
Actinium Pharmaceuticals, Inc.

# ATNM: NYSE AMERICAN

June 2021

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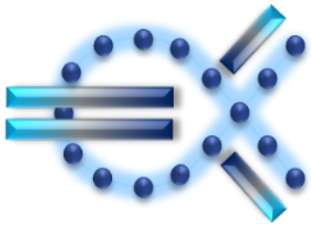
# Company Highlights

***Late-stage, diverse Antibody Radiation-Conjugate (ARC) pipeline is maturing and progressing toward topline pivotal, POC trial and platform data amidst growing interest for targeted radiotherapies***



- Pivotal Phase 3 SIERRA trial for lead program, Iomab-B, showing clear value proposition for BMT conditioning through 75% enrollment
- Leading next-generation targeted conditioning clinical-stage pipeline for Bone Marrow Transplant (BMT), CAR-T and GeneTx
- Actimab-A, CD33 targeting ARC advancing in multiple R/R AML combination trials including with CLAG-M and venetoclax, PoC data could set the stage for one or more pivotal trials
- AWE technology platform drives innovation and partnerships including renewed collaboration with Astellas in solid tumors/theranostics and NIH/MSKCC in next-generation conditioning for CAR-T
- Strong balance sheet with ~$72 million* enables multiple clinical and corporate milestones including completion of SIERRA enrollment, topline data, POC data from multiple Actimab-A combination trials and expanded AWE platform R&D



AML – Acute Myeloid Leukemia, MDS – Myelodysplastic Syndrome, MM – Multiple Myeloma
* as of March 31, 2021

# AWE Platform Powers Our Pipeline of ARCs

***Deep pipeline of potent Antibody Radiation-Conjugates with significant therapeutic and combination potential in hematology and oncology***

| Targeted Conditioning | Phase 1 | Phase 2 | Phase 3 | 2021 Milestones |
|---|---|---|---|---|
| **Iomab-B** BMT – CD45 | r/r AML 55+ | **Pivotal Phase 3 SIERRA** | | *100% enrollment* |
| **Iomab-ACT** CAR-T – CD45 | CD19 R/R B-ALL, DLBCL | **Phase 1/2** | Memorial Sloan Kettering Cancer Center; NIH National Institutes of Health | *POC data* |
| **Iomab-ACT** GeneTx – CD45 | HIV-related Lymphoma | **Phase 1/2** | **GeneTx** | *POC data* |
| **Actimab-MDS** BMT – CD33 | MDS | **Phase 1** | ***Planned Pivotal Program*** | |

| CD33 ARC Combinations | Phase 1 | Phase 2 | Phase 3 | Milestones |
|---|---|---|---|---|
| **Actimab-A + CLAG-M** | R/R AML | **Phase 1** | | *Ph 1 Data* |
| **Actimab-A + venetoclax** | R/R AML | **Phase 1** | | *POC data* |

## AWE Platform Collaborations & Preclinical Programs

astellas

- **Ac-225 + Undisclosed Astellas Targeting Agents Solid Tumor Theranostics**
- **Ac-225 ARCs**
- **Ac-225- Daratumumab (CD38)**

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AML – Acute Myeloid Leukemia, MDS – Myelodysplastic Syndrome, MM – Multiple Myeloma, ALL – Acute Lymphoblastic Leukemia, NHL / HL – Non-Hodgkin's / Hodgkin's Lymphoma, HIV = Human Immunodeficiency Virus

# AWE Platform Drives Pipeline, Enables Future Opportunities

***Our AWE technology platform allows us to create ARCs for multiple areas of clinical development***

## AWE Technology Platform

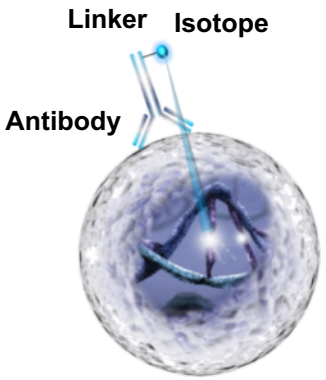
**Scientific Founders**

Memorial Sloan Kettering Cancer Center

Organon

**Collaborators**

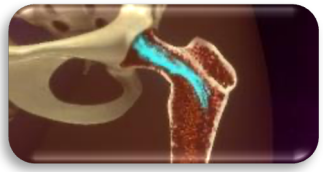
astellas



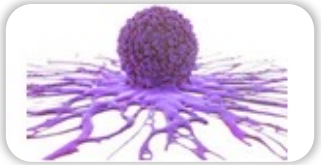

***Strong, Growing IP Portfolio of 140+ Patents***

## Areas of Focus

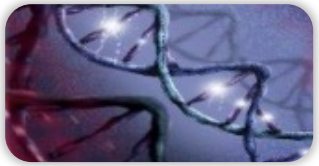
**Targeted Conditioning**



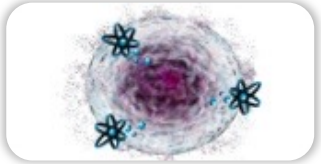
**Solid Tumors**



**ARC Therapeutics and Combinations**



**Next-Generation ARCs**



## Multiple Targets

**CD45**
Leukemia, Lymphoma and immune cells

**CD33**
AML, MDS and MM

**CD38**
MM and leukemia cells

**Undisclosed**
Solid tumor theranostics

astellas

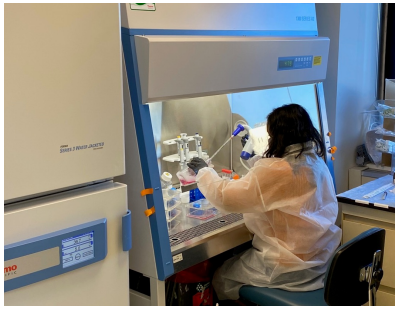
## Multiple Isotopes[1]

**Iodine-131**
*Range: 2.3 mm*
*Energy: 0.6 MeV*

**Actinium-225**
*Range: .048 mm*
*Energy: 5.8 MeV*

**Lutetium-177**
*Range: 1.8 mm*
*Energy: 0.50 MeV*

## Enhanced R&D Infrastructure & Capabilities



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1) Pouget J.-P. *et al. Nat. Rev. Clin. Oncol.* 8, 720–734 (2011); published online 8 November 2011.

# Why Conditioning Matters

***Conditioning is critical for BMT, ACT and GeneTx to be successful, but these potentially curative therapies currently depend on non-targeted chemotherapy and external radiation***

**Conditioning:** Needed to deplete stem cells in the bone marrow to facilitate engraftment of new cells

**Diseases/Disorders**

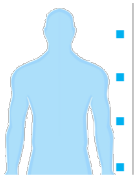
**BMT, ACT & GeneTx: Potential Cures**

Chemotherapy

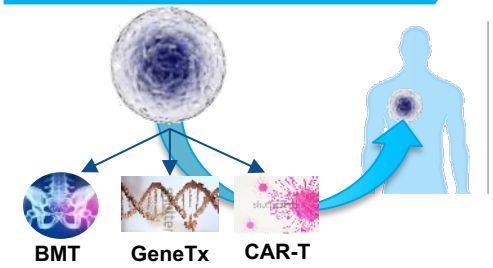
External Radiation

Stem cells

- Non-targeted
- Limits patient access
- Acute and chronic toxicities
- High-risk of failure/mortality



- Cancer (heme/solid)
- Genetic disorders
- Immune disorders
- Rare diseases



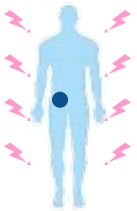

***Significant need for new conditioning regimens to replace non-targeted approaches to increase patient access and improve outcomes***

**Myeloablative Conditioning - High-Dose Chemotherapy**

Limitation:
Too toxic, many patients cannot tolerate

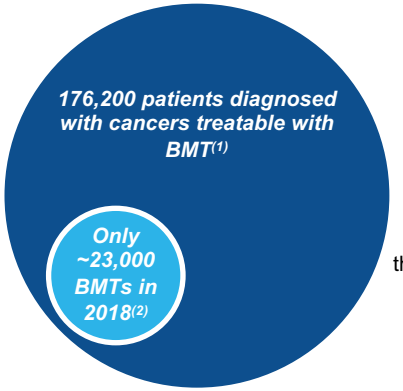
Result:
Restricted access and high Treatment Related Morality

**Reduced Intensity Conditioning - Low-dose chemo/radiation**



Limitation:
Can't eliminate all cancer and produce CR

Result:
High Relapse Rates




**>150,000 Patients**

that could potentially benefit from a BMT that do not receive one today



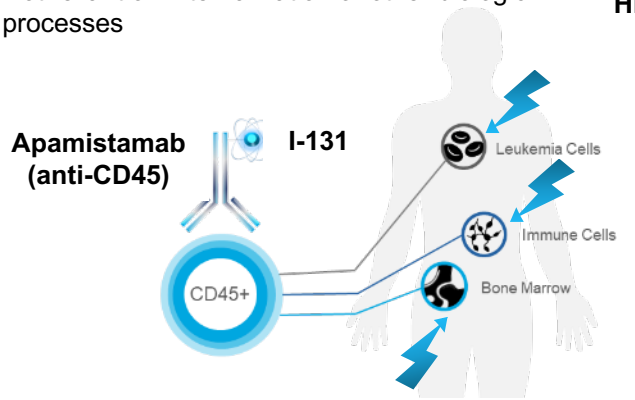
1) Cancer Facts & figures, 2019. American Cancer Society, 2019. Leukemia, Lymphoma and Myeloma. 2) D'Souza, A, Fretham C, Lee SJ, et al. Current Use of and Trends in Hematopoietic Cell Transplantation in the United States. Biol Blood Marrow Transplant. 2020 May 11:S1083-8791(20)30225-1, doi: 10.1016/j.bbmt.2020.04.013, PMID 32438042.

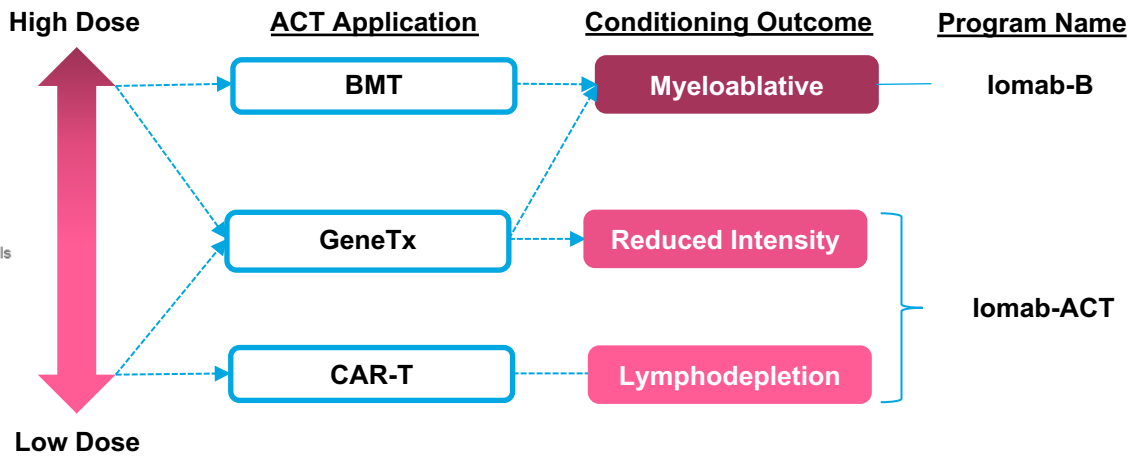
# CD45 Targeted Conditioning Asset and Program

***Only clinical stage Targeted Conditioning program with applications in BMT, GeneTx, CAR-T and other adoptive cell therapies***

**ARC Advantages:**

- Delivers a greater amount of validated radiation directly to target cells than external radiation
- Single infusion, rapid conditioning in days
- Less toxicities and better tolerated, stronger patient for BMT, GeneTx & ACT
- Not reliant on internalization or other biologic processes




**CD45 Advantages:**

- Expressed on leukemia and lymphoma cancer cells
- Expressed on immune cells, including bone marrow stem cells
- Enables simultaneous tumor/disease and stem cell ablation
- Not expressed outside the hematopoietic system
- High expression rates ~200,000 copies per cell, low internalization rates ~10%(1)



1) Van Der Jagt et al. Localization of radiolabeled antimyeloid antibodies in a human acute leukemia xenograft tumor model. Cancer Res. 1992;52:89-94

# Iomab-B Value Proposition: Enhanced Access, Improved Outcomes

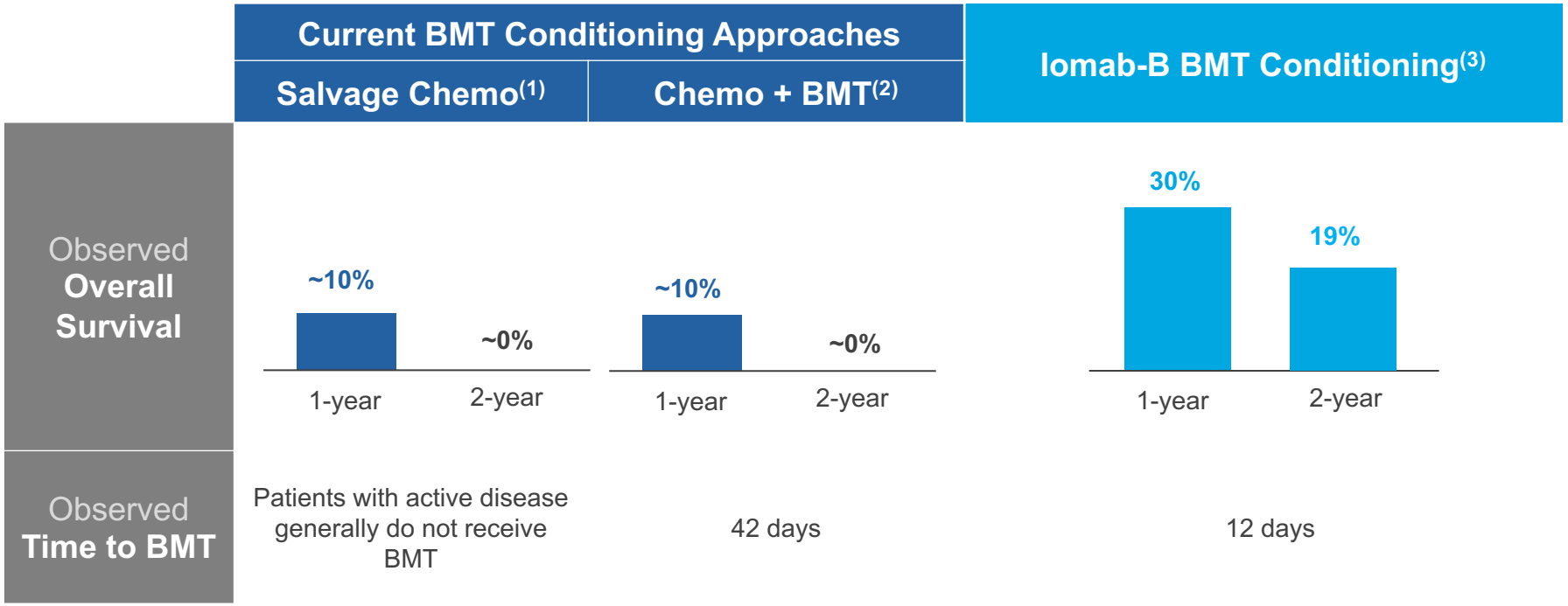
***Transplant becomes a viable option for older patients with active, relapsed or refractory disease***

## Prior Clinical Experience

- **300+ patients**
- **12 clinical trials**
- **6 diseases (AML, MDS, MM, ALL, NHL/HL)**
- **Improved survival and curative outcomes**

FRED HUTCH CURES START HERE®

## AML – Current Situation vs. POC Results

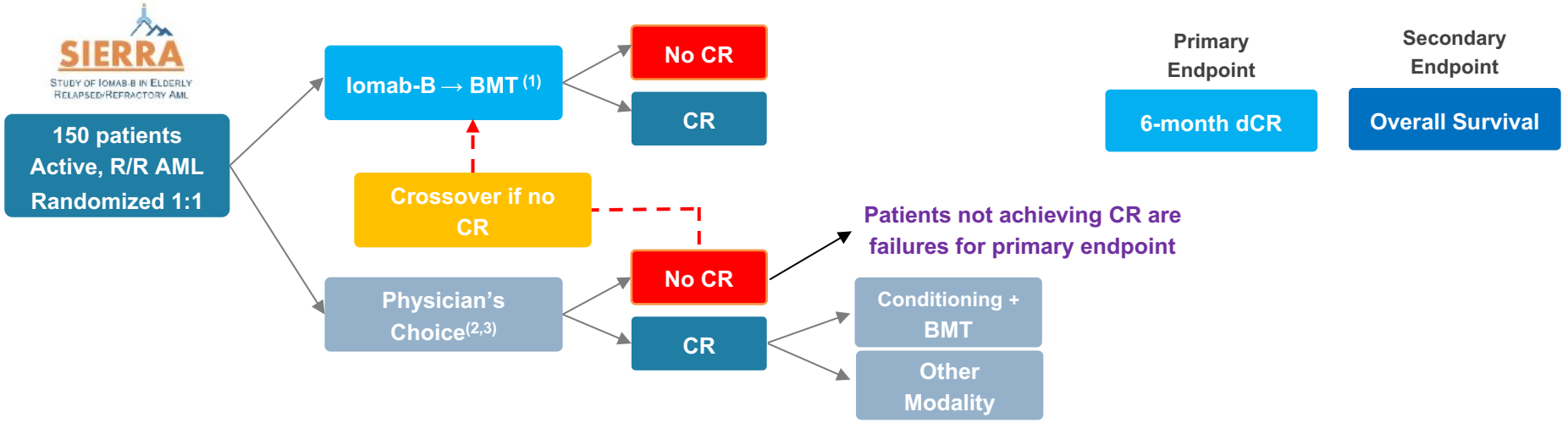



1) Roboz et al. J Clin Oncol 32:1919-1926 (2014) Intl Randomized Phase III Study of Elacytarabine Versus Investigator Choice in Patients with Relapsed/Refractory Acute Myeloid Leukemia (N=381) 2) Armistead et al. Biol Blood Marrow Transplant 15 :1431-1438 (2009) MD Anderson outcomes analysis. (Chemo + BMT N=19) 3) Pagel et. al. Blood 114:5444-5453 (2009) and additional data on file (N=36)

# Ongoing Pivotal Phase 3 SIERRA Trial for Iomab-B

***The only randomized Phase 3 trial investigating a BMT option for patients older than 55 years with ACTIVE, relapsed or refractory AML***

- 150 patients total, 75 patients per arm
  - **Primary Endpoint:** Durable Complete Remission (dCR) at 6 months
  - **Secondary Endpoint:** Overall Survival (OS)
- Need to show a 2x difference in dCR primary endpoint at full enrollment

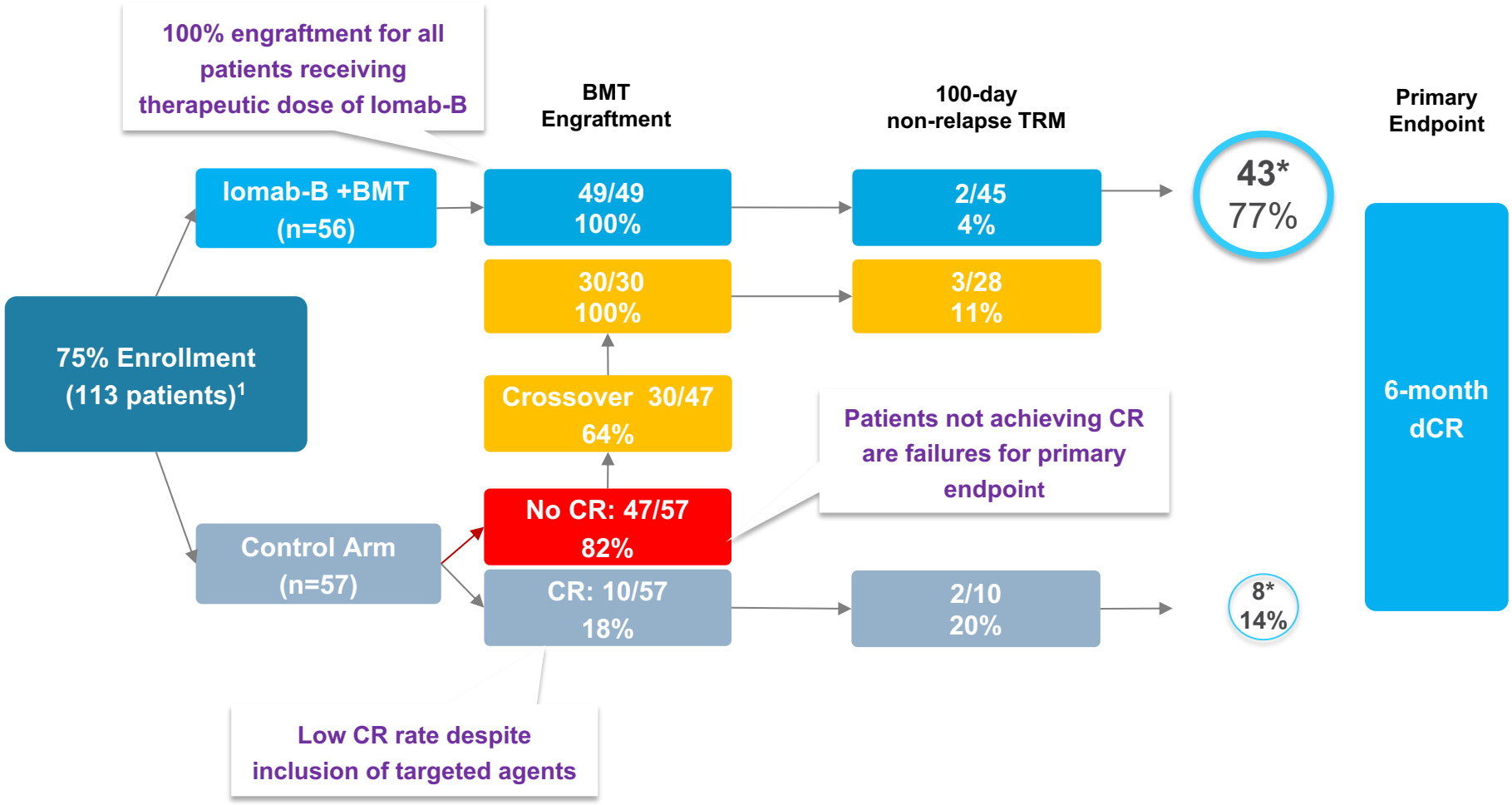





1) Pagel et. al. Blood 114:5444-5453 (2009) and additional data on file (N=36) 2) Roboz et al. J Clin Oncol 32:1919-1926 (2014) International Randomized Phase III Study of Elacytarabine Versus Investigator Choice in Patients with Relapsed/Refractory Acute Myeloid Leukemia (N=381) 3) Armistead et al. Biol Blood Marrow Transplant 15 :1431-1438 (2009) MD Anderson outcomes analysis. (Chemo + BMT N=19)

# 75% Enrollment: Universal BMT and Engraftment Continues

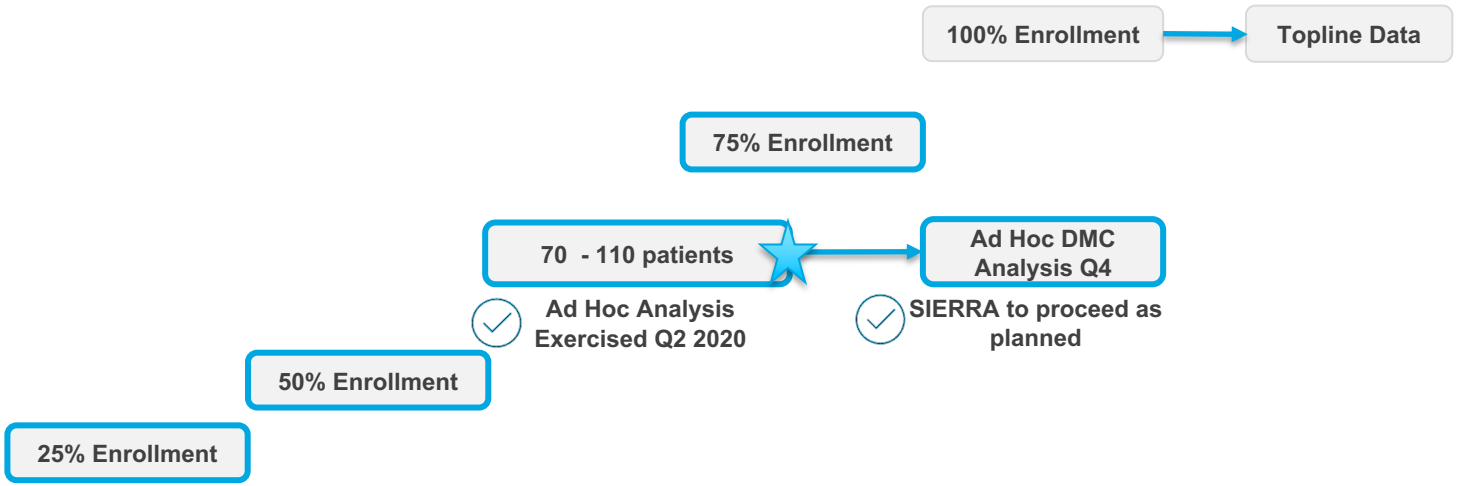
***Universal BMT access and engraftment for all patients that received a therapeutic dose of Iomab-B including 60% of patients that crossed over after salvage therapy***




1) Gyurkocza et al. TCT 2021 Oral Presentation. Targeted Radioimmunotherapy with Anti-CD45 Iodine (131I) Apamistamab [Iomab-B] in Older Patients with Active, Relapsed or Refractory (R/R) Acute Myeloid Leukemia Results in Successful and Timely Engraftment Not Related to the Radiation Dose Delivered *Patients potentially available for the primary endpoint of 6-month dCR

# SIERRA Trial Status

***Strong momentum following ASH 2020, Positive DMC Interim Analysis and TCT 2021 with 100% enrollment expected in 2021***




- SIERRA is over 75% enrolled
- Universal engraftment and positive safety results reported at 25%, 50% and 75% enrollment, engraftment predictive of long-term outcomes
- DMC recommended that SIERRA proceed as planned to full enrollment, no safety concerns raised
- Minimal alpha spend with ad hoc interim analysis, p-value threshold of 0.046 at full enrollment (150 patients)
- Actinium did not receive primary and secondary endpoint data that the DMC evaluated

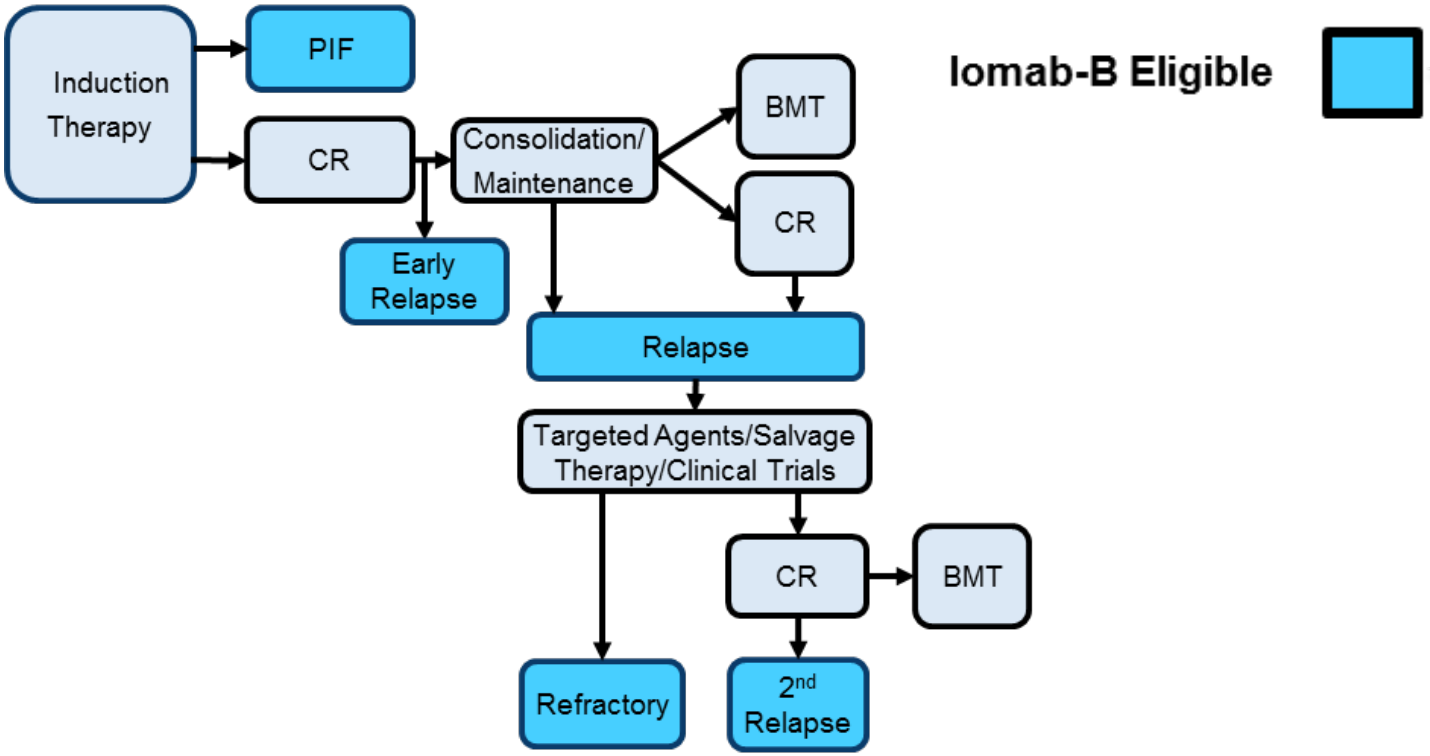


1) Interim events represent scheduled DMC analyses for safety and/or futility per the study protocol. DMC may evaluate at other time points. 2) Ad hoc efficacy analyses may be requested at the Company's discretion.

# Iomab-B's Highly Differentiated Position in AML

***Despite 9 AML drug approvals, none are curative and a significant patient population remains where Iomab-B has a clear and compelling value proposition as it is the only path to a potentially curative BMT in relapsed/refractory AML***

***Iomab-B would represent a paradigm change in conditioning as it is both an induction and conditioning agent unlike currently used agents. Iomab-B potentially enables patients to go directly to a BMT without being in remission.***

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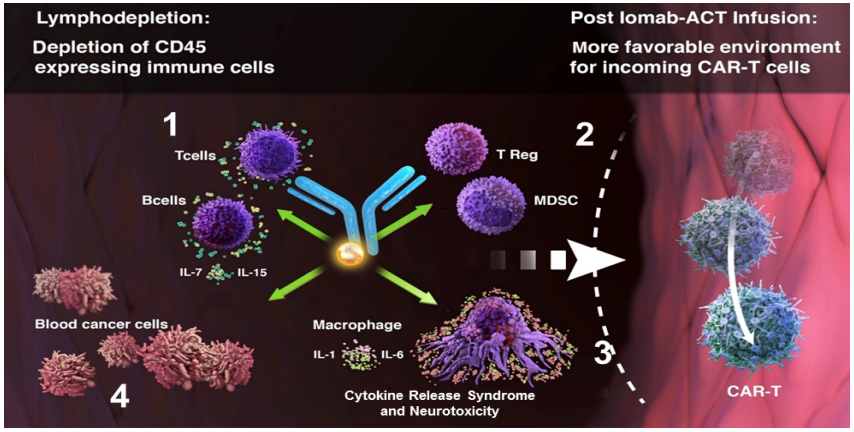
1) Figure is for illustrative purposes and may not cover all treatment options or pathways PIF = Primary Induction Failure CR= Complete Remission 2) Interim events represent scheduled DMC analyses for safety and/or futility per the study protocol. DMC may evaluate at other time points at their discretion. 3) Ad hoc efficacy analyses may be requested at the Company's discretion.

# Iomab-ACT: NIH Funded CAR-T Clinical Collaboration

***MSK's 19-28z CAR-T's strong efficacy but challenging CRS and neurotoxicity profile ideal for collaboration***

- CD45 positive immune cells are implicated in major CAR-T side effects; cytokine release syndrome (CRS) and neurotoxicity
- Iomab-ACT intended to selectively target and deplete these immune cells to reduce severity and incidence of toxicities
- Iomab-ACT is a single infusion, outpatient administration compared to current chemotherapy that requires multiple infusions
- Phase 1/2 trial will enroll up to 39 DLBCL and B-ALL patients
- Patient enrollment initiated; POC data expected from Phase 1 portion of study in 2021

**Iomab-ACT enables targeted depletion of multiple immune cells implicated in CAR-T toxicities**

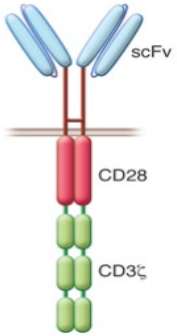



**Robust data with MSK 19-28z provides clear benchmark to evaluate Iomab-ACT's impact**

Memorial Sloan Kettering Cancer Center

NIH National Institutes of Health SBIR/STTR

The NEW ENGLAND JOURNAL of MEDICINE




- 83% CR rate in B-ALL compares favorably with CR rates of approved CD19 CAR-T [1]
- 20-26% Grade 3 CRS rates[1]
- 42-67% Grade 3&4 neurotoxicity[1]

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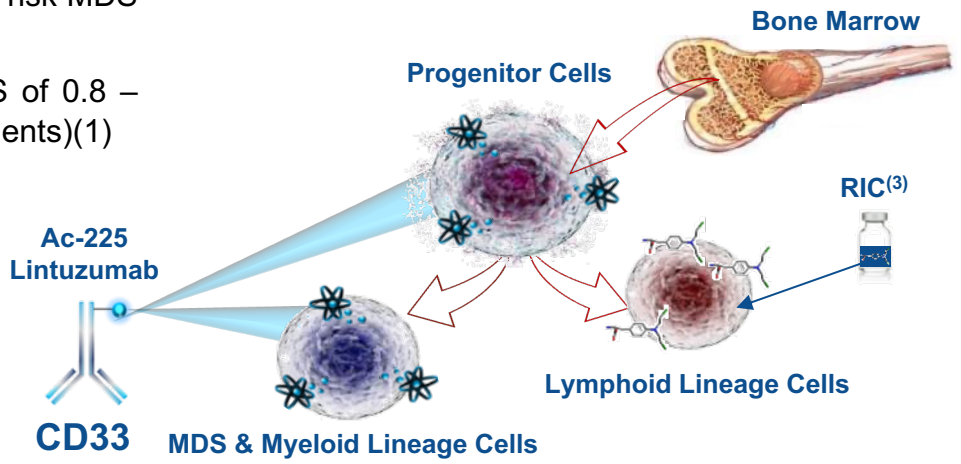
[1]Park, Jae H. et al., New England Journal of Medicine 2018; 378:449-459. CD19 approved CAR-Ts: Yescarta Zuma-1 trial in R/R B-cell lymphompa 83% ORR. Kymriah JULIET trial in R/R B-cell lymphoma 52% ORR [2]Locke, Frederick L. et. al., The Lancet Oncology, 2018; Schuster et al., 2017 NEJM 2019; CAR-T construct adapted from Sadelain et al. The Journal of Clinical Investigation(2015)

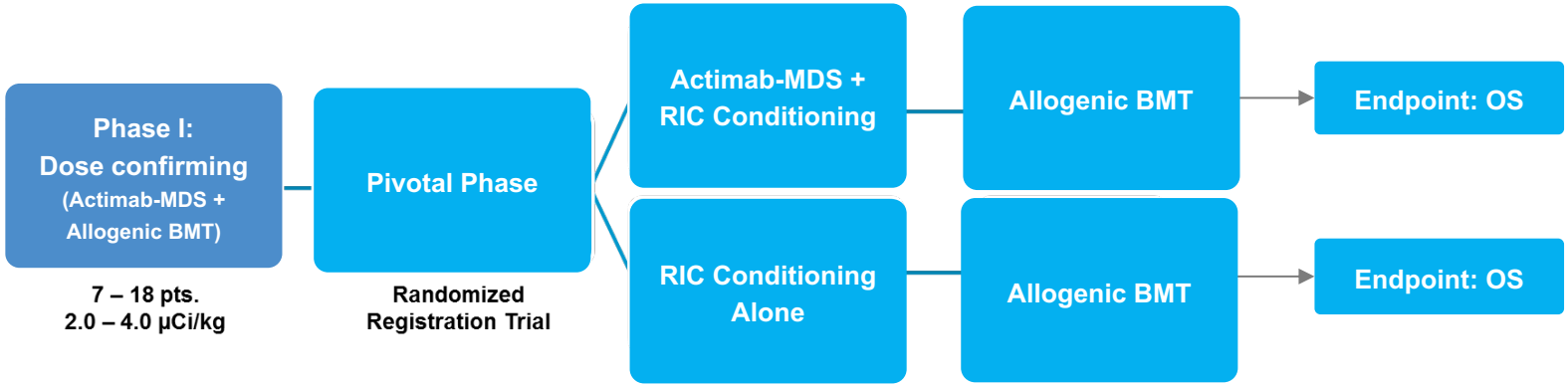
# Actimab-MDS: Targeted Conditioning Franchise Expansion

***Actimab-MDS is Actinium's second pivotal program in targeted conditioning***

- BMT is considered the only curative treatment option for high-risk MDS patients
- High-Risk MDS patients have dismal outcomes (Median OS of 0.8 – 1.6 years vs. 3.0 – 5.3 years for intermediate and low risk patients)(1)
- Current approaches to BMT largely similar to AML (Chemo based MAC or RIC conditioning)
- CD33 is expressed in a vast majority of MDS patients(2)
- At high doses (2.0 µCi/kg) Actimab-A exhibited significant myelosuppression, a surrogate for conditioning, in Phase 2 single-agent trial at fractionated doses




**Novel conditioning regimen, no other trial of this kind for patients with MDS**

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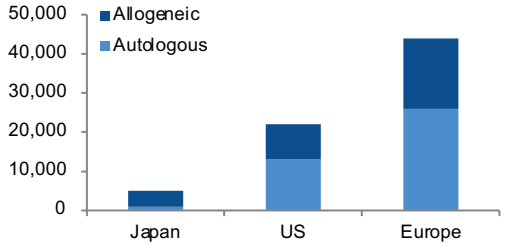
1) Greenberg, Tuechler, Schanz et al, Revised International Prognostic Scoring System (IPSS-R) for Myelodysplastic Syndrome, Blood 120: 2454, 2012 2) Jilani et al. Differences in CD33 Intensity Between Various Myeloid Neoplasms. Amer Journal for Clinical Pathology. 2002, 118:560-566 3) Reduced Intensity Conditioning comprised of Melphalan and Fludarabine

# Targeted Conditioning: Compelling Market Opportunity

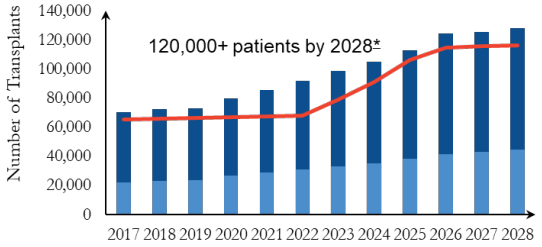
***Concentrated market and growing addressable patient population that could be expanded with targeted conditioning***

**Major markets (US, EU, Japan) can be served effectively and efficiently with lean infrastructure**


**Over 70,000 transplant procedures performed in the US(1), EU(2) and Japan(3) in 2016**




**Targeted conditioning can enable significant expansion of the addressable patient population(4)**




## *Distinct Opportunity For Comprehensive Portfolio Build-out*

| | Allogeneic Transplants | | | | | Autologous Transplants | | | Allo / Auto |
|---|---|---|---|---|---|---|---|---|---|
| **Multiple Tumors** | AML | MDS | ALL | MCL | MF | MM | FL | Hodgkin's | Non-Malignant Disorders |
| **ACT (GeneTX, CAR-T )** | Immune Disorders (HIV), Heme Malignancies, Genetic Disorders, Rare Diseases | | | | | GeneTx | CAR-T | | |

Active clinical program | Phase 1/2 Clinical data | Expansion opportunity

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1) Current Uses and Outcomes of Hematopoietic Cell Transplantation 2017 Summary Slides. Center for International Blood & Marrow Transplant Research 2) European Society for Blood and Marrow Transplantation. 2017 Annual Report 3) Activities and Outcomes of Hematopoietic Cell Transplantation in Japan 2017. The Japanese Data Center for Hematopoietic Cell Transplantation. 4) Goldman Sachs Transplant Market Analysis, 2018.

# Highly Differentiated CD33-Alpha Program

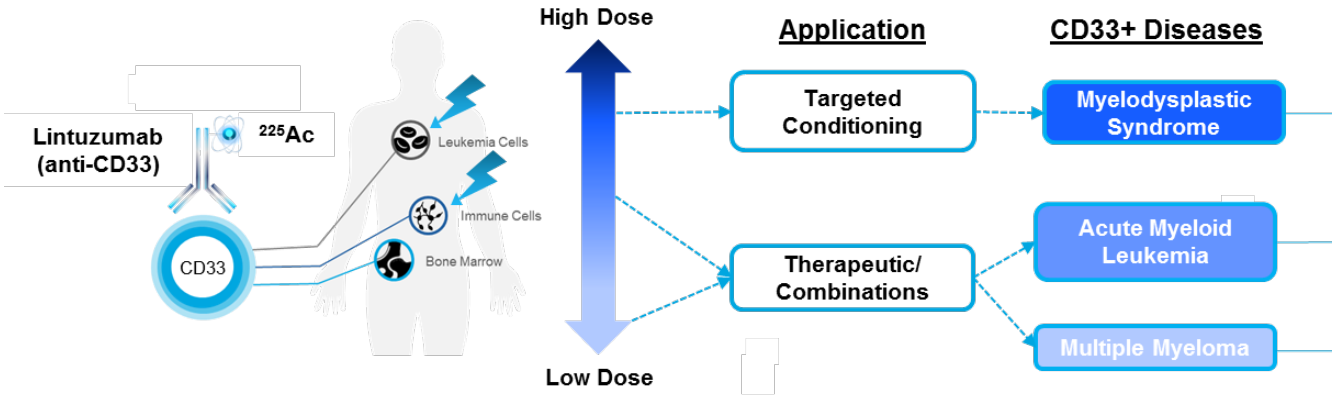
***Development strategy being driven by clinical data and radioimmunobiology***

- Clinical experience in 125+ patients in 6 clinical trials
- Minimal non-hematologic toxicities > grade 3 outside of myelosuppression in Phase 1/2 trial
- Clinical data driving high-dose targeted conditioning and low-dose combination development strategy
- Multiple opportunities to use Actimab-A in combination with chemotherapy, targeted agents and immunotherapy

**Actimab-A Phase 1/2 Results**

| Dose Level (µCi/kg/fraction) | Response Rate (%) (CR, CRp & Cri) |
|---|---|
| 0.5 µCi/kg[1] | 0% |
| 1.0 µCi/kg[1] | 17% (1 CR) |
| 1.5 µCi/kg[2] | 22% (3 CRp, 3 CRi) |
| 2.0 µCi/kg[3] | 69% (1 CR, 2 CRp, 6 CRi) |

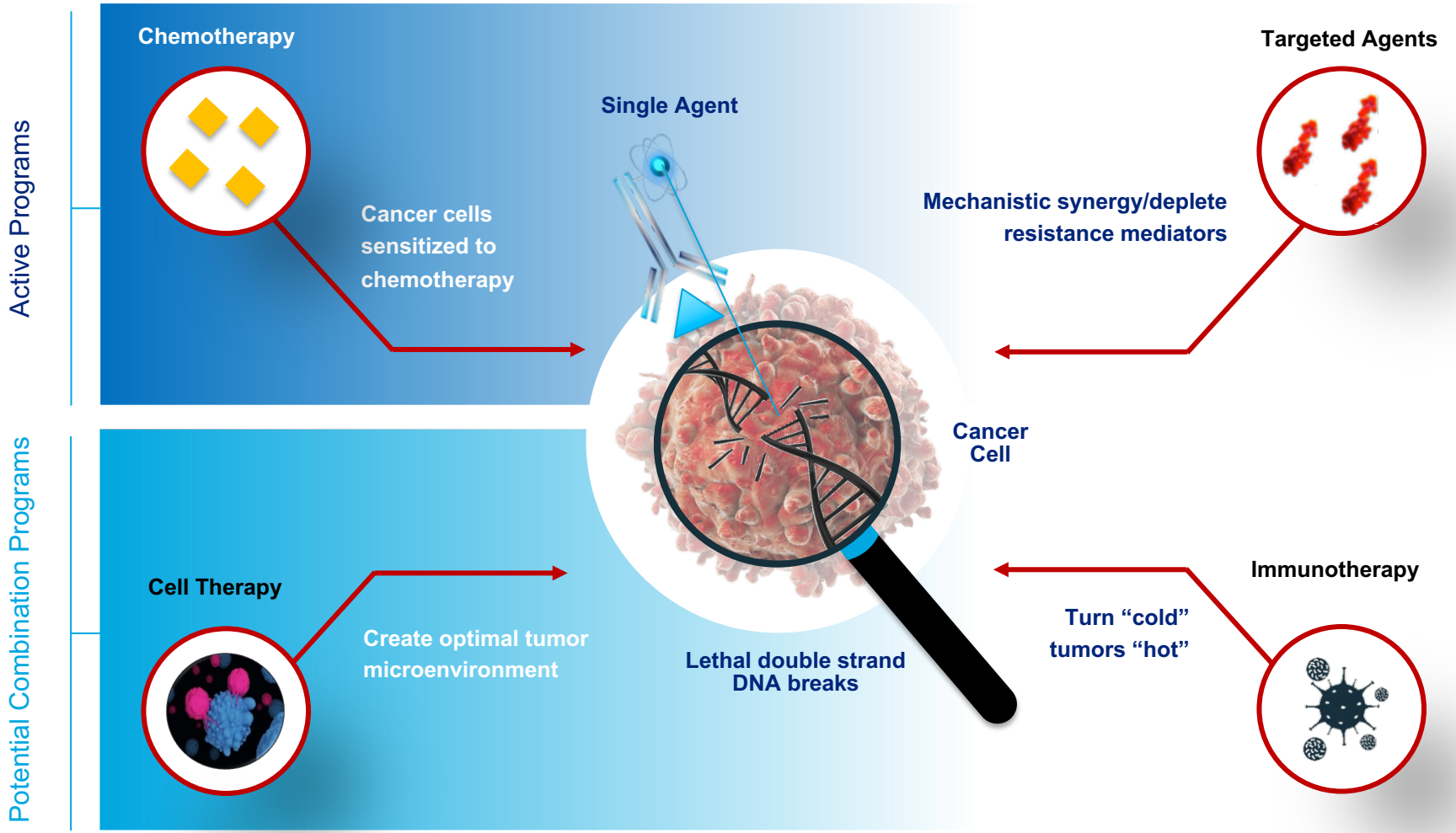
**Actimab-A Development Strategy**




1) Jurcic et al. ASH 2016. (N=9) 2) Atallah et al. Blood (2018) 132 (Supplement 1): 1457 (N=27) 3(Finn et al. Blood (2017) 130 (Supplement 1): 2638; (N=13)

# Potential Mechanistic Synergies Drive CD33 Program Expansion

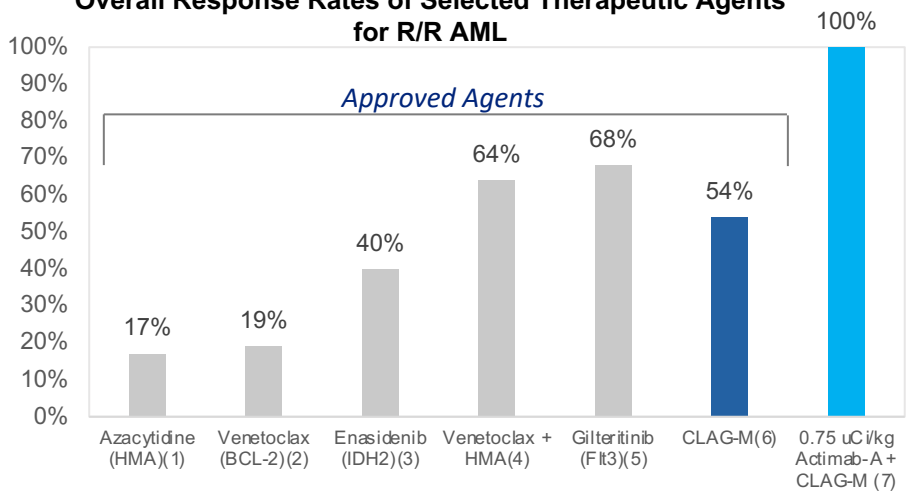
**Actinium has data demonstrating the potentiating and synergistic effect of targeted radiotherapy**



# Promising Phase 1 Results: Actimab-A + CLAG-M Combo

***High remission rates vs approved agents from Actimab-A + CLAG-M combo in R/R AML***

**Overall Response Rates of Selected Therapeutic Agents for R/R AML**




**MRD Negativity Rate in R/R AML**

| | CLAG-M[8] | Actimab-A + CLAG-M[7] |
|---|---|---|
| MRD- Rate | 39% | 70% |

- 100% remission rate (1 CR, 2 CRp) in cohort 3 compares favorably to 54% remission rate with CLAG-M alone
  - **85% increase in CR rate compared to CLAG-M alone**
- Proof of concept data supports mechanistic synergy of the combination

- MRD negativity in 70% of all patients with remissions (7/10)
- CR/CRi and MRD- observed in all dose cohorts
- First two dose cohorts included subtherapeutic doses of Actimab-A

Trial expansion includes additional dose cohort of 1.0 uCi/kg to evaluate efficacy criteria—including MRD- rate, duration of response, overall response—and establish MTD

1) Itzykson et al. Azacitidine for the treatment of relapsed and refractory AML in older patients. Leuk Res. 2015 Feb;39(2):124-30. 2) Konopleva et al. Efficacy and Biological Correlates of Response in a Phase II Study of Venetoclax Monotherapy in Patients with Acute Myelogenous Leukemia. Cancer Discov. 2016 Oct;6(10):1106-1117. 3) Stein et al. Enasidenib in mutant IDH2 relapsed or refractory acute myeloid leukemia. Blood. 2017 Aug 10;130(6):722-731. 4) Aldoss et al. Efficacy of the combination of venetoclax and hypomethylating agents in relapsed/refractory acute myeloid leukemia. Haematologica. 2018 Sep;103(9):e404-e407. 5) Perl et al. Gilteritinib or Chemotherapy for Relapsed or Refractory FLT3-Mutated AML. N Engl J Med. 2019 Oct 31;381(18):1728-1740. 6) Mushtaq et al. Comparison of Salvage Chemotherapy Regimens in Relapsed/Refractory Acute Myeloid Leukemia. ASH Annual Meeting 2018 7) Jurcic et al. Phase 1 trial of targeted alpha-particle therapy with LDAC in patients age 60 or older with untreated AML. ASH 2016 7) Abedin, S., et. al, A Phase 1 Study of Lintuzumab Ac225 in Combination with CLAG-M Chemotherapy in Relapsed/Refractory AML, *Blood, 2020* ASH 2020 Abstract #165; 8) Mushtaq et al. Comparison of salvage chemotherapy regimens and prognostic significance of minimal residual disease in relapsed/refractory acute myeloid leukemia. Leukemia & Lymphoma 2020;

# Actimab-A + Venetoclax Combination Trial

***Venetoclax is used widely across AML segments, however, most patients ultimately relapse - preclinical and clinical data support mechanistic synergy of Actimab-A with Venetoclax***

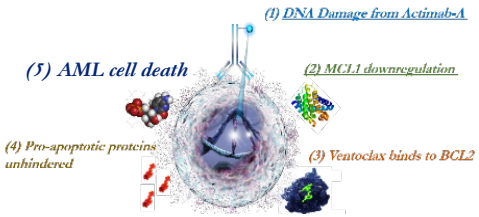
- Venetoclax is a Bcl-2 inhibitor approved in 3 hematologic indications and is recommended for fit and unfit patients with AML with HMA or LDAC per NCCN guidelines. **Venetoclax showed a 19% ORR in R/R AML as single agent[1]**

**Actimab-A + Venetoclax First in Human Results**

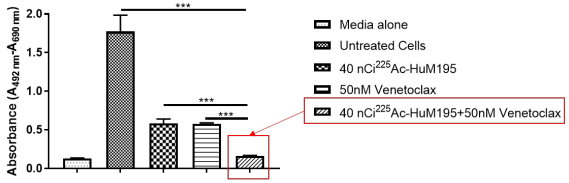
- **67% ORR in cohort 1**: 1 Complete Response and 1 Partial Response with a subtherapeutic dose of 0.5 µCi/kg of Actimab-A and one cycle of venetoclax
- All 3 patients were poor risk with adverse cytogenetics, and each patient has an additional high-risk marker (FLT3-ITD+, antecedent JAK2+ myelofibrosis, or TP53 mutation)
- No DLTs in dose cohort 1, trial has advanced to dose cohort 2 of 1.0 µCi/kg of Actimab-A
- Phase 1 trial completion and Phase 1 POC data in 2021

***Actimab-A restores sensitivity to venetoclax and has single agent anti-leukemic activity supporting the rationale for ongoing Phase 1/2 combination trial***

***Rationale: Actimab-A depletes Mcl-1, a mediator of venetoclax resistance***




**Demonstrable Mechanistic Synergy[2]**




**First in Human Clinical Proof of Concept[3]**

| Patient Characteristics | Patient Outcome |
|---|---|
| 2nd Relapse, 20-25% BM blasts ASXL1, BRAF, IDH2, RUNX1, SRSF2, TP53 mutations | CRi after 1 cycle of Actimab-A + ven, proceeded to 2nd cycle |
| Refractory, > 60% BM blasts, FLT3-ITD mutation | Partial Response, BM blasts decreased to 30% |
| Relapsed, 30% BM blasts, prior myelofibrosis with JAK2, SRSF2 mutations | Disease progression, discontinued study |

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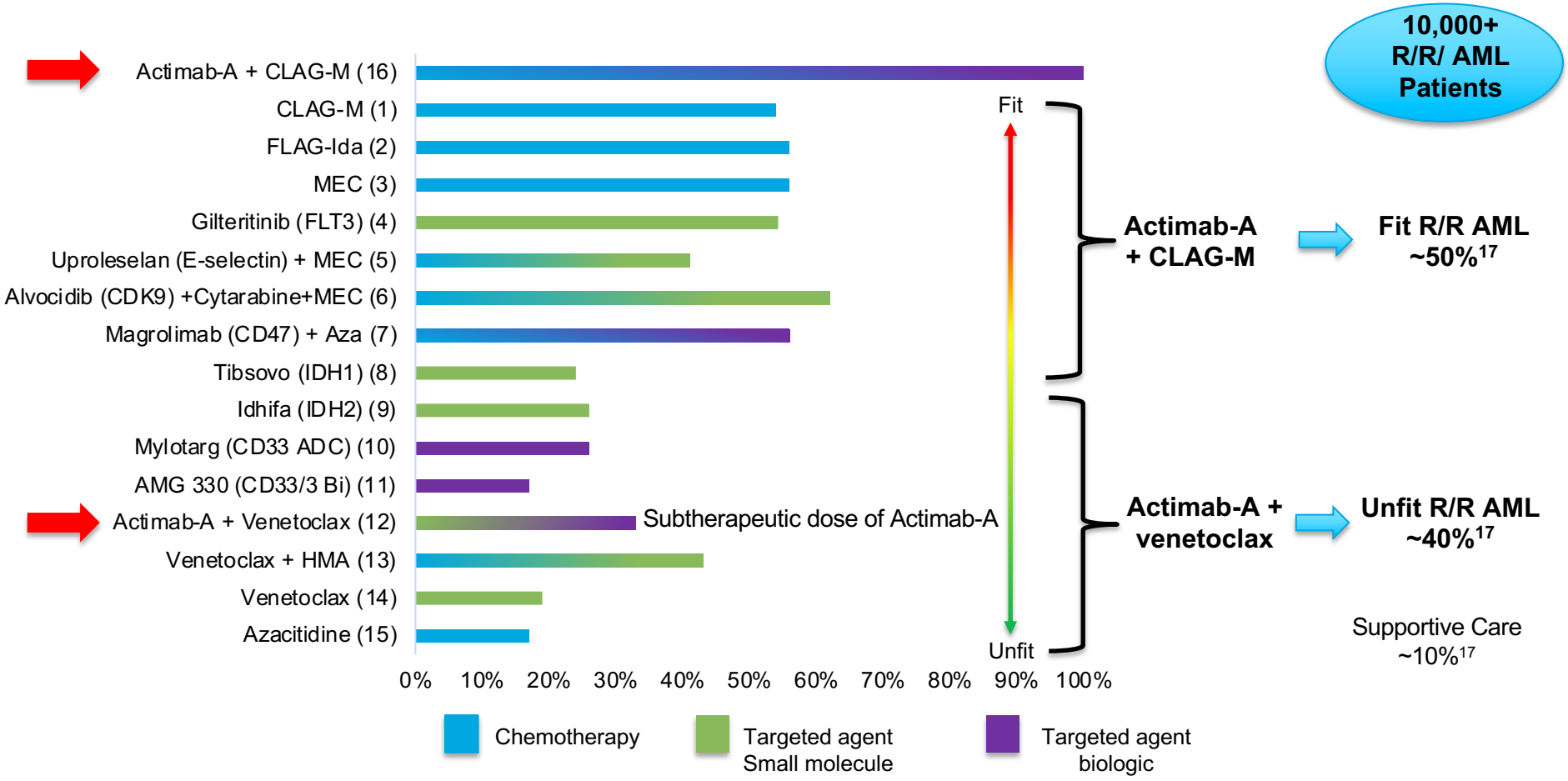
1) Aldosset al. Efficacy of the combination of venetoclax and hypomethylating agents in relapsed/refractory acute myeloid leukemia. Haematologica2018.1888094.; 2) Garg et al. 225-Ac-CD33 radioimmunotherapy potently increases the sensitivity of resistant acute myeloid leukemia lines to the Bcl-2 inhibitor venetoclax by mediating a reduction in cellular Mcl-1 levels. Poster 3808. AACR Annual Meeting 2019. 3) Hegazi, et. al. Lintuzumab-225Ac in Combination with Venetoclax in Relapsed/Refractory AML: Early Results of a Phase I/II Study Poster 2875. 62nd ASH Annual Meeting 2020.

# Actimab-A Combinations Showing Impressive Results in R/R AML

## Potential best in class profiles for both fit and unfit patients with R/R AML




1) Mushtaq, et al. Leukemia & Lymphoma 2020, September (9)] ; 2) Westhus, et. al., Leuk Lymphoma. 2019 Apr ; 60(4) :1014-1022; 3) Scheckel, et. al., Leuk Res. 2020 Mar ;90 :106300; 4) Perl, et. al, N Engl J Med 2019; 381:1728-1740; 5) DeAngelo, et. al., Blood (2018) 132 (Supplement 1): 331; 6) Zeidner, et. al., Blood (2018) 132 (Supplement 1): 30 7) Sallman, et. al., J Clin Oncol 38 : 2020 (suppl ; abstr 7507); 8) Pollyea, et. al., J Clin Oncol 36 : 2018 (suppl 15); 9) Stein, et. al., Blood 2017 Aug 10 ; 130(6) : 722-731; 10) FDA Label: https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/761060s003lbl.pdf; 11) Ravandi, et. al., J Clin Oncol 38 (suppl 15; abstr 7508); 12) Ram, et. al., Ann Hematol. 2019 Aug; 98(8)1927-1932; 13) Konopleva, et. al., Cancer Discov. 2016 Oct; 6(10):1106-1117; 14) Itzykson, et. al., Leuk Res. 2015 Feb ;39(2) :124-30; 15) Abedin, S., et. al, A Phase 1 Study of Lintuzumab Ac225 in Combination with CLAG-M Chemotherapy in Relapsed/Refractory AML, Blood, 2020; 17) Borlenghi, et. al., Validting the Patient's "Fitness" Criteria Proposed to Guide Treatment Decisions in Elderly AML: a Multicenter Study on a Population-Based Series of 362 Patients by the Network "Rete Ematologica Lombarda" (REL), Blood (2014) 124(21):279

# Attractive Market Opportunity in R/R AML Led By Iomab-B

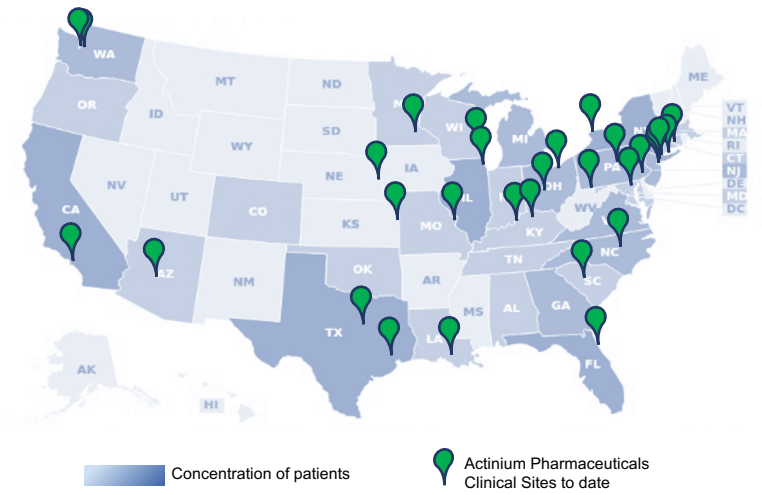
***Iomab-B and Actimab-A programs address both fit and unfit patients as a conditioning agent and therapeutic***

***Actinium's ARCs may offer novel treatment options for key R/R AML patient segments***

| | Fit | Unfit |
|---|---|---|
| **Therapeutic** | **Actimab-A + CLAG-M** | **Actimab-A + Venetoclax** |
| **Conditioning** | Iomab-B | SIERRA Study of Iomab-B in Elderly Relapsed/Refractory AML<br>**Iomab-B** |

Planned Trial **Active Trial**

***Potential to build a specialty oncology business capturing a majority of the R/R AML patient population who are treated at the top 100 cancer hospitals***



# Expected Value Creating Milestones

***Multiple clinical and corporate milestones expected throughout 2021 enabled by strong balance sheet and enhanced clinical development and R&D capabilities***

| | Milestone | Status |
|---|---|---|
| **Targeted Conditioning** | | |
| **Iomab-B Pivotal Phase 3 SIERRA Trial** | Present feasibility, engraftment and detailed safety data from 75% of patient enrollment at ASH | ✓ |
| | Interim ad hoc analysis | ✓ |
| | Complete enrollment/BLA filing | 2021/2022 |
| **Iomab-ACT Program** | Secure GeneTx development partner | ✓ |
| | GeneTx proof of concept data | 2021 |
| | CAR-T clinical collaboration with MSK; NIH grant funding | ✓ |
| | CAR-T proof of concept data | 2021 |
| **CD33 ARC Combinations and AWE Technology Platform** | | |
| **Actimab-A + CLAG-M** | Complete 3rd and planned final cohort and present PoC data | ✓ |
| | Complete expanded 4th cohort and present full Phase 1 data | 2021 |
| **Actimab-A + Venetoclax** | Phase 1 POC data from Actimab-A venetoclax combination trial | 2021 |
| **Actimab-MDS Pivotal Program** | Regulatory Update/Initiate pivotal program | 2021 |
| **AWE Technology Platform** | Secured collaboration with Astellas utilizing AWE for solid tumor theranostics | ✓ |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Thank You

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