ALLTERUM

Allterum Therapeutics, Inc.

Advancing the Next Generation of Best-In-Class Precision Oncology and Inflammation Therapeutics

www.allterum.com

FANNIN

A Fannin-Established Company

Acute Lymphoblastic Leukemia

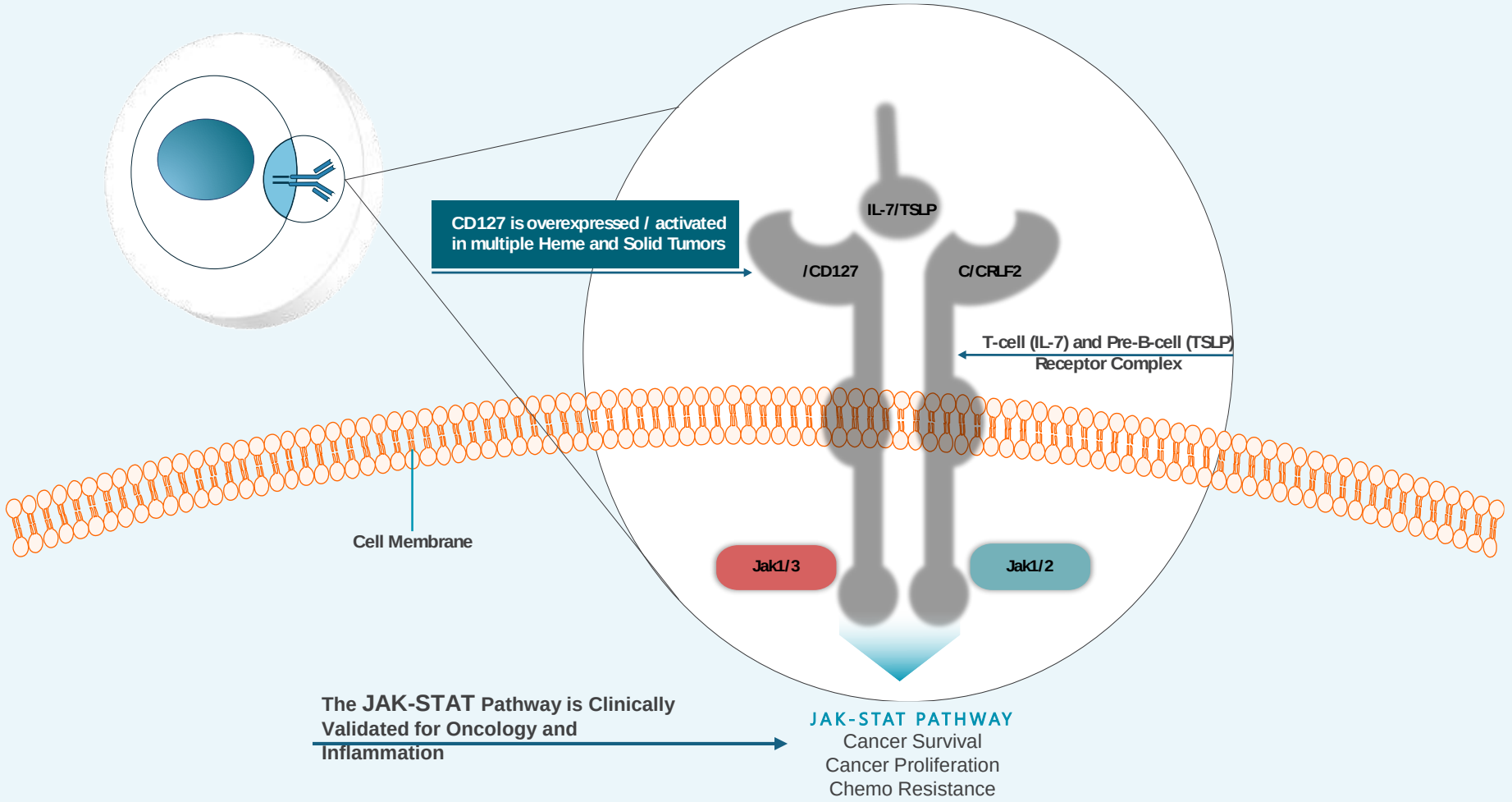
AMERICAN CANCER SOCIETY:
"~7,000 ALL new patients/yr, 80% children"

THE GOOD NEWS:
Most patients respond well to initial front-line treatment

THE PROBLEM:
About 25% of patients relapse following an initial remission

Lack of Good Alternative Therapies for Relapsing and/or Refractory ALL Patients Leads to Overall 5-year Survival Rates of <50%

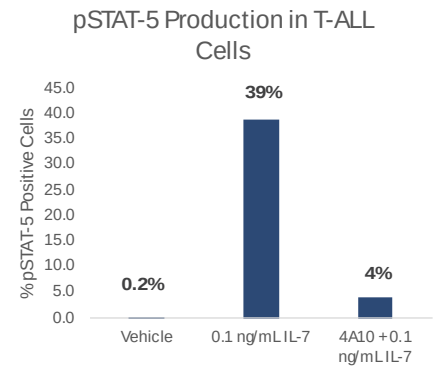
4A10: Highly Selective, Best-In-Class, Triple MOA (Inhibition, ADCC, ADCP)



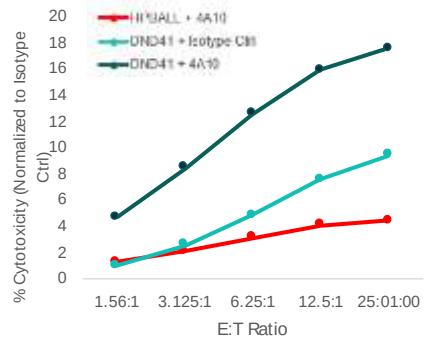
The JAK-STAT Pathway is Clinically Validated for Oncology and Inflammation

JAK-STAT PATHWAY
Cancer Survival
Cancer Proliferation
Chemo Resistance

4A10 Inhibits pSTAT-5 Production[4]



4A10 induced Antibody-Dependent Cellular Cytotoxicity (ADCC) is dependent on CD127[5]



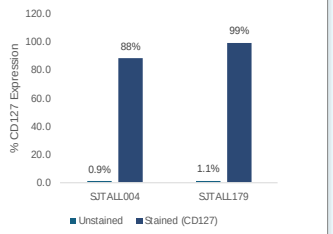
4A10 induces ADCC in CD127+ DND41 cells but not in CD127- HPB/ALL cells.

[4] Data from Durum Lab at NCI (unpublished)
[5] Internal Allterum data (unpublished)

Robust Data Package Supports Transition To The Clinic

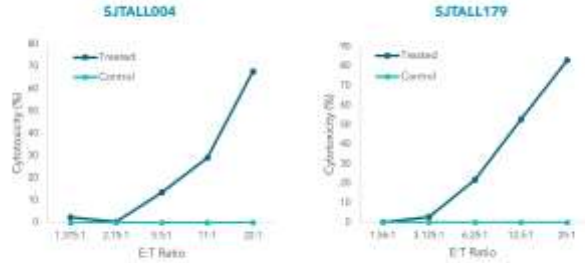
CD127 is Highly Expressed on ETP[1] T-ALL and 4A10 Mediates ADCC[2]

CD127 Expression in Patient Derived ETP T-ALL Cells



CD127 expression (blue) indicated by increased MFI readout via flow cytometry

4A10 Induces ADCC in ETP T-ALL Models

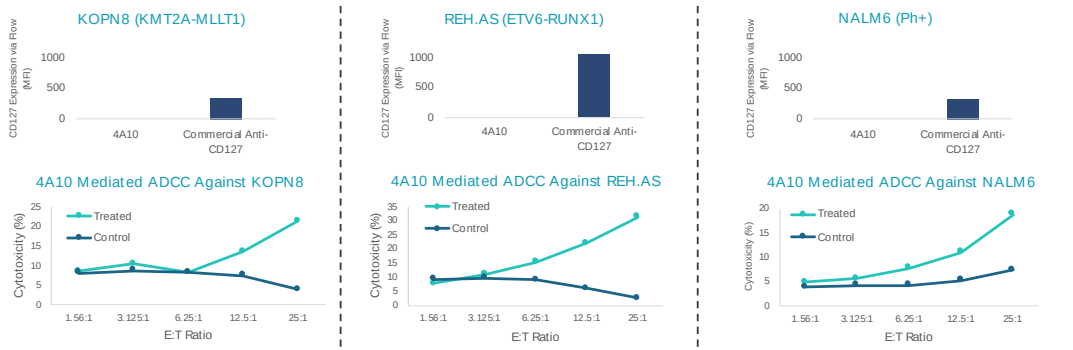


Increasing the ratio of effector to target (E:T) cells correlates with increased 4A10-induced ADCC

[1] ETP = Early T-cell Precursor ALL; associated with poor response to treatment and poor outcomes
[2] Data from Durum Lab (unpublished)

CD127 is Highly Expressed in B-ALL Cell Lines, 4A10 Mediates ADCC

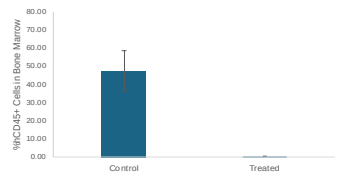
4A10 Binds CD127 and Induces ADCC In Multiple B-ALL Cell Lines[1,2,3]



[1] 4A10 detects and binds CD127 similarly to commercial Anti-CD127 used in flow cytometry
[2] Data from Durum Lab (unpublished)
[3] Increasing the ratio of effector to target (E:T) cells correlates with increased 4A10-induced ADCC

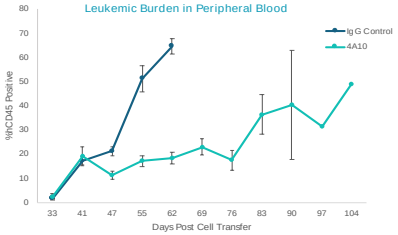
4A10: In Vivo Efficacy in T-ALL & B-ALL (PDX models)

4A10 Treatment Reduced T-ALL Leukemic Burden in BM

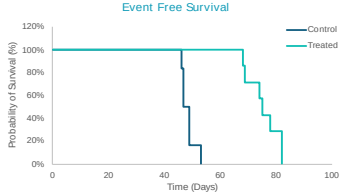


Note: NCCN criteria for morphologic complete remission (CR) includes <5% lymphoblasts in patient marrow[2].

4A10 Significantly Delayed Leukemia Growth In ETP T-ALL PDXs

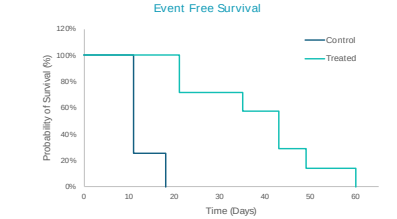


4A10 Significantly Increased Survival in Mice with T-ALL



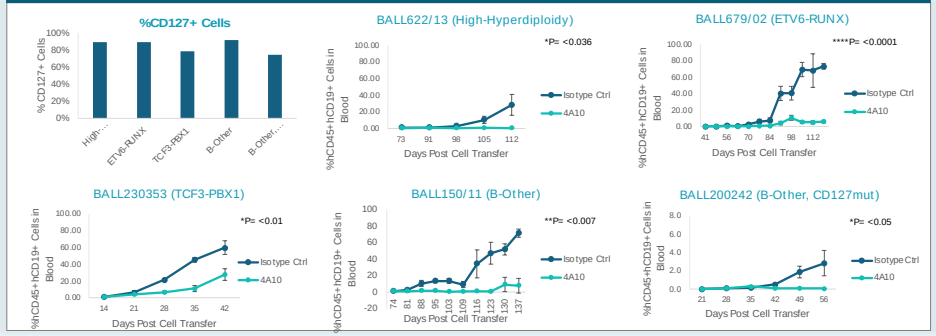
Note: 4A10 in-vivo activity was comparable to that reported for blinatumomab (Blincyto), an Amgen BiTE targeting CD19/CD3 approved for R/R B-ALL

4A10 Enhanced Survival In Mice with ETP T-ALL



Post Treatment Initiation (4A10 Treatment through D45)

4A10 Anticancer Activity in 5 Different B-ALL Subtype PDX Models[1,2]



[1] For each model, mice were treated once/week with 4A10 after establishing leukemia
[2] Data from Boldrini Institute (Priscila Zenatti, unpublished)

4A10 Has Favorable Safety Profile & Significant External Validation

No 4A10-associated safety signals

In multiple species, including NOAEL[1] at MFD[2] in NHPs[3] (GLP tox)

Minimum 4A10 binding to normal tissue observed

In a GLP tissue cross-reactivity study

No evidence of "Cytokine Storm"

In human PBMCs[4] treated with 4A10

4A10 binds CD127 in human and NHPs with high selectivity and affinity

Consistent with published data

External Validation

- Key data reproduced by multiple collaborators
- Program endorsed by prominent US leukemia investigators
- FDA granted **Orphan Drug** & **Fast Track** Designations
- Received four competitive, peer-reviewed grants (NCI[6] x 1, CPRIT[7] x 3)
- Accepted into the NCI NExT[8] & PIVOT[9] Programs
- Pediatric Rare Disease Voucher Eligibility

[1]NOAEL = No Observed Adverse Event Level
[2]MFD= Maximum feasible dose
[3]NHPs = Non human primates
[4]PBMCs = Pluri-potent bone marrow cells

[5]NCI = National Cancer Institute
[6]CPRIT = Cancer Prevention and Research Institute of Texas
[7]NExT = NCI experimental therapeutics
[8]PIVOT = NCI pediatric preclinical in-vivo testing

Substantial Non-Dilutive Capital Secured To De-Risk Early Development

- 1Q25: Completed Preclinical Proof-of-Concept, IND Enabling Studies, and Key CMC Work
- 3Q25: FDA Cleared 4A10 Investigational New Drug Application (IND)
- 4Q25-1Q26: Transition to the Clinic and Initiate the Phase 1 Clinical Trial

Accomplishments To-Date

4A10 In-Licensed from National Cancer Institute (NCI)

FDA Granted Orphan Drug Designation

Pediatric Rare Disease Designation (Eligible for Pediatric Review Voucher)

Robust animal data package generated with leading academic centers

Safety profile from GLP Tox studies suggests favorable tolerability in patients

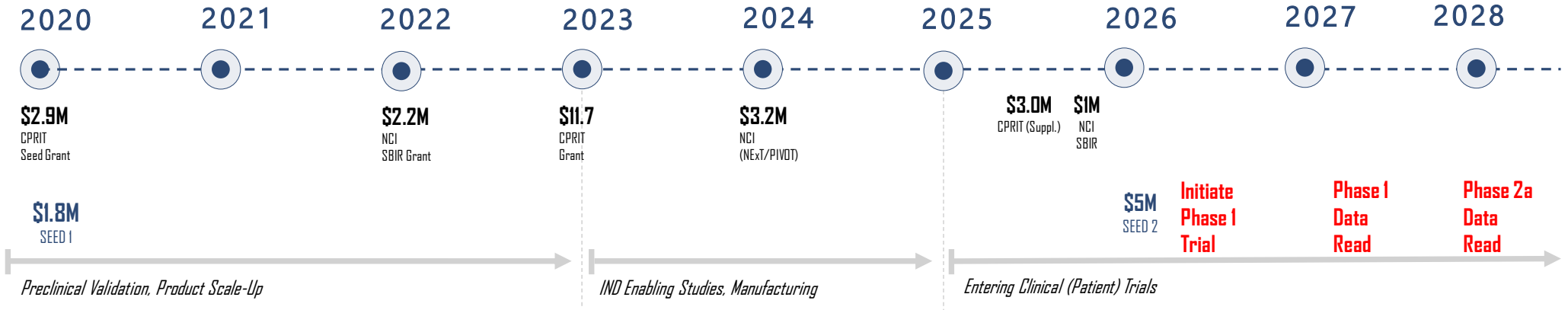
FDA cleared 4A10 IND allowing initiation of First-In-Human clinical trials

FDA Granted Fast Track designation

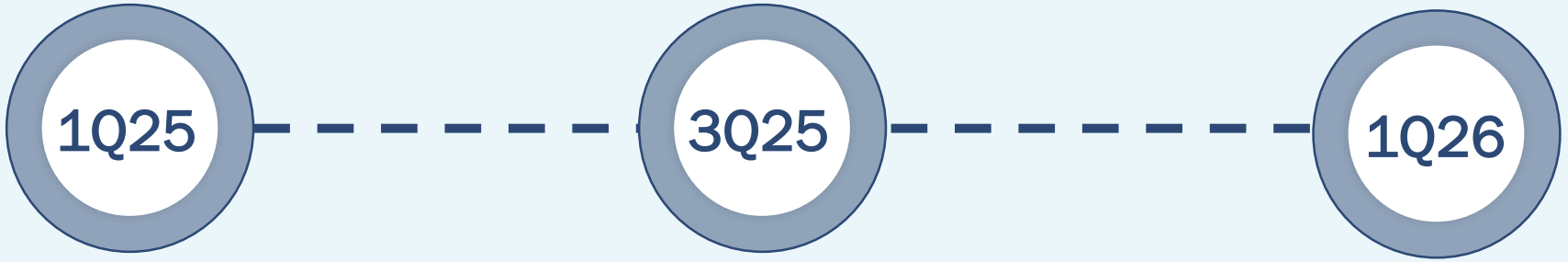
$24M
in grant funding to-date

$6.0M
in equity financing to-date

80%
of funding to-date is non-dilutive to shareholders



Target Timeline to Clinical Trial Initiation



Program Endorsed by Prominent Leukemia Investigators

IND Clearance

Clinical Trial Sites Initiated

Transition To The Clinic Activities

- Key Endorsements Received
- Study Protocol Approved by FDA
- Study Infrastructure In-Place
- IRB Approvals
- Study and Site Initiation Activities
- Key Management Hirings

SEED 2 + CPRIT/NCI Grants: Funds ALL Through the Completion of Phase 2a

~$14.5M in funding is required to complete phase 1/2a clinical trials in T/B-ALL

- $5.5M – Remaining funds in CPRIT grant
- $5M – SEED 2 financing
- $1M – NCI SBIR grant awarded 3Q25
- $3M – CPRIT supplemental grant awarded 2Q25

Intended Use of Proceeds*

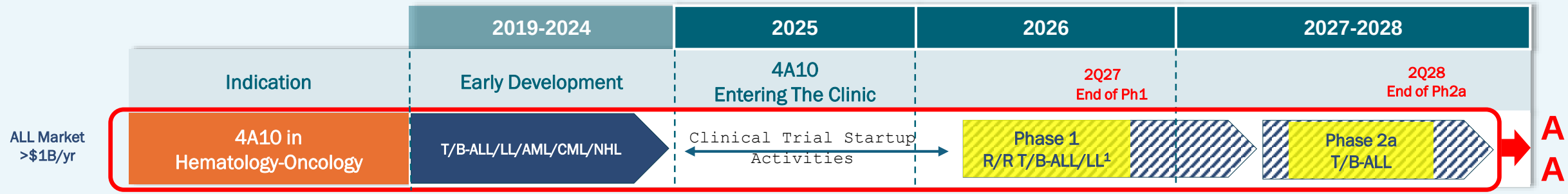
- ~ $5.0M - Phase 1 Clinical Trial
- ~ $2.0M - Phase 2a T-ALL Clinical Trial
- ~ $3.0M - Phase 2a B-ALL Clinical Trial
- ~ $0.6M - Pipeline Expansion activities
- ~ $3.4M - G&A
- ~ $0.5M - Runway

**Calculation is based on $100K/patient cost*

SEED 2 to close by the end of 2Q26

Clinical Development Plan

Fully Funded through the completion of Phase 2a in T/B-ALL



[2] AML= Acute Myeloid Leukemia

[3] NHL= Non-Hodgkin Lymphoma

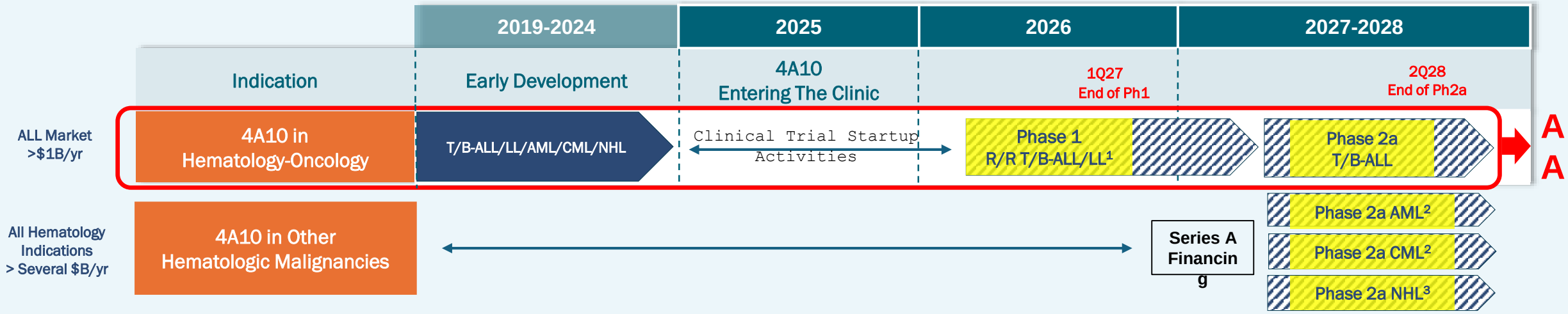
[1] R/R T/B-ALL/LL = Relapsed / Refractory T-cell or pre-B-cell Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma

Completed

In Progress / Future Trial

Clinical Development Plan

Expanding to other hematology-oncology indications



[2] AML= Acute Myeloid Leukemia

[3] NHL= Non-Hodgkin Lymphoma

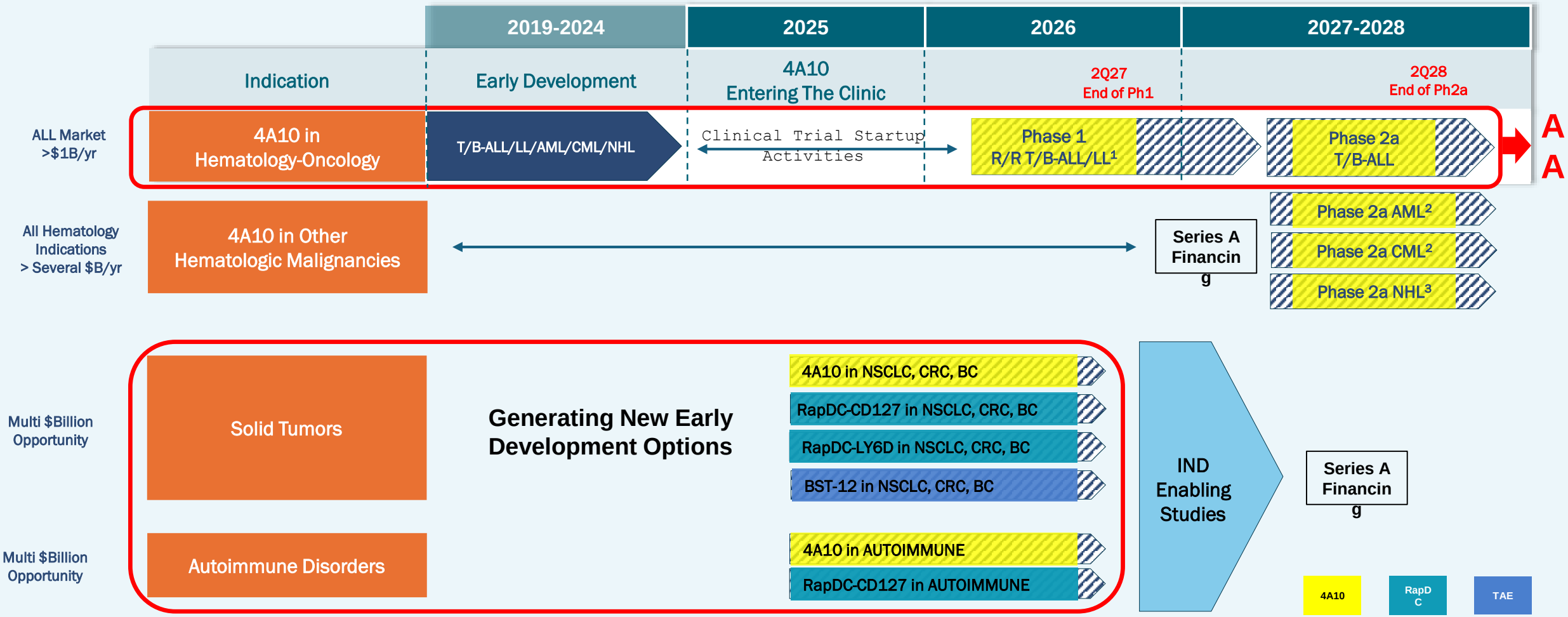
[1] R/R T/B-ALL/LL = Relapsed / Refractory T-cell or pre-B-cell Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma

Completed

In Progress / Future Trial

Clinical Development Plan

Expanding 4A10 & pipeline assets to solid tumors and autoimmune disorders



[2] AML= Acute Myeloid Leukemia

[3] NHL= Non-Hodgkin Lymphoma

[1] R/R T/B-ALL/LL = Relapsed / Refractory T-cell or pre-B-cell Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma

Completed

In Progress / Future Trial

4A10: Significant Untapped Commercial Opportunities In Combinations

- There are a myriad of validated signaling pathways downstream of CD127
- 4A10 is attractive as a combination partner because:
  - May improve efficacy of commercial drugs
  - Does not add toxicity

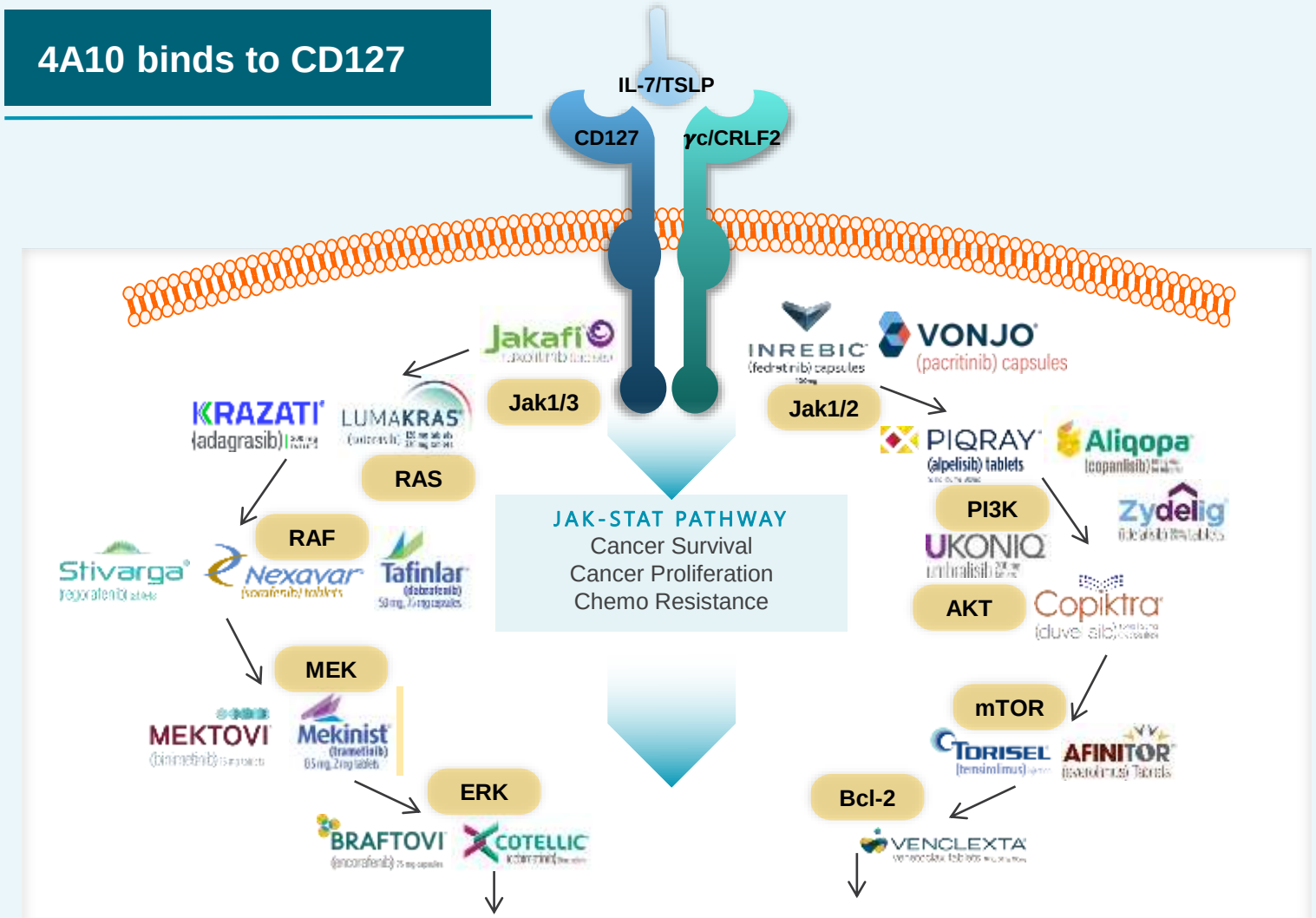
~$1.4B
VONJO (pacritinib) capsules

~$2.7B
Jakafi ruxolitinib (tablets)

~$2.5B
VENCLEXTA venetoclax tablets

~$2B
Tafinlar

4A10 binds to CD127



A World Class Leadership Team

Yan Moore, MD, MBA
Chief Executive Officer
BMS, GE Healthcare, GSK, Sanofi
Ariad, GPC Biotech, IPSEN, Omega
TAU, Drexel U, HBS, LBS
linkedin.com/in/yan-moore-md-mba-4386862

Mark Worscheh, MBA
Chief Financial Officer
Fannin Partners, Aquinas Co's
NatWest, Merrill Lynch, Salomon Brothers
Notre Damm U, Stanford GSB
linkedin.com/in/mark-worscheh-387b3b

Philip P. Breitfeld, MD
Chief Medical Officer
Merck KGaA, Quintiles, IQVIA
HMS, UMass, Princeton U
linkedin.com/in/philip-p-breitfeld-md-b429526

Atul Varadhachary, MD, PhD
President R&D
McKinsey, Agennix, Reliance Life Sciences
Mumbai U, John's Hopkins U
linkedin.com/in/varadhachary

John "Jack" Schaumberg
Head, Clinical Operations
Pulmotect, Agennix, PRA,
Pfizer, GSK
https://www.linkedin.com/in/jack-schaumberg-6a2a0911/

Shibani Kudchadkar, MD, ACRP-CP
Associate Medical Director,
Clinical Operations & Development
Krystal Biotech, Jeune Aesthetics
ICON plc, Johns Hopkins U, Penn State COM
https://www.linkedin.com/in/shibanikudchadkar-a490241aa/

Brian Wipke, PhD
VP, Research & Development
Manifold Bio, Moderna, Biogen, Elan Pharmaceuticals
University of Washington, University of California Berkeley
https://www.linkedin.com/in/brianwipke

Ross H. Clary, BSc
Dir. Investor Relations
Fannin
Texas A&M
linkedin.com/in/rossclary

Michael J. Heffernan, PhD
Head, Quality & Technical Operations
Duke U, Baylor, Georgia Tech
Virginia Tech
linkedin.com/in/mjhefferan

Stephanie Vega, PhD
Sr. R&D Manager,
Non-Clinical Development
UTMB, Fannin, Raptamere Therapeutics
https://www.linkedin.com/in/stephaniepvega/

Uksha Saini, PhD
Sr. Discovery Scientist, R&D
Fannin
IHBT, Ohio State U
linkedin.com/in/uksha-saini-449b42aa

Morgan Benson, ACRP-CP
Program Associate
Bellicum, Kiromic (Immunocell)
www.linkedin.com/in/morgan-benson-clinops

Justine Delgado, PhD
Clinical Trial Manager
Beckman Coulter, Salarius
Iterion, March Biosciences
University of Iowa
www.linkedin.com/in/justine-delgado-08219

Board of Directors

Atul Varadhachary, MD, PhD
Exec. Chair, Board of Directors
McKinsey, Agennix, Reliance Life Sciences
Mumbai U, John's Hopkins U
linkedin.com/in/varadhachary

Leo Linbeck, III, MBA
Member, Board of Directors
CEO Aquinas Co's
Lecturer in Management @ Stanford GSB
linkedin.com/in/leo-linbeck-88482127

Mark Worscheh, MBA
Member, Board of Directors
Fannin Partners, Aquinas Co's
NatWest, Merrill Lynch, Salomon Brothers
Notre Damm U, Stanford GSB
linkedin.com/in/mark-worscheh-387b3b

Yan Moore, MD, MBA
CEO & Member, Board of Directors
BMS, GE Healthcare, GSK, Sanofi
Ariad, GPC Biotech, IPSEN, Omega
TAU, Drexel U, HBS, LBS
linkedin.com/in/yan-moore-md-mba-4386862

Scientific Advisors / Collaborators

Scott Durum, PhD

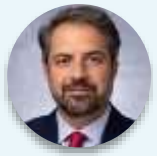
- 4A10 Lead Inventor
- Senior PI (NCI) and Head, Cytokines & Immunity
- >25 years of IL-7 research

Eric Schafer, MD, MHS

- Associate Professor, Hematology/ Oncology at Baylor College and Texas Children's Hospital
- Member of Children's Oncology Group and TACL

Susan Rheingold, MD

- Professor of Pediatrics at University of Pennsylvania
- Medical Director, Outpatient Oncology at CHOP



Elias Jabbour, MD

- Professor, Leukemia, at MD Anderson Cancer Center
- Lead 4A10 investigator for adult ALL patients

Sarah K. Tasian, MD

- Chief, Hematologic Malignancies Program at CHOP
- Development of molecularly-targeted therapeutics for children with high-risk leukemias

Andres Yunes, PhD

- Investigator, Leukemia, Boldrini Research Center (Brazil)
- Genetic testing and PDX models of T- and B-ALL.

Priscila Zenatti, PhD

- Investigator, Leukemia, Boldrini Research Center
- Pediatric leukemia therapeutics & murine models

Richard Gorlick, MD

- Division Head, Division of Pediatrics at MDACC
- Study Chair for 4A10 osteosarcoma PDXs in partnership with NCI PIVOT program

Branko Cuglievan, MD

- Section Chief, Pediatric Hematological Malignancies
- The University of Texas MD Anderson Cancer Center and Children's Memorial Hermann

Developmental Partners

NCI Experimental Therapeutics (NExT) Program

Providing support for toxicology studies and GMP manufacturing

- **Rosemarie Aurigemma, PhD**: Associate Director, Developmental Therapeutics Program
- **Jason Yovandich, PhD**: Chief, Biological Resources Branch (BRB)
- **Kasia Bourcier, PhD**: Program Director, BRB
- **Elizabeth Glaze, PhD, DABT**: Chief, Toxicology and Pharmacology Branch (TPB)

Prominent Leukemia & Lymphoma Collaborating Investigators

- Eric Schafer, MD, MHS
- Susan Rheingold, MD
- Elias Jabbour, MD
- Branko Cuglievan, MD

Lead NCI Inventor & Scientific Expert

- Scot Durum, PhD

NCI Preclinical in Vivo Testing (PIVOT) Program

Testing 4A10 efficacy in osteosarcoma PDX models; partnered with MDACC and Jackson Labs

National Cancer Institute · Children's Hospital of Philadelphia · Baylor College of Medicine · Texas Children's Hospital · Catalyst Clinical Research · FUJIFILM Diosynth · MD Anderson Cancer Center · Boldrini · PPD

SUMMARY

Key Anticipated Catalysts

2025

- **1Q25:** First close series SEED 2
- **3Q25**: IND clearance
- **3Q25**: $3M (CPRIT), $1M (NCI SBIR) awarded
- **4Q25:** FDA Fast Track Designation

2026

- **2026**: Initiate phase 1 first-in-human
- **2026**: Final close of SEED 2
- Initiate additional 4A10 clinical programs
- Initiate IND enabling studies for pipeline asset(s)

2027

- Phase 1 in T/B-ALL & LL data readout
- Initiate Phase 2a in T/B-ALL
- Potential FDA accelerated approval conversation
- Multiple phase 2a trials for additional hematology-oncology programs
- Enter the clinic with pipeline assets

4A10 binds to CD127 expressed on tumor cells with high selectivity and high affinity

- De-risked early development and validated science
- The initial target indication in T/B-ALL remains an area of significant unmet need
- Abbreviated path to potential accelerated approval in T-ALL; based on phase 2a results
- Program is fully funded through the completion of phase 2a trial in T/B-ALL

There are significant commercial opportunities in ALL and beyond

- Single agent activity anticipated across hematology, solid tumors, and autoimmune disorders
- Potential to improve efficacy, with no added toxicity, when used in combinations with commercial drugs
- Represents >$1B market potential for 4A10

Secured rights (option) to additional innovative first-in-class value-generating early development assets

- RapDC-CD127
- RapDC-LY6D
- TAE (BST-12)

The company is led by a bio-pharma veteran CEO with a proven and successful drug development track record

ALLTERUM

Thank you!

ymoore@allterum.com

FANNIN

A Fannin-Established Company