PRESS RELEASE

ERYTECH wins the European Small and Mid-Cap Award in the Most Innovative Newcomer category

Lyon (France), December 10, 2015 – ERYTECH Pharma (Euronext Paris: ERYP & OTC US: EYRYY), the French biopharmaceutical company that develops innovative 'tumor starvation' treatments for acute leukemia and other malignancies with unmet medical needs, announced today that it received yesterday evening the "European Small and Mid-Cap" award in the "Most Innovative Newcomer" category by the Federation of European Stock Exchanges.

The Federation of European Securities Exchanges (FESE) represents 36 exchanges in equities, bonds, derivatives and commodities through 19 Full Members from 30 countries. The European Small and Mid-Cap Awards were launched in cooperation with the European Commission to promote the best practices and success stories of the most dynamic companies financed by European public capital markets, in particular targeting growth companies.

ERYTECH Pharma received the "Most Innovative New Comer" award for its ERYCAPS technology platform, as an innovative approach to encapsulate drugs into red blood cells. With this technology Erytech is developing a pipeline of product candidates targeting markets with high unmet medical needs.

ERY-ASP/GRASPA, ERYTECH's lead product derived from this platform, has demonstrated favourable safety and efficacy results in three clinical trials in Europe, including a pivotal Phase 2/3 study in patients with relapsed Acute Lymphoblastic Leukemia (ALL), and has recently been submitted for European Marketing Authorization with the European Medicines Agency (EMA). Phase 2 studies with ERY-ASP are ongoing in other oncology indications, such as Acute Myeloid Leukemia and pancreatic cancer and Erytech is also preparing the launch of clinical trials in Non-Hodgkin Lymphoma.

In addition, two other product candidates have already been derived from the ERYCAPS platform and the Company is exploring the use of the platform for the development of Enzyme Replacement therapies and Cancer Vaccines.

"We are proud to have won this 'Most Innovative Newcomer' award. It is a clear recognition of ERYTECH's technology expertise and of the efforts of our teams in the recent years to develop innovative therapies from this unique platform" commented Gil Beyen, Chief Executive Officer of ERYTECH.

About ERYTECH and ERY-ASP (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 announced positive efficacy and safety results from its completed Phase 2/3 pivotal clinical trial in Europe with its lead product candidate, ERY-ASP, also known under the trade name GRASPA®, in children and adults with relapsed or refractory ALL. ERYTECH also has an ongoing Phase 1 clinical trial of ERY-ASP in the United States in adults with newly diagnosed ALL, and a Phase 2 clinical trial in Europe evaluating GRASPA as a first-line therapy for the treatment of elderly patients with AML, each in combination with chemotherapy.

ERY-ASP 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.

Every year over 50,000 patients in Europe and the United States are diagnosed with ALL or AML. For about 80% of these patients, mainly adults and relapsing patients, current forms of L-asparaginase cannot be used due to their toxicity or as a result of allergic reactions. ERYTECH believes that the safety and efficacy profile of ERY-ASP/GRASPA®, as observed in its Phase 2/3 pivotal clinical trial, offers an attractive alternative option for the treatment of leukemia patients.

ERYTECH believes that ERY-ASP 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. In addition to its current product candidates that focus on using encapsulated enzymes to induce tumor starvation, ERYTECH is exploring the use of its platform for developing cancer vaccines and enzyme replacement therapies.

The EMA and the U.S. Food and Drug Administration (FDA) have granted orphan drug designations for ERY-ASP/GRASPA for the treatment of ALL, AML and pancreatic cancer. ERYTECH produces ERY-ASP 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 ERY-ASP 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.

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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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 the 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.amffrance.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 the 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.