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Actinium Pharmaceuticals Issues Mid-Year Letter to Shareholders Highlighting Accomplishments and Significant Value Enumerating Catalysts Over the Coming Quarters

- Iomab-B Phase 3 SIERRA trial enrollment is accelerating as the number of clinical trial sites increase, competitive position as only induction and conditioning regimen remains unchallenged
- Actimab-A Phase 2 trial remains on target to yield interim data in the second half of 2017
- Executive, clinical development and product development teams laser focused on trial enrollment ensuring maximum opportunities for significant and enduring shareholder value and patient outcomes

NEW YORK, June 15, 2017 (GLOBE NEWSWIRE) -- Actinium Pharmaceuticals, Inc. (NYSE MKT:ATNM) ("Actinium" or "the Company"), a biopharmaceutical company developing innovative targeted therapies for cancers lacking effective treatment options, today issued the following letter to shareholders:

Dear Actinium Shareholders,

We are nearly halfway through the year and it has been a busy one so far at Actinium with quite a few positive changes at the Company. There is a new senior team in place that will build the company during its next phase of development and with summer upon us, we would like to take stock and provide an outlook for all key aspects of the company. We are entering a period where significant milestones are expected from our clinical programs, which can provide the opportunity to establish Actinium Pharmaceuticals as a leading radioimmunotherapy company. Your recalibrated senior management team is cognizant about this potential and is highly motivated to unlock the value inherent in our clinical assets and platform technology during this next phase of Actinium's evolution as a company. I am honored to provide you with this update and on behalf of all of us at Actinium, we are grateful for the support and patience of you our shareholders which allows us to continue our patient-centric and value creating work.

PROGRESS IN 1H:2017 - STAGE IS SET FOR BUILDING INCREASING VALUE ON ALL FRONTS

Iomab-B – SIERRA Trial Underway at Top U.S. Sites with more expected. Key Opinion Leader Support, Positive Regulatory Events and Lack of Competition Bode Well For Success

Trial Update – New Clinical Team Leadership is Intensely Focused on Enrollment

Under our new Chief Medical Officer, Dr. Mark Berger, who has sharply focused our clinical development team, the SIERRA trial is underway at eleven transplant centers, including some of the most prestigious research institutions: MD Anderson Cancer Center, Memorial Sloan-Kettering Cancer Center and Fred Hutchinson Cancer Research Center. The clinical team expects to reach their target of 15 U.S. clinical trial sites by the end of the summer with an additional number of Canadian sites by year-end, enabled by the recent clearance from Health Canada. Cumulatively, the 15 U.S. sites represent approximately thirty percent of the transplant volume in the U.S. It is very unusual for a Phase 3 trial to be able to attain this type of high volume site exposure, which bodes well for enrollment and commercialization.

It is important to note that until the SIERRA trial, Iomab-B had only been used at the world class Fred Hutchinson Cancer Research Center. As Iomab-B is a radiopharmaceutical and requires education and coordination between several constituencies both inside and outside the hospital prior to administration, it has simply taken time to get these sites to the point where they can treat patients. However, once a site is activated, there are patients eligible for this trial and physicians are interested in referring patients to the trial. Further, once a center gains the experience with their first patient, we find that the patient enrollment increases at that center. With the number of trial sites expected to reach steady state in the next several months, we believe that patient enrollment will occur in greater numbers and enable achieving the several interim DMC (Data Monitoring Committee) updates in increasingly shorter intervals.

Our focused and highly motivated clinical team has now done the vast majority of the necessary and time-consuming legwork to activate trial sites. This platform of work should now yield significantly greater clarity on enrollment timelines and trial completion dates. Prior enrollment projections were based on surveys while our latest guidance is based on experience with these sites and also comfort from our now functionally integrated clinical operations, supply chain and clinical strategy teams. As such, we continue to forecast that we will have visible clinical data via the first DMC readout at twenty-five percent enrollment by end of 2017, fifty and seventy-five percent enrollment updates occurring in the first half and middle of next year respectively, with complete enrollment by the end of 2018. Important to note that the two ad-hoc DMC readouts could potentially result in a truncated trial prior to top-line results which are expected in 2H:2019. As such, we expect to be on track for a BLA filing and launch in the first and second half of 2020 respectively.

Competitive Outlook is Bright and the Regulatory Environment Supportive of Expansion and Partnering

While the ramp up of the SIERRA trial has been challenging in terms of getting the leukemia, bone marrow transplant and nuclear medicine groups at hospitals familiar with using Iomab-B and working across disciplines when using it, we use these challenges to our advantage since doctors and clinical staff recognize that progress will only come from new modalities of treatment and new ways of working together. *Keeping progress in mind, we note that Iomab-B still stands alone as the only induction and conditioning agent currently in clinical*

development with no visible competition evident either in the clinic or even via scientific advances. This is an important fact to keep in mind.

In recognition of this fact, it has been rewarding that lomab-B received strong expressions of support by highly regarded physicians at the BMT Tandem Conference, which is the major medical meeting for bone marrow transplant. Dr. Lancet of the Moffitt Cancer Center and Dr. Giralt of Memorial Sloan Kettering, clearly articulated that lomab-B is unique in that it enables transplants in older patients with active relapsed or refractory AML. Patients with active disease are not eligible for a bone marrow transplant and the expectation is that lomab-B will change this paradigm and make transplant available to a significantly greater number of AML patients. Our clinical and pre-commercial strategy team targets key industry conferences such as the BMT Tandem Meeting, Society of Nuclear Medicine and Molecular Imaging Conference and the American Society of Hematology's annual meeting. As we focus intently on delivering results on the SIERRA trial, we are also laying the foundation for the potential commercialization of lomab-B and expansion of its label indications.

There is a large opportunity to expand the use of lomab-B in other hematological conditions for which promising clinical data exists and we are prioritizing development in additional diseases. The positive scientific advice from the EMA this quarter provides a clear regulatory pathway for marketing authorization in the EU for lomab-B. Consequently, we intend to increase our partnering activities related to lomab-B in the United States, Europe and other geographies. While we continue to believe we can commercialize lomab-B in the U.S. independently given the concentrated nature of the transplant market, we recognize the potential value of a strategic partner given the immense potential of lomab-B both in and outside of AML. Consequently, we will work hard to explore all available options with the goal of maximizing the value of lomab-B for you our shareholders.

Actimab-A – Potential for Clear Differentiation versus Other CD33 Targeting Approaches in AML

Our renewed clinical team has done a stellar job in rapidly progressing into the Phase 2 clinical trial after making significant revisions to the clinical trial protocol that we believe will lead to better outcomes for patients. We currently have twelve active clinical trial sites in the Actimab-A Phase 2 clinical trial, which more than doubles the sites in the Phase 1 portion of the trial. More importantly, promising efficacy data from the Phase 1 trial coupled with operational efficiencies are ensuring that we will be in a position to readout data from the trial in 2H:2017. We remain optimistic that these results will provide a clear signal of its efficacy in the target population that is extremely difficult to treat, support its relatively benign safety profile, and inform future development.

Actimab-A targets CD33, which is a marker, expressed in a majority of patients with AML. Mylotarg, which targets CD33, was until recently the only drug approved in AML in the past few decades and our CMO, Dr. Berger, led that development program. Several pharmaceutical and biotechnology companies have programs targeting CD33, however, we are confident that given the potential indicated by prior results of Actimab-A coupled with Dr. Berger's significant development experience and knowledge of the disease's biology, we will be able to generate significant value from this program.

Actimab-A combines the targeting capabilities of the anti-CD33 antibody, HuM-195, with the powerful yet concentrated distribution of Actinium-225's energy. This results in Actimab-A

being an effective anti-leukemic agent but at the same time tolerable treatment that is applicable to older patients who cannot tolerate other therapies. Actimab-A is the only CD33 targeting radioisotope based drug candidate in human clinical trials. While other companies are exploring other novel therapeutic approaches, we believe our targeted radioimmunotherapy approach will provide on balance, superior and highly differentiated safety, efficacy and ease of use that can potentially yield the best outcomes for patients. Based on the results of that interim analysis as well as results from the Actimab-M trial, we will look to secure a strategic partner for the CD33 based asset.

Actimab-M – Trial Can Significantly Expand Value Creation from the CD33 Program

Our Actimab-M construct is the first CD33 targeting agent in a clinical trial for patients with multiple myeloma. We are enthusiastic about this trial for multiple reasons; it represents implementation of new ideas from within Actinium, the strong scientific rationale and preclinical data upon which this trial is based implies lower risk, and positive results would open up a significant additional market for this drug construct bolstering our partnering efforts.

We were excited when our scientific and preclinical investigations led us to ascertain that CD33 is a risk factor that leads to a sixty percent higher, three-year mortality in patients with multiple myeloma. Further there appears to be a substantial subset of myeloma patients that have CD33 expression levels that are in line with those of AML patients, which further supports conducting this trial, as we know that our construct effectively targets CD33. We also believe that our radioimmunotherapy approach is more likely to have an effect versus other CD33 based efforts, as myeloma is a highly radiosensitive cancer. Despite the approval of numerous therapies for multiple myeloma, it remains a largely incurable blood cancer. In fact, we are initially targeting patients who have failed three prior lines of treatment and who are refractory to standard therapies referred to as QUAD (Carfilzomib, Lenalidomide, Pomalidomide, and Dexamethasone). Traditionally, therapies in these last line patients have been approved on the basis of single-digit complete response rates. This represents a relatively low threshold and we are optimistic that the Actimab-M trial can produce higher responses.

We are delighted to be working with Dr. Yair Levy of Baylor University Medical Center on this Phase 1 trial for Actimab-M. We expect to readout topline data from this study next year and positive safety and efficacy signals will open up options that would include; pursuing a registration study and in partnership, combination trials.

Alpha-Particle Immunotherapy Platform – Efforts Underway to Unlock Value

Even today, external radiation is the most commonly used treatment modality for cancer with approximately fifty percent of cancer patients receiving some form of radiation therapy as part of their treatment. Our technology allows us to directly target cancer internally using antibodies loaded with actinium-225, the most powerful form of medical radiation, with greater efficacy and lower side effects than external radiation. Actinium has long held a singular position in actinium-225 based research and development but this situation is changing as academic researchers have produced clinical data in cancers outside of AML which demonstrate clearly that actinium-225 holds tremendous potential and is superior to beta isotopes in efficacy. We note from our participation in the 10th International Symposium on Targeted Alpha Therapy in Japan and the Society of Nuclear Medicine and Molecular

Imaging Conference in Denver, that there is increasing appreciation of the potential of actinium-225 based approaches for producing major medical breakthroughs. Actinium based therapeutics are being viewed as the wave of the future in many areas of oncology and attracting other companies to this space. Actinium welcomes such interest and intends to adopt a collaborative approach in the belief that a rising tide will benefit all ships while blazing a path forward as the leading actinium-225 based company. We have initiated internal efforts and strategies that will result in pipeline expansion and partnerships over time that leverage this capability and look forward to updating you on our progress.

OUTLOOK - STAGE IS SET FOR CREATING INCREASING VALUE ON ALL FRONTS

We are intensely focused on patient enrollment in all three trials as we acutely recognize that positive data from these programs will be the key to unlocking value for shareholders and perhaps more importantly for patients and physicians. We would like to point out that while there has been a delay of approximately three quarters with the lomab-B program due to longer than projected site activation times, education and coordination, there has been no change to lomab-B's value proposition and no competitive threat is visible. Therefore, while disappointing to us and shareholders alike, we do not believe that these delays are material overall. The lomab-B program is on track and progressing strongly. The value proposition remains unchanged and increasingly validated due to recognition by leading transplant physicians even during the trial start-up phase that is boosting the progress of the trial. Further, we have made some changes that have resulted in a much stronger and highly motivated organization. Our now functionally integrated clinical operations, supply chain and clinical strategy teams are confident in meeting these deliverables. The table below list all potentially material and value enumerating clinical milestones over the coming quarters.

	Milestone	Timeline
lomab-B	Site Activation Complete (15-20 sites)	2H:2017
	1st DMC Update	2H:2017
	2nd DMC Update	1H:2018
	1st Ad Hoc DMC Update	Mid-2018
	3rd DMC Update	2H:2018
	2nd Ad Hoc DMC Update	2H:2018
	Complete Patient Enrollment	End 2018
	Top Line Data Results	1H:2019
	BLA Filing	2H:2019
Actimab-A	Interim Analysis	2H:2017
	Complete Patient Enrollment	1H:2018
	Top Line Data Results	1H:2018
Actimab-M		
	Top Line Data Results	1H:2018

We have made material progress in the first half of 2017. Our clinical trials are now actively recruiting patients across the country at well over 20 clinical trial sites and patient enrollment is accelerating. There are no shortcuts or easy buttons in biotechnology drug development, just hard work and execution. The core leadership and senior team at Actinium has been refreshed this year and our people have never been more committed and focused on the tasks at hand. We are dedicated to improving the outcomes for patients in the disease

areas we target and to bringing benefit to them and their families. We are also staunch in our longer-term efforts to establish targeted radioimmunotherapy as a key option in cancer therapy and Actinium as a leading radioimmunotherapy company. We believe this vision is integral to generating significant and enduring value for you, the shareholders of Actinium.

Sincerely,

Sandesh Seth
Chairman and CEO

About Actinium Pharmaceuticals, Inc.

Actinium Pharmaceuticals, Inc. is a biopharmaceutical company developing innovative targeted therapies for patients with cancers lacking effective treatment options. Actinium's proprietary platform utilizes monoclonal antibodies to deliver radioisotopes directly to cells of interest in order to kill those cells safely and effectively. The Company's lead product candidate lomab-B is designed to be used, upon approval, in preparing patients for a hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. A bone marrow transplant is often the only potential cure for patients with blood-borne cancers but the current standard preparation for a transplant requires chemotherapy and/or total body irradiation that result in significant toxicities. Actinium believes lomab-B will enable a faster and less toxic preparation of patients seeking a bone marrow transplant, leading to increased transplant success and survival rates. The Company is currently conducting a single pivotal 150-patient, multicenter Phase 3 clinical study of lomab-B in patients with relapsed or refractory acute myeloid leukemia (AML) age 55 and older. The Company's second product candidate, Actimab-A, is currently in a multicenter open-label, 53-patient Phase 2 trial for patients newly diagnosed with AML age 60 and over. Actimab-A is being developed to induce remissions in elderly patients with AML who lack effective treatment options and often cannot tolerate the toxicities of standard frontline therapies. In addition, Actinium is developing Actimab-M, which is being studied in patients with relapsed or refractory multiple myeloma in a Phase 1 clinical trial. Actinium is also utilizing its alpha-particle immunotherapy (APIT) technology platform to generate new drug candidates based on antibodies linked to the element Actinium-225 that are directed at various cancers that are blood-borne or form solid tumors. Actinium Pharmaceuticals is based in New York, NY. To learn more about Actinium Pharmaceuticals, please visit www.actiniumpharma.com and to follow @ActiniumPharma on Twitter please visit, www.twitter.com/actiniumpharma.

Forward-Looking Statements for Actinium Pharmaceuticals, Inc.

This news release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and involve risks and uncertainties, which may cause actual results to differ materially from those set forth in the statements. The forward-looking statements may include statements regarding product development, product potential, or financial performance. No forward-looking statement can be guaranteed and actual results may differ materially from those projected. Actinium Pharmaceuticals undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

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