
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 May 2017

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 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

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

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: May 30, 2017

ADVANCED ACCELERATOR APPLICATIONS S.A.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated May 30, 2017 titled “Advanced Accelerator Applications and Blue Earth Diagnostics Announce European Manufacturing and Distribution Agreements for Axumin™ (Fluciclovine (¹⁸ F)) for PET Imaging of Recurrent Prostate Cancer”



PRESS RELEASE

Advanced Accelerator Applications and Blue Earth Diagnostics Announce European Manufacturing and Distribution Agreements for Axumin™ (Fluciclovine (¹⁸F)) for PET Imaging of Recurrent Prostate Cancer

Saint-Genis-Pouilly, France and Oxford, UK – May 30, 2017 – Advanced Accelerator Applications S.A. (NASDAQ:AAAP) (AAA), an international specialist in Molecular Nuclear Medicine, and **Blue Earth Diagnostics Ltd.**, a molecular imaging diagnostics company, today announced that they have entered into a non-exclusive manufacturing agreement and an exclusive distribution agreement for the supply of Blue Earth Diagnostics' PET imaging product Axumin™ (fluciclovine (¹⁸F)) in France, Germany, Spain, Italy, and Portugal. Axumin is indicated in Europe for use in Positron Emission Tomography (PET) imaging to detect recurrence of prostate cancer in adult men with a suspected recurrence based on elevated blood prostate specific antigen (PSA) levels after primary curative treatment.*

Axumin is the first and only PET imaging agent approved by the European Commission for use in men with suspected recurrent prostate cancer in all European Union member states as well as in Iceland, Liechtenstein and Norway. Following receipt of marketing authorization for Axumin from the European Commission on May 22, 2017, Blue Earth Diagnostics is working to build a network of authorized and approved manufacturing locations across Europe.

Stefano Buono, Chief Executive Officer of AAA stated, "These agreements with Blue Earth Diagnostics reinforce our position as a leading partner in the highly specialized PET manufacturing and distribution market. With our broad network of 15 PET production sites in five countries, we are one of only two companies with both the specialist manufacturing skills and capacity for large-scale PET production in Europe. We look forward to working with Blue Earth Diagnostics and to further expanding our portfolio of PET products."

Jonathan Allis, Chief Executive Officer of Blue Earth Diagnostics said, "With its broad network, deep sector expertise and shared commitment to delivering innovative molecular imaging agents for patients and their physicians, AAA is an ideal partner for us. The agreements mark a significant step forward in making Axumin commercially available across Europe, and we look forward to working with the team at AAA."

*This press release is intended to provide information about Blue Earth Diagnostics' business in Europe. Please be aware that the approval status and product label for Axumin varies by country worldwide. Refer to the individual country product label for complete information or contact Blue Earth Diagnostics.

About Blue Earth Diagnostics

Blue Earth Diagnostics is a molecular imaging diagnostics company focused on the development and commercialization of novel PET imaging agents to inform clinical management and guide care for cancer patients in areas of unmet medical need. Formed in 2014, Blue Earth Diagnostics is led by recognized experts in the clinical development and commercialization of innovative nuclear medicine products. The Company's first approved and commercially available product is Axumin™ (fluciclovine F 18), a novel molecular imaging agent approved in the United States and the European Union for use in PET imaging to detect and localize prostate cancer in men experiencing suspected biochemical recurrence. The Company is funded by Syncona Limited, an investment company listed on the London Stock Exchange (LON: SYNC). For more information, visit: www.blueearthdiagnostics.com.

About Advanced Accelerator Applications S.A.

Advanced Accelerator Applications is an innovative radiopharmaceutical company that develops, produces and commercializes Molecular Nuclear Medicine products. AAA's lead investigational therapeutic candidate, lutetium Lu 177 dotatate (Lutathera®), is a novel MNM compound in development for the treatment of Neuroendocrine Tumors, a significant unmet medical need. Founded in 2002, AAA has its headquarters in Saint-Genis-Pouilly, France. AAA currently has 21 production and R&D facilities able to manufacture both diagnostics and therapeutic MNM products, and more than 500 employees in 13 countries (France, Italy, the UK, Germany, Switzerland, Spain, Poland, Portugal, The Netherlands, Belgium, Israel, the US and Canada). AAA reported sales of €109.3 million in 2016 (+23% vs. 2015). AAA is listed on the Nasdaq Global Select Market under the ticker "AAP". For more information, please visit: www.adacap.com.

Cautionary Statement Regarding Forward-Looking Statements for AAA

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 lutetium Lu 177 dotatate (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 lutetium Lu 177 dotatate (Lutathera®) and our other products or product candidates; our estimates regarding the market opportunity for lutetium Lu 177 dotatate (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 US; 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; regulatory actions or litigation; and general economic, political, demographic

and business conditions in Europe, the US 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.

Contacts:

AAA Corporate Communications

Rachel Levine
Director of Communications
Tel: + 1-212-235-2395
rachel.levine@adacap.com

AAA Investor Relations

Jordan Silverstein
Director of Investor Relations
Tel: + 1-212-235-2394
jordan.silverstein@adacap.com

Blue Earth Diagnostics (US)

Priscilla Harlan
Vice President, Corporate Communications
Tel: + 781-799-7917
p.harlan@blueearthdx.com

Blue Earth Diagnostics (Europe)

Dr. Val Jones
Val Jones PR Ltd
Tel: +44 (0) 7917 175 192
v.jones@blueearthdx.com

Media inquiries:

Makovsky & Company (for AAA)

Lee Davies
Tel: +212-508-9651
ldavies@makovsky.com

Sam Brown Inc. (for Blue Earth Diagnostics)

Mike Beyer
Tel: + 312-961-2502
mikebeyer@sambrown.com

ABBREVIATED PRESCRIBING INFORMATION FOR AXUMIN IN EUROPE

▼ Axumin 1600 MBq/ml solution for injection/ Axumin 3200 MBq/ml solution for injection (fluciclovine, ¹⁸F)

Indication: Axumin is indicated for Positron Emission Tomography (PET) imaging to detect recurrence of prostate cancer in adult men with a suspected recurrence based on elevated blood prostate specific antigen (PSA) levels after primary curative treatment.

Dosage: 370 MBq fluciclovine (¹⁸F)

Method of use: Diagnostic use only. I.V. administration. Refer to SmPC for dilution instructions prior to dosing and information on image acquisition.

Contraindications: Patients with hypersensitivity to active substance or excipients.

Common Adverse Reactions (reported in $\geq 1/100$ to $< 1/10$ patients): Injection site reactions, dysgeusia and paraosmia.

Special Warnings and Precautions: *Individual benefit/risk justification:* Radiation exposure of patient must be justifiable by likely benefit. Consider possible increased radiation exposure risk in patients with renal impairment. PSA value may affect the diagnostic performance.

Patient preparation: Patients should avoid exercise for at least a day before and not eat or drink for at least 4 hours prior to administration. Afterwards, encourage patients to drink water and void as often as possible during first hours to reduce radiation exposure of the bladder. Restrict close contact with infants and pregnant women for 12 hours after administration.

Interpretation of fluciclovine (¹⁸F) images and limitations of use: Images should be interpreted visually by appropriately trained personnel. Suspicion of cancer is based on fluciclovine (¹⁸F) uptake in comparison with tissue background. For small lesions (<1 cm diameter) focal uptake greater than blood pool should be considered suspicious for cancer. For larger lesions, uptake equal to or greater than bone marrow is considered suspicious for cancer. Image interpretation errors can occur; fluciclovine (¹⁸F) uptake is not specific for prostate cancer and may occur with other types of cancer, prostatitis and benign prostatic hyperplasia. False-positive cases have been described with inflammatory response after cryotherapy and radiation artefacts in patients previously treated with radiotherapy. Clinical correlation, which may include histopathological evaluation, should be considered where appropriate. Iodinated CT contrast or oral contrast media is not required to interpret images. Detection of prostate cancer recurrence in prostate/prostate bed, regional lymph nodes, bone, soft tissue and non-regional lymph nodes by fluciclovine (¹⁸F) PET has been reported.

Specific warnings: Contains up to 39 mg sodium per dose; to be taken into consideration by patients on a controlled sodium diet. Not indicated for use in women or children.

MA Number: EU/1/17/1186/001-002

MA Holder: Blue Earth Diagnostics Ltd, 215 Euston Road, London, NW1 2BE UK.

POM

Date of Preparation: May 2017
