

ERYTECH to Present Preclinical Results Supporting Immunotherapy Potential of ERYMMUNE Platform at Two Upcoming Medical Meetings

Lyon (France), March 7, 2016 – ERYTECH Pharma (Euronext Paris - ERYP), a French clinical-stage biopharmaceutical company developing innovative therapies for rare forms of cancer and orphan diseases based on its proprietary ERYCAPS platform, encapsulating therapeutic drug substances inside red blood cells, today announced the presentation of encouraging preclinical data supporting the Company's ERYMMUNE program at two upcoming immunotherapy medical meetings, [World ADOPT Summit 2017](#) and [10th Symposium of Vaccinology](#). The World ADOPT Summit 2017 is being held March 7-9, 2017 at the Cavendish Conference Centre in London, U.K., and the 10th Symposium of Vaccinology is being held March 20-21, 2017 at the Université Lumière Lyon II in Lyon, France. In conjunction with the Symposium of Vaccinology, ERYTECH will also share the results with the members of the French Society of Immunology.

Dr. Alexander Scheer, PhD, Chief Scientific Officer of ERYTECH, commented, *"Results of this study are very encouraging because they show proof of concept that our ERYMMUNE red blood cell-based immune therapy technology significantly delays growth of tumors treated when key tumor antigens are encapsulated. The ERYMMUNE platform leverages the biological mechanism of stimulating cancer-killing cytotoxic CD4 and CD8 T-cells specific to tumor-associated antigens encapsulated in red blood cells. These data support the therapeutic strategy of using red blood cells as carriers to induce efficient and antigen-specific immune response for effective cancer immunotherapy, suggesting that this platform has immense potential in cancer immunotherapy and provides solid foundation for further investigation into the clinical benefit of this approach."*

The ERYMMUNE platform uses the unique physiological mechanism of red blood cells (RBC) trafficking to stimulate cytotoxic T-cells specific to RBC-entrapped tumor-associated antigens. The platform artificially ages red blood cells and targets the majority of them to the spleen, where they undergo erythrophagocytosis and present their encapsulated peptides to Antigen Presenting Cells (APC), thus activating CD4/CD8 T-cells. This versatile technology enables the encapsulation of single- or multi-epitope antigens.

The posters, titled **"Erythrocytes used as tumor antigen delivery system to target antigen-presenting cells embodies an innovative approach for in situ cancer immunotherapy"** (presented at the World ADOPT Summit on March 8th, 2017 at 2:40-3:40pm GMT) and **"Therapeutic vaccine using erythrocytes: innovative approach to target antigen-presenting cells for in situ cancer immunotherapy"** (presented at the 10th Symposium of Vaccinology on March 20th and 21st, 2017 at 1:00-2:00pm CET) will present data from ERYTECH's preclinical study on the ERYMMUNE technology.

This experimental study entrapped key tumor antigens, including ovalbumin protein, tyrosinase-related protein 2 peptide (TRP2, a melanoma tumor antigen) and prostate specific antigen (PSA), in erythrocytes (red blood cells) and coated the cells with anti-TER 119 antibodies. These encapsulated red blood cells were then injected into mouse models. Results demonstrated a strong cytotoxic T-cell response with ovalbumin protein and TRP2 peptide, showing in vivo target cell lysis of 97% and 96%, respectively, as compared to the control group, free tumor antigen (non-encapsulated), which induced less than 5% of lysis. Findings also showed elevated levels of IFN γ -secreting CD8 T-cells in tumors treated with TRP2 peptide and PSA protein entrapped erythrocytes.

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 plans to pursue regulatory approvals for its lead product candidate, eryaspase, also known as ERY-ASP or under the trade name GRASPA®, having achieved 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 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 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 EYRY).

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Forward-looking information

This press release contains forward-looking statements, forecasts and estimates with respect to the clinical development plans, 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. 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 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.