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 June 2018

Commission File Number: 001-38281

ERYTECH Pharma S.A.
(Translation of registrant's name into English)

Bâtiment Adénine, 60 Avenue Rockefeller
69008 Lyon 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): ☐

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): ☐

EXHIBIT LIST

Exhibit	Description
99.1	Press Release dated June 15, 2018.

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, thereunto duly authorized.

ERYTECH Pharma S.A.

Date: June 15, 2018

By: /s/ Eric Soyer
Name Eric Soyer
Title: Chief Financial Officer and Chief Operating Officer

PRESS RELEASE

ERYTECH to Present Preclinical and Clinical Data on Use of Eryaspase in ALL and AML at EHA 2018

Lyon (France), June 15, 2018 – ERYTECH Pharma (Euronext: ERYP - Nasdaq: ERYP), a clinical-stage biopharmaceutical company developing innovative therapies by encapsulating therapeutic drug substances inside red blood cells, today announced that it will present preclinical data on the enzymatic activity of eryaspase (GRASPA®) for the treatment of relapsed acute lymphoblastic leukemia (ALL) and results of its Phase 2b clinical trial evaluating eryaspase (GRASPA®) for the treatment of acute myeloid leukemia (AML) at the European Hematology Association (EHA) Congress, being held June 14-17, 2018 in Stockholm, Sweden.

The preclinical eryaspase data will be presented during Poster Session I by Dr. Karine Aguera, ERYTECH's R&D Project Leader.

Poster Session: Preclinical Demonstration of Intracellular Activity of Asparaginase Encapsulated in Red Blood Cells Both in the Absence and in the Presence of Neutralizing Anti-Asparaginase Antibodies

Abstract #:	**PF160**
Lead Author:	Karine Aguera
Poster Session:	Poster Session I
Location:	Poster Area
Date:	Friday, June 15, 2018
Time:	5:30 p.m. - 7:00 p.m. (CEST)

In these *in vivo* and *in vitro* preclinical studies, eryaspase was effective in reducing L-asparagine (ASN) levels, both in the presence and absence of neutralizing anti-asparaginase antibodies (nAbs). The preclinical findings, confirmed in additional *in vitro* experiments with eryaspase, support the theory that intra-cellular asparaginase activity may be responsible for the sustained effect on ASN reduction and can provide a more effective approach for the delivery of the L-asparaginase enzyme in patients with ALL, particularly in patients who have developed nAbs.

The AML Phase 2b trial data will be presented during Poster Session II by Dr. Mathilde Hunault of Centre Hospitalier Universitaire (CHU) d'Angers, France.

Poster Session: A Phase 2b of Eryaspase in Combination with Low-Dose Cytarabine as First-Line Therapy in Elderly Patients with Acute Myeloid Leukemia (ENFORCE – NCT01810705)

Abstract #:	**PS984**
Lead Author:	Xavier Thomas
Poster Session:	Poster Session II
Location:	Poster Area
Date:	Saturday, June 16, 2018
Time:	5:30 p.m. - 7:00 p.m. (CEST)

The Phase 2b trial to evaluate the efficacy of eryaspase in elderly AML patients did not meet its primary endpoint to improve overall survival in this difficult-to-treat patient population. Patient selection is likely the most important factor with enrolled patients remaining only briefly on treatment and unable to achieve a potential drug effect. Individualized risk stratification based on multi-parameter assessment tools and co-morbidity burden should be considered for older adults with AML participating in clinical trials.

ERYTECH also has an abstract on the incidence of Venous Thromboembolism (VTE) in 125 ALL patients, treated in five studies.

Abstract: Venous Thromboembolism in Patients with Acute Lymphoblastic Leukemia (ALL) Treated with Eryaspase (L-Asparaginase Encapsulated in Red Blood Cells)

Abstract #: **PB1627**
Lead Author: Yves Bertrand
Location: EHA Website Abstracts

The findings of this study show that the risk of VTE with eryaspase treatment in ALL patients was low and observed primarily in adults. The low incidence of these events may be related to decreased incidence of impaired coagulation parameters.

All of the abstracts are currently available on the EHA website. The posters will be accessible on ERYTECH's website at the start of each poster session.

About ERYTECH: www.erytech.com

Founded in Lyon, France in 2004, ERYTECH is a clinical-stage biopharmaceutical company developing innovative therapies for rare forms of cancer and orphan diseases. Leveraging its proprietary ERYCAPS platform, which uses a novel technology to encapsulate therapeutic drug substances inside red blood cells, ERYTECH has developed a pipeline of product candidates targeting markets with high unmet medical needs. ERYTECH's initial focus is on the development of products that target the altered amino acid metabolism of cancer cells, depriving them of nutrients necessary for their survival.

The Company's lead product, eryaspase, also known under the trade name GRASPA®, consists of an enzyme, L-asparaginase, encapsulated inside donor-derived red blood cells. L-asparaginase depletes asparagine, a naturally occurring amino acid essential for the survival and proliferation of cancer cells. L-asparaginase has been a standard component of multi-agent chemotherapy for the treatment of pediatric acute lymphoblastic leukemia (ALL), but side effects limit treatment compliance, especially in adults and patients with weak performance status.

Eryaspase demonstrated positive efficacy and safety results in various clinical trials in ALL, including in a Phase 2 study in patients over 55 years of age and in a Phase 2/3 trial in relapsed or refractory ALL patients, as well as in pancreatic cancer, where it achieved positive results in a Phase 2b trial of second-line treatment of patients with metastatic pancreatic cancer. ERYTECH is preparing for the launch of a pivotal Phase 3 clinical trial in second line pancreatic cancer and Phase 2 trials in first line pancreatic cancer and triple-negative breast cancer.

ERYTECH produces eryaspase at its own GMP-approved and operational manufacturing site in Lyon (France), and at a site for clinical production in Philadelphia (USA). ERYTECH has entered into licensing and distribution partnership agreements for eryaspase for ALL and AML in Europe with Orphan Europe (Recordati Group), and for ALL in Israel with TEVA, which will market the product under the GRASPA® brand name. The European Medicines Agency (EMA) and the U.S. Food and Drug Administration (FDA) have granted orphan drug designations for eryaspase for the treatment of ALL, AML and pancreatic cancer.

In addition to eryaspase, ERYTECH is developing erymethionase, methionine-g-lyase encapsulated in red blood cells, to target cancer cells' amino acid metabolism and induce tumor starvation. ERYTECH is also exploring the use of its ERYCAPS platform for developing cancer immunotherapies (ERYMMUNE) and enzyme replacement therapies (ERYZYME).

ERYTECH is listed on the Nasdaq Global Select Market in the United States (ticker: ERYP) and on the Euronext regulated market in Paris (ISIN code: FR0011471135, ticker: ERYP). ERYTECH is part of the CAC Healthcare, CAC Pharma & Bio, CAC Mid & Small, CAC All Tradable, EnterNext PEA-PME 150 and Next Biotech indexes.

CONTACTS

ERYTECH
Naomi Eichenbaum
Director Investor Relations

+33 4 78 74 44 38
+1 917 312 5151
naomi.eichenbaum@erytech.com

NewCap
Julien Perez
Investor relations
Nicolas Merigeau
Media relations
+33 1 44 71 98 52
ERYTECH@newcap.eu

Forward-looking information

This press release contains forward-looking statements, forecasts and estimates with respect to the clinical results from and the development plans of eryaspase, business and regulatory strategy, and anticipated future performance of ERYTECH and of the market in which it operates. Certain of these statements, forecasts and estimates can be recognized by the use of words such as, without limitation, “believes”, “anticipates”, “expects”, “intends”, “plans”, “seeks”, “estimates”, “may”, “will” and “continue” and similar expressions. All statements contained in this press release other than statements of historical facts are forward-looking statements, including, without limitation, statements regarding the potential of ERYTECH’s product pipeline, its clinical development and regulatory plans for eryaspase, the timing of ERYTECH’s clinical studies and trials and announcements of data from those studies and trials, and the contents and timing of decisions by the FDA and EMA regarding ERYTECH’s product candidates. Such statements, forecasts and estimates are based on various assumptions and assessments of known and unknown risks, uncertainties and other factors, which were deemed reasonable when made but may or may not prove to be correct. Actual events are difficult to predict and may depend upon factors that are beyond ERYTECH’s control. There can be no guarantees with respect to pipeline product candidates that the candidates will receive the necessary regulatory approvals or that they will prove to be commercially successful. Therefore, actual results may turn out to be materially different from the anticipated future results, performance or achievements expressed or implied by such statements, forecasts and estimates. Further description of these risks, uncertainties and other risks can be found in the Company’s regulatory filings with the French Autorité des Marchés Financiers (AMF), the Company’s Securities and Exchange Commission (SEC) filings and reports, including in the Company’s 2017 Document de Référence filed with the AMF in April 2018 and in the Company’s Annual Report on Form 20-F filed with the SEC on April 24, 2018, as amended on May 23, 2018, and future filings and reports by the Company. Given these uncertainties, no representations are made as to the accuracy or fairness of such forward-looking statements, forecasts and estimates. Furthermore, forward-looking statements, forecasts and estimates only speak as of the date of this press release. Readers are cautioned not to place undue reliance on any of these forward-looking statements. ERYTECH disclaims any obligation to update any such forward-looking statement, forecast or estimates to reflect any change in ERYTECH’s expectations with regard thereto, or any change in events, conditions or circumstances on which any such statement, forecast or estimate is based, except to the extent required by law.