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): January 23, 2018

ACTINIUM PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**000-52446**	**74-2963609**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

275 Madison Avenue, 7th Floor New York, NY	**10016**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(646) 677-3870**

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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 7.01. Regulation FD Disclosure

On January 24, 2018, Actinium Pharmaceuticals, Inc. sent a Company Update and Outlook for 2018 (the "Company Update"), and Key December Events and Their Relevance & Company Fact Sheet ("Key Events") to its shareholders. A copy of the Company Update and Key Events are attached as Exhibit 99.1 and Exhibit 99.2, respectively, to this Current Report on Form 8-K and are 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 99.1	Company Update and Outlook for 2018
Exhibit 99,2	Key December Events and Their Relevance & Company Fact Sheet

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: January 24, 2018

ACTINIUM PHARMACEUTICALS, INC.

By: */s/ Sandesh Seth*
Name: Sandesh Seth
Title: CEO & Chairman

Exhibit 99.1

Letter to Investors

Company Update and Outlook for 2018

On behalf of the team at Actinium, I would like to wish you all an awesome 2018 and also thank our many shareholders for their unstinting support of the Company's proposals for the Annual Shareholder Meeting in December, all of which passed with resounding majorities.

After bearing witness to the Company's performance over the past several years as a board member and Executive Chairman, I have confidence stating that today, Actinium, from an operations perspective, has broken from its past. The several news releases in December provide a visible signal of the capabilities of our new team who have set the foundation for an event driven 2018 that can result in significant value creation. I paraphrase below italicized language from the attached fact sheet which sums up our transformation from dysfunction to function:

- *Clinical operations are now fully functional with over fifty patients enrolled across all 3 clinical trials as of early December with the overwhelming majority enrolled after June 2017.*
    - *Enrollment of Iomab-B in our pivotal SIERRA trial is proceeding well and is on track for the significant clinical milestones expected in 2018.*
    - *Enrollment of Actimab-A which was lackluster compared to industry standards in years prior is now robust despite 4 recent product approvals in AML and this trial is on track for topline results in 2018 as per prior guidance.*
- *The Company has effectively set up the exoskeleton of a commercial infrastructure at this time in terms of supply chain, across all 3 clinical programs.*
- *Importantly, our team has leveraged the myelosuppressive capability of the CD33 targeting construct into a potentially transformative clinical initiative in MDS or Myelodysplastic Syndromes via Actimab-MDS.*
- *Actimab-MDS provides the Company another product candidate in the bone marrow transplant market.*
- *Actimab-M provides another shot on goal for Actinium's CD33 Program and bolsters our claim that this program has best-in-class potential.*
- *The launch of the AWE Program is designed to build on these results for internal purposes and collaborations. Our new Chief Scientific Officer, Dr. Dale Ludwig is expected to add material value to these efforts going forward.*

I would also like to provide some perspective on our programs and the progress we have made last year, most of it under the direction of our new management team.

Building an Industry Leading CD33 Program with Multiple Shots on Goal

The Company is developing, potentially, the leading CD33 targeting program in the industry with clinical programs in three indications:

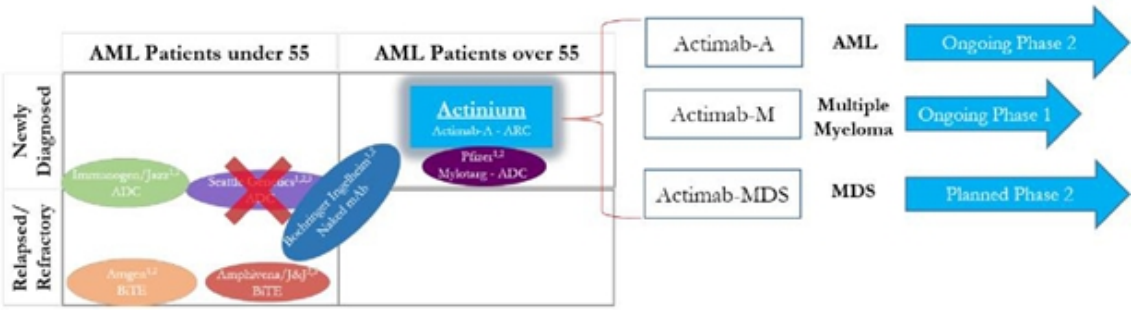
- Actimab-A for unfit elderly AML patients in Phase 2
- Actimab-M for refractory multiple myeloma in a proof of concept Phase 1 trial
- Actimab-MDS for BMT conditioning in high-risk MDS patients with a planned Phase 2

As illustrated in the diagram below, there are several large biotech/pharma companies developing drug candidates targeting CD33 but only in AML as they may be limited by their technological approach. Actinium is able to pursue multiple indications because our ARC or Antibody Radiation Conjugate approach has several advantages:

- The radioisotope can destroy cellular DNA from the cell surface due to linear energy transfer, so an ARC does not need to internalize. This capability is important as it translates to lower drug concentrations required for potency and also lower target expression.
- ARCs can also destroy cells by crossfire which further increases their potency. This ability provides a viable approach in diseases outside of AML like multiple myeloma and MDS. ADCs, bi-specifics and naked antibodies are unlikely to have the same potential.
- Potency of the ARC and low amounts of antibody required for effective targeting translate to relative ease of administration, a safety benefit, monotherapy potential and treatment on an outpatient basis.

Actinium's CD33 program should yield multiple clinical milestones in 2018 that can solidify its leadership potential.

Actinium's CD33 program is the only unpartnered program developed by a smaller company.



I am excited about the progress we have made under this program. Our Chief Medical Officer, Dr. Mark Berger, is something of a CD33 expert who was responsible for the first approval of Mylotarg. Under his stewardship, enrollment in our lead trial for Actimab-A is proceeding well and topline results are expected by mid-year. Actimab-M and Actimab-MDS are also being well executed and I believe that in 2018 we will progress the CD33 program to a point where its superiority in the class is well established.

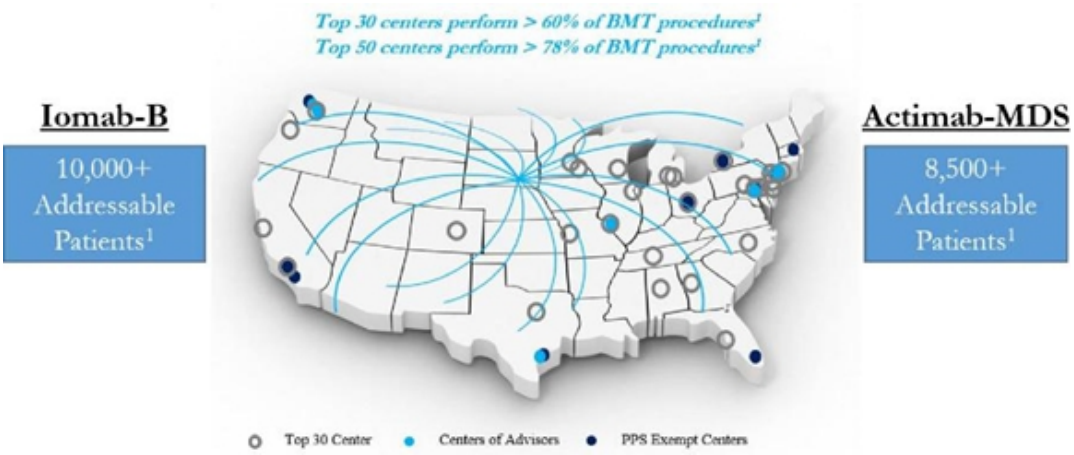
Unlocking Significant Value in Myeloablation for Bone Marrow Transplant

Bone Marrow Transplant or BMT is an accepted way of treating cancer patients that can result in cures. This area of medicine while well-established is not well-serviced by biopharma companies and consequently not well understood by investors as there are very few companies that focus on improving BMT. Lately the area has been drawing some attention by "smart money" venture investors and the investment banks that service them, as companies are beginning to focus on improving various aspects of BMT. Also, certain analysts and investors are starting to realize that BMT offers a successful and well-established pathway for curing cancer and are making insightful comparisons with the currently more limited CAR-T therapy which should help bring more attention to this area of medicine.

Iomab-B, our CD45 targeting ARC and Actimab-MDS are being developed to provide enhanced access to bone marrow transplant, with improved transplant outcomes via improved myeloablation or conditioning of the bone marrow prior to a transplant. In plain English, these drug candidates wipe out the diseased bone marrow effectively but in a much safer way than the highly toxic chemotherapy regimens that are current standard of care. As a result of this effect, patients that cannot withstand chemotherapy can go to transplant with our drug candidates and have better results from the procedure including cures. Actimab-M also has that potential in transplant.

The concentrated nature of centers providing bone marrows transplant positions Actinium uniquely to serve this major unmet medical need with the progress made in 2H:2017. Our hard-won relationships with key transplant centers, understanding of internal protocols governing use of ARCs and transplant, a well-functioning supply chain under the leadership of Dr. Nitya Ray, and the simple fact that the prior data in hundreds of patients treated with our drug candidates attracts investigators to participate in our programs, provides the foundation for realizing this vision and making material strides towards that goal in 2018. *Important to note that we are the only company with programs that are as advanced, and we intend to extend our leadership position this year.*

Actinium is unique in that there is no other company with a multi-disease, multi-product pipeline that targets improved transplant access and outcomes via improved myeloablation.



Company Outlook

In a nutshell, recent events send a clear signal that the Company is now fully functional, able to operate efficiently on all fronts, and recruit high quality talent. Indeed, we are now capable of driving toward the milestones of 2018 that have the potential for significant value accretion from our 4 clinical programs and the AWE Program. Assuming that the early signs bear themselves out and yield positive results, significant and transformative value creation is possible.

Program & Milestones	1H:2018	2H:2018	1H:2019	2H:2019	2020
Iomab-B					
• 50%, 75% & 100% enrollment	X	X			
• DMC Safety Analyses	X	X			
• Ad Hoc Interim Analyses		X	X		
• Top line data readout				X	
• BLA filing submission				X	
• Commercialization preparation			X	X	
• Commercial launch					X
Actimab-A					
• Complete patient enrollment	X				
• Top line analysis		X			
• FDA End of Phase 2 meeting		X			
• Pivotal trial initiated			X		
• Continue Phase 2/Pivotal trial				X	X
Actimab-M					
• Complete Phase 1 trial enrollment		X			
• Top line data readout		X			
• Initiate Phase 2/Pivotal trial			X		
• Continue Phase 2/Pivotal trial				X	X
Actimab-MDS					
• Pre-IND meeting with FDA	X				
• Phase 2 clinical trial		X	X	X	
Partnerships & Collaborations					
• AWE collaborations					
• Product/program partnerships					

Our executive team is committed to generating value by achieving the milestones above. Our entire company is motivated and energized to materialize our shared vision for Actinium. Our intent over the next three to five years is to build upon the promise of both the CD45 and CD33 programs by gaining approval and commercializing multiple product candidates based on these programs to enhance access to bone marrow transplant with improved outcomes via our improved myeloablation approach and to partner strategically to enhance the value of our programs.

We look forward to providing both company and program updates throughout 2018 as we work both smartly and tirelessly to succeed in this endeavor.

Respectfully,

/s/ Sandesh Seth
Sandesh Seth
Chairman and CEO

Exhibit 99.2

Addendum

Key December Events and Their Relevance
&
Company Fact Sheet

Investor Contacts:

Steve O'Loughlin
Principal Financial Officer.
Actinium Pharmaceuticals, Inc.
soloughlin@actiniumpharma.com

Marek Ciszewski, J.D.
Managing Director, Head of Life Sciences
Liolios Investor Relations
ATNM@liolios.com

Actinium Pharmaceuticals, Inc.
275 Madison Avenue, Suite 702
New York, New York 10016

Key December Events and Their Relevance

Iomab-B - Pivotal SIERRA Trial Update.

The company met its milestone of a trial update which included; the DMC opinion to continue the trial, enrollment progress, supply chain capabilities including supply for crossovers, and protocol modifications designed to boost participation in 2018. Iomab-B, a CD-45 targeting ARC or Antibody Radio-Conjugate is being developed to enable expanded access to Bone Marrow Transplant or BMT with improved outcomes via improved myeloablation in elderly relapsed or refractory patients with AML or Acute Myeloid Leukemia.

Why is this important for Actinium?

Clinical operations are now fully functional with over fifty patients enrolled across all 3 clinical trials as of early December with the overwhelming majority enrolled after June 2017. Enrollment is expected to be bolstered as investigator requests for including more choices in the control arm is accommodated and as all of the 15 activated sites begin to accrue patients. *Enrollment of Iomab-B is approaching 30 patients and is on track stage for the significant milestones expected in 2018.*

The supply chain team has delivered product unfailingly on-demand to the 15 trial sites which represent over 30 percent of BMT volume. This is especially meaningful given that 80 percent of BMT patients are treated in the top 50 or so major teaching hospitals. *The Company has effectively set up the exoskeleton of a commercial infrastructure at this time.*

Actimab-A – **Phase 2 Trial Update**

Actimab-A, a CD33 targeting ARC is being tested as an induction agent in elderly, unfit AML patients with an update provided as per company guidance at the ASH or American Society of Hematology Annual Meeting. Results included high, 69% single agent overall response rate and 98% median reduction in bone marrow blasts or immature cancer cells at the 2.0 *u*Ci/kg high dose and the rationale for migration to the 1.5 *u*Ci/kg dose due to myelosuppression.

Why is this important for Actinium?

The results further demonstrated the potent single agent activity of Actimab-A and its tolerability outside of myelosuppression. Importantly, the 1.5 *u*Ci/kg dose showed a higher ORR than the 2.0 *u*Ci/kg high dose (67% vs 50%) in the Phase 1 portion of the trial and the expectation is that this leg of the trial will result in the balance of safety and efficacy required to support a pivotal trial either as a single agent or in combination like most other drug candidates. *Enrollment of Actimab-A which was lackluster in years prior is now robust despite 4 recent product approvals in AML and this trial is on track for topline results as per prior guidance.*

Importantly, the team has leveraged the myelosuppressive capability of this CD33 construct into a potentially transformative clinical initiative in MDS or Myelodysplastic Syndromes via Actimab-MDS.

Actimab-MDS – Unveiling of a New Clinical Initiative in MDS

Actimab-MDS is a new clinical initiative led by Dr. Gail Roboz of Cornell University and a high-profile consortium of world renowned medical centers that comprise the MDS Clinical Research Consortium. The plan is to initiate in a Phase 2 trial in 2018 that tests a high-dose of our CD33 targeting ARC or Antibody Radio-Conjugate as an improved myeloablation approach to enhance access to transplant and improve outcomes in underserved, high-risk p53+ patients with MDS or Myelodysplastic Syndromes.

Why is this important for Actinium?

Actimab-MDS provides the Company another product candidate in the bone marrow transplant area. The Phase 2 trial costs are significantly defrayed due to participation of the Consortium and on hand availability of major components of clinical drug supply. Actimab-MDS would be commercialized in the same transplant centers as Iomab-B and the concentration of this market will enable leverage of the supply chain and call point relationships.

Actimab-M and AWE Publications at ASH – Rebuilding Scientific Capabilities

The Actimab-M related poster at ASH provided support for the scientific rationale for targeting CD33 in Multiple Myeloma. Actimab-M is a low dose CD33 targeting ARC that is being tested as an induction agent in fourth-line refractory multiple myeloma patients. Launch of the AWE Program or Actinium Warhead Enabling program by showcasing at ASH the 10x superior cell killing power of Darzalex, a blockbuster CD38 targeting antibody when labelled with Ac-225 compared to the unlabeled antibody.

Why is this important for Actinium?

Actimab-M has the potential for also providing enhanced access to bone marrow transplant and improved outcomes due to improved myeloablation. *It provides another shot on goal for Actinium's CD33 Program.*

The ARC approach can provide superior outcomes versus ADCs or naked antibodies as demonstrated by the clinical promise of the CD33 program and the CD38 labelling experiments with Darzalex. *The launch of the AWE Program is designed to build on these results both for internal purposes but also for collaborations. Our new Chief Scientific Officer, Dr. Dale Ludwig is expected to add material value to these efforts going forward.*

Actinium Pharmaceuticals, Inc.

FACTSHEET
January 2018

OVERVIEW

Actinium Pharmaceuticals Inc. is a clinical-stage biopharmaceutical company focused on developing and commercializing targeted therapies for potentially superior myeloablation and conditioning of the bone marrow prior to a bone marrow transplant and for the targeting and killing of cancer cells. Our targeted therapies have demonstrated the potential to result in significantly improved access to bone marrow transplant with better outcomes, namely increased marrow engraftment and survival. Our targeted therapies are ARC's or Antibody Radio-Conjugates that combine the targeting ability of monoclonal antibodies with the cell killing ability of radioisotopes. Three of our four ARC drug candidates are based on our AWE or Actinium Warhead Enabling Technology Platform that utilizes the isotope Actinium-225 (Ac-225) which emits alpha particles. We are currently conducting clinical trials for our four product candidates; Iomab-B, Actimab-A Actimab-M and Actimab-MDS, as well as performing research on other potential drug candidates utilizing our proprietary AWE Technology Platform.

Executive Management

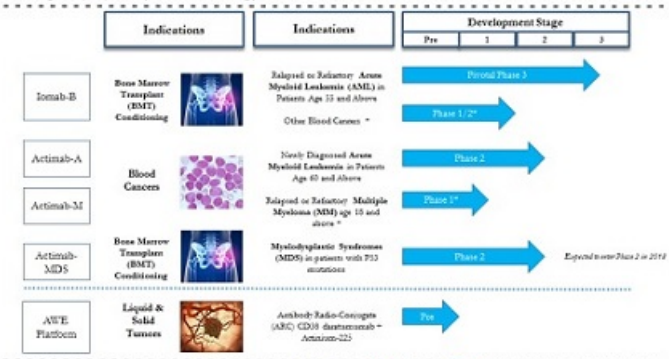
Sandesh Seth
Executive Chairman and CEO

Mark Berger, M.D.
Chief Medical Officer

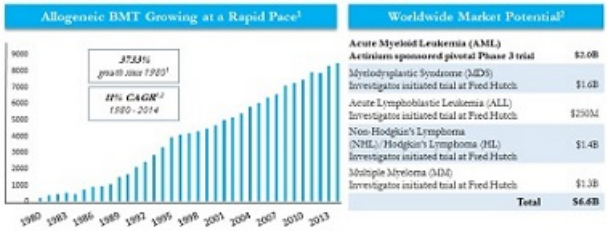
Dale Ludwig, Ph.D.
Chief Scientific Officer

Nitya Ray, Ph.D.
Executive VP, Head of Product Development, Manufacturing and Supply Chain

Steve O'Loughlin
Principal Financial and Accounting Officer



Iomab-B and Actimab-MDS: Market Potential



Worldwide Market Potential[2]	
Acute Myeloid Leukemia (AML)	
Actinium sponsored pivotal Phase 3 trial	**$2.0B**
Myelodysplastic Syndrome (MDS) Investigators initiated trial at Fred Hutch	$1.6B
Acute Lymphoblastic Leukemia (ALL) Investigators initiated trial at Fred Hutch	$250M
Non-Hodgkin's Lymphoma (NHL)/Hodgkin's Lymphoma (HL) Investigators initiated trial at Fred Hutch	$1.4B
Multiple Myeloma (MM) Investigators initiated trial at Fred Hutch	$1.3B
Total	**$6.6B**

1) *Pasquini MC, Zhu X. Current uses and outcomes of hematopoietic stem cell transplantation: CIBMTR Summary Slides, 2015.*
2) *Company estimates*

Iomab-B - Pivotal Phase 3

- Only drug candidate in development that simultaneously ablates cancer cells and bone marrow cells via CD45 target
- Focused on expanding access to transplant and improving outcomes via improved myeloablation
- 150-patient SIERRA trial is expected to complete enrollment by the end of 2018 with a BLA submission for FDA approval targeted in 2019

Iomab-B Proof of Concept Results; Improved Outcomes

1) *Iomab-B BMT: Blood 114:5444-5453 and additional data on file Pagel et. al.*
2) *Biol Blood Marrow Transplant 15 :1431-1438 (2009) MD Anderson outcomes analysis. (Chemo + BMT n=19) (Salvage Chemo n = 95)*

Actimab-A - Phase 2

Phase 2 Trial Highlights:

- 69% response rate as single agent not in combination
- Single agent, two infusions, 7 days apart

Phase 1 Results[1]	
Dose Level (µCi/kg/ fraction)	Low PB Response Rate (CRc)
2 x 0.5	0%
2 x 1.0	33%
2 x 1.5	67%
2 x 2.0	50%

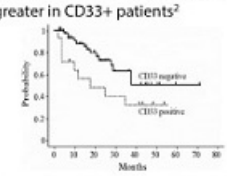
Phase 2 – ASH '17[2]	
Dose Level (µCi/kg/ fraction)	Response Rate (CRc) All low PB
2 x 1.5	Enrolling
2 x 2.0	69% (9/13)

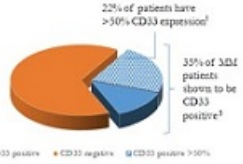
- Median age of 75, 6 (67%) patients had prior hematologic disease - 5 (MDS) & 1 (tCML)
- Limited non-hematologic toxicities > grade 3
- Data expected in 2Q18 on 2 x 1.5 µCi/kg/fraction to reduce myelosuppression

1) *Jurcic et al. 2016 ASH Abstract. Phase 1 Trial of Targeted Alpha-Particle Therapy with Actinium-225-Lintuzumab and LDAC in patients Age 60 or Older with Untreated AML.*
2) *2017 ASH Abstract #2638. A Phase 2 Study of Actinium-225-Lintuzumab in Older Patients with Previously Untreated AML Unfit for Intensive Chemotherapy. Program: Oral and Poster Abstracts. Session: 616. Acute Myeloid Leukemia: Novel Therapy, excluding Transplantation: Poster II*

Actimab-M - Phase 1

- First CD33 agent and alpha-particle therapy in multiple myeloma (MM)
- Intended indication is patients with relapsed or refractory MM
- 25% - 35% of MM patients express CD33[1] and the 3-year mortality rate is 60% greater in CD33+ patients[2]





1) *Levy, Moshe et al "CD33 Is Expressed in a Significant Subset of Multiple Myeloma Patients in the US and May Represent a Viable Therapeutic Target." Blood 130.Suppl 1 (2017): 5378. Web. 05 Jan. 2018.*
2) *H Avet-Loiseau, CD33 is expressed on plasma cells of a significant number of myeloma patients, and may represent a therapeutic target, Leukemia (2005) 19, 2021–2022.)*
3) *Onyx Pharmaceuticals, SEER, NCI, ACS, Celgene, Myeloma Euronet, GLOBOCAN, CIBMTR, Kyprolis Insert, W Matsui JHI estimate, Ferlay et al Eur J Cancer 2013*

Actimab-MDS - Planned Phase 2

- Trial is in collaboration with Dr. Gail Roboz of Weill-Cornell and the MDS clinical research consortium
- Leveraging the myelosuppressive capabilities as a bridge to transplant for high-risk MDS patients with a p53 genetic mutation

Myeloablative Conditioning		Reduced Intensity Conditioning
↑	Treatment Related Mortality	↓
↓	Relapse	↑
↑	Myelosuppression	↓
↑	Extramedullary toxicities	↓

Iomab-B and Actimab-A Trial Sites: SIERRA trial sites represent 25-30% of the BMT market by volume

Mayo Clinic Florida · Banner MD Anderson Cancer Center · Baylor Scott & White Medical Center · Columbia University Medical Center · Weill Cornell Medical College · Yale Cancer Center · Penn State Cancer Institute · The James · The University of Kansas Cancer Center · Fred Hutch Cures Start Here · Penn Medicine · MD Anderson Cancer Network · Mayo Clinic · Roswell Park Cancer Institute · Memorial Sloan Kettering Cancer Center · University Hospitals Cleveland Medical Center · Ochsner Medical Center – West Bank Campus · Duke Cancer Institute · Loyola Medicine · Washington University in St. Louis · Carbone Cancer Center University of Wisconsin School of Medicine and Public Health · HealthCare · Harbor-UCLA Medical Center · St. Francis Cancer Center · Swedish Cancer Institute · WVU Cancer Institute · University of Louisville · KentuckyOne Health · U.S. Department of Veterans Affairs