UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of January, 2016

Commission File Number: 001-36826

ADVANCED ACCELERATOR APPLICATIONS S.A.

(Exact name of registrant as specified in its charter)

20 rue Diesel
01630 Saint Genis Pouilly, France
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

Form 20-F X Form 40-F _____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Yes _____ No X

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Yes _____ No X

SIGNATURE

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, thereunto duly authorized.

ADVANCED ACCELERATOR APPLICATIONS S.A.

By: /s/ Heinz Mäusli
Name: Heinz Mäusli
Title: Chief Financial Officer

Date: January 27, 2016

ADVANCED ACCELERATOR APPLICATIONS S.A.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated January 26, 2016 titled "Zevacor to produce SomaKit-TATE doses for AAA"

PRESS RELEASE |

Zevacor to produce SomaKit-TATE doses for AAA

Novel kit for the preparation of Ga-68 DOTATATE for neuroendocrine tumor detection

Dulles, Virginia, January 26, 2016 – Zevacor Pharma, Inc. (fka IBA Molecular North America, Inc.), a leader in the manufacture and distribution of radiopharmaceuticals, announced that it has been selected to supply Gallium 68 (Ga-68) DOTATATE doses prepared with a novel kit to U.S. hospitals and imaging centers for Advanced Accelerator Applications S.A. (NASDAQ:AAAP) ("AAA"). SomaKit-TATE is a patented kit currently in development for the preparation of 68Ga-DOTATATE for injection, to help diagnose and manage somatostatin receptor-positive neuroendocrine tumor patients using Positron Emission Tomography ("PET"). The kit has received orphan drug designation from the U.S. Food and Drug Administration ("FDA"). The FDA has also granted Priority Review to AAA's New Drug Application ("NDA") for the kit. The license application for the kit is currently under review by the FDA and the agreement between Zevacor and AAA is in anticipation of NDA approval.

Zevacor's U.S. network of radiopharmaceutical manufacturing facilities will prepare and deliver SomaKit-TATE patient doses to advanced medical imaging sites in key metropolitan areas where high demand is anticipated.

"*We are pleased to work with AAA on this promising diagnostic compound*," noted Peter Webner, Interim Executive Vice President and COO of Zevacor. "*Zevacor's expertise in providing scalable manufacturing and distribution for clinical research doses makes us the premier partner for AAA to use in developing and introducing this new, targeted radiopharmaceutical.*"

"*I believe that SomaKit-TATE has the potential to improve the accuracy of diagnosis while reducing radiation exposure for patients compared to the existing standard,*" said Stefano Buono, Chief Executive Officer, Advanced Accelerator Applications. " *We are pleased to have signed this non-exclusive agreement with Zevacor for the preparation and delivery of SomaKit-TATE. We believe that Zevacor is a flexible and proactive partner who shares our commitment to driving innovation. Zevacor's ability to service and support our sites across the country will be important for the US commercialization of this innovative product. We believe the establishment of broadly available doses of Ga-68 radiopharmaceuticals will also mark an important milestone in the development of PET imaging, a development similar to the establishment of unit dose supply of Fluorine-18 labeled radiopharmaceuticals in the early 2000's*."

About SomaKit-TATE

Somakit-TATE is a novel patented Kit developed by AAA for the preparation of 68Ga-DOTATATE for injection, to help diagnose and manage somatostatin receptor-positive NET patients using Positron Emission Tomography ("PET"). SomaKit-TATE has the potential to improve the accuracy of diagnosis while reducing radiation exposure for patients. The kit has been designated as an orphan drug by the EMA and the FDA and is currently under evaluation to help diagnose Gastro-Entero-Pancreatic Neuroendocrine

cancers via PET/CT imaging. The U.S. Food and Drug Administration ("FDA") has granted Priority Review to AAA's NDA for SomaKit-TATE.

Somakit-TATE is being developed as a companion PET diagnostic product candidate for Lutathera, a Lutetium-177, or Lu-177, labeled somatostatin analogue peptide currently under development for the treatment of GEP-NETs.

About Zevacor Pharma, Inc.

Zevacor Pharma, Inc. (formerly IBA Molecular North America, Inc.) is a leading developer, manufacturer, and distributor of radiopharmaceutical products and educational services used in nuclear medicine and molecular imaging in the United States. Zevacor has a unique product portfolio of tracers that are aimed at improving patient care through the better diagnosis and treatment of disease. Zevacor also provides investigative and custom radiolabeling services to pharmaceutical, biotech, and research institutions nationwide helping them develop the next generation of molecular imaging and therapeutic products. Zevacor Pharma, Inc. is an affiliate of Zevacor Molecular, a PET and SPECT radiopharmaceutical firm based in Noblesville, Indiana and both are a subsidiary of Illinois Health and Science (IHS), a non-profit healthcare system that specializes in enhancing patient care through strategic investments in healthcare-related opportunities. The Zevacor family takes pride in role helping fulfill IHS's mission to enhance longevity and the quality of human life through improved patient care and outcomes. For more information, please visit www.zevacor.com.

About Advanced Accelerator Applications

Advanced Accelerator Applications (AAA) is a radiopharmaceutical company founded in 2002 that develops innovative diagnostic and therapeutic products. AAA's main focus is in the field of molecular imaging and targeted, individualized therapy for patients with serious conditions (Personalized Medicine). AAA currently has 18 production and R&D facilities able to manufacture both diagnostic and therapeutic MNM products, and has over 400 employees in 12 countries (France, Italy, UK, Germany, Switzerland, Spain, Poland, Portugal, The Netherlands, Israel, U.S. and Canada). In 2014, AAA reported sales of €69.9 million (+29.9% vs. 2013). AAA is listed on the Nasdaq Global Select Market under the ticker "AAAP". For more information please visit www.adacap.com

Cautionary Statement Regarding Forward-Looking Statements

This press release may contain forward-looking statements. All statements, other than statements of historical facts, contained in this press release, including statements regarding the Company's strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements reflect the Company's current expectation regarding future events. These forward-looking statements involve risks and uncertainties that may cause actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, but are not limited to, changing market conditions, the successful and timely completion of clinical studies, the timing of

our submission of applications for regulatory approvals, EMA, FDA and other regulatory approvals for our product candidates, the occurrence of side effects or serious adverse events caused by or associated with our products and product candidates; our ability to procure adequate quantities of necessary supplies and raw materials for Lutathera and other chemical compounds acceptable for use in our manufacturing processes from our suppliers; our ability to organize timely and safe delivery of our products or product candidates by third parties; any problems with the manufacture, quality or performance of our products or product candidates; the rate and degree of market acceptance and the clinical utility of Lutathera and our other products or product candidates; our estimates regarding the market opportunity for Lutathera, our other product candidates and our existing products; our anticipation that we will generate higher sales as we diversify our products; our ability to implement our growth strategy including expansion in the U.S.; our ability to sustain and create additional sales, marketing and distribution capabilities; our intellectual property and licensing position; legislation or regulation in countries where we sell our products that affect product pricing, taxation, reimbursement, access or distribution channels; and general economic, political, demographic and business conditions in Europe, the U.S. and elsewhere. Except as required by applicable securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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