PRESS RELEASE

ERYTECH Provides Business Update and Reports Financial Highlights for Third Quarter 2016

Conference call and webcast scheduled for
Friday, November 4th at 15:00 pm CET/10:00 am EDT

- **Ongoing review by European Medicines Agency (EMA) of Marketing Authorization Application (MAA) for eryaspase (GRASPA®) for the treatment of acute lymphoblastic leukemia (ALL);**
- **Completed enrollment of patients in Phase 2 studies of eryaspase in acute myeloid leukemia (AML) and pancreatic cancer;**
- **Strengthened executive management team and board of directors;**
- **Cash position of €30.4 million at September 30, 2016**

Lyon (France), November 3, 2016 – ERYTECH Pharma (Euronext Paris: ERYP), the French biopharmaceutical company developing 'tumor starvation' treatments for acute leukemia and other oncology indications with unmet medical needs, today provided a business update and reported its financial results for the quarter ended September 30, 2016.

Third Quarter and Recent Business Highlights

- ERYTECH's MAA for GRASPA® to treat relapsed and refractory ALL, submitted in September 2015, remains under review by the EMA's Committee for Human Medicinal Products (CHMP). The Company received its Day 180 List of Outstanding Issues and expects to be in a position to receive an opinion from the CHMP regarding the approvability of GRASPA® during 2017.

- The Phase 2 trial of eryaspase (GRASPA®) for the treatment of pancreatic cancer completed enrollment of 141 patients in September. In this study, eryaspase is being evaluated in combination with the standard of care (currently Gemcitabine or FOLFOX regimen) as compared to the standard of care alone in a 2-to-1 randomization for second-line treatment of metastatic pancreatic cancer. The Company expects to report primary results of the study in Q1 2017.

- The Phase 2b trial of eryaspase (GRASPA®) for the treatment of AML completed enrollment of a total of 123 patients in August, and is on track for reporting of primary data in the second half of 2017. In this study, eryaspase is being evaluated in combination with low-dose cytarabine and compared with low-dose cytarabine alone in a 2-to-1 randomization.

- The US Phase 1 study in adult ALL patients has completed enrollment in the second patient cohort and is expected to confirm the recommended dose for Phase 2 in Q1 2017.

- Preclinical programs with new product candidates ERY-MET and ERY-ADI are progressing, and the Company is further developing the usage of the ERYCAPS platform in immuno-oncology and enzyme replacement therapies.

- ERYTECH has entered into an agreement with Invetech, a global leader in instrument development and custom automation, for the further automation and scale-up of its ERYCAPS encapsulation equipment.

- The Company strengthened its executive management through the appointments of Dr. Alexander Scheer as Chief Scientific Officer (CSO) and Jean-Sébastien Cleiftie as Chief Business Officer (CBO). Dr. Scheer has over 15 years of experience in R&D and has a strong understanding of the life science industry in multiple therapeutic areas including oncology. Mr. Cleiftie has over 15 years of experience in drug development, life science venture capital, pharmaceutical business development and licensing within the U.S. and European biopharmaceutical ecosystem.

- The Company also appointed Allene M. Diaz to its Board of Directors, initially as a non-voting member ('censeur'). Ms. Diaz has more than 20 years of experience in the global biopharmaceutical and biotechnology field.

Financial Highlights

Net loss for the 9-month period ended September 30, 2016 was €16.1 million, compared to a net loss of €11.1 million for the same period in the prior year. The €5.0 million increase reflected increased activity to advance the company's preclinical and clinical development programs. The increase was driven by higher service and contracting fees, mostly related to the clinical and regulatory progress of product development projects, and by higher personnel costs following the staffing of key positions in the preclinical, clinical and pharmaceutical operations domains, to address the activity expansion and prepare the company for further development, both in Europe and in the United States.

As of September 30, 2016, ERYTECH had cash and cash equivalents totaling €30.4 million, compared with €36.5 million on June 30, 2016 and €45.6 million on December 31, 2015. Total net cash utilization was €6.1 million in the third quarter of 2016 and €15.2 million for the nine-month period ended September 30, 2016. As with the net loss for these periods, net cash utilization during the three and nine months ended September 30, 2016 reflected increased activity in product development and the strengthening of the Company's operations.

The Company reiterated its earlier guidance that total cash utilization for the full year 2016 is expected to be in the range of €18 million to €20 million.

The financial results for third quarter 2016 are in line with the Company's expectations and established strategy for 2016, which focuses on advancing the clinical development of its innovative therapies for acute leukemia and other oncology indications in Europe and the United States.

Gil Beyen, ERYTECH's Chairman and Chief Executive Officer commented, *"In the third quarter of 2016, we continued to achieve important milestones in the clinical development of our products and strengthened our business operations. Both of our ongoing GRASPA studies in AML and pancreatic cancer are fully enrolled, with reporting of primary data expected in 2017. The outcomes of these studies will determine our future development and commercial plans for GRASPA in these indications. We also continue to focus on advancing our preclinical programs, which aim to further expand the application of our proprietary ERYCAPS platform technology. The new appointments to the executive leadership and Board of Directors of ERYTECH will further support the advancement of our clinical and preclinical pipeline, and will be important as we look toward maximizing the commercial impact of our programs in the future. Finally, we submitted our responses to the EMA's Day 120 List of Questions related to our European Marketing Authorization Application for GRASPA in ALL this summer, and we are now working to address the Day 180 List of Outstanding Issues. We continue to expect a decision on the approvability of GRASPA in 2017."*

Q3 2016 Business Update Conference Call Details

As a reminder, ERYTECH management will hold a conference call and webcast on Friday, November 4, 2016 at 15:00 CET / 10:00am EDT to review the Q3 2016 operational highlights. Gil Beyen, Chairman and CEO, Eric Soyer, CFO and COO and Iman El-Hariry, CMO will deliver a brief presentation, followed by a Q&A session.

Investors and analysts wishing to participate can access the call via the following teleconferencing numbers:

USA: +1 8778874163

United-Kingdom: +44 2030432440

Switzerland: +41 225809022

Germany: +49 69222229031

France: +33 172001510

Belgium: +32 24029640

Sweden: +46 850334664

Finland : +358 942599700

Netherlands: + 31 107138194

Confirmation Code: **36350673#**

The webcast can be followed live online via the link: http://www.anywhereconference.com?UserAudioMode=DATA&Name=&Conference=135304855&PIN=36350673

Following the live call, a replay will be available for 90 days. To listen to the replay, please dial:

USA: +1 877 64 230 18

United-Kingdom: +44(0) 2033679460

France: +33(0)1 72 00 15 00

Confirmation Code: **304855#**

Additionally, an archive of the webcast will be available on the "Webcast" section of the Company's investor relations site at www.erytech.com

Next financial updates:

- Financial highlights for the 4th quarter and full year 2016: March 2, 2017 (after market close), followed by a conference call and webcast on March 3, 2017 (3:00pm CET/10:00am ET)

Upcoming participations at investor conferences:

- Bryan Garnier Healthcare Conference, November 15, 2016 in Paris
- Jefferies Global Healthcare Conference, November 16-17, 2016 in London
- Eigenkapitalforum, November 21-24, 2016 in Frankfurt
- ODDO Midcap Forum, January 5-6, 2017 in Lyon
- J.P. Morgan Healthcare Conference, January 9-13, 2017 in San Francisco
- Leerink Partners Global Healthcare Conference, February 15-16, 2017 in New York

About ERYTECH and eryaspase (GRASPA®): 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 treatment of blood cancers, including acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML), by depriving tumors of

nutrients necessary for their survival. ERYTECH has recently filed for European Marketing Authorization for its lead product candidate, eryaspase, also known as ERY-ASP or under the trade name GRASPA®, following positive efficacy and safety results from its completed Phase 2/3 pivotal clinical trial in Europe in children and adults with relapsed or refractory ALL. ERYTECH also has an ongoing Phase 1 clinical trial of eryaspase in the United States in adults with newly diagnosed ALL, and a Phase 2b clinical trial in Europe in elderly patients with newly diagnosed AML, each in combination with chemotherapy. ERYTECH believes that eryaspase also has the potential as a treatment approach in solid tumors and is conducting a Phase 2 clinical trial in Europe in patients with metastatic pancreatic cancer.

Eryaspase 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, from circulating blood plasma. 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 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 two other product candidates that focus on using encapsulated enzymes to induce tumor starvation. The company is also exploring the use of its ERYCAPS platform for developing cancer immunotherapies and enzyme replacement therapies.

ERYTECH is listed on Euronext regulated market in Paris (ISIN code: FR0011471135, ticker: ERYP) and is part of the CAC Healthcare, CAC Pharma & Bio, CAC Mid & Small, CAC All Tradable, EnterNext PEA-PME 150 and Next Biotech indexes. ERYTECH is also listed in the U.S. under an ADR level 1 program (OTC, ticker EYRYY).

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OTCMarkets
Ticker : EYRYY

Forward-looking information

This document may contain forward-looking statements and estimates with respect to the financial position, results of operations, business strategy, plans, objectives 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. They include all matters that are not historical facts. 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. Documents filed by ERYTECH Pharma with the French Autorité des Marchés Financiers (www.amf-france.org), also available on ERYTECH’s website (www.erytech.com) describe such risks and uncertainties. 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 the publication of this document. 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.