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 December 2016

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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: December 8, 2016

ADVANCED ACCELERATOR APPLICATIONS S.A.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated December 8, 2016 titled "Advanced Accelerator Applications Announces CMS Pass-Through Reimbursement Code for its First FDA Approved Drug NETSPOT®"

Exhibit 99.1

PRESS RELEASE

Advanced Accelerator Applications Announces CMS Pass-Through Reimbursement Code for its First FDA Approved Drug NETSPOT®

Saint-Genis-Pouilly, France – December 8, 2016 – Advanced Accelerator Applications S.A. (NASDAQ:AAAP) ("AAA" or "the Company"), an international specialist in Molecular Nuclear Medicine ("MNM"), today announced that the Centers for Medicare & Medicaid Services (CMS) has granted NETSPOT® Transitional Pass-Through status under an "A-code" (A9587) for drug reimbursement, effective January 1, 2017. Additionally, the same Healthcare Common Procedure Coding System ("HCPCS") "A Code" will be used on claims to private payers. NETSPOT® was approved by the U.S. Food and Drug Administration ("FDA") in June 2016 for the preparation of gallium Ga 68 dotatate for injection, for the localization of somatostatin receptor positive neuroendocrine tumors ("NETs") in adult and pediatric patients using Positron Emission Tomography ("PET').

A first-in-class drug, NETSPOT® was approved after a record-breaking 23 months from the first pre-Investigational New Drug meeting with the FDA. The product has been used and paid for over the past six months, even prior to the issuance of this Pass-Through code, demonstrating recognition of NETSPOT's® value to NET patient management.

NETSPOT® is available in two forms: As a drug kit for reconstitution using a Ga 68 generator, and as a ready-to-use injection delivered from local radiopharmacies in select metropolitan areas. AAA and its radiopharmacy partners around the U.S. are now delivering more than 120 patient-ready doses of NETSPOT® in injection form per month. Ten radiopharmacies are currently in operation, with three more expected to become active shortly. The company plans to grow its network of radiopharmacy partners to more than 40 sites over the first half of 2017. Metropolitan areas where patient-ready doses of NETSPOT® are currently, or soon to be, available in injection form include Boston, Denver, Houston, Lexington (KY), New Jersey, New Orleans, New York, Philadelphia, Phoenix, Pittsburgh, the San Francisco Bay Area, St. Louis, and Washington DC.

Stefano Buono, Chief Executive Officer of AAA said, *"The enthusiastic response of the NET patient and physician community to NETSPOT® has been remarkable. Once effective, this coding will streamline billing and reimbursement for all institutions using the product. The NETSPOT® rollout is progressing in line with our expectations and recent changes in the Nuclear Regulatory Commission guidelines should facilitate placement of additional gallium Ga 68 generators around the country."*

About NETSPOT®

NETSPOT® is an FDA-approved, patented drug kit developed by AAA for the preparation of gallium Ga 68 dotatate for injection, for localization of somatostatin receptor positive neuroendocrine tumors in adult and pediatric patients using Positron Emission Tomography. The kit has been designated as an orphan drug by the EMA and the FDA. For full prescribing information for NETSPOT® please refer to: http://go.usa.gov/cSywA.

About Advanced Accelerator Applications

Advanced Accelerator Applications is an innovative radiopharmaceutical company that develops, produces and commercializes Molecular Nuclear Medicine products. AAA's lead therapeutic product candidate, Lutathera®, is a novel MNM compound that AAA is currently developing 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 22 production and R&D facilities able to manufacture both diagnostics and therapeutic MNM products, and has over 490 employees in 13 countries (France, Italy, UK, Germany, Switzerland, Spain, Poland, Portugal, The Netherlands, Belgium, Israel, U.S. and Canada). AAA reported sales of €88.6 million in 2015 (+27% vs. 2014) and sales of €81.3 million for the first 9 months of 2016 (+23% vs. 9 months 2015). 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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