ALLTERUM

Allterum Therapeutics, Inc.

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

- Phase 1 First-In-Human Trial is Enrolling Patients
- Program is Funded Through Phase 2a in ALL
- Series Seed 2 Completed in 2Q26
- Series A / Development Partnership - Planned in 2027

www.allterum.com

FANNIN
*A Fannin-Established Company*

# 4A10: Strategic Development Path to Solve the High Unmet Need in R/R ALL

## 4A10 DEVELOPMENT PATH

1. Discovered by Dr. Scott Durum at NCI
2. 2019: In-licensed
3. 1H 2025: IND-enabling completed
4. 3Q 2025: IND filed and cleared
5. 2Q 2026: Clinical trial ready to enroll

## WHAT CRITICAL PROBLEM IS 4A10 SOLVING?



**High clinical unmet need**

- 5-year overall survival <50%
- Lack of good alternative therapies for relapsing or refractory patients

**<50%**

**5-year survival**



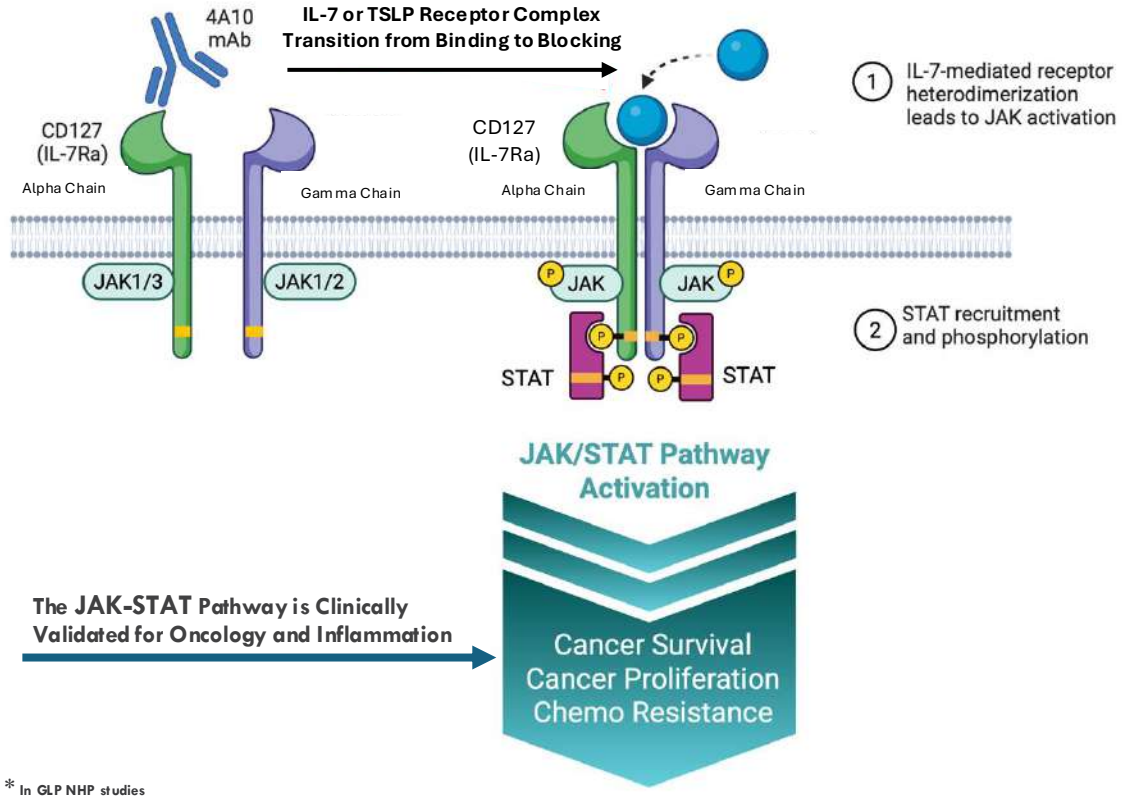

**Regulatory opportunity**

- Orphan designation
- Fast Track designation
- PRV (Priority Review Voucher) eligible - for rare pediatric diseases

**R/R ALL Represents a High-Value First Indication for 4A10**

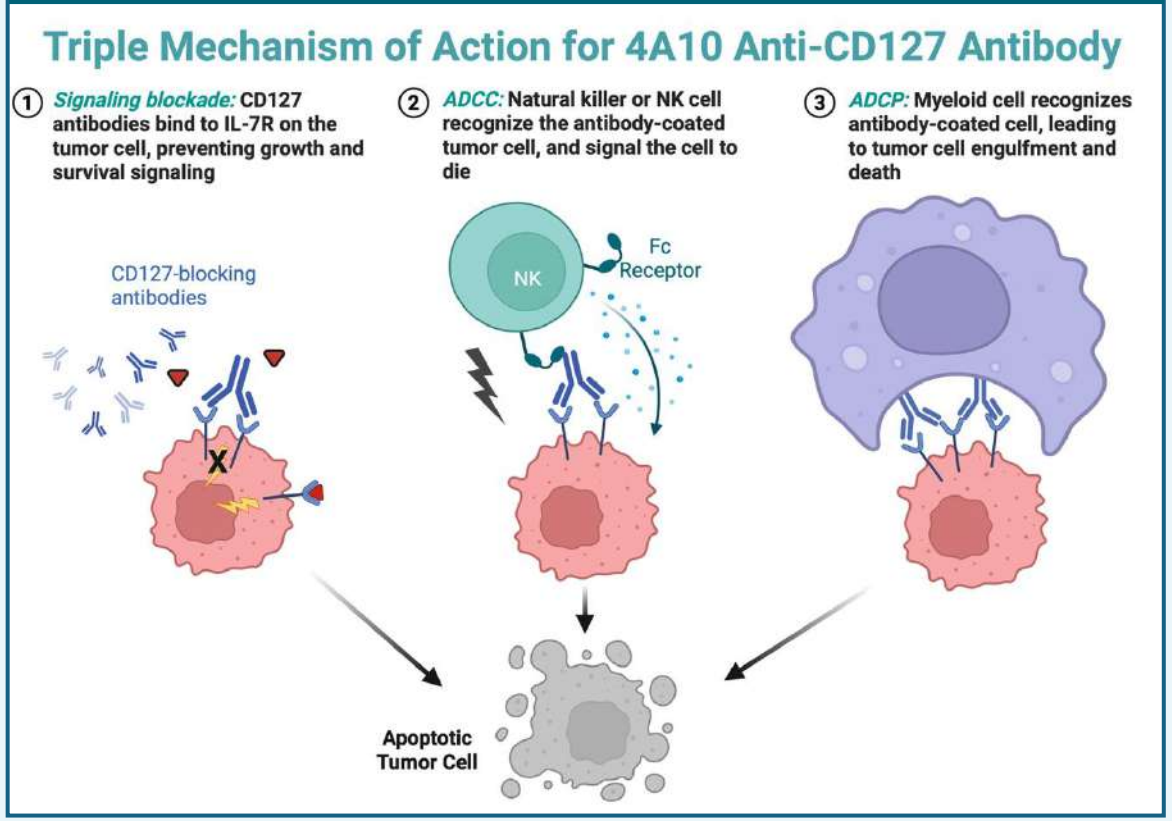
# 4A10: Best-In-Class Anti-CD127 Therapy

| Clinically Validated Target | Robust In-Vivo Efficacy | No Binding to Normal Tissues | Well Tolerated* vs. Previous IL-7i | No Evidence of a Cytokine Storm |
|---|---|---|---|---|




* In GLP NHP studies

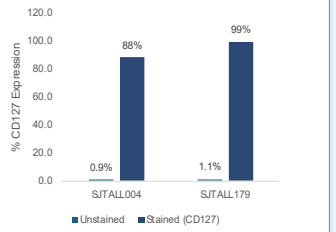
## Triple Mechanism of Action



# Robust Efficacy Data Package Supported Transition To The Clinic

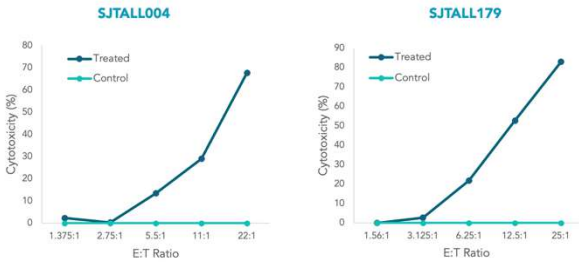
## CD127 is Highly Expressed on ETP[1] T-ALL and 4A10 Mediates ADCC[2]

### 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

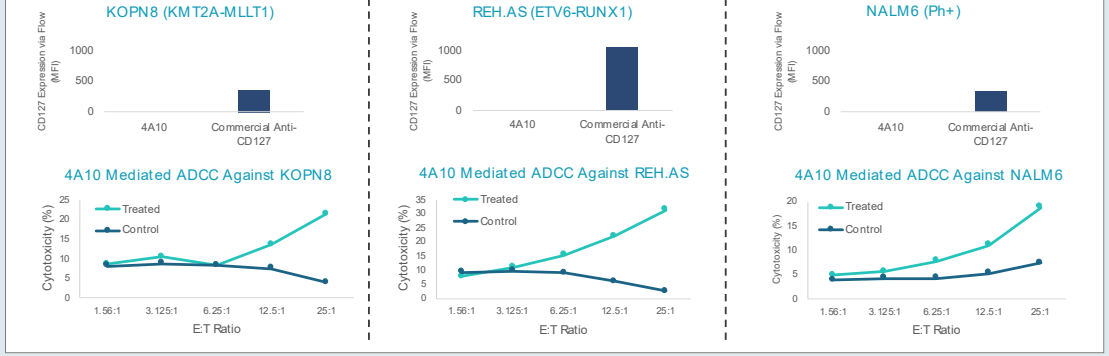



**Increasing the ratio of effector to target (E:T) cells correlates with increased 4A10-induced ADCC**

[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

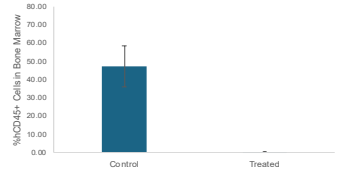
### 4A10 Binds CD127 and Induces ADCC In Multiple B-ALL Cell Lines[1,2,3]




[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

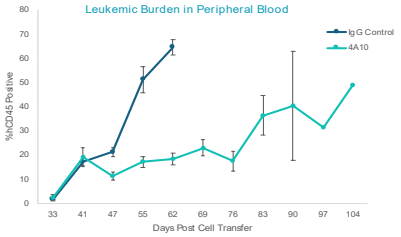
## 4A10: In Vivo Efficacy in T-ALL & B-ALL (PDX models)

### 4A10 Treatment Reduced T-ALL Leukemic Burden in BM

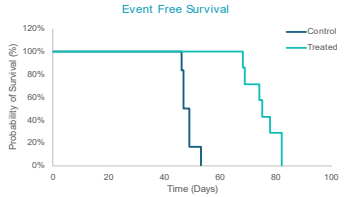



Note: NCCN criteria for morphologic complete remission (CR) includes <5% lymphoblasts in patient marrow[2].

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

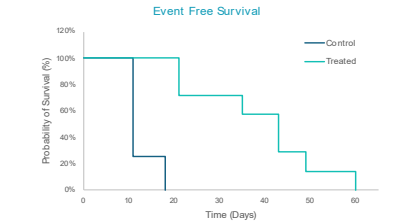



### 4A10 Significantly Increased Survival in Mice with T-ALL



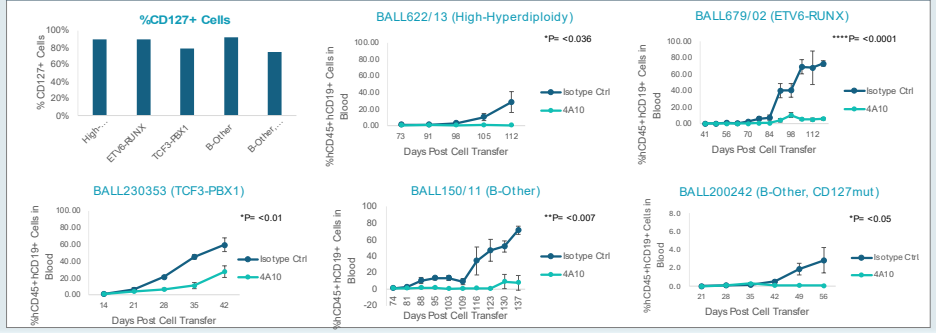

Note: 4A10 in-vivo activity was comparable to that reported for blinatumomab (Blincyto), an Amgen BiTE targeting CD19/CD3 approved for R/R B-ALL

### 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 Baldrini Institute (Priscila Zenatti, unpublished)

# Favorable Safety Profile



## No 4A10-associated safety signals

In multiple species, including NOAEL[1] at MFD (250mg/kg)[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



## Binds CD127 with high selectivity and high affinity

Consistent with published data

## Significant External Validation

- Key data reproduced by multiple collaborators
- Program endorsed by prominent US leukemia investigators
- FDA 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
- Priority Review Voucher Eligibility

[1]NOAEL = No Observed Adverse Event Level
[2]MFD= Maximum feasible dose
[3]NHPs = Non human primates
[4]PBMCs = Peripheral blood mononuclear cells
[6]NCI = National Cancer Institute
[7]CPRIT = Cancer Prevention and Research Institute of Texas
[8]NExT = NCI experimental therapeutics
[9]PIVOT = NCI pediatric preclinical in-vivo testing

# Substantial Derisking Efforts in Early Development with Non-Dilutive Capital

## Key Development Milestones

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

**Orphan Drug Designation**

**Priority Review Voucher eligible (for rare pediatric disease designation)**

**Robust animal data package generated with leading academic centers**

**GLP Tox studies (NHPs) suggests favorable tolerability in patients**

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

**Fast Track designation**

**$24M** in grant funding to-date

**$6.8M** in equity financing to-date

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

**2020**
- **$2.9M** CPRIT Seed Grant
- **$1.8M** SEED 1

**2021**

**2022**
- **$2.2M** NCI SBIR Grant

**2023**
- **$11.7M** CPRIT Grant

**2024**
- **$3.2M** NCI (NExT/PIVOT)

**2025**

**2026**
- **$3.0M** CPRIT (Suppl.)
- **$1M** NCI SBIR
- **$5M** SEED 2
- **Initiate Phase 1 Trial**

**2027**
- **Phase 1 Data Read**

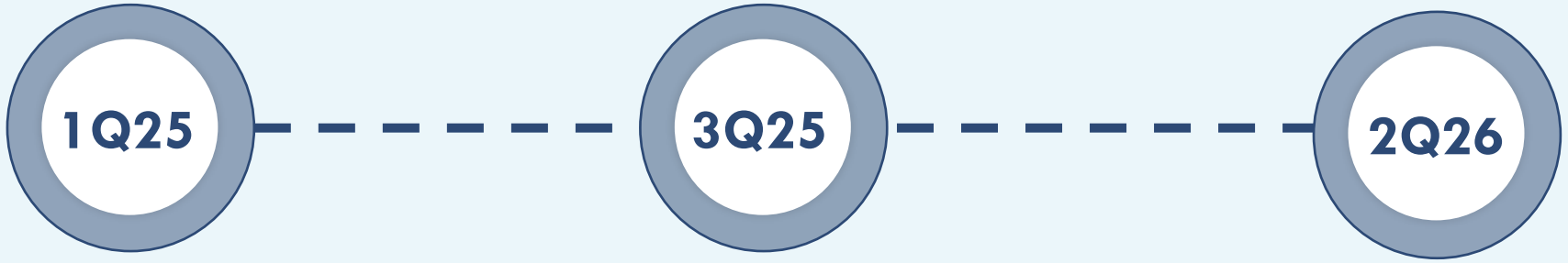
**2028**
- **Phase 2a Data Read**

*Preclinical Validation, Product Scale-Up*

*IND Enabling Studies, Manufacturing*

*Entered Clinical (Patient) Trials*

# Timeline to Entering the Clinic




**Program Endorsed by Prominent Leukemia Investigators**

**IND Cleared by FDA**

**Clinical Trial Sites Ready to Enroll Patients**

## 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 (MM, R&D)

# SEED 2 + CPRIT/NCI Grants: Funds T/B-ALL Through 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*

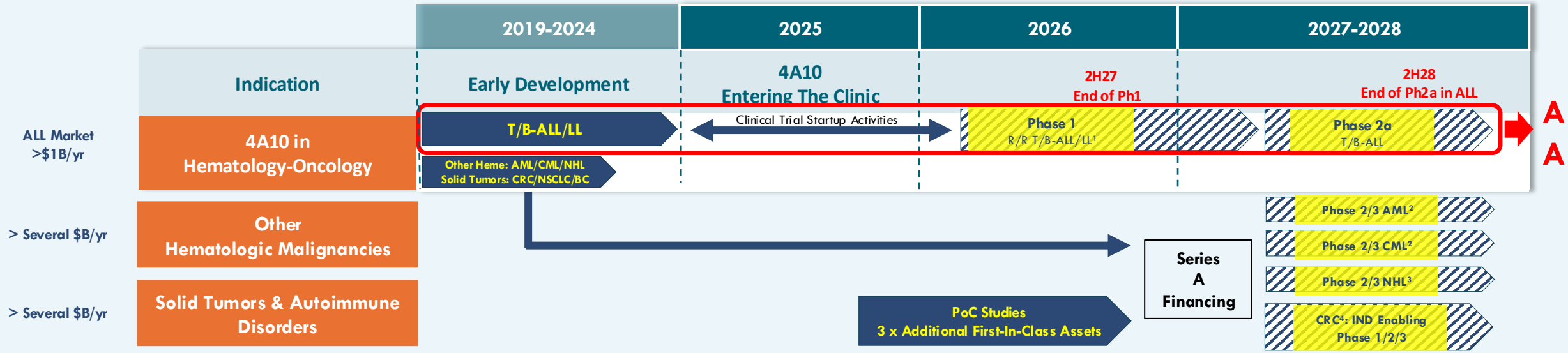
- ~ $5.0M - Phase 1 Clinical Trial
- ~ $2.0M - Phase 2a T-ALL Clinical Trial
- ~ $3.0M - Phase 2a B-ALL Clinical Trial
- ~ $0.6M - Pipeline Expansion activities
- ~ $3.4M - G&A
- ~ $0.5M - Runway

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

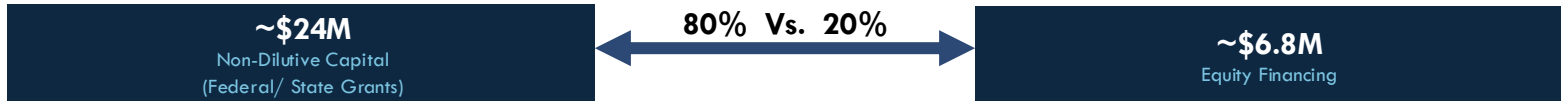
## SEED 2 Round Closed in 2Q26

# Initial Commercialization Opportunity in ~ 24mo

(relapsed/refractory T-ALL is eligible for Accelerated Approval)




## STRATEGIC DERISKING WITH NON-DILUTIVE CAPITAL




NIH NATIONAL CANCER INSTITUTE · PIVOT Pediatric Preclinical In Vivo Testing · National Cancer Institute · The University of Texas MD Anderson Cancer Center Making Cancer History · CPRIT Cancer Prevention & Research Institute of Texas · FDA Priority Review · Boldrini · Texas Children's Hospital · Children's Hospital of Philadelphia · Baylor College of Medicine · Catalyst Clinical Research

[1] R/R T/B-ALL/LL = Relapsed / Refractory T-cell or pre-B-cell Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma
[2] AML= Acute Myeloid Leukemia
[3] NHL= Non-Hodgkin Lymphoma
[4] CRC= Colorectal Cancer

Completed · In Progress / Future Trial

# Significant Untapped Commercial Opportunity In Combinations

Annual Revenues of Drugs Approved Downstream of IL-7

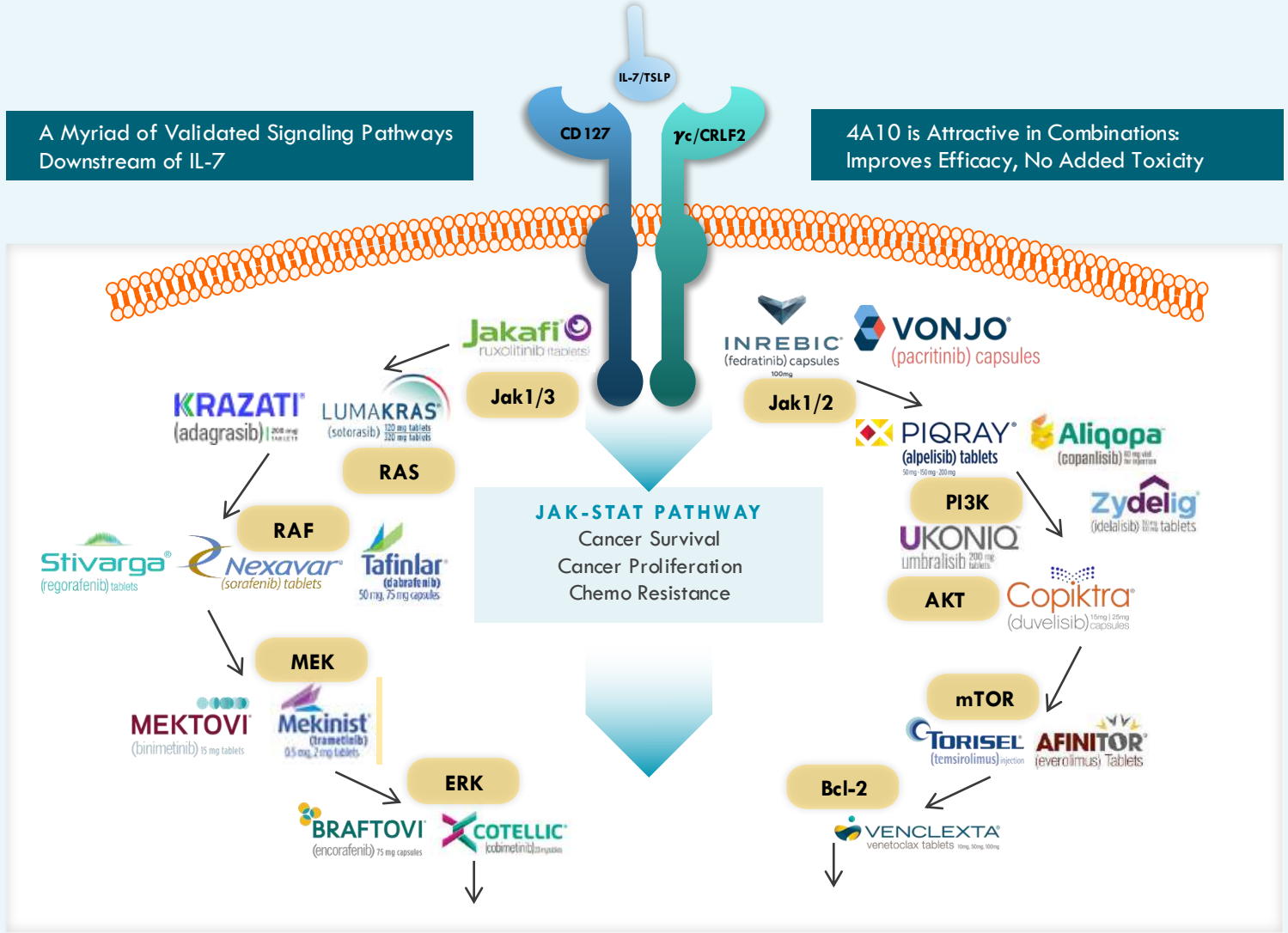
~$1.4B
VONJO (pacritinib) capsules

~$2.7B
Jakafi ruxolitinib tablets

~$2.5B
VENCLEXTA venetoclax tablets

~$2B
Tafinlar (dabrafenib)

A Myriad of Validated Signaling Pathways Downstream of IL-7




4A10 is Attractive in Combinations: Improves Efficacy, No Added Toxicity

# A World Class Leadership Team



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# 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 Discoverer & Scientific Expert**

- **Scott 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 biotechnologies · The University of Texas MD Anderson Cancer Center · Boldrini · PPD

SUMMARY

# The Allterum Journey to Value Creation

**2025**

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

**2026**

- **2Q26:** Phase 1 first-in-human is enrolling patients
- **2Q26:** Final close of SEED 2
- Initiate additional clinical programs
- Initiate IND enabling studies for pipeline asset(s)

**2027**

- 2H27: Phase 1 data readout (ALL)
- 2H27: Initiate Phase 2a in ALL
- End of Phase 2a: Approach FDA for an accelerated approval
- 2H27 (pending funding): Initiate phase 2 cohorts in AML, NHL
- 2027-2028: Enter the clinic with pipeline assets

## Best-in-Class Anti-CD127: Triple MoA

- Highly Selective & No Off-Target Toxicity
- FDA Fast Track & Orphan Designations, Abbreviated Path to Accelerated Approval
- Eligible for a Priority Review Voucher (PRV)
- Funded Through Phase 2a in ALL

## >$1B Market Potential - ALL & 5+ Indication Expansion

- $24M in Non-Dilutive Capital (NCI & CPRIT grants); De-Risked, Validated Science
- Single Agent Activity Across Hematology, Autoimmune Disorders & Solid Tumors
- Combination Synergy with Approved Drugs; Improved Efficacy, No Added Toxicity

## Diversified First-In-Class Pipeline

- RapDC-CD127
- COF-01
- TAE (BST-12)

## The Company is Led by a Bio-Pharma Veteran CEO with a Proven Drug Development Track Record

ALLTERUM

# Thank you!

ymoore@allterum.com



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