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# Actinium Completes Technology Transfer for Manufacturing of Its Lead Drug Candidate lomab™-B

*Company Now Positioned to Prepare and Initiate Pivotal Phase 3 Clinical Trial*

NEW YORK-- Actinium Pharmaceuticals, Inc. (OTCQB:ATNM.OB) ("Actinium" or "the Company"), a biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers, has successfully transferred the technology for the manufacture of lomab™-B (BC8-I-131), a drug being developed for therapeutic treatment of incurable blood cancers. The Company now intends to complete plans to scale-up, submit an Investigational New Drug (IND) Application to the U.S. Food and Drug Administration and initiate a pivotal Phase 3 clinical trial in 2014.

The processes for radiolabeling, testing and evaluating the stability of lomab™-B have been successfully completed, and plans for scale-up are underway. Actinium has also acquired inventory of the monoclonal antibody BC8 and has planned future large-scale manufacturing of this antibody.

"Moving ahead with the manufacturing of lomab™-B brings us one step closer to commencing a multicenter trial in an area where a new drug is badly needed," said Dr. Kaushik J. Dave, President and CEO of Actinium Pharmaceuticals. "We hope that our drug candidate might prove to be a life-saving treatment for patients who currently have very few options."

Actinium expects lomab™-B will add to the Company's existing product line that includes Actimab™-A (Ac-225-Lintuzumab), currently in Phase 1/2 clinical trials. Actimab™-A is an antibody-directed alpha emitter being evaluated for acute myeloid leukemia.

## **About lomab™-B**

lomab™-B is a radioimmunoconjugate consisting of BC8, a novel murine monoclonal antibody, and iodine 131 radioisotope. BC8 has been developed by Fred Hutchinson Cancer Research Center to target CD45, a pan-leukocytic antigen widely expressed on white blood cells. This antigen makes BC8 potentially useful in targeting white blood cells in preparation for hematopoietic stem cell transplantation in a number of blood cancer indications, including acute myeloid leukemia (AML), chronic myeloid leukemia (CML), acute lymphoblastic leukemia (ALL), chronic lymphocytic leukemia (CLL), Hodgkin disease (HD), Non-Hodgkin lymphomas (NHL) and multiple myeloma (MM). When labeled with radioactive isotopes, BC8 carries radioactivity directly to the site of cancerous growth and bone marrow while avoiding effects of radiation on most healthy tissues.

## **About Actimab™-A**

Actimab™-A is a drug candidate construct made using Actinium Pharmaceuticals' proprietary patented technology for arming monoclonal antibodies with alpha emitters actinium 225 and bismuth 213. Antibodies are used as high precision delivery systems that bring powerful alpha emitters into or immediately next to targeted cancer cells. Actimab™-A consists of the Lintuzumab monoclonal antibody and actinium 225.

Actinium-225 decays by giving off high-energy alpha particles, which kill cancer cells. When actinium decays, it produces a series of daughter atoms, each of which gives off its own alpha particle, increasing the chances that the cancer cell will be destroyed. The technology was first developed by Dr. David Scheinberg at Memorial Sloan Kettering Cancer Center.

Lintuzumab is a monoclonal antibody that targets CD33, found on myeloid leukemia cells. It is the humanized version of M195, the antibody initially developed by Dr. David Scheinberg of Memorial Sloan Kettering Cancer Center.

### **About hematopoietic stem cell transplantation**

Hematopoietic stem cell transplantation is a \$1.3 billion per year market in the U.S. Over the period 2004–2007 (most recent available data), it was the hospital procedure with the fastest-growing number of hospital stays and aggregate cost growth in the U.S., according to the U.S. Government Agency for Healthcare Research and Quality.

In 2010, about 20,000 transplants were performed in the U.S. Approximately 12,000 were autologous and approximately 8,000 were allogeneic. Worldwide, there were about 60,000 transplants overall; about 34,000 autologous and 26,000 allogeneic. The number of patients over the age of 50 has been steadily increasing over the last decade and based on the latest available data grew from 8 percent in 2000 to 21 percent in 2005 and 27 percent in 2007.

### **About Actinium Pharmaceuticals**

Actinium Pharmaceuticals, Inc. is a biopharmaceutical company that develops innovative alpha particle immunotherapeutics based on its proprietary platform for the therapeutic utilization of alpha particle emitting actinium-225 and bismuth-213 radiopharmaceuticals in association with monoclonal antibodies.

### **For more information:**

Visit our website [www.actiniumpharmaceuticals.com](http://www.actiniumpharmaceuticals.com)

### **Forward-Looking Statement for Actinium Pharmaceuticals, Inc.**

This news release contains “forward-looking statements” as that term is 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 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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