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 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: May 25, 2017

ADVANCED ACCELERATOR APPLICATIONS S.A.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press Release dated May 25, 2017 titled "Advanced Accelerator Applications Appoints Christine Mikail to Board of Directors"

PRESS RELEASE

Advanced Accelerator Applications Appoints Christine Mikail to Board of Directors

Saint-Genis-Pouilly, France – May 25, 2017 – Advanced Accelerator Applications S.A. (NASDAQ:AAAP) (AAA or the Company), an international specialist in Molecular Nuclear Medicine (MNM), today announced that Christine Mikail, J.D. has joined the Company's board of directors as an independent non-executive director.

"*Ms. Mikail brings both a broad legal skillset and substantial business development experience in the pharmaceutical industry,"* stated Stefano Buono, Chief Executive Officer of AAA. "*Her expertise in these areas will augment the current board composition, as we continue to build a global enterprise and advance the development and commercialization of our theragnostic pipeline."*

"*I am delighted to join AAA's board of directors at such an exciting time in the Company's development,*" said Ms. Mikail. "*With the potential approval of lutetium Lu 177 dotatate (Lutathera®) on the horizon, and additional significant oncology assets entering clinical development, I look forward to supporting the Company's continued growth by applying the same hands-on approach I have utilized throughout my career."*

Christine Mikail has over fifteen years of experience managing and advising a number of public and private biotech and pharmaceutical companies focusing in the legal and business development functions. Ms. Mikail is the founder of DCA Advisory where she is currently advising several start-up and private biotech companies. She is also an Adjunct Professor at the Rutgers Business School in New Jersey. From March 2015, to March 2017, she was Chief Administrative Officer, Head of External Business Development and Alliance Management, and General Counsel at Axovant Sciences, Inc., where she helped raise $362 million in one the largest biotech Initial Public Offerings. Prior to this, Ms. Mikail served as Senior Vice President of Legal Affairs, General Counsel and Secretary at NPS Pharmaceuticals, Inc., where she was an integral part of the deal team that sold NPS Pharma to Shire Pharmaceuticals for $5.2 billion.

AAA thanks Dr. Yvonne Greenstreet, who has completed her term as a board director, for her service and contributions to the Company's development. During Dr. Greenstreet's tenure, AAA completed a successful IPO, delivered positive Phase 3 study results for lutetium Lu 177 dotatate (Lutathera®), and successfully launched its first drug in the Unites States.

About Advanced Accelerator Applications

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 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 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, UK, Germany, Switzerland, Spain, Poland, Portugal, The Netherlands, Belgium, Israel, the U.S. 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 "AAAP". For more information, please visit: www.adacap.com.

About Molecular Nuclear Medicine (“MNM”)

Molecular Nuclear Medicine is a medical specialty using trace amounts of active substances, called radiopharmaceuticals, to create images of organs and lesions, and to treat various diseases, like cancer. The technique works by injecting targeted radiopharmaceuticals into the patient’s body that accumulate in the organs or lesions and reveal specific biochemical processes. MNM can be divided in two branches: Molecular Nuclear Diagnostics and Molecular Nuclear Therapy. Molecular nuclear diagnostics employs a variety of imaging devices and radiopharmaceuticals. PET (Positron Emission Tomography) and SPECT (Single Photon Emission Computed Tomography) are highly sensitive imaging technologies that enable physicians to diagnose different types of cancer, cardiovascular diseases, neurological disorders and other diseases in their early stages. Molecular nuclear therapy uses radioactive sources (radionuclides) to treat a range of tumor types. Using short-range particles, this therapy can target tumors with little effect on normal tissues.

Cautionary Statement Regarding Forward-Looking Statements

This press release contains 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 that appear in a number of places in this press release include the Company's current expectation regarding future events and various matters, including expected timing of filings with the FDA and EMA, approval dates, and expansion of NETSPOT®. 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 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; regulatory actions or litigation; 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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