UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 21, 2014

ACTINIUM PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-52446**	**88-0378336**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

546 Fifth Avenue, 14th Floor New York, NY	**10036**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(646) 459-4201**

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a -12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d -2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e -4(c))

Item 7.01. Regulation FD Disclosure.

On October 21, 2014, Actinium Pharmaceuticals, Inc. (the "Company") presented an overview of the Company's two lead development programs at the Key Opinion Leader ("KOL") event focused on emerging therapies for Acute Myeloid Leukemia, at the Palace Hotel in New York City. The Company hosted the event. A copy of the Company's presentation is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated into this Item 7.01 by reference. The meeting featured Joseph G. Jurcic, MD, Professor of Medicine and Director of the Hematologic Malignancies Section of the Hematology/Oncology Division at Columbia University Medical Center. A copy of Dr. Jurcic's presentation is attached as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated into this Item 7.01 by reference. In accordance with General Instruction B.2 of Form 8-K, the information set forth herein is deemed to be "furnished" and shall not be deemed to be "filed" for purposes of the Securities Exchange Act of 1934, as amended. The information set forth in Item 7.01 of this Current Report on Form 8-K shall not be deemed an admission as to the materiality of any information in this Current Report on Form 8-K that is required to be disclosed solely to satisfy the requirements of Regulation FD.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	KOL Event Lead Programs Overview Presentation.
99.2	KOL Presentation, dated October 21, 2014.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: October 21, 2014

ACTINIUM PHARMACEUTICALS, INC.

By: */s/ Kaushik J. Dave*
Name: Kaushik J. Dave
Title: President and Chief Executive Officer

Exhibit 99.1

Actinium Pharmaceuticals, Inc.

Key Opinion Leader Event

Emerging Therapies For Acute Myeloid Leukemia

Featuring

Dr. Joseph Jurcic

COLUMBIA UNIVERSITY
MEDICAL CENTER

Disclaimer and Safe Harbor Statement

Disclaimer

The contents of this presentation and the information which you are given at the time of these slides and the presentation have not been approved by an authorized person within the meaning of the Financial Services and Markets Act 2000 (the "Act"). Reliance on this presentation and its slides for the purpose of engaging in investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. This presentation does not constitute or form part of any offer for sale or subscription or solicitation of any offer to buy or subscribe for any securities in Actinium Pharmaceuticals, Inc. ("ATNM" or the "Company") nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. No reliance may be placed for any purpose whatsoever on the information contained in these slides or presentation and/or opinions therein. These slides and the presentation are exempt from the general restriction (in section 21 of the Act) on the communication of invitations or inducements to engage in investment activity on the grounds that it is made to: (a) persons who have professional experience in matters relating to investments who fall within Article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (b) high net worth entities and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(1) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not rely on this presentation or any of its contents and all persons (whether relevant persons or otherwise) are recommended to seek their own independent financial advice from a person authorized for the purposes of the Act before engaging in any investment activity involving the Company's securities.

Safe Harbor Statement

This presentation contains "forward-looking statements" within the meaning of the "safe-harbor" provisions of the private securities litigation reform act of 1995. Such forward-looking information and statements are based on the current estimates and projections of the Company or assumptions based on information currently available to the Company. Such statements involve known and unknown risks, uncertainties and other factors that could cause the actual results of the Company to differ materially from the results expressed or implied by such statements, including changes from anticipated levels of revenues, future national or regional economic and competitive conditions, difficulties in developing the Company's technology platforms, retaining and expanding the Company's customer base, fluctuations in consumer spending on the Company's products and other factors. Accordingly, although the Company believes that the expectations reflected in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. The Company has no obligation to update the forward-looking information contained in this presentation. Any forward-looking statements or information in this presentation speak only as at the date of this presentation.

Company Description

A public biotechnology company using world class science to develop and commercialize antibody directed radioisotopes to target unmet medical needs in cancer.

Antibody Approaches Targeting Cancer Cells

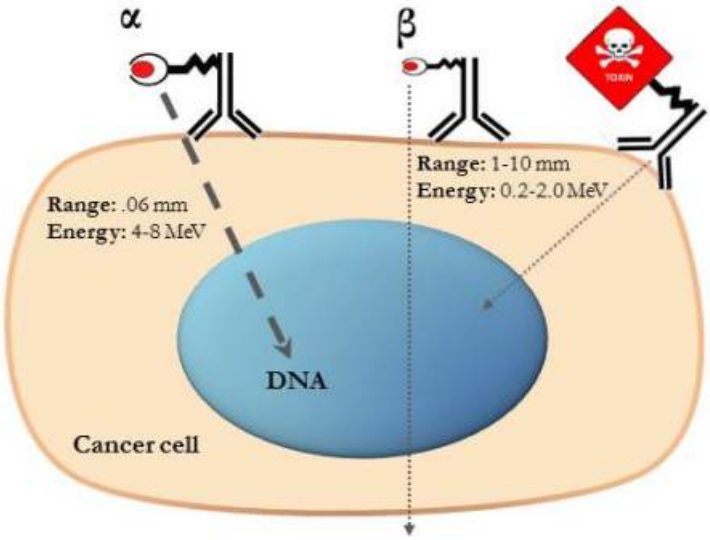
Cancer Treatment Options

Opportunity		Radiation		Monoclonal Antibodies (mAbs)
Treatment %	50%	♦ External radiation majority treatment ♦ Internal radiation has mostly no IP	<10%	♦ Always a pharmaceutical ♦ Strong IP protection
Pharmaceutical Revenue %	<3%	♦ Commoditized	~30%	♦ Mostly proprietary

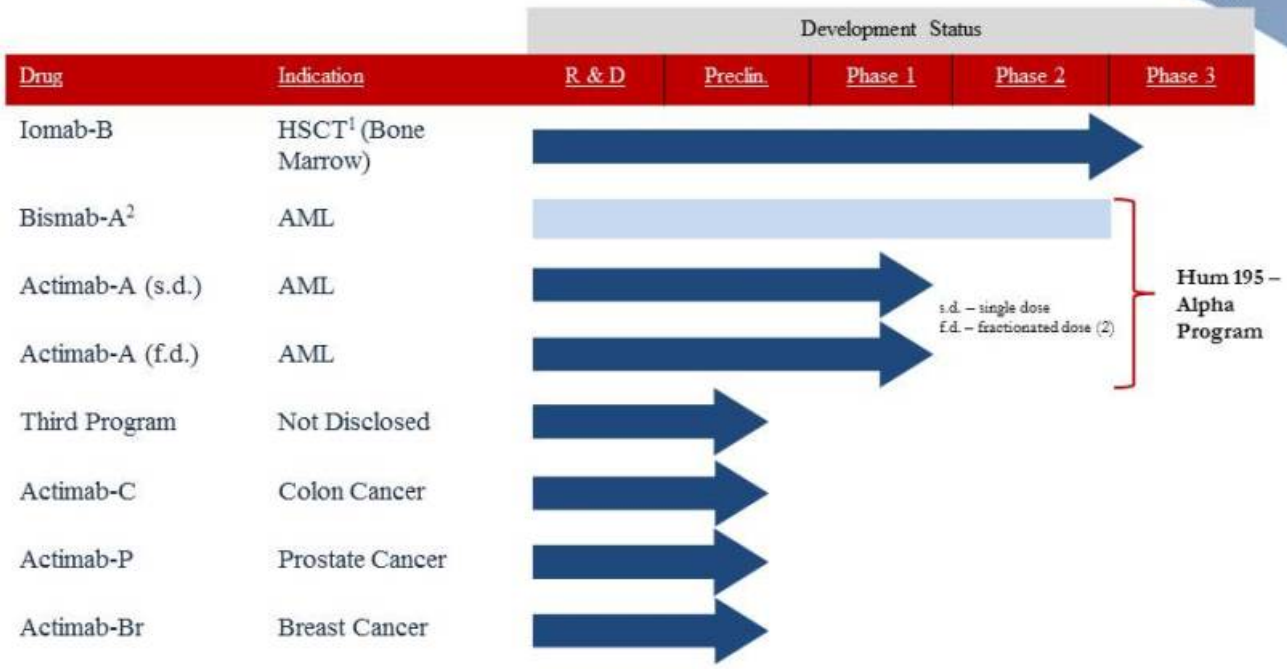
Payload Approaches

	Company
α	**α - emitters**
	Actinium Pharmaceuticals
	Algeta - Acquired by Bayer
β	**β - emitters**
	GSK
	Spectrum Pharmaceuticals
	Immunomedics
	Novelos Therapeutics
	Peregrine Pharmaceuticals
	Toxins
	Pfizer
	Seattle Genetics
	Immunogen
	Peregrine Pharmaceuticals
	Progenics

Actinium Pharmaceuticals



ATNM's Product Pipeline

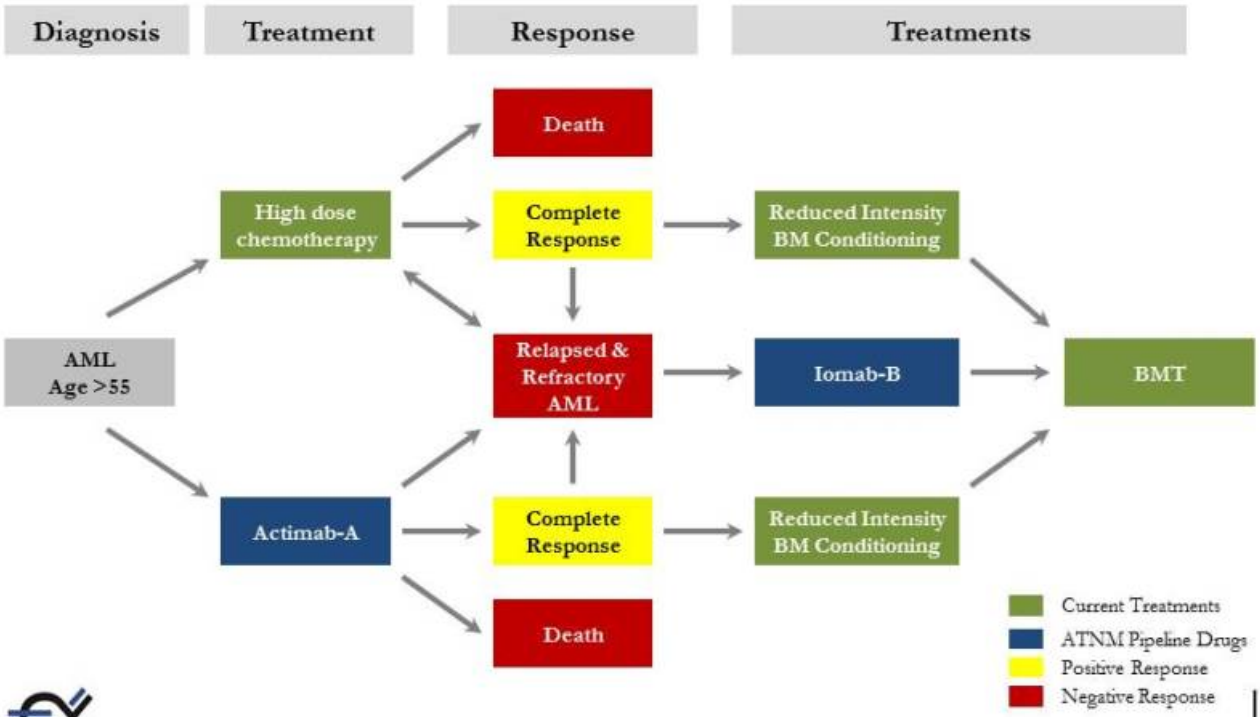


1 HSCT stands for Hematopoietic Stem Cell Transplantation, a procedure in which cells capable of reconstituting normal bone marrow function are transplanted to a patient.
2 ATNM has decided to discontinue development of Bismab-A at this time due to supply, logistics and cost reasons. Actimab-A is the second generation drug of Bismab-A.

Actinium Pharmaceuticals

Market Positioning for Iomab-B, Actimab-A

ATNM products target both treatment stages for AML patients over 55 years of age



Actinium Pharmaceuticals

Iomab-B A New Treatment Paradigm

- ✓ Provides treatment alternative to patients with no options
- ✓ Significantly expands patient population eligible for BMT
- ✓ Provides potentially a faster way of performing BMT with fewer side effects
- ✓ Minimizes transplant related mortality
- ✓ Significantly increases curative outcomes

Hum 195 – Alpha Program

Bismab-A → Actimab-A

Second generation Actimab-A 500x more potent than Bismab-A

	1st Generation Bismab-A Profile	APIT Platform	2nd Generation Actimab-A Advantages
Target:	♦ AML		♦ AML
Effectiveness:	♦ Proof of concept in humans		+ 500x more potent than Bismab-A
Clinical Stage:	♦ Promising results in Phase II		♦ Currently in a Phase I/II Trial
Supply Chain:	♦ Complex, high COGS		+ Simple, 10x lower COGS
Ease of Use:	♦ Complex on site preparation		+ Central manufacturing
	♦ Does not require additional diagnostics		♦ Does not require additional diagnostics

Hum 195 – Alpha Program

Bismab-A monotherapy

- Patients: Rel/ref AML only
- Proof of principle that mAb labeled with a emitter can be delivered safely
- MTD not reached
- BM blast reduction >50%: 33% of patients

Bismab A + IDAC cytoreduction

- Patients: Rel/ref, ≥60 hi risk newly diagnosed
- MTD: 1mCi/kg
- Early mortality: 10%
- BM blast reduction >50%: 62% of patients
- CR: 33% in high risk
- Median OS 7.7m (13.7m for responders) (vs 1.8 m in ≥60 hi risk newly diagnosed)

Actimab-A monotherapy

- Patient: Rel/ref AML only
- MTD: 3 mCi/kg
- BM blast reduction >50%: 53% of patients
- CRi: 20% in rel/ref
- Long term survivors up to 2 years

Actimab-A + LDAC cytoreduction

- Patients: >=60 with hi risk newly diagnosed AML
- Clinical & Program Development
  - ASH Abstract Nov 6th
  - Program Update Around ASH-December

Near-term Value Drivers

Potential milestones in next 12-24 months

- **Iomab-B**
  - ✓ Complete Phase III Protocol
  - ✓ Start cGMP mAb mfg
  - ✓ Start drug mfg cGMP process
  - – Complete cGMP mAb mfg
  - – Complete Drug mfg cGMP
  - – Submit Phase III IND
  - – Start Phase III
  - – Enrollment updates
  - – Clinical progress updates
  - – Complete Phase III enrollment
  - – Updates in other indications
- **Actimab-A**
  - – Establish proof of concept
  - – Complete mfg. improvements
  - – Establish clear pathway to approval
  - – Expand indications

Actinium Pharmaceuticals, Inc.

Key Opinion Leader Event

Emerging Therapies For Acute Myeloid Leukemia

Featuring

Dr. Joseph Jurcic

Columbia University Medical Center

Radioimmunotherapy of AML with Actimab-A and Iomab-B

Joseph G. Jurcic, MD
Professor of Medicine at CUMC
Director, Hematologic Malignancies
Columbia University Medical Center

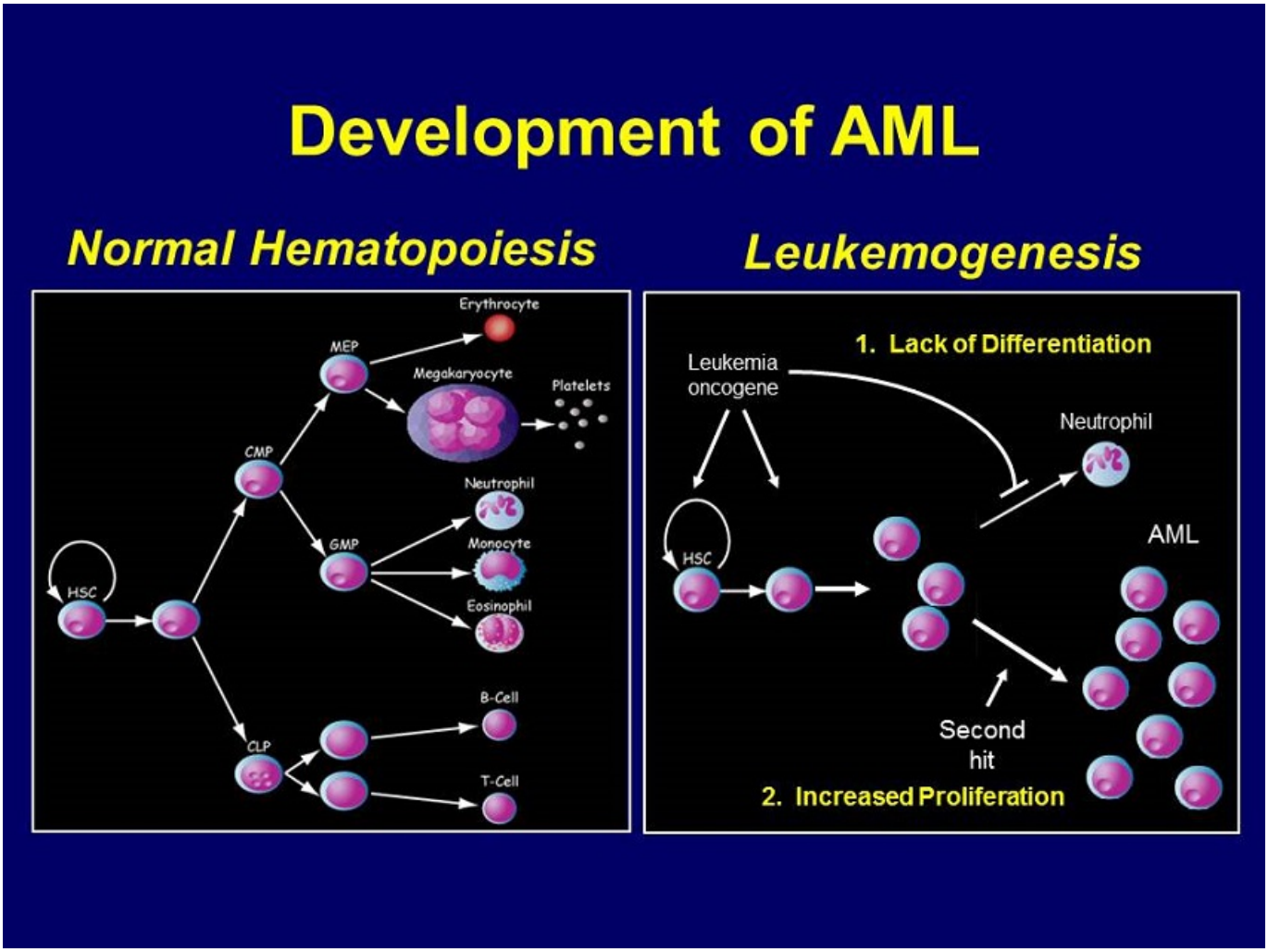
COLUMBIA UNIVERSITY
MEDICAL CENTER
Herbert Irving Comprehensive Cancer Center

NewYork-Presbyterian
The University Hospital of Columbia and Cornell

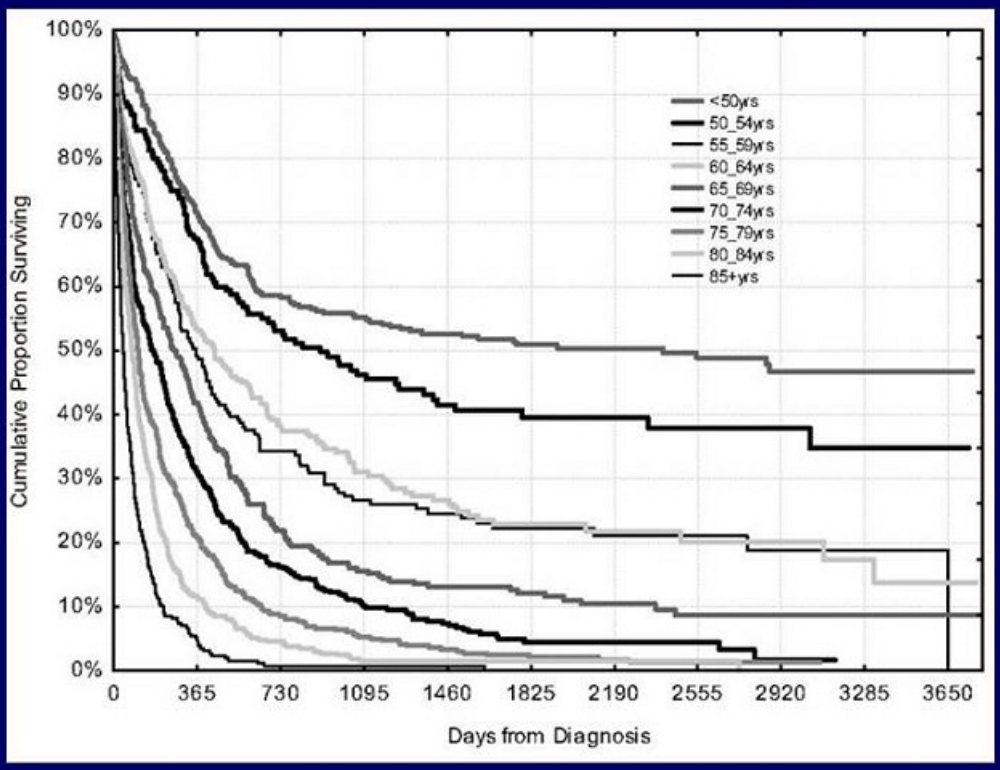
Outline

- AML background
- Current front-line treatment approaches
- Emerging therapies for older patients
- Targeted α-particle therapy with Actimab-A
- Current management for relapsed AML
- Conditioning with Iomab-B before HCT

Development of AML

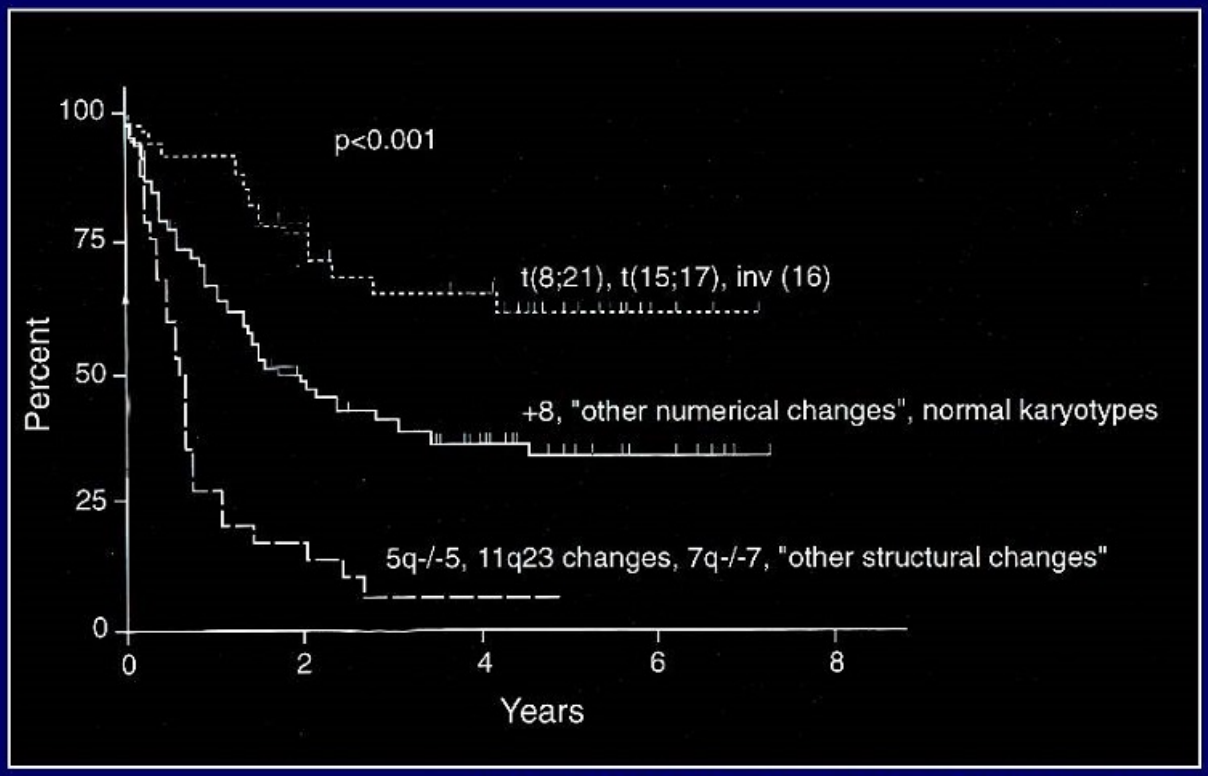


AML Survival by Age



Juliusson G *et al. Blood* 2009;113:4179-4187.

AML: Cytogenetics Determines Survival



Bloomfield CD *et al. Cancer Res* 1998;58:4173-4179.

Risk Status Based on Cytogenetic and Molecular Abnormalities

Risk Status	Cytogenetics	Molecular Abnormalities
Better-risk	inv(16) or t(16;16) t(8;21) t(15;17)	Normal cytogenetics: NPM1 mutation in the absence of FLT3-ITD or isolated biallelic CEBPA mutation
Intermediate-risk	Normal cytogenetics +8 alone t(9;11) Other non-defined	t(8;21), inv(16), t(16;16): with c-KIT mutation
Poor-risk	Complex (≥ 3 clonal abnormalities) Monosomal karyotype -5, 5q-, -7, 7q- 11q23 – non t(9;11) inv(3), t(3;3) t(6;9) t(9;22)	Normal cytogenetics: with FLT3-ITD mutation

NCCN Guidelines Version 2.2013.

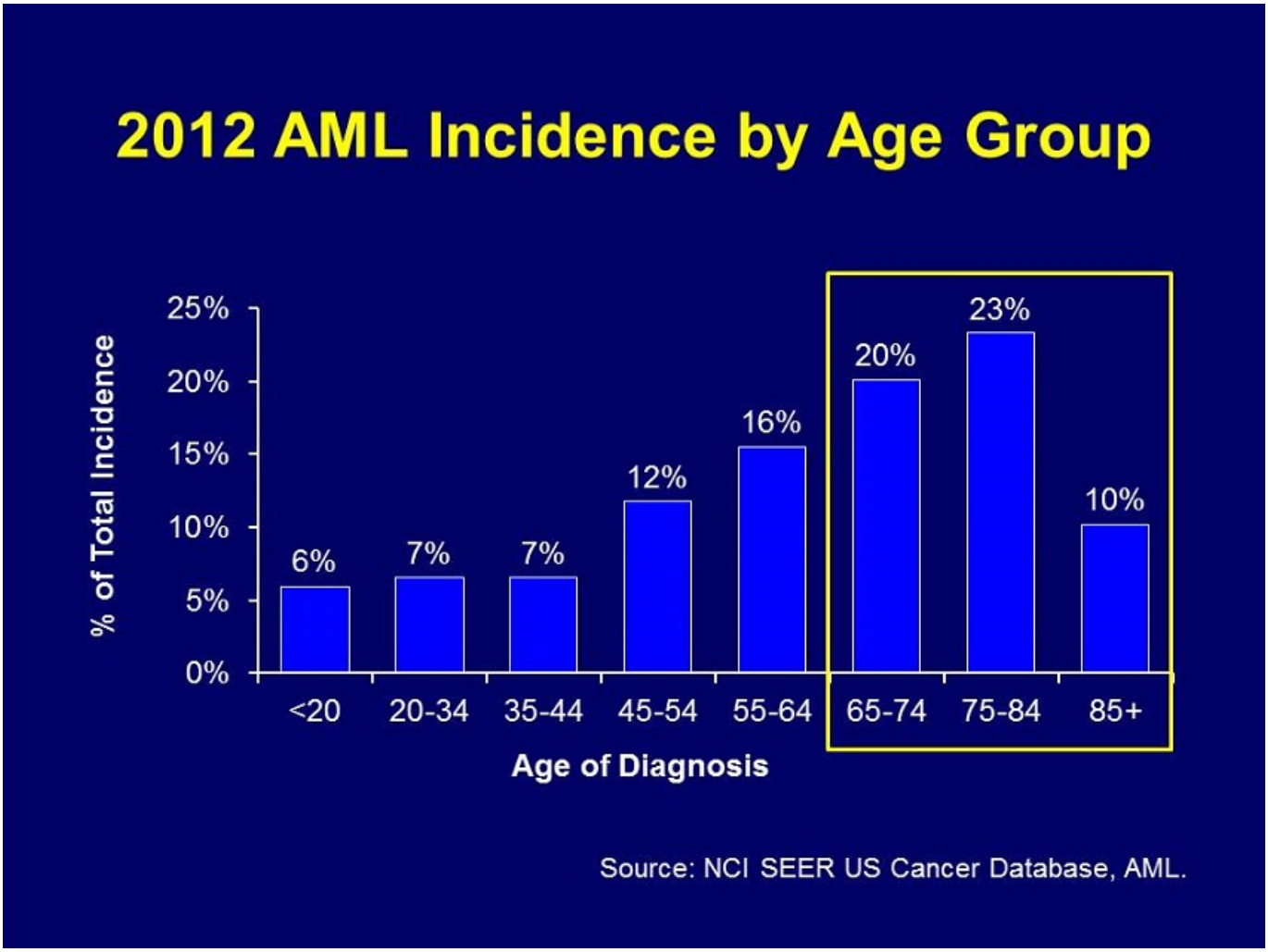
Phases of AML Therapy

- **Induction**
  - Cytarabine + anthracycline
- **Postremission**
  - Consolidation chemotherapy
  - Hematopoietic cell transplantation (HCT)

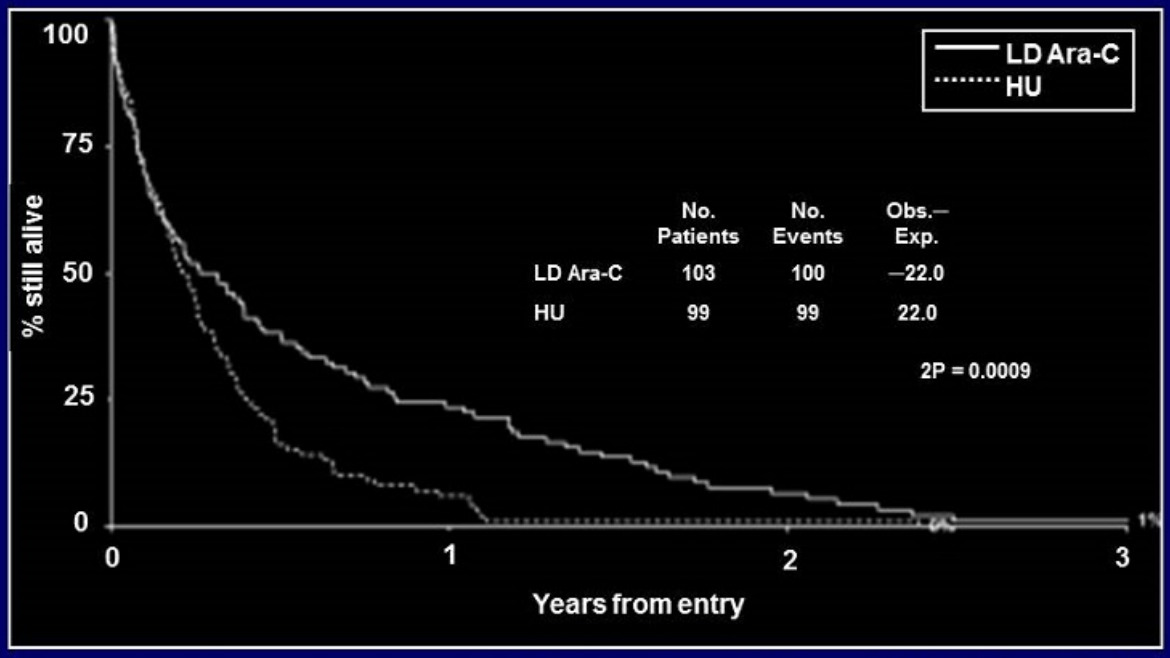
Treatment Outcome by Age

Age	< 56 yo	56-65 yo	66-75 yo	>75 yo
No. of patients	368	246	274	80
Response, no. (%)				
CR	235 (64)	113 (46)	108 (39)	26 (33)
Resistant disease	99 (27)	91 (37)	101 (37)	29 (36)
Median survival, mo. (95% CI)	18.8 (14.9-22.6)	9.0 (8.1-10.2)	6.9 (5.4-7.7)	3.5 (1.4-6.1)
Median DFS, mo. (95% CI)	21.6 (15.8-25.5)	7.4 (65.-8.8)	8.3 (6.3-10.2)	8.9 (5.8-10.8)

Appelbaum FR *et al. Blood* 2006; 107:3481-3485.


2012 AML Incidence by Age Group
% of Total Incidence
25%
20%
15%
10%
5%
0%
6%
7%
7%
12%
16%
20%
23%
10%
<20
20-34
35-44
45-54
55-64
65-74
75-84
85+
Age of Diagnosis
Source: NCI SEER US Cancer Database, AML.

Low-Dose Cytarabine in Older AML Patients



Burnett AK *et al*. *Cancer* 2007; 109:1114-1124.

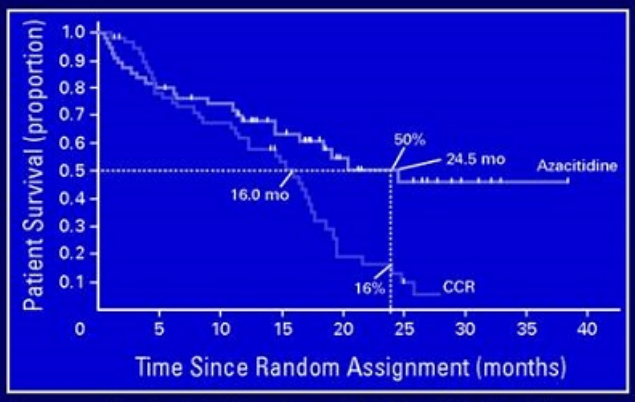
Recently Studied Newer Agents For Older AML Patients

Drug	Class	Response (CR+CRp)	Comments
Tipifarnib[1]	Farnesyltransferase inhibitor	22/158 (14%)	Median survival – 5 mos. Serious AEs – 47%
Low-dose Clofarabine[2]	Nucleoside analogue	10/26 (38%)	1-year survival – 21%
Clofarabine/ Ara-C[3]	Nucleoside analogues	36/60 (60%)	Median survival – 10 mos. Pneumonia – 38% Bacteremia – 33%
Cloretazine[4]	Alkylator	22/45 (49%)	1-year survival – 22% Early mortality – 20%

[1]Lancet JE *Blood* 2007; 109:1387. [2]Burnett AK *Blood* 2006; 108: abstr 1985. [3]Faderl S *Blood* 2006; 108: 45. [4]Karp JE *Proc ASCO* 2006; 24: abst 6512.

Hypomethylating Agents for Older AML Patients

Azacitidine



Fenaux P *et al. J Clin Oncol*; 2010; 28:562-56.

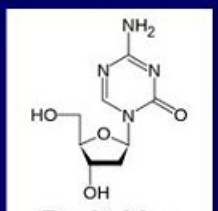
Decitabine

- **5-Day Regimen** (Cashen AF *et al. JCO* 2010; 28:556-561.)
  - 24% CR
  - Median survival 7.7 mos.
  - Median time to response 3 cycles
- **10-Day Regimen** (Blum W *et al. PNAS* 2010: 107:7473-7478.)
  - 47% CR
  - Median survival 12.8 mos.
- **Randomized to Conventional Care** (Thomas XG *et al. ASOC* 2011:6504.)
  - CR+CRp 18% (vs. 8%) (p=0.001)
  - Median survival 7.7 mos. (vs. 5 mos.) (*p*=0.10).

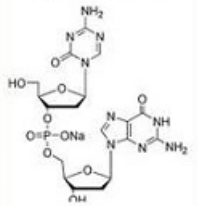
Novel Low-Intensity Therapies

SGI-110[1]

- 67 patients with relapsed/refractory or untreated older AML patients randomized to 60 or 90 mg/m^2 SQ x 5 days
- 8/50 (16%) of relapsed/refractory patients had CRc (CR + CRp + CRi).
- 9/17 untreated patients achieved CRc.
- No difference in responses rates between 60 and 90 mg/m^2.
- Greater frequency of grade 3/4 adverse events for 90 mg/m^2.



Decitabine

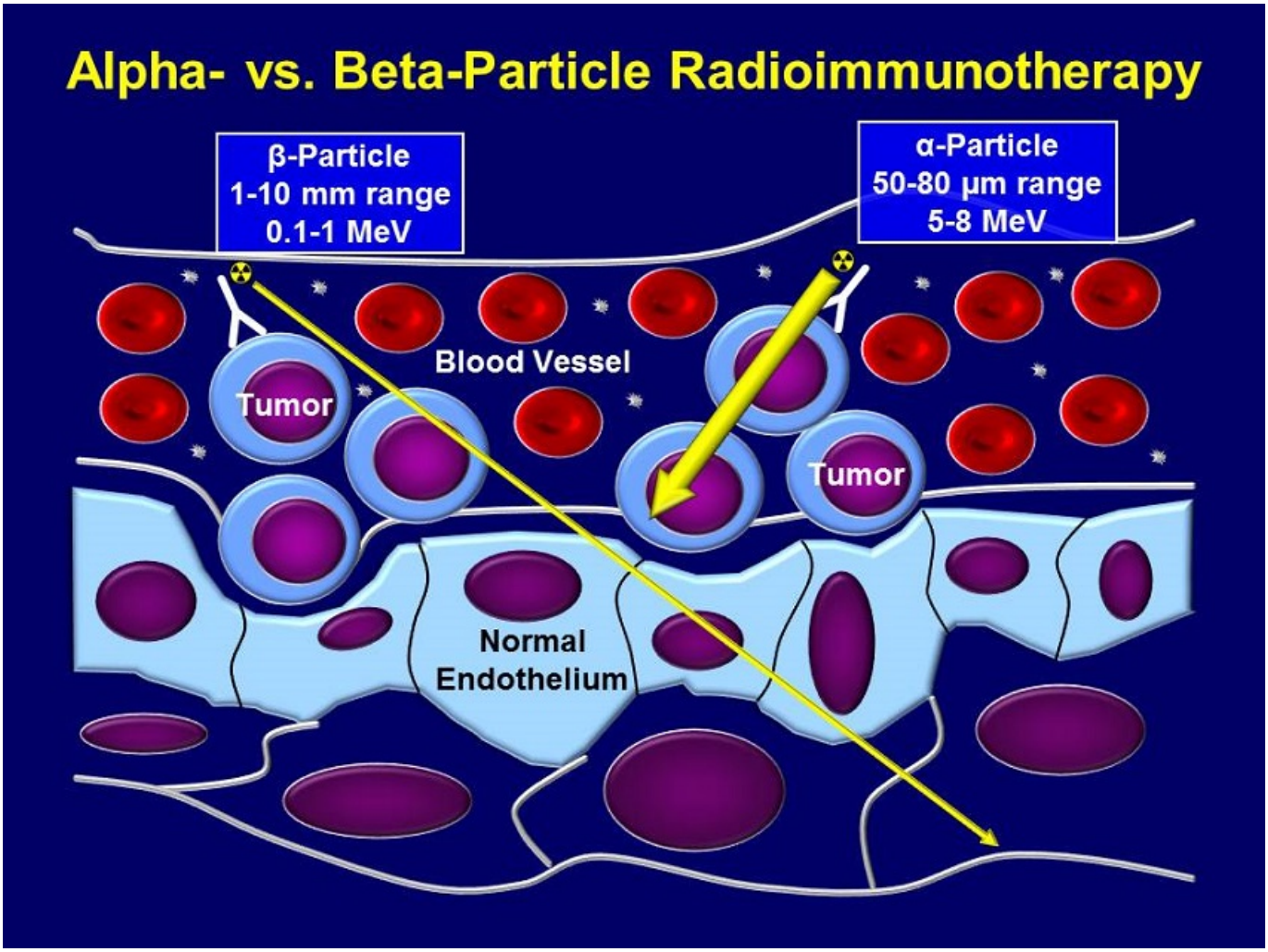


SGI-110

Volasertib[2]

- Cell cycle kinase inhibitor that induces mitotic arrest and apoptosis by targeting Polo-like kinase.
- 87 patients with untreated AML received volasertib + LDAC (n=42) or LDAC (n=45) in a randomized phase II trial.
- CR/CRi rate, 31% for volasertib + LDAC; 11% for LDAC.
- Increased grade ≥ 3 infections and GI toxicity in volasertib arm.

[1]Kantarjian HM *et al*. *Blood* (ASH Abstracts) 2013; 122:497.
[2]Maertens J *et al*. *Blood* (ASH Abstracts) 2012; 120:411.


Alpha- vs. Beta-Particle Radioimmunotherapy
β-Particle
1-10 mm range
0.1-1 MeV
α-Particle
50-80 μm range
5-8 MeV
Blood Vessel
Tumor
Tumor
Normal
Endothelium

^{213}Bi-Lintuzumab: A 1st Generation α-Emitting Antibody Conjugate

^{213}Bi-Lintuzumab
- ***Level 1:*** 0.28 mCi/kg
- ***Level 2:*** 0.42 mCi/kg
- ***Level 3:*** 0.56 mCi/kg
- ***Level 4:*** 0.7 mCi/kg
- ***Level 5:*** 1 mCi/kg

- Patients received 16-95 mCi in 3-7 fractions
- Lintuzumab doses adjusted to a specific activity of 12-15 mCi/mg

- Myelosuppression lasted 12-41 days (median, 22 days)
- Transient liver function abnormalities seen in 6 patients
- Maximum tolerated dose was not reached
- 14/18 patients had reductions in bone marrow blasts

Jurcic JG *et al. Blood* 2002; 100:1233-1239.

Results by Disease Status for ^{213}Bi-Lintuzumab Doses ≥ 1 mCi/kg

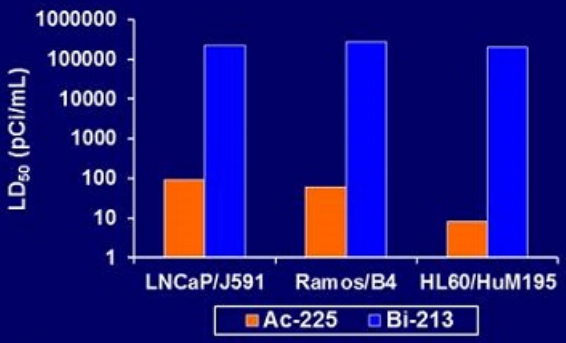
Disease Status	No. of Patients	CR	CRp	PR	Overall Response
Untreated AML, Untreated relapse	18	2	2	2	6 (33%)
1° refractory, Refractory relapse	7	0	0	0	0

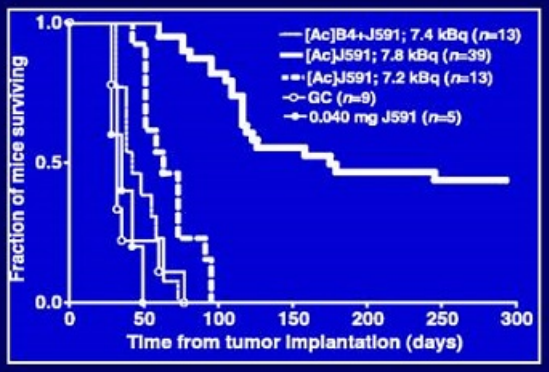
Rosenblat TL *et al. Clin Cancer Res* 2010; 16:5303-5311.

Actinium-225: An α-Particle Nanogenerator

$^{225}Ac \xrightarrow[10\ days]{\alpha} {}^{221}Fr \xrightarrow[4.9\ min]{\alpha} {}^{217}At \xrightarrow[0.032\ sec]{\alpha} {}^{213}Bi \xrightarrow[46\ min]{\alpha}$ Stable Isotopes

- Use of ^{213}Bi is limited by:
  - Short half-life
  - Need for an on-site generator
- ^{225}Ac can be conjugated to antibodies using DOTA.
- ^{225}Ac-labeled antibodies are 1,000-10,000 times more potent *in vitro* compared to ^{213}Bi analogs.
- Nanocurie doses of ^{225}Ac-labeled tumor-specific antibodies prolong survival of mice in xenograft models.

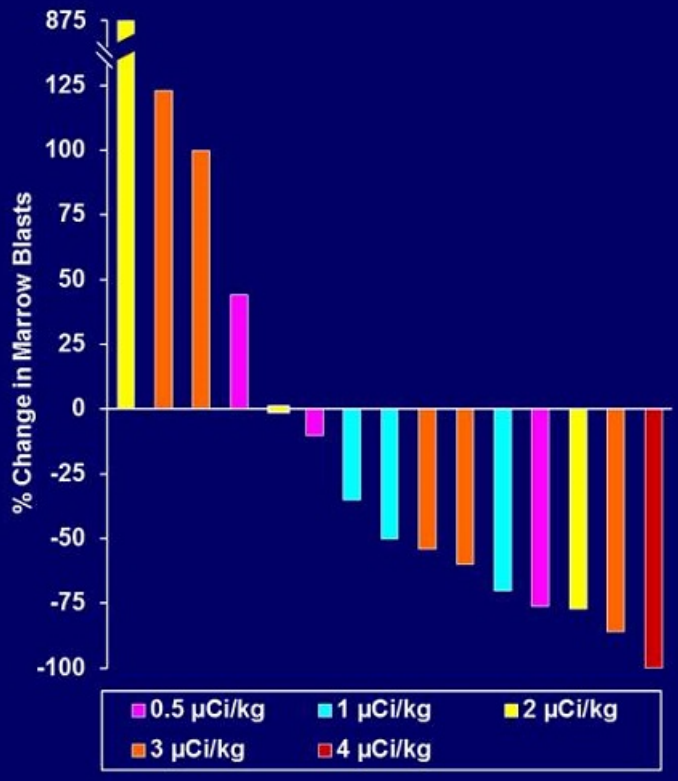




McDevitt MR *et al. Science* 2001; 294:1537-1540.

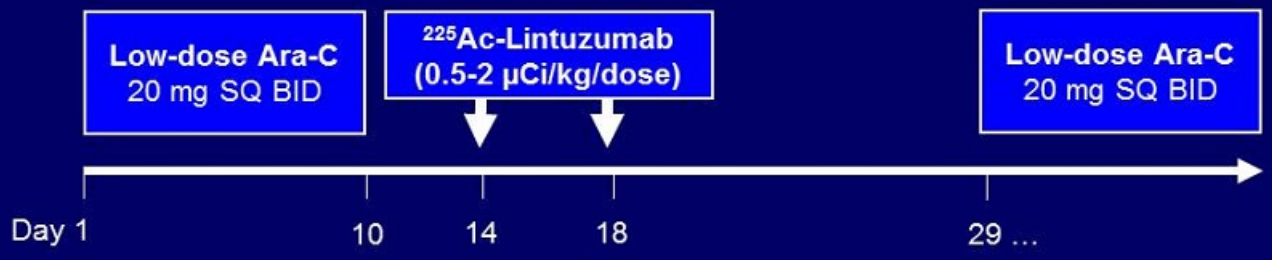
Phase I Trial of ^{225}Ac-Lintuzumab (Actimab-A)

- 18 patients with relapsed or refractory AML received 0.5-4 µCi/kg
- Dose-limiting toxicity was prolonged myelosuppression
- No renal toxicity was seen
- Bone marrow blasts reduced in 10/15 (67%) evaluable patients
- 8 patients (53%) had blast reductions of ≥ 50%
- 3 patients receiving 1, 3, and 4 µCi/kg achieved ≤ 5% bone marrow blasts

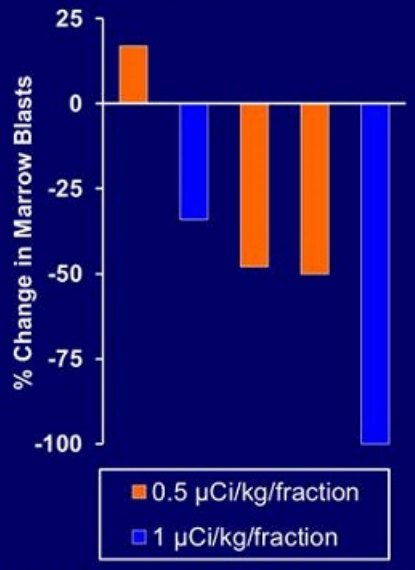


Jurcic JG *et al. Blood* (ASH Meeting Abstracts) 2012; 118:768.

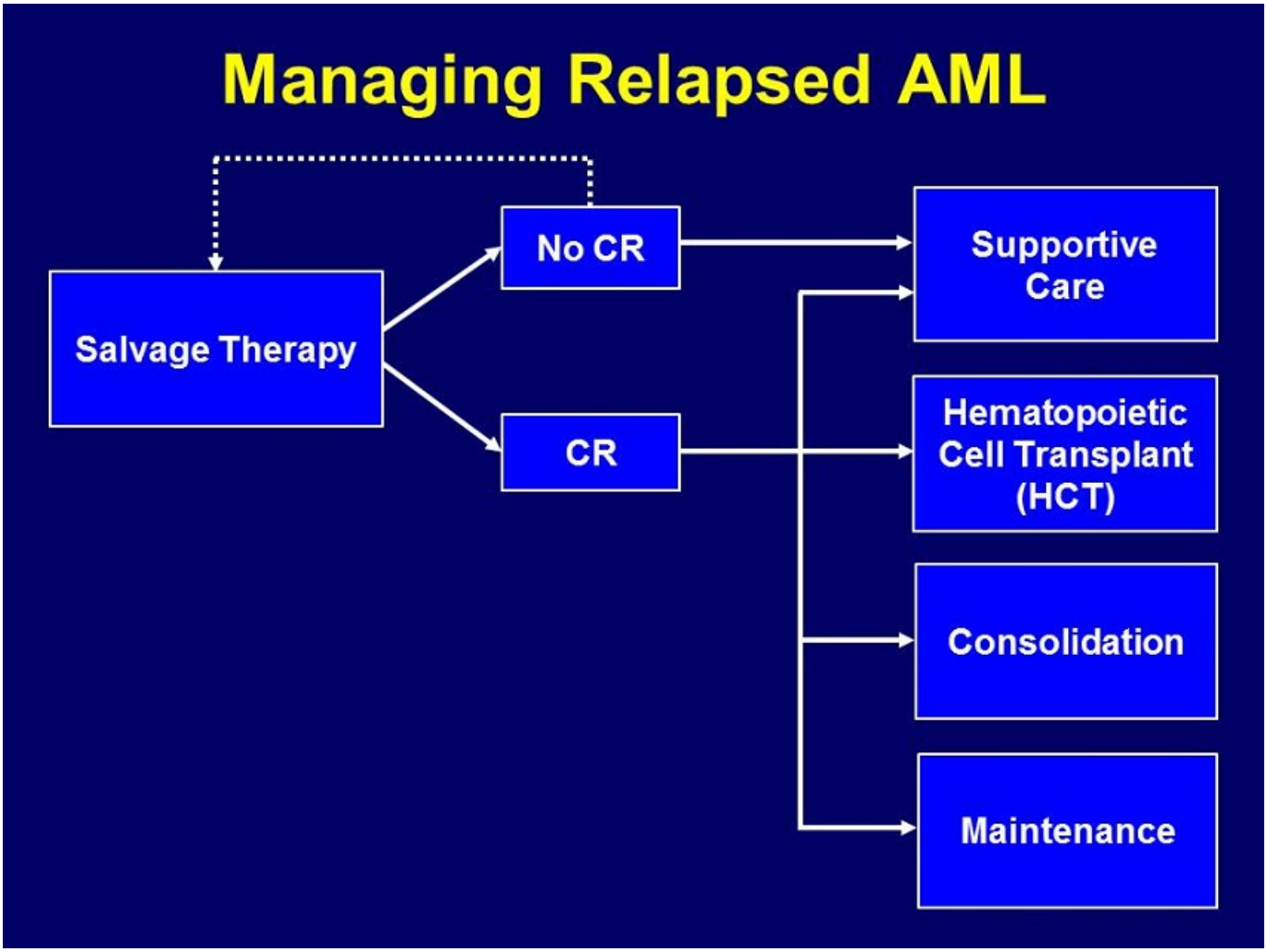
LDAC + Actimab-A in Older AML Patients



- Bone marrow blast reductions seen in 4 patients (57%) after 1st cycle
- Mean blast reduction was 58% (range, 34-100%)
- Median number of cycles given was 2 (range, 1-4)
- Median time to progression was 2.5 months (range, 2-7+ months)
- Accrual continues to define MTD and response rate



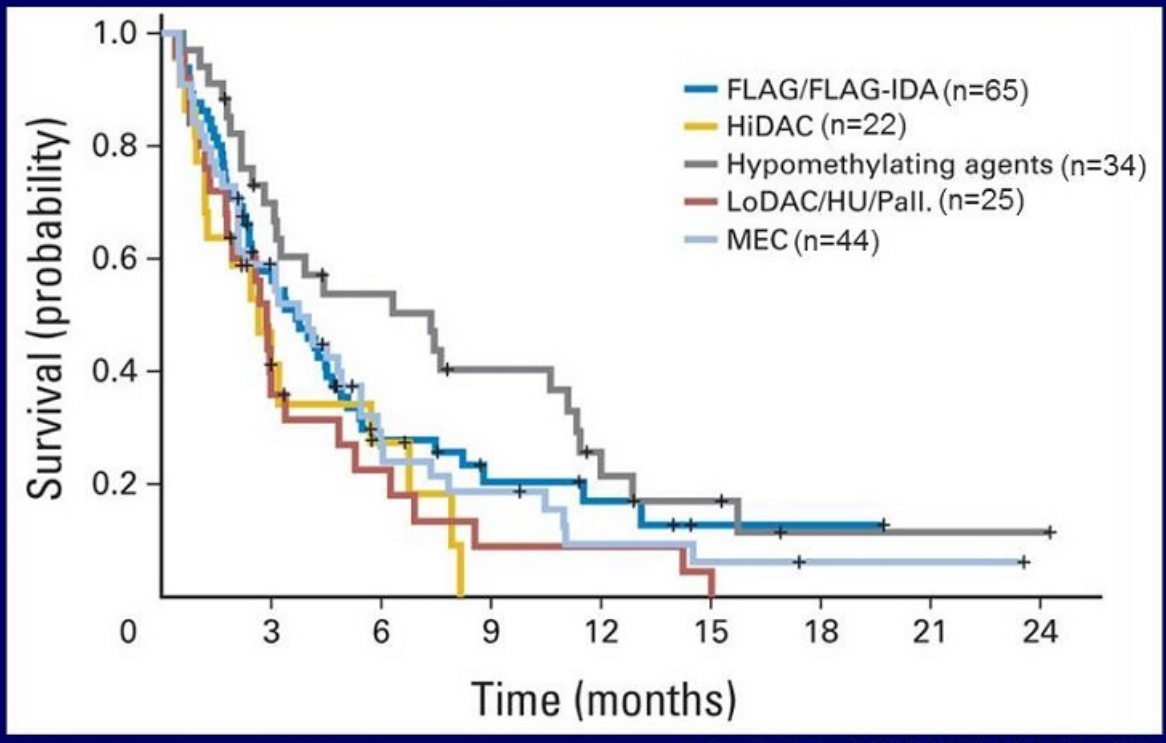
Jurcic JG *et al. Blood* (ASH Meeting Abstracts) 2013; 122:1460.


Managing Relapsed AML
Salvage Therapy
No CR
CR
Supportive Care
Hematopoietic Cell Transplant (HCT)
Consolidation
Maintenance

Salvage Therapy for Relapsed AML

- No FDA-approved regimens
- Standard chemotherapy
  - High-dose cytarabine
  - Etoposide/mitoxantrone ± cytarabine (MEC)
  - Fludarabine/cytarabine/G-CSF ± idarubicin (FLAG-Ida)
  - Cladribine/cytarabine/G-CSF ± idarubicin (CLAG-Ida)
  - Hypomethylating agents
- Investigational therapy
  - Antibodies, drug conjugates
  - Novel chemotherapy agents
  - Small molecule inhibitors (e.g., *flt-3*, *IDH1, IDH2*, etc.)
  - Others

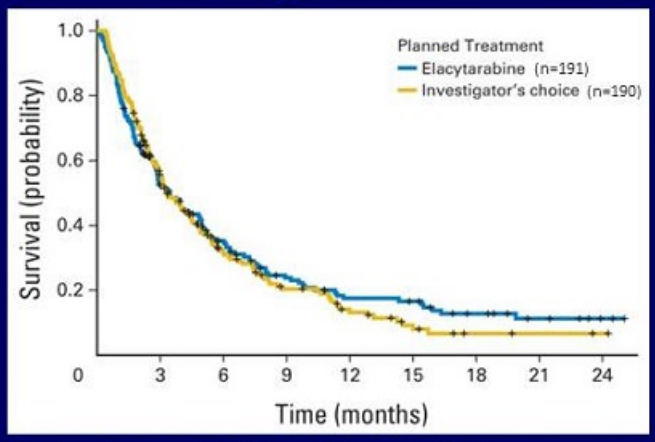
Outcomes after Salvage Chemotherapy for Relapsed AML



Roboz GJ *et al. JCO* 2014;32:1919-1926.

Recent Phase III Trials for Relapsed AML

Elacytarabine



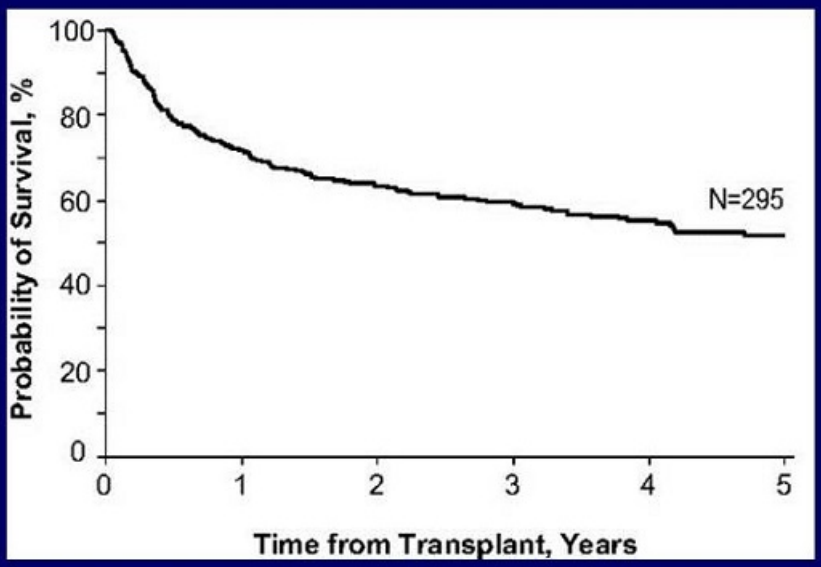
Roboz GJ *et al*. *JCO* 2014;32:1919-1926.

Vosaroxin

	Vosaroxin + Ara-C (n=356)	Placebo + Ara-C (n=355)	*P*-value
Median OS	7.5 mos	6.1 mos	0.06
CR	30.1%	16.3%	< 0.001
30-day mortality	7.9%	6.6%	
Grade ≥3 SAEs	55.5%	35.7%	

http://ir.sunesis.com/phoenix.zhtml?c=194116&p=irol-newsArticle&ID=1974155

HCT in 2nd Remission



Foreman SJ, Rowe JM. *Blood* 2013; 121:1077-1082.

- OS after HCT in CR2 for patients 18-50 yo:
  - 6 m: ~80%
  - 12 m: ~70%
  - 2 y: ~60%

BUT:

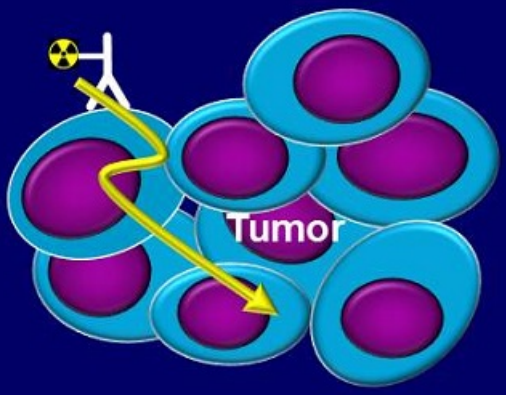
- Only ~15% enter CR2, so OS for all patients is:
  - 6 m: ~12%
  - 12 m: ~10%
  - 2 y: ~10%

Impact of Disease Burden on HCT Outcomes

Disease burden	No. of patients	Median survival (mos.)	Median PFS (mos.)
Morphologic & cytogenetic remission	8	10.4	7.8
Morphologic remission only	6	4.6	2.9
Overt relapse	33	5.9	2.8

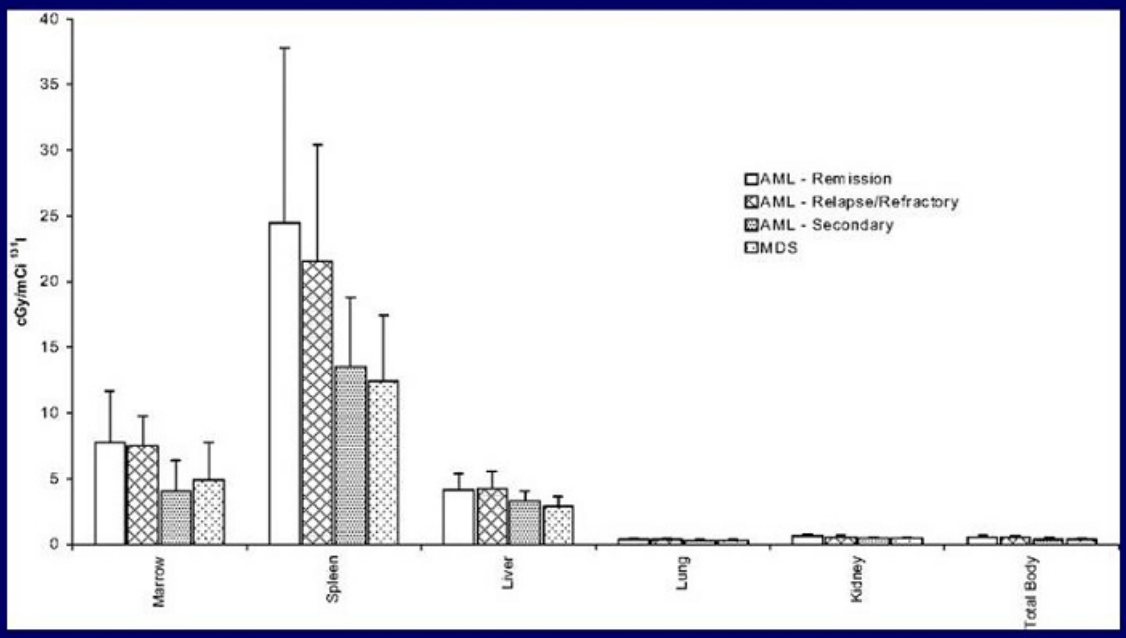
Kebriaei P *et al. Bone Marrow Transplant* 2005; 965-970.

Rationale for RIT in HCT Regimens



- AML is highly radiosensitive.
- TBI is effective in HCT regimens at high doses.
- TBI cannot be safely dose escalated.
- RIT can increase radiation doses to leukemia cells and normal bone marrow without increasing doses to normal tissues.
- Iomab-B consists of an anti-CD45 mAb that targets lympho-hematopoietic cells and the β-particle emitting radionuclide ^{131}I.

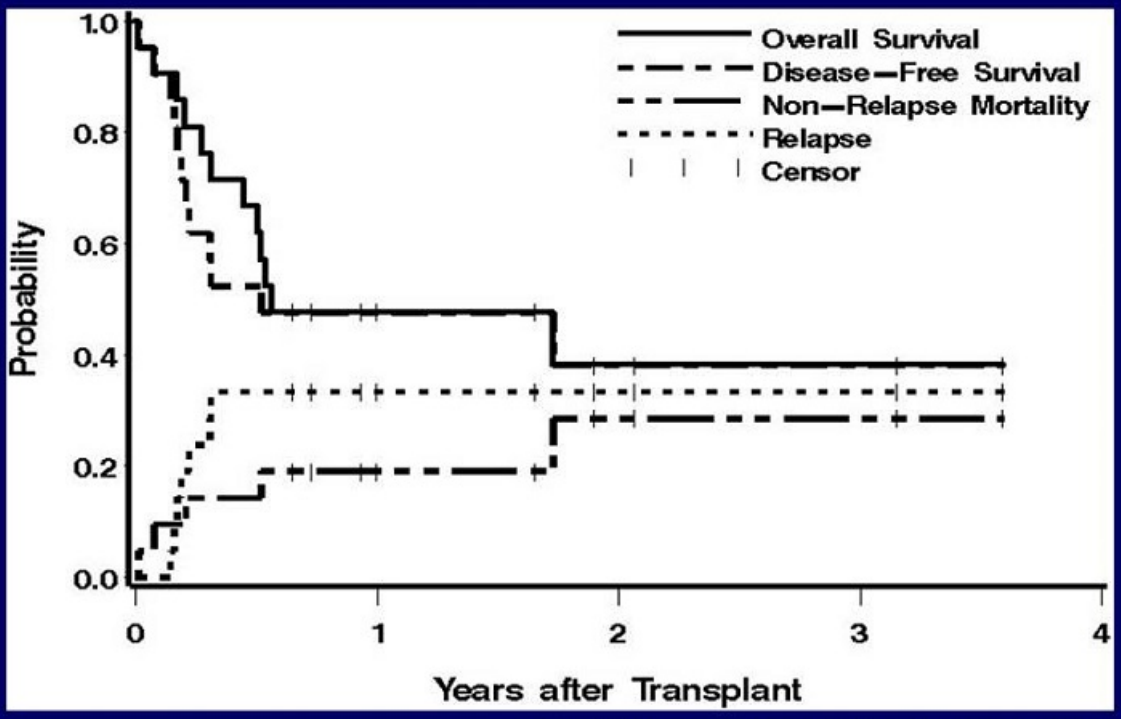
Iomab-B Biodistribution



Treatment at MTD (24 Gy to liver) delivers ~36 Gy to marrow and ~100 Gy to spleen.

Pagel JM *et al. Blood* 2009; 114:5444-5453.

Outcomes after Iomab-B at MTD

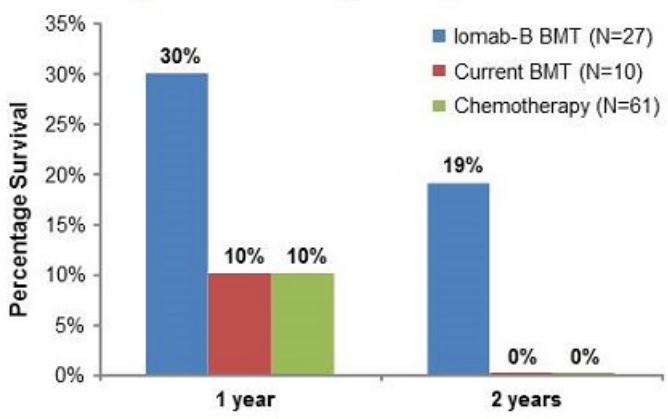


Pagel JM *et al. Blood* 2009; 114:5444-5453.

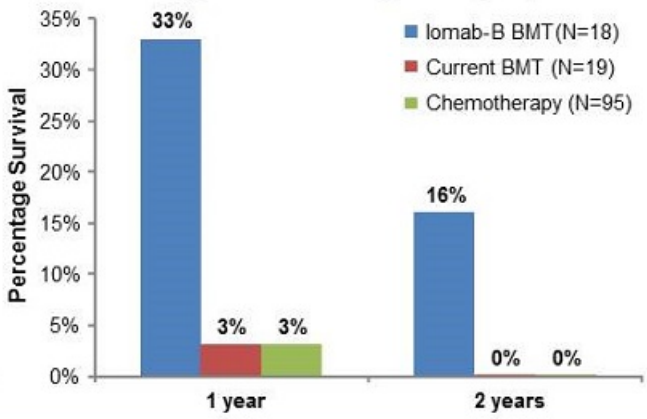
Compelling Results Enable Pivotal Phase III Trial

- Complete response rate: 100%
- Engraftment by Day 28: 100%
- Transplant related mortality: 14% (same as RIC)
- Non-relapse mortality (NRM):
  - Day 100: 10%
  - Overall: 20% (46% with myeloablative conditioning)

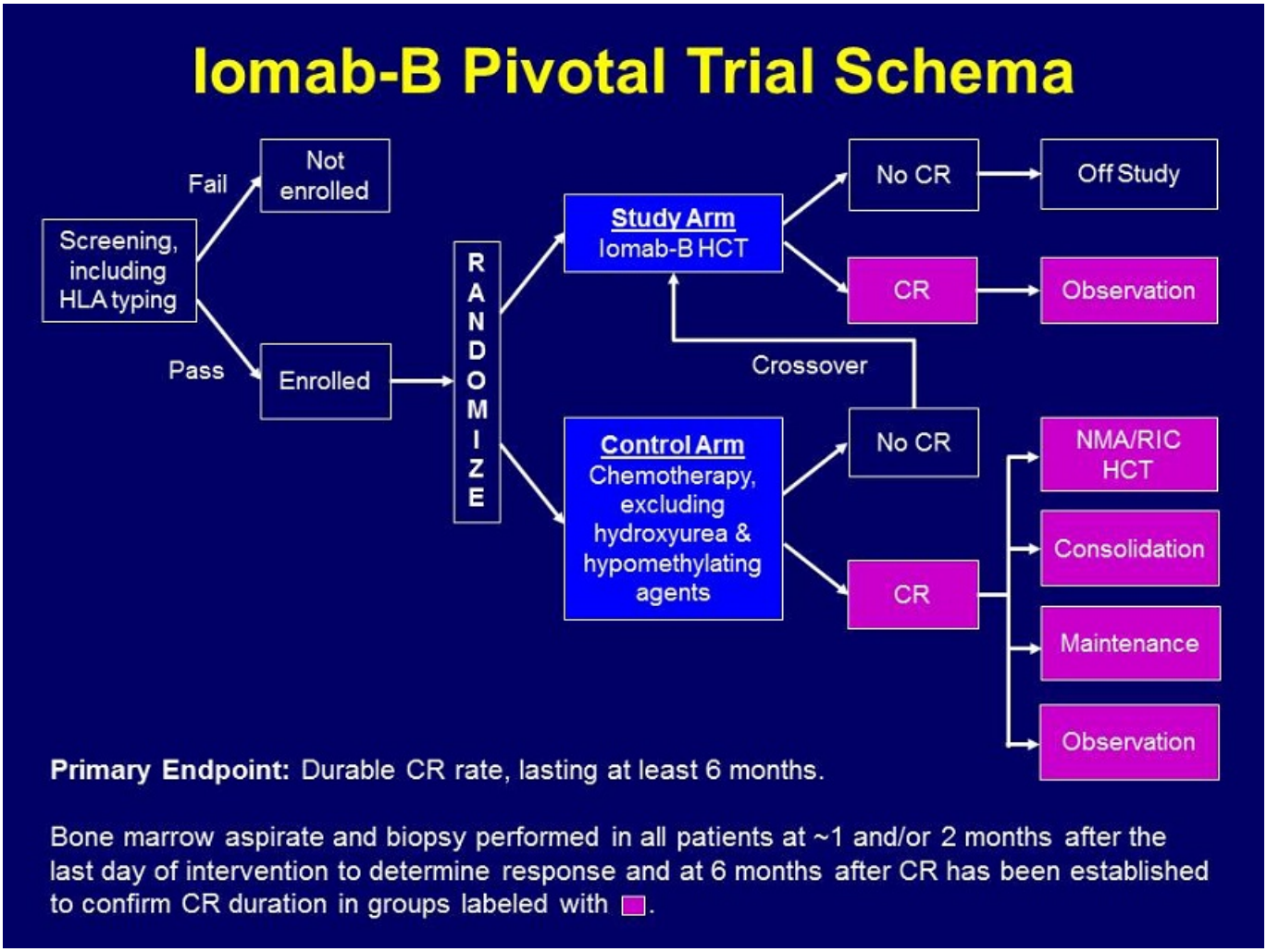
All relapsed/refractory AML patients > 50



Rel/ref AML pts > 50 with poor cytogenetics



N = Number of patients treated
Iomab-B results from FHCRC clinical trials
Current BMT and Chemotherapy results from MD Anderson outcomes analysis


Iomab-B Pivotal Trial Schema
Fail
Not enrolled
Screening, including HLA typing
Pass
Enrolled
RANDOMIZE
Study Arm
Iomab-B HCT
No CR
Off Study
CR
Observation
Crossover
Control Arm
Chemotherapy, excluding hydroxyurea & hypomethylating agents
No CR
CR
NMA/RIC HCT
Consolidation
Maintenance
Observation
Primary Endpoint: Durable CR rate, lasting at least 6 months.
Bone marrow aspirate and biopsy performed in all patients at ~1 and/or 2 months after the last day of intervention to determine response and at 6 months after CR has been established to confirm CR duration in groups labeled with ■.

Conclusions

Actimab-A

- α-particle immunotherapy results in efficient single-cell tumor kill.
- Single-agent ^{213}Bi-lintuzumab has anti-leukemic activity and produced remissions when given with cytarabine.
- ^{225}Ac-lintuzumab (Actimab-A) showed safety and efficacy in a phase I trial and is under study with LDAC for untreated older AML patients.

Iomab-B

- Poor response and toxicity of conventional salvage chemotherapy are barriers to curative HCT for relapsed AML.
- ^{131}I-anti-CD45 (Iomab-B) can potentially increase anti-leukemic effects of conditioning without added toxicity.
- Phase III study will address whether RIT-based conditioning is superior to conventional management for relapsed/refractory AML.