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): June 11, 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.)

501 Fifth Avenue, 3rd Floor New York, NY	**10017**
(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

Iomab™-B Product and Company Update

Actinium Pharmaceuticals Inc. (the "Company") is reporting additional information associated with a recent panel presentation of key opinion leading physicians and related to its lead product candidates, Iomab™-B and Actimab-A. A panel at the NewYorkBIO-CONference on May 15, 2014 of leading hematologists/oncologists with expertise in treating acute myelogenous leukemia (AML) demonstrated the significant unmet medical need for older (>55 years of age) patients with relapsed or refractory AML. The panelists clarified the potential role of Iomab™-B in extending these patients' lives and discussed supportive clinical data, as well as practical considerations and the potential safety and tolerability of the drug candidate. The physician panel also elaborated on the rationale for the upcoming pivotal clinical trial for Iomab™-B, including justification for the design of the control arm of the study, as well as the primary and secondary endpoints.

The partial transcript of the proceedings is available below and includes discussion points that pertain directly to our target patient population and the application of Iomab™-B. All corresponding videos with slide presentations will be made available via links on the Company's website and the associated press release.

The panel discussion was titled *"Can Older Refractory/Relapsed AML Patients Undergo Successful BMT without Entering CR First?".* CR is complete remission. The panel highlighted the significant unmet medical need for older patients with AML and the role of radioimmunotherapy (RIT), with a specific focus on Iomab™-B. Relapsed/refractory AML patients lack options and have poor historical outcomes if given hematopoietic stem cell transplantation (HSCT) without first achieving complete remission, but the panel noted that Iomab™-B could change this paradigm.

About The Panel

The panel reviewed Iomab™-B survival data and discussed the potential for Iomab™-B to overturn the old paradigm that remission is required for HSCT, providing an opportunity to address a broader patient population and at an earlier stage in treatment. Administration of Iomab™-B to older relapsed/refractory AML patients enables them to be given potentially curative HSCT which they would otherwise not qualify for or be able to tolerate. Dr. Sergio Giralt, Chief of the Adult Bone Marrow Transplant Service at Memorial Sloan Kettering Cancer Center, discussed the pivotal trial design for Iomab™-B, in relapsed-refractory AML patients >55. This is a single-arm controlled study which has been planned with FDA guidance. Dr. Giralt explained that the control arm of physician's choice of chemotherapy, was both sensible and necessary because it reflects current best practices, and physicians will be amenable to enrolling their patients in such a trial. He further stated that the control-arm patients that do achieve the primary endpoint of complete response will be given HSCT, and those that do not achieve complete response will cross over into the study arm. Furthermore, Dr. Joseph Jurcic, Director, Hematologic Malignancies Section of the Hematology/Oncology Division, Columbia University Medical Center explained that while physicians typically vary or customize their chemotherapy regimens for such patients, there is actually very little variability in survival, which is minimal. Therefore, we would not expect confounding variables within the control arm to diminish the separation from the study arm.

PANEL PARTICIPANTS:

- **Joseph Jurcic, MD**, Director, Hematologic Malignancies Section of the Hematology/ Oncology Division, Columbia University Medical Center
- **Sergio Giralt, MD**, Chief, Adult BMT Service, Memorial Sloan Kettering Cancer Center

- **Markus Mapara**, **MD, PhD**, Director, BMT Program, Columbia University Medical Center
- **Mark Frattini**, **MD, PhD**, Director of Research for the Hematologic Malignancies, Columbia University Medical Center
- **Peter Maslak, MD**, Chief, Hematology Laboratory Service, Memorial Sloan Kettering Cancer Center
- **Sebastian Mayer**, **MD**, Assistant Professor of Medicine, Weill Cornell Medical College; Assistant Attending Physician, New York-Presbyterian Hospital

To access the video webcast of the NewYorkBIO-CONference panel presentation, please go to the Investors section of Actinium's website at www.actiniumpharma.com under the Media Content tab.

About Iomab-B

Iomab™-B will be used in preparing patients for HSCT, the fastest growing hospital procedure in the U.S. The Company established an agreement with the FDA that the path to a Biologics License Application (BLA) submission will include a single, pivotal Phase 3 clinical study, if it is successful. The trial population in this two arm, randomized, controlled, multicenter trial will be refractory and relapsed Acute Myeloid Leukemia (AML) patients over the age of 55. The trial size was set at 150 patients with 75 patients per arm. The primary endpoint in the pivotal Phase 3 trial is durable complete remission, defined as a complete remission lasting at least 6 months. There are currently no effective treatments approved by the FDA for AML in this patient population and there is no defined standard of care. Iomab™-B has completed several physician sponsored clinical trials examining its potential as a conditioning regimen prior to HSCT in various blood cancers including the Phase 1/2 study in relapsed and/or refractory AML patients. The results of these studies in over 300 patients have demonstrated the potential of Iomab™-B to create a new treatment paradigm for bone marrow transplants by: expanding the pool to ineligible patients who do not have any viable treatment options currently; enabling a shorter and safer preparatory interval for HSCT; reducing post-transplant complications; and showing a clear survival benefit including curative potential.

Iomab™-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 (FHCRC) 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 AML, chronic myeloid leukemia (CML), acute lymphoblastic leukemia (ALL), chronic lymphocytic leukemia (CLL), Hodgkin's 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. The BC8 antibody, cell line and related know-how has been exclusively licensed by Actinium from FHCRC for all medical uses in exchange for milestones, royalties, and research support. Actinium has developed a strategy for protecting Iomab-B based on trade secret protection and orphan drug and data exclusivities. The Company intends to file process, labeling and other patents to extend the intellectual property position of Iomab-B for which there are no current patents. Although a partial sequence has been published, the full sequence of the BC8 antibody has not been published and is not known to be in the public domain.

About Actinium Pharmaceuticals

Actinium Pharmaceuticals, Inc. (www.actiniumpharma.com) is a New York-based biopharmaceutical company developing innovative targeted payload immunotherapeutics for the treatment of advanced cancers. Actinium's targeted radiotherapy is based on its proprietary delivery platform for the therapeutic utilization of alpha-emitting actinium-225 and bismuth-213 and certain beta-emitting radiopharmaceuticals in conjunction with monoclonal antibodies. The Company's lead radiopharmaceutical Iomab™-B will be used in preparing patients for hematopoietic stem cell transplant, commonly referred to as bone marrow transplant. The Company is preparing a single, pivotal, multicenter Phase 3 clinical study of Iomab™-B in refractory and relapsed Acute Myeloid Leukemia (AML) patients over the age of 55 with a primary endpoint of durable complete remission. The Company's second program, Actimab-A, is continuing its clinical development in a Phase 1/2 trial for newly diagnosed AML patients over the age of 60 in a single-arm multicenter trial. Actimab-A is an antibody-drug construct containing actinium-225. The Company's patent portfolio includes 35 issued and pending patents, of those 7 issued in the US, 26 issued or pending internationally and two pending in the US. Patents covering certain constructs have been exclusively licensed by the Company from Memorial Sloan-Kettering Cancer Center (MSKCC) in exchange for license fees, research support payments, development milestones, royalties on net sales for the term of the licensed patents or, if later, 10 years from first commercial sale, and 15% of sublicense income the Company may receive. The Company owes MSKCC which is the largest shareholder of Actinium up to $249,463 in past fees and research support payments, which it is obligated to pay by the end of 2014. U.S. patents for the antibody component of the product expire in 2014 (foreign patents have expired), and have been licensed from Abbvie (as successor to Protein Design Labs) in exchange for future development and commercialization milestones, a royalty on net sales for a period of 12.5 years from first commercial sale, a negotiation right to be the clinical and/or commercial antibody supplier, a negotiation right to co-promote Actimab-A in the U.S. on terms to be negotiated, and the grant-back of IP rights covering improvements to the antibody for use other than with an alpha-emitting isotope. The patents licensed from MSKCC and Abbvie span patent lives that extend from 2014 through 2021 in the U.S. The Company also owns patents (pending) covering labeling of the isotope actinium-225 to various antibodies which expire in 2030. The Company sources actinium-225 under an annual agreement with the Oak Ridge National Laboratory that expires at the end of this year and, as in the past, the company expects to renew the contract. The Company owns patents that cover isotope production of actinium-225 in a cyclotron which expire in 2026-2027 in the U.S.

PARTIAL TRANSCRIPT:

The transcript from the 18-minute edited version (which we have titled "Iomab-B's impact on AML") of the panel presentation is below. The full-length discussion is also available via the above video link.

Joseph Jurcic, MD

Treating AML is a daunting task. So this is a population study that was conducted in Sweden, and as you can see for younger patients under age 50, long-term survival is achieved in somewhere around 50 percent, and it's not too much worse if you're 50 to 54. But once you hit 55, things get a lot worse, and of course decade-by-decade it gets worse and worse so that for older patients, say in the 65 to 70 range, long-term survival is extremely rare and the median survival events are, are really only just a few months.

So a very daunting task. And the other sobering fact is this is a disease of older patients. More than half are over age 65 at the time of diagnosis. So, we have a tough job ahead of us, and clearly new agents are necessary to treat this disease more effectively.

Peter Maslak, MD

So, leukemia is a systemic disease, so it requires the institution of chemotherapy in order to rid the body of any traces of malignancy and so by and large the strategy has been relatively unchanged since the 70s. The institution of combination chemotherapy with an anthracycline, a drug like daunorubicin, which was one of the first anthracyclines used in AML. Idarubicin, mitoxantrone, with Ara-C, and this has formed the backbone of AML chemotherapy since the 70s…

In the modern era though, hematopoietic stem cell transplant has been actually equated with a curative therapy in many patients. At first in the younger patient population andmore recently in older patients with the modification of the conditioning regimens, the mini-grafts, which I'm sure Dr. Giralt will mention a bit later.

Mark Frattini, MD PhD

Yeah, so this is a series that came out of a study that Fred Appelbaum led that looked at this outcome, and as you can see across the top, as Dr. Jurcic mentioned at the beginning, age really is a defining parameter here, and as you can see, the number of patients that responded in less than 56, they had a 64 percent complete response rate, with only a third of the patients having resistant disease, and if you look at the, about, 65 and older, they're pretty much lumped into the same category -- about 30 to 35 percent complete response rate, with, again, about the same amount of resistant disease, and when you go down and look at their median survival, it's in the order of months, for the elderly. So really, the therapy, you know, the reasons for this are both toxicities to the therapy, as well as resistant disease, as marked by genetics and what we're learning about more now with molecular abnormalities as well.

Joseph Jurcic, MD

It's uncanny. This data is almost identical to the Swedish population study that I showed you initially.

Peter Maslak, MD

So once somebody's relapsed, they've biologically declared themselves as being incurable with standard sorts of agents, and they either require participation in a clinical trial if they actually are looking to basically improve their lot, or actually a referral to a transplantation center with subsequent hematopoietic stem cell transplant.

Sebastian Mayer, MD

If you want to give an effective dose of chemotherapy or radiation, it will be so high, that the bone marrow will not recover. So early studies have been designed to give this conditioning regimen, as it's called. This can be chemotherapy or radiation or both in combination, and then give a salvage with stem cells from a tissue compatible donor.

Sergio Giralt, MD

…trying to exploit more chemotherapy or more radiation was not going to give us the window of opportunity that we needed, and therefore what we really needed was different ways of delivering chemotherapy or different ways of delivering radiation right to the place where we want it the most, which is the diseased marrow.

Joseph Jurcic, MD

Actually the Hutch has provided some internal data showing that dose - that seven gray seems to be a pretty predictive cutoff, seven grays to the marrow seems to be an important discriminator between long-term survival and not. So, Sergio, what about radioimmunotherapy as a way to deliver this radiation?

Sergio Giralt, MD

So if you think about what we and others have been facing with this, we know that if we could deliver a certain amount of radiation we can probably eliminate even the most resistant of leukemic cells. And the barrier to deliver that radiation, particularly when it's external beam radiation, is that we have to irradiate the whole body and therefore we irradiate normal tissues that can't tolerate these high doses of radiation.

So is there a way of delivering radiation straight to the places that we need?

Radioimmunotherapy is a way of delivering the radiation into the places where the leukemia cells are hiding or where the tumor cells are. The technology is theoretically available for any tumor, as long as we can identify what we'll call a Trojan Horse, or delivery mechanism, that will allow to bring the ionizing radiation close to the tumor while sparing normal tissues. What you will hear today is that Iomab-B is a way of delivering radiation through a monoclonal antibody against CD45, which is expressed in leukemic cells, together with a radionuclide, Iodine-131. So essentially, it's stuck together, and now you're delivering very high doses of radiation to the tumor without delivering those high doses of radiation to normal tissues.

Joseph Jurcic, MD

So, I guess one of the key questions is, does this actually work? Does the radiation get to where it needs to be? And so Markus, I don't know if you want comment on the utility of this approach.

Markus Mapara, MD PhD

Obviously, as Dr. Giralt just pointed out, trying to target the radiation to the hematopoietic system is absolutely key for several reasons. One is, you don't want off-target effects - toxicity by the radiation to other organs. But it's also known that if you damage other organs this will also enhance the risk of developing something which is called GVHD, which you've also heard today. Therefore, targeting is absolutely key and this data shows the bio-distribution to the different organs and shows very, very nicely how little ends up in the lung or the kidneys, but how really the majority of the tracer is being targeted to the hematopoietic tissues, so, to the spleen and to the marrow - really showing that it is possible to target this tracer to the organs where it's really relevant and without hitting the organs which cause the problems when you do the transplant process. You really can specifically target the hematopoietic compartment where leukemic cells are.

Joseph Jurcic, MD

So, the group in Seattle have used this approach on a very poor-risk group of patients - patients with advanced myeloid leukemia who have overt relapse. This is the population, again, that basically had a dismal prognosis of only a few months' survival even with transplant that was done in the setting of overt disease, and they used this approach. And this is the outcome. Markus, would you like to describe the results?

Markus Mapara, MD PhD

Yes, basically this is really enormously fascinating that you're seeing patients here who have resistant disease, and as we've discussed, this is really the worst case scenario for a patient to go into transplant. With an approach which is really limiting the toxicity, and targets only really the hematopoietic tissue you really see, that you get very good overall survival and very acceptable relapse rates here. So, potentially arguing that you're getting 50 percent of the patients [to] survive which is really very, very impressive.

Joseph Jurcic, MD

These sorts of data really challenge the paradigm that you need to be in remission in order to have a transplant. So this is somewhat unexpected, really.

Markus Mapara, MD PhD

And again, I think the major mechanism really is that we are able…we talked about the age group, these are primarily also older patients, we are able to take patients to transplant who otherwise would not be getting a transplant. This is really, I think, a complete change in paradigm.

Joseph Jurcic, MD

So, in fact, now we need to think about moving this forward. Sergio, what would be your sort of strategy to bring this forward?

Sergio Giralt, MD

I think you've identified this is definitely an area of unmet medical need. So, actually, the field has evolved dramatically. Twenty years ago many centers would simply reject patients who were not in remission. And then what would happen is patients would continue to get therapy that as many of you have already seen is ineffective. Then when they tried to do a Hail Mary transplant, it didn't work. So, transplant doesn't work for refractory disease.

So I think as the field has evolved, as we've learned more about how the graft versus leukemia effect works, as more and more of us have decided that rather than continuing to beat patients with chemotherapy, which we know it doesn't work - many of them have tried to take patients to transplant. Those results again have not been great, but at least it shows that you can get patients in remission and that some of them, although a minority of them, can stay in remission for a long period of time. And with traditional, conventional conditioning regimens, the mortality rates is very high.

So, what Iomab-B has allowed us to do is one, it's very well tolerated. I mean really, the mortality…you can't cure somebody who dies from your treatment, that's kind of like the paradigm. So, to be able to cure them, you have to be able to deliver the treatment and actually have them tolerate the treatment well. So the 20 percent one year mortality is actually extremely good. It's half of what one would expect with a traditional ablative regimen. Everybody engrafts, so the cells can take adequately, and it's a relatively well-tolerated procedure, so there is little non hematologic toxicity, so it's not that people are staying in the hospital for weeks and weeks on end, so it is also an economically feasible procedure, instead of…because if you have any treatment that you're keeping patients in the hospital for 50 days, it becomes very difficult to support for transplant centers. They just simply don't have the capacity. This, however, fits right in a niche where you can now provide lifesaving treatment on unmet medical need for patients over the age of 50 who have really no other curative approach.

Joseph Jurcic, MD

This slide shows a proposed scheme for the phase three trial - if you'll walk us through that, Sergio.

Sergio Giralt, MD

If you think about how traditional phase three trials are done. So, you have somebody who says okay, you have refractory acute leukemia. You're gonna get randomized to this, investigational arm, or you're gonna get randomized to a control. So the first problem that we had trying to take this to the agency, was what the path to approval because there's no established control. So, there really is no standard of care - it's not like breast cancer where there is a standard of care that's been established by multiple phase three trials. Here, there really is no standard.

So, the idea was okay, we're going to allow - one arm's to be the investigational treatment, the other arm is going to be what the physicians think is the best chemotherapy, essentially, what people are doing now. So, if you think that patient needs treatment, give them the best you have. And it has to be chemotherapy, so it can't be hypomethylating agents, it can't be an investigational agent and it has to be some form of chemotherapy which has at least an inkling of a chance of achieving a complete response.

So, you think about the study – so then, the next thing, so what's our endpoint? So the endpoint is complete remission, because remember how we built up the case that complete remission is the first step towards cure. If I can't get a patient into a complete remission I can't give them long-term disease control. So, what we believe is that Iomab-B in the context of transplant will get you many more complete remissions than patients trying to get any conventional treatment, and then, even if they don't, then going onto some other form of what we will call consolidation therapy.

So let's say you're on the control arm, you get a complete remission - that's not it. You can either go for observation, you can go for maintenance, you can go for consolidation, or you can go for a reduced intensity transplant. And we think that the preliminary data is so good that despite the fact that the control arm actually gets two chances- you get a complete remission and then you get something to stay in complete remission, while the experimental arm, the Iomab arm, just gets the transplant and that's it.

But we believe that the results are so good that at six months, which is the primary endpoint that the agency decided was important to make a difference, the CR rate is going to be significantly higher for the people who got the experimental arm, the Iomab-B and the transplant, versus those who got the chemotherapy, followed by…and I can tell you, in that control arm, most people who are going to get a complete remission are going to go to transplant. Because that, that book, has already been written. With chemotherapy alone, the CR rate at a year is less than ten percent; those remissions are very short-lived. So the only way to maintain those remissions is some form of transplant treatment afterwards.

Joseph Jurcic, MD

I think the six month time point is actually an important one because again, if you look at this survival curve, most of the relapses that occurred after an Iomab-B containing conditioning regimen happened in that six month time period - so that really does seem to be an appropriate, endpoint for the study. And frankly, I like the study simply because it is real world [Giralt: Correct.] - it's allowing you to pick the chemotherapy that you believe best, and then do what you would do. If that person responds, take them to transplant; or if you don't have an appropriate donor, do what you think is best

Sergio Giralt, MD

So one of the challenges in the other trials is that the problem with the randomized trial in this context in which there is no good control is that if you prescribe what the control is going to be, a lot of physicians will not refer patients because they're not going to expose their patient to a 50 percent chance of getting a treatment that they believe is inadequate. While here, you'll at least get a 50 percent chance of getting the investigational arm and a 50 percent chance of doing what you would have done anyway. Which is, a chemotherapy, and then see if I can take them to transplant.

Man, asks question:

How many different types of chemotherapy options did you have in the control arm?

Joseph Jurcic, MD

The main options will be the sorts of regimens that we had on one of the earlier slides. Options like high dose cytarabine, like FLAG, like MEC. So the standard combinations that are used today."

Man, continues question:

But statistically conducting of the…

Joseph Jurcic, MD

Statistically, well the interesting thing - all of these regimens actually yield about the same results, so, it's going to wash out. In fact there have been studies looking at this even in the randomized setting. All of these - we, you know, as doctors, we like to think we know what's best for our patients and we pick one of these. But the reality is in a randomized setting, it's all about the same, and it almost doesn't matter."

Sergio Giralt, MD

And the statisticians have field days with us because of this. If you recognize that all of these things are the same, why add the variability, why not just say everybody has to get MEC? Because: it will affect the accrual to an enormous degree, and what we want is this trial to accrue as quickly as possible so we can go to the agency and have a drug that we can have in the market to help for patients.

Joseph Jurcic, MD

I hope what we've shown you over the past 45 minutes or so is that poor response and toxicity of conventional salvage regimens really are barriers to getting patients to curative stem cell transplants; that Iomab-B can potentially increase the anti-leukemic effects of conditioning without added toxicity; and that this phase three study will really be the first to address whether radioimmunotherapy used during conditioning will be superior to conventional management strategies for relapsed and refractory AML.

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: June 11, 2014

ACTINIUM PHARMACEUTICALS, INC.

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