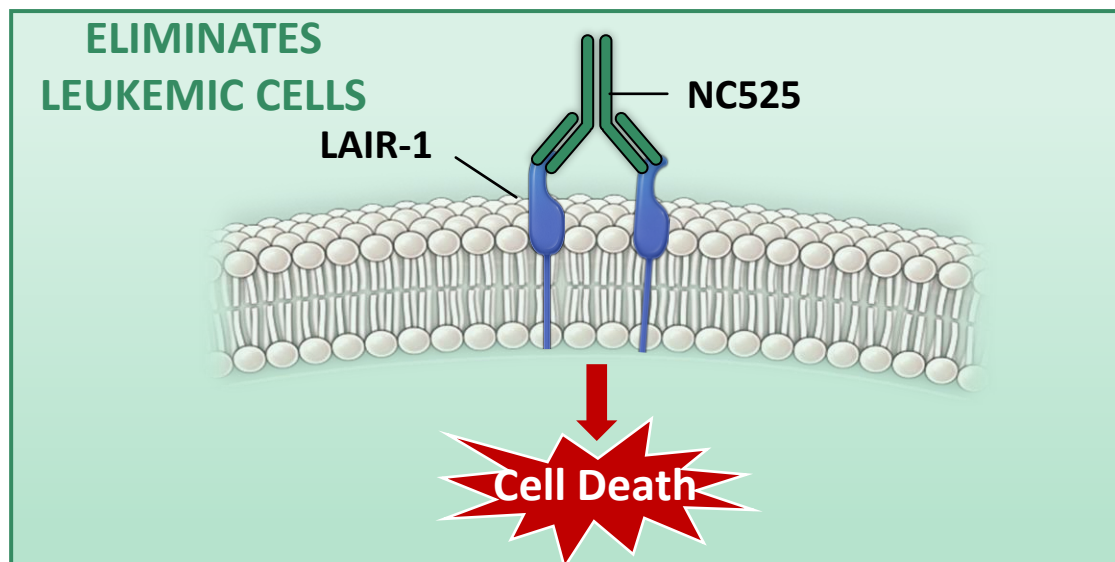
TARGET
LESION 2

Paraaortic lymph node



NC525

LAIR-1 MAB



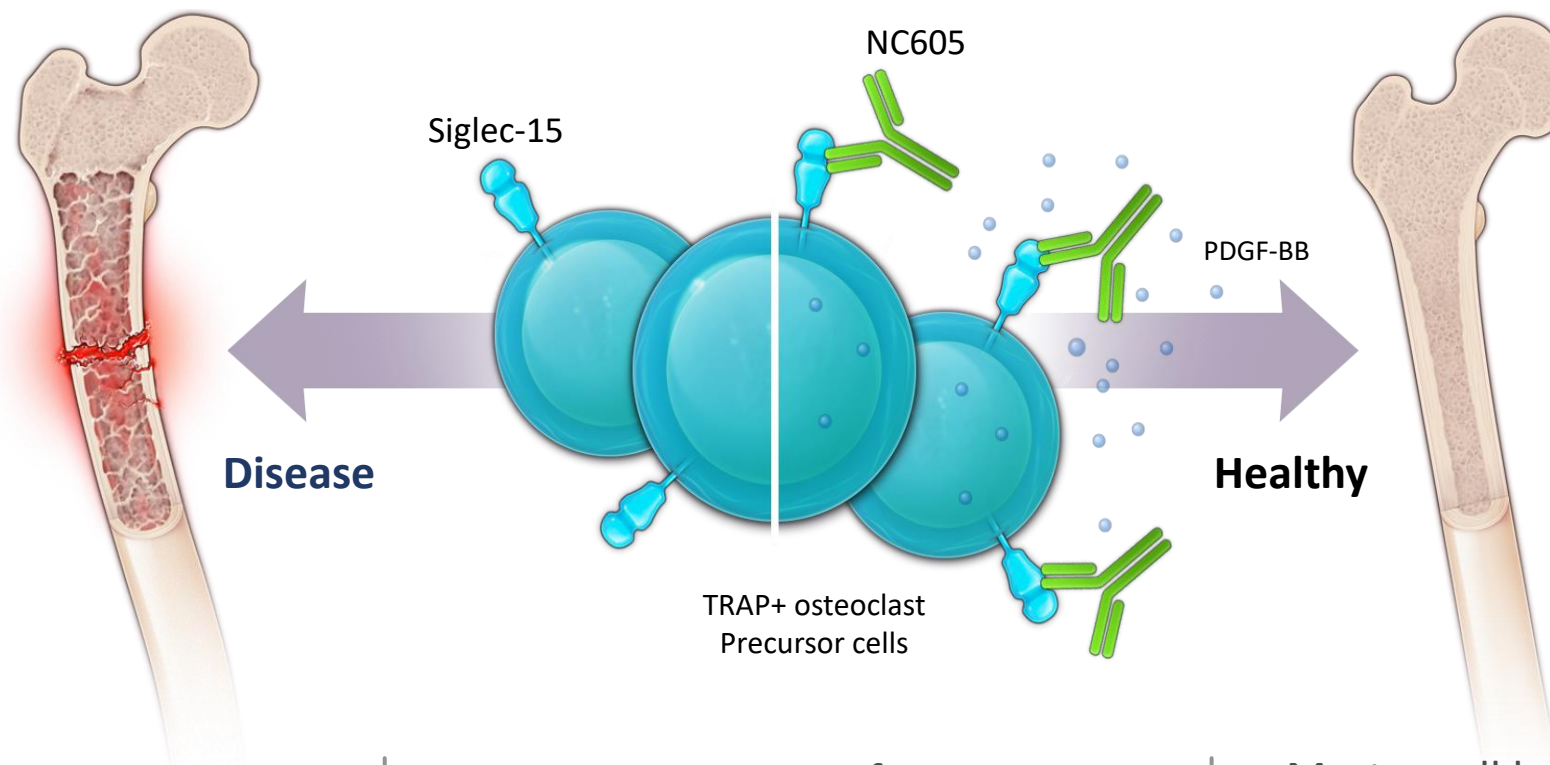
- LAIR-1 is essential for AML development and cell survival
- Data defining MOA recently published (Lovewell RR et al., J Clin Invest 2023)

- Leukemia (AML)
- High-risk myelodysplastic syndrome
- Chronic myelomonocytic leukemia

- Ph1 dose escalation study ongoing
- Phase 1a data 4Q 2024
- Currently seeking partner

NC605

SIGLEC-15 MAB



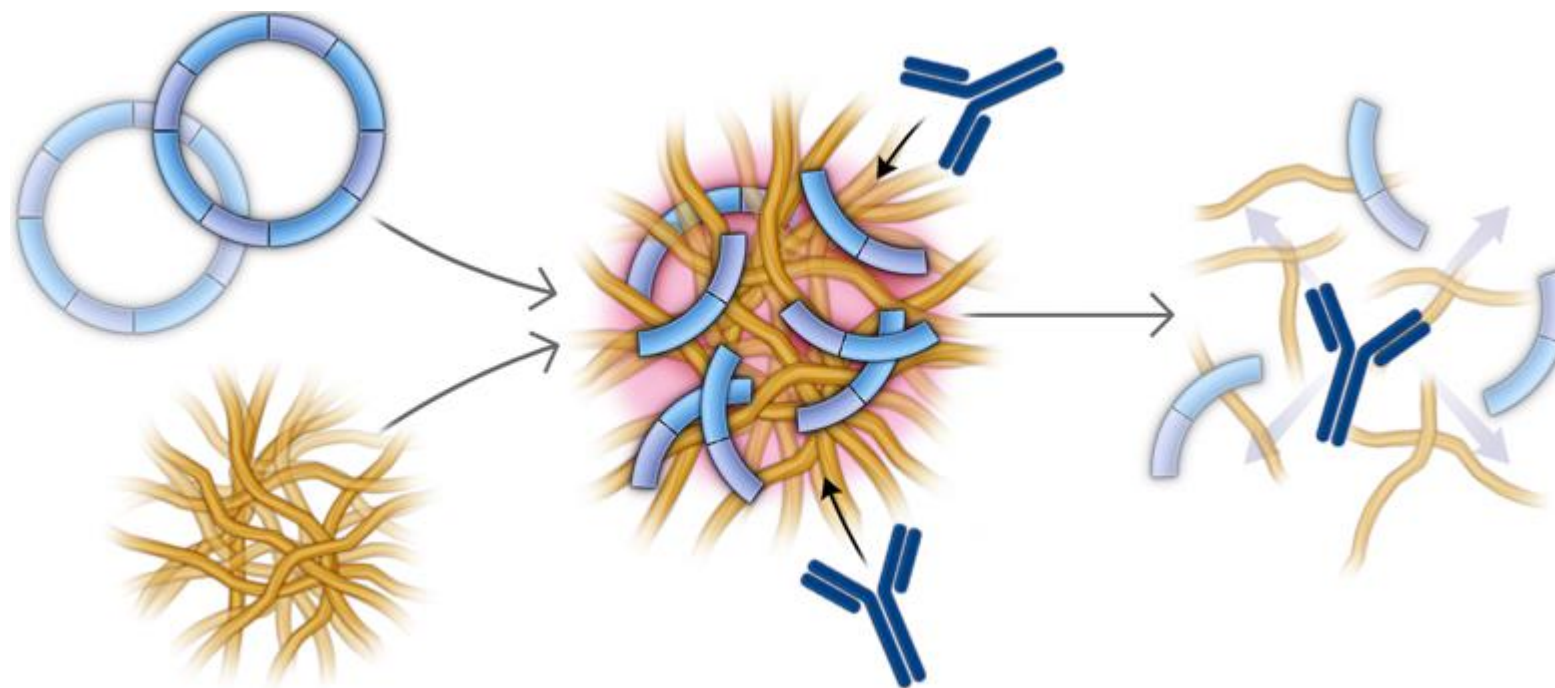
- Prevents bone loss
- Promotes bone formation
- Decreases fractures

- Osteogenesis imperfecta
- Osteoporosis
- Non-union fracture

- Master cell bank available
- Initiating tox studies
- Currently seeking partner

NC181

APOE4 MAB



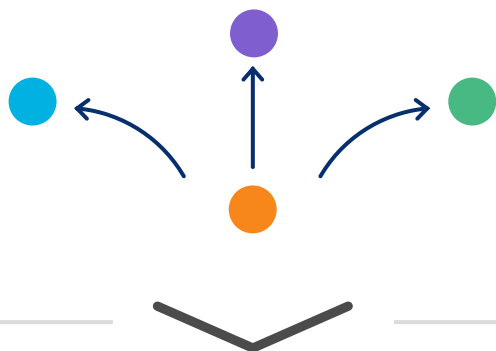
- Reduces amyloid plaques
- Suppresses neuroinflammation
- Improves cerebrovascular function

- Alzheimer's disease
- Cerebral amyloid angiopathy (CAA)
- Parkinson's disease

- Master cell bank being generated
- Currently seeking partner

FIND-ADC™ Technology Uniquely Unlocks New Targets for ADCs

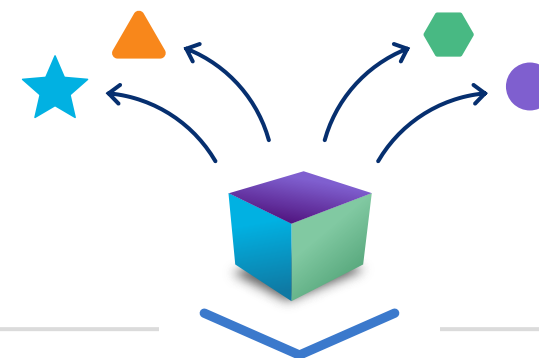
TRADITIONAL DISCOVERY



Incremental payload and linker improvements to the **same pool of existing targets** (HER2, EGFR, FR α , TROP-2, CLDN18.2, BCMA, CD19)

NextCure

FIND-ADC



Identifying new targets for ADCs that unlock novel products and value