

#### **Targeting the Recalcitrance of Cancer**

Alanis is developing precision antibodies for the treatment of cancers that are resistant to current treatments











Precision medicine is the future of cancer therapy

### **Current paradigm for the treatment of AML:**

- Targets clonal genetic variants arising from the bone marrow stroma
- Fails to eliminate residual leukemic stem cells

#### Our approach targets:

- Malignant stem cells in the bone marrow
- Minimum residual disease to improve overall survival



Bone marrow microenvironment supports residual disease leading to relapse



# There is significant unmet need and opportunity in MDS/AML for therapy targeting residual disease to improve survival



The AML global drug market in 2024 is ~\$3B USD and is estimated to reach over \$6.5B by 2030



The MDS global drug market in 2024 is ~\$2B and is expected to double to >\$4B by 2030



Growth will be driven by population aging, earlier detection, and new diseasemodifying drugs

[Grand View Research 2024 Report ID: GVR-2-68038-434-5 & GVR-4-68040-384-0]



NON-CONFIDENTIAL PRESENTATION 2025

## Targeting Jagged-1/Notch-1: The pathway in the bone marrow driving leukemogenesis in MDS/AML

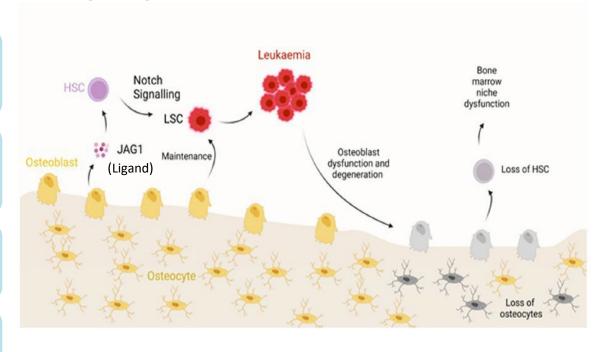
β-catenin & jagged-1 expression are elevated in osteoblasts by FOX01 increasing Notch1 signaling in leukemic stem cells

β-cat/Jagged-1<sup>+</sup> osteoblasts are hijacked to drive leukemogenesis via elevated Notch1 signaling, undermining normal hematopoiesis

Cytokine-mediated LSC feedback loop maintains aberrant osteoblast-based signaling

Disease progression increases osteoblast and LSC nests, depleting marrow, raising Jagged-1<sup>+</sup> osteoblasts, worsening anemia and elevating blast counts

#### Notch1 signaling between osteoblasts and leukemic stem cells

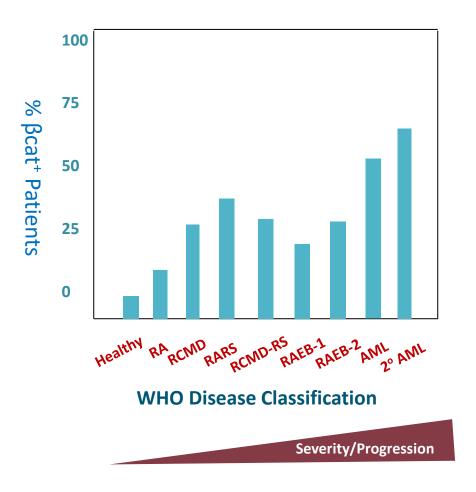


[Kode et al. Leukemia 2016 January; 30(1): 1–13]



## The oncogenic signaling pathway is detected in up to 70% of high-risk MDS/AML patients

- >450 patient samples analyzed
- Samples were tested across the different disease classifications
- Normal subjects ≤ 5% β-catenin activation



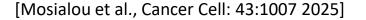
[Mosialou et al., Cancer Cell: 43:1007 2025]



# Treatment of ex vivo bone marrow cultures from Notch1—activated MDS/AML patients with the antibody to jagged-1 ATI-D1

- Inhibits tumor cell proliferation
- Promotes tumor cell death
- Restores hematopoiesis

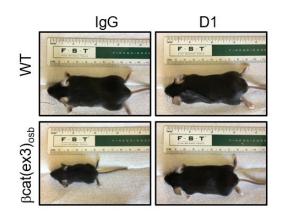
Metric	Change	Disease	
Proliferating Cells	0%	Healthy <sup>Low</sup>	
Proliferating Tumor Cells	↓60-100% in 86% patients	MDS <sup>Low</sup> /MDS <sup>High</sup>	
Dead Tumor Cells	个50-100% in 50% patients	MDS <sup>Low</sup> /MDS <sup>High</sup>	
Myeloid Cells	<b>↑110%</b>	AML <sup>Low</sup> /AML <sup>High</sup>	
Erythroid Cells	<b>↑100%</b>	AML <sup>Low</sup> /AML <sup>High</sup>	

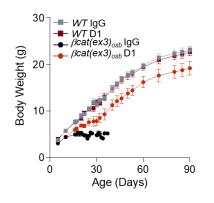


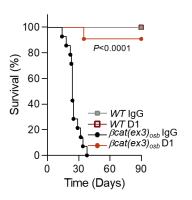


### Treatment of AML mice with ATI-D1

- Restores weight gain
- Restores hematopoiesis
- Prolongs survival







#### Treatment restores hematologic status

Status	Wild type mice		AML mice	
Treatment	Control IgG	ATI-D1	Control IgG	ATI-D1
Anemia (RBC account)	Normal	Normal	<50% Normal	Normal
Thrombocytopenia	Normal	Normal	<50% Normal	Normal
WBC count	Normal	Normal	<50% Normal	Normal
Lymphocytes	Normal	Normal	<50% Normal	Normal
Neutrophils	Normal	Normal	<50% Normal	Normal



[Mosialou et al., Cancer Cell: 43:1007 2025]

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#### **ATI-D1 Development Status**

- Antibody Master Cell Bank created (yield>8.0g/L)
- Scale up, analytical methods, process development ongoing
- pIND 1Q 2026
- Phase 1/2 trial in high risk MDS and AML with biomarker planned



Alanis can reach clinical proof of concept in 3 years



#### **Intellectual property**

- Issued patent covering the jagged-1 target
- ATI-D1 Composition of matter patent pending

#### **Fundraising & timeline**

Open to licensing especially co-development Seeking \$10M in a Series A to support development over the next ~2-3 years to

- Match a \$4.5M NCI Phase IIb Development Award
- Complete IND and generate cGMP antibody
- Complete a Phase 1/2 clinical trial in MDS/AML



Alanis has received \$3M in funding to date



#### An exceptional team of experts with the experience and knowledge to support the efforts...



imbruvica.

(ibrutinib) 140mg capsules













#### **Executive Team**



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Jill Herendeen D. Pharm Regulatory / Rubicon

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