Actinium Investment Highlights

- Actinium is a leader in the field of ARC’s or Antibody Radiation-Conjugates for Targeted Conditioning
- Pivotal Phase 3 SIERRA Trial over 50% enrolled for lead candidate Iomab-B
- Positive interim SIERRA data from first 25% of patients presented at ASH 2018 in oral presentation
- Targeted Conditioning is ripe for innovation with no competition in clinical trials
- Multi-billion market opportunity contained within the top 50-80 medical centers in the U.S.
- Opportunity for expansion into other indications in BMT or Bone Marrow Transplant, CAR-T and other cell therapy Targeted Conditioning
- Ongoing research collaboration with Astellas Pharma, Inc. utilizing our AWE technology platform

**Pipeline Focused on Eliminating Chemotherapy Prior to Potentially Curative BMT and CAR-T with our ARC’s**

1. Blood Cancer & Bone Marrow Cells are Highly Radiation Sensitive
2. ARC’s delivers high amounts of effective radiation directly to these cells
3. ARC’s target and kill cancer cells and bone marrow cells while sparing non-targeted cells
4. Patient is conditioned and can receive their BMT
5. Our Goals: Improve patient outcomes
   Improve patient access

**Multi-billion Dollar Market Opportunity for Targeted Conditioning Concentrated Within the Top 50-80 BMT Centers**

Near-term catalysts from Pivotal Phase 3 trial, 2nd pivotal program and AWE technology platform

Actinium is leading Targeted Conditioning that is applicable to several diseases and applications representing a growing market opportunity
**Pivotal Phase 3 Iomab-B & the SIERRA Trial**

**Iomab-B Targets CD45: The Ideal Target for BMT Conditioning with ARC’s**

- Iomab-B extensively studied at FHCRC
  - 300+ patients
  - 12 clinical trials
  - 6 diseases
  - Improved survival and curative outcomes

**SIERRA – Only Phase 3 Trial to Offer BMT**

- Need to show a 2x difference in dCR to achieve primary endpoint
- Statistics and powering called for 61 patients per arm

**Compelling Interim SIERRA Results**

- Universal engraftment for all patients receiving Iomab-B including crossover patients
- Iomab-B well tolerated, no treatment related mortality
- Iomab-B gets patients to transplant faster than salvage chemo
- Webinar of Dr. Sergio Giralt, Chief Attending Physician, Bone Marrow Transplant at Memorial Sloan Kettering discussing interim SIERRA results

**Targeted Conditioning Franchise Expansion**

**Actimab-MDS Program: Second Pivotal Program for BMT Conditioning**

- Leverages ATNM’s deep CD33 experience
- Current approaches to high-risk MDS BMT similar to AML (MAC or RIC)
- No other trial of its kind for patients with high-risk MDS
- Webinar of Dr. Gail Roboz, Director of Clinical and Translational Leukemia at Weill Cornell highlighting the Actimab-MDS program

**Iomab-ACT Program: Lymphodepletion for CAR-T and Other Cell Therapies**

- Lower dose of Iomab-B
- Single Dose
- Outpatient
- Fits seamlessly with CAR-T process
- Webinar of Dr. Nirav Shah, Ass. Prof. of Medicine, Hematology at Medical College of Wisconsin highlighting the Iomab-ACT program

**AWE Technology Platform Driving Partnerships and Innovation**

- Executed collaboration with Astellas in March 2018
- Actinium received seven-figure upfront payment and research funding
- Leverages Actinium’s expertise and capabilities in ARC’s