

MAY 12, 2021



Next-Generation Immunomedicines

BofA Securities 2021 Virtual Health Care Conference

Forward-Looking Statements

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. Words such as “may,” “will,” “expect,” “anticipate,” “estimate,” “intend,” “next,” “near-term,” “future” and similar expressions, as well as other words and expressions referencing future events, conditions, or circumstances, are intended to identify forward-looking statements. Examples of forward-looking statements in this presentation may include, among others, statements regarding: (i) the timing, progress and results of our preclinical and clinical trials; (ii) the evaluation of biomarkers; (iii) the impact of the COVID-19 pandemic on the initiation, progress or expected timing of those trials and the timing of related data, as well as our efforts to adjust trial-related activities to address the impact of the COVID-19 pandemic; (iv) the timing or likelihood of regulatory filings for our product candidates; (v) our manufacturing capabilities and strategy; (vi) the potential benefits and activity of our product candidates; (vii) our expectations regarding the nature of the biological pathways we are studying; (viii) our expectations regarding our FIND-IO platform; and (ix) the potential benefits of our relationships with Dr. Lieping Chen and Yale University.

Various factors could cause actual results to differ materially from those projected in any forward-looking statement. Such risks and uncertainties include, among others: the impact of the ongoing COVID-19 pandemic on our business, including our clinical trials, third parties on which we rely and our operations; our limited operating history and no products approved for commercial sale; our history of significant losses; our need to obtain additional financing; risks related to clinical development, marketing approval and commercialization; and the unproven approach to the discovery and development of product candidates based on our FIND-IO platform. No forward-looking statement is a guarantee of future results or events, and one should avoid placing undue reliance on such statements. For further discussion of these and other factors that could affect the outcome of our forward-looking statements, see our filings with the Securities and Exchange Commission, including in “Risk Factors” and “Special Note Regarding Forward-Looking Statements” in the Risk Factors section and throughout NextCure’s Form 10-K filed with the SEC on May 6, 2021. Except as otherwise indicated, this presentation speaks as of the date indicated herein. Except as required by law, we assume no obligation to update any forward-looking statements, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future. The information in this presentation is not complete and may be changed.

NextCure Highlights

PIPELINE

- NC318 (S15): Phase 2
- NC410 (LAIR-1): Phase 1
- NC762 (B7-H4): IND











PLATFORM

- FIND-IO functional screening discovery engine
- Validating novel cancer targets
- New MOAs

PEOPLE

- Fully integrated: GMP manufacturing facility + team
- Experienced team: CMO – Dr. Han Myint
- Founder/SAB Head: Dr. Lieping Chen (discovered PD-L1)

Product Development Pipeline

PROGRAMS	CELLS	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	NEXT MILESTONE	WORLDWIDE RIGHTS
PRODUCT CANDIDATES								
NC318 (S15) Monotherapy	Tumors and macrophages	 ONCOLOGY					Report update 4Q 2021	
NC318 (S15) Anti-PD-1 Combo*	Tumors and macrophages	 ONCOLOGY					Initial data 1H 2022	
NC410 (LAIR-1)	Dendritic and T cells	 ONCOLOGY					Initial data 2H 2021	
NC762 (B7-H4)	Tumors	 ONCOLOGY					Start Phase 1 2Q 2021	
DISCOVERY AND RESEARCH PROGRAMS								
Multiple Programs	Multiple cell types						IND filing in 2022	

*Investigator-initiated (IIT) trial (Yale University)

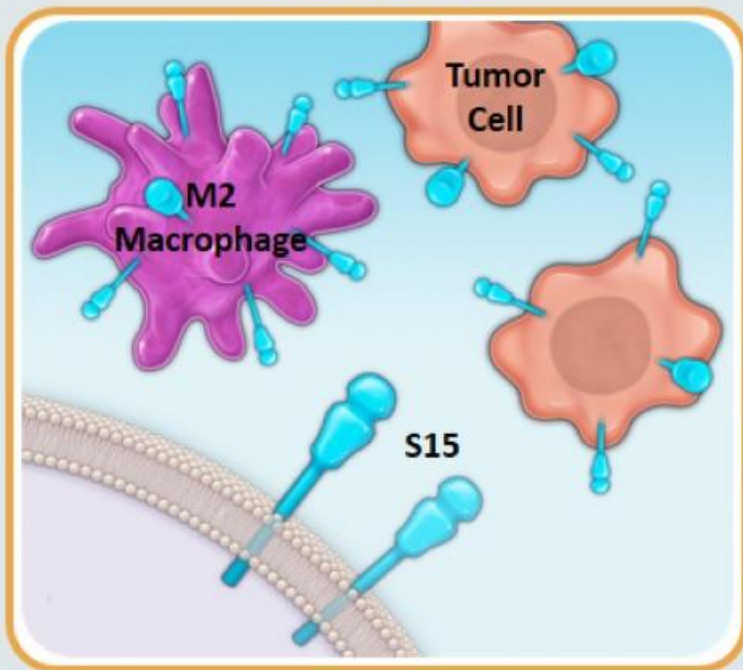
NC318

Humanized Siglec-15 (S15) Monoclonal Antibody

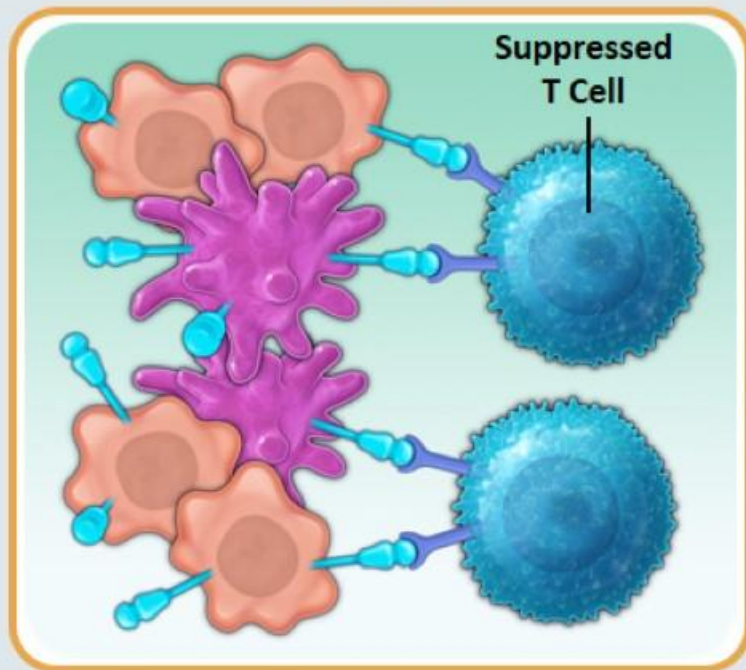


Phase 1/2
CLINICAL
TRIAL

BIOLOGY



MOA



UPDATE

- CLIA validated IHC assay for patient selection
- Yale investigator-initiated trial
 - NSCLC
 - Monotherapy
 - Pembro combo
- Applying lessons learnt to other programs

NC318 Phase 1/2 Monotherapy Trial Status as of March 4, 2021

PHASE 1

- Dose escalation
- 49 patients
- 15 tumor types
- All comers regardless of PD-L1 or S15 expression status
- 1 confirmed CR (118+ weeks)
- 1 confirmed PR (92+ weeks)

PHASE 2

- 400 mg every 2 weeks
- Biopsies required
- Confirmed PRs
 - H&N (40 weeks)
 - TNBC (21+ weeks)
- S15+ patient selection

Yale Investigator-Initiated Phase 2 Trial in Non-Small Cell Lung Cancer

PRINCIPAL INVESTIGATORS

- Roy Herbst, MD, PhD
- Scott Gettinger, MD

MONO

- S15+ patients
- PD-1 refractory

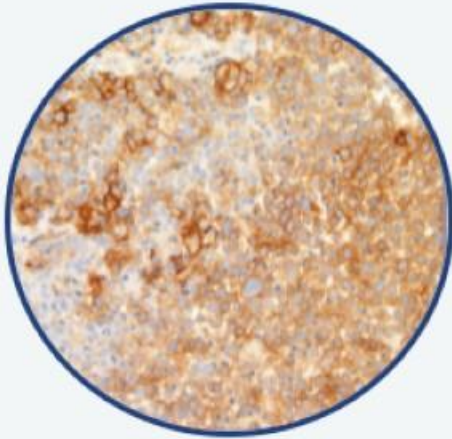
COMBO

- Pembrolizumab
- 2 arms
 - PD-1 refractory
 - PD-1 naïve

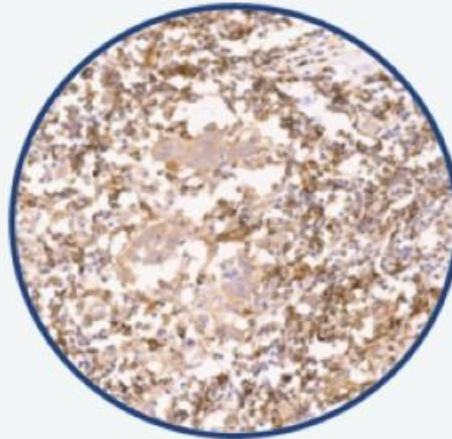
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Selecting S15 Positive Patients for NC318 Study

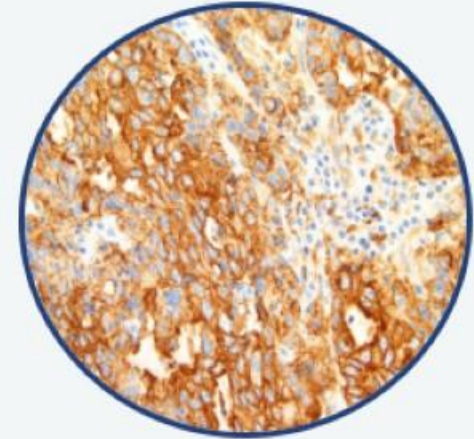
Head & Neck



Breast



NSCLC



Tissue Biopsies



CLIA Validated Assay



Enrich S15+ Patients

NC410

Decoy Human Fusion Protein
Targeting the TME

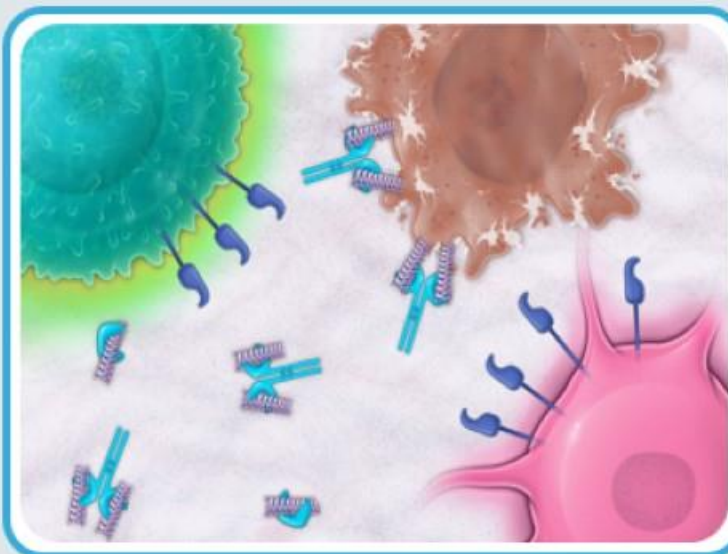


Phase 1/2
CLINICAL
TRIAL

BIOLOGY

- Dendritic cells and T cells
- Advanced or metastatic cancers
 - NSCLC
 - Ovarian cancer
 - Pancreatic cancer

MOA



UPDATE

- Extracellular matrix remodeling
- Enhances T cell infiltration and tumor killing
- Synergistic combinations
- ASCO 2021 poster

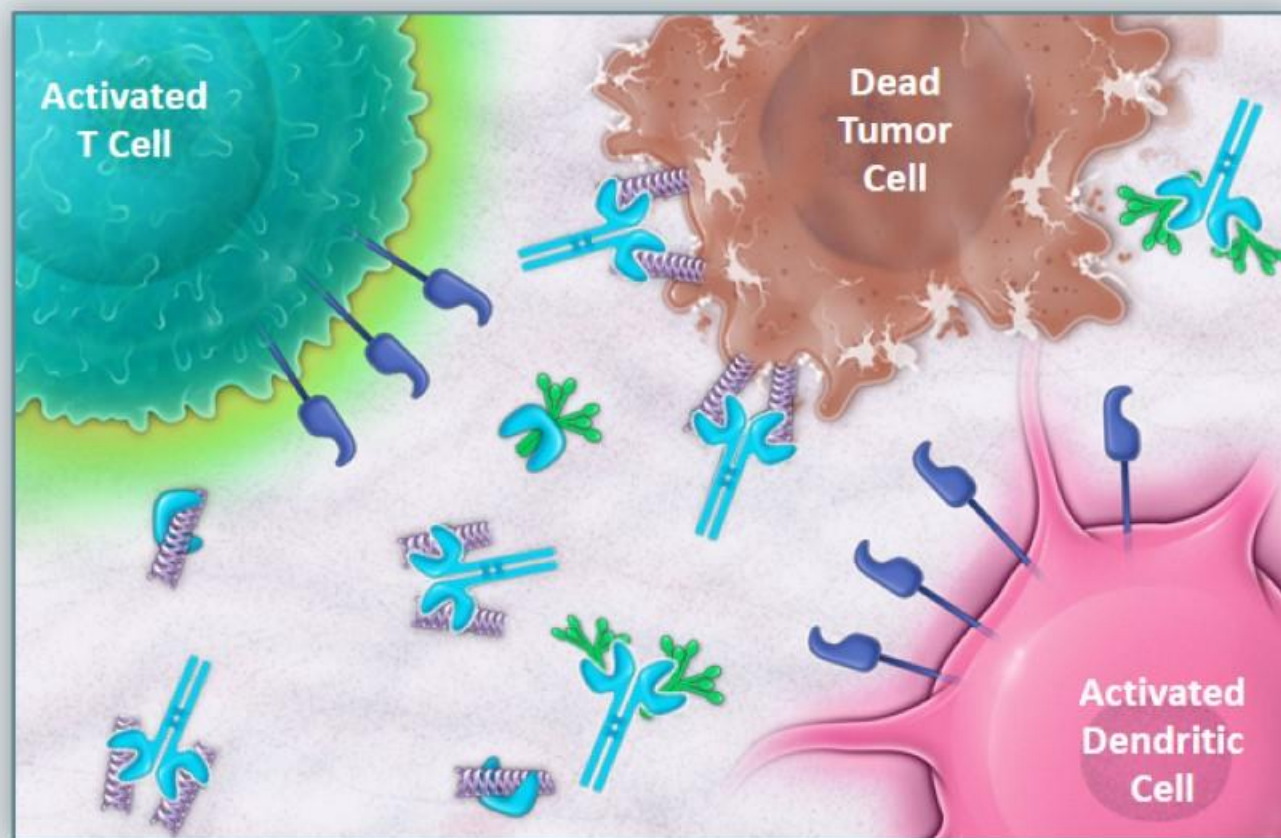
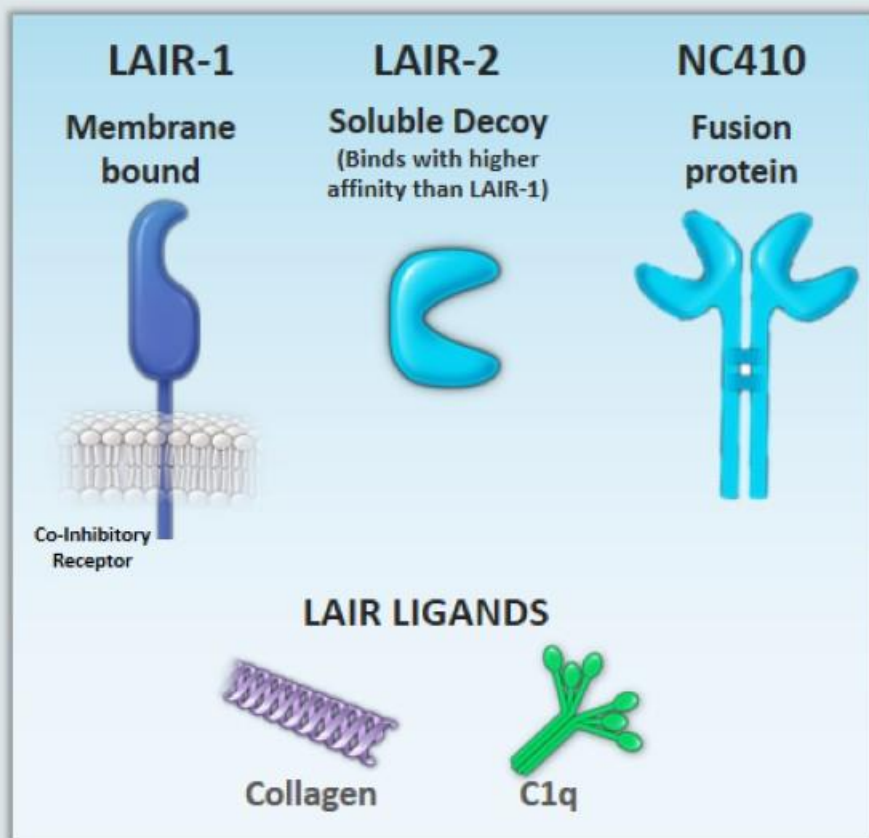
LAIR-1 & LAIR-2 Functional Relationship

LAIR & LIGANDS

LAIR-1 and LAIR-2 Bind Collagen and C1q

NC410 IS A FUSION PROTEIN OF LAIR-2

Decoy for LAIR-1 and promotes T cell function and DC activation



NC410 Phase 1 Portion of Phase 1/2 First-in-Human Trial

DESIGN

- Dose-escalation
- Safety & tolerability

TUMOR TYPES

- Advanced or metastatic solid tumors
- NSCLC
 - Ovarian cancer
 - Pancreatic cancer

DELIVERABLES

Initial Phase 1 data
2H 2021



NATIONAL CANCER INSTITUTE
Center for Cancer Research



John Theurer
Cancer Center
at Hackensack University Medical Center

THE UNIVERSITY OF TEXAS

MDAnderson
~~Cancer~~ Center

NC762

Humanized B7-H4 Monoclonal Antibody

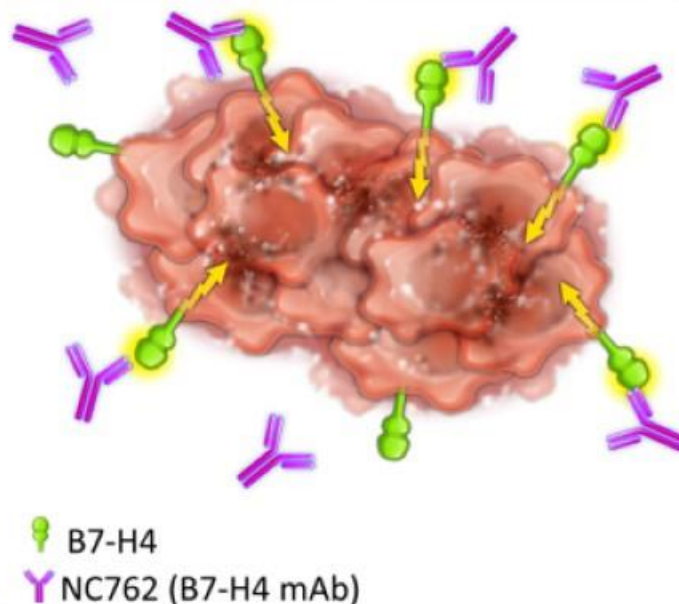


Phase 1/2
CLINICAL
TRIAL

BIOLOGY

- Inhibits tumor cell growth and is not dependent on T cells
- NK cells enhance anti-tumor activity
- Advanced or metastatic cancers
 - NSCLC
 - Breast cancer
 - Ovarian cancer

MOA



UPDATE

- IND filed
- Unique mechanism of action
- IHC assay for patient selection
- Biomarkers
- Phase 1 2Q 2021
- AACR 2021 poster

GMP Manufacturing Facility: Added Additional Capacity

2,000L Capacity



Speed

Use of a CMO adds ~8 months to timelines

Flexibility

Prioritization and scheduling

Efficiency

Operational and capital efficiency

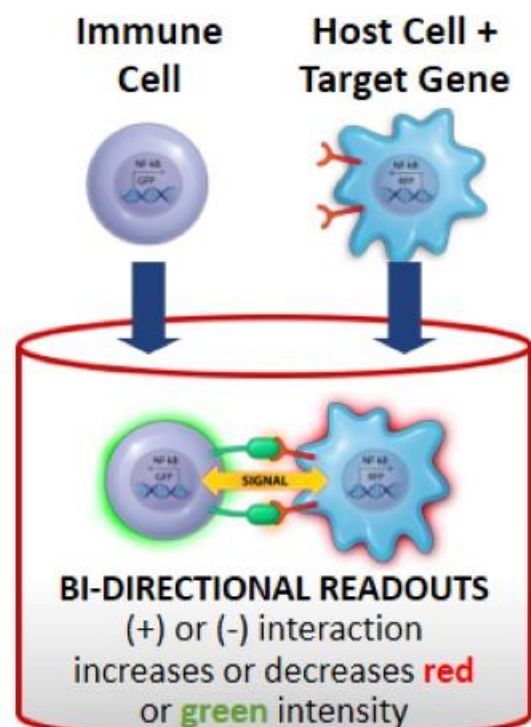
Quality

Controlling quality with experienced team

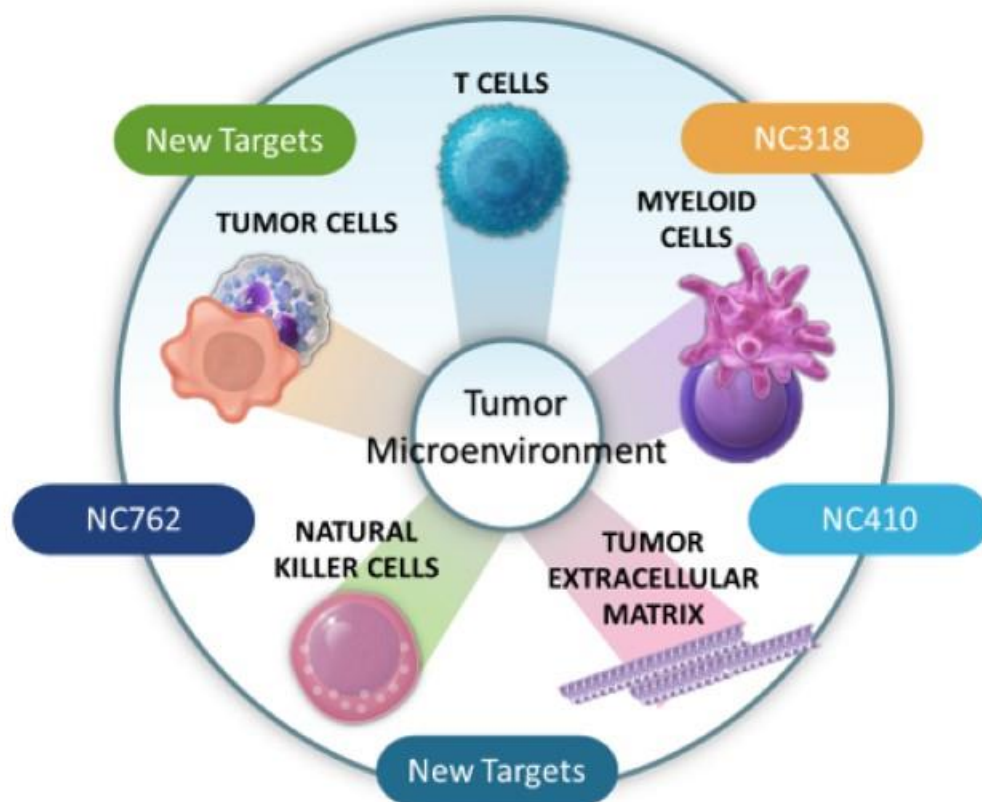
Utilized to Produce Clinical Material for All Lead Programs

FIND-IO: Finding Solutions with a Powerful Discovery Engine

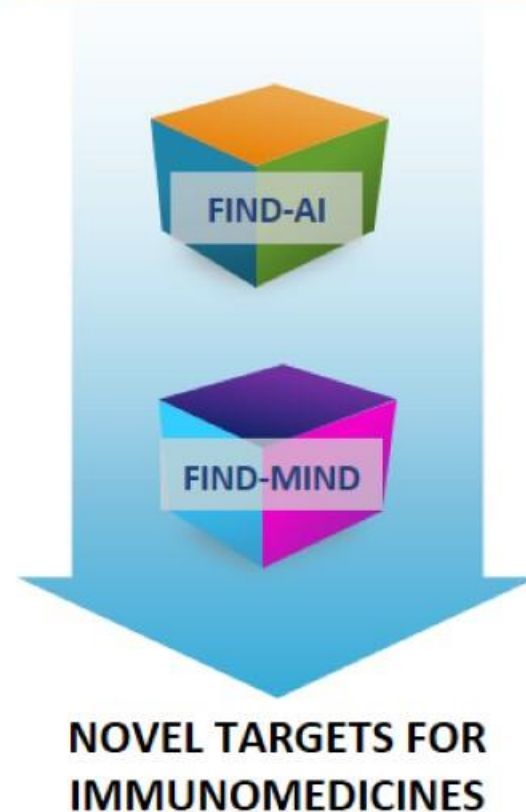
FUNCTIONAL READOUTS



FUTURE PIPELINE



DIVERSIFICATION



Anticipated Near-Term Milestones

Cash Position: \$268.2M Runway: 2H 2023

PROGRAMS	2021				2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PRODUCT CANDIDATES								
NC318 (S15) Monotherapy				Phase 2 update				
NC318 (S15) Anti-PD-1 Combo*		Start Phase 2			Anticipate initial data			
NC410 (LAIR-1)				Initial data				
NC762 (B7-H4)		Start Phase 1				Initial data		

*Investigator-initiated (IIT) trial (Yale University)



Committed to Addressing the Unmet Needs of Patients with New Solutions

FOCUSED
Approach

PROVEN
Momentum

INNOVATIVE
Platform

EXPERIENCED
Team

FUTURE
Deliverables