

ERYTECH provides business update and financial results for the full year 2014

*Conference call and webcast (in English) on Tuesday, March 31st at 15:00pm CET
(14:00pm GMT/09:00am EST)*

- A year of strategic progress, including positive Phase III data in ALL
- Other clinical programs advancing
- Solid cash position of € 37 million

Lyon (France), March 30, 2015 – ERYTECH (Euronext Paris: ERYP & OTC US: EYRY), the French biopharmaceutical company that develops innovative ‘tumor starvation’ treatments for acute leukemia and other oncology indications with unmet medical needs, provides a business update and reports its financial results for the period ending December 31, 2014.

Business Highlights

- Positive Phase III results from pivotal study with GRASPA® in Acute Lymphoblastic Leukemia (ALL)
- Positive DSMB on first 60 patients in Phase IIb study in Acute Myeloid Leukemia (AML)
- Phase I/II study in ALL launched in the US and first cohort of patients enrolled
- Phase II study in pancreatic cancer launched in France
- Expanded Access Program launched in France for ALL patients intolerant to current asparaginases
- Orphan drug designation granted to ERY-ASP in AML in the USA
- Platform of encapsulation in red blood cells strengthened with novel oncology product candidate
- IP portfolio strengthened
- Board of Directors strengthened with three new independent board members
- Winner of EuropaBio’s Most Innovative European Biotech SME Award 2014

Financial Highlights

- € 30 million raised with specialized international investors
- Net result maintained notwithstanding the increased activity level
- Strong cash balance of € 37 million on December 31, 2014

Upcoming Milestones

- DSMB updates on Phase II pancreas cancer study
- DSMB update on Phase IIb study in AML
- Submission of European Marketing Authorization Application for GRASPA® in ALL
- DSMB update on US Phase I/II ALL study
- Update on US clinical development plans
- Launch of Phase II study in NH Lymphoma

“2014 has been a truly pivotal year for ERYTECH. The positive Phase III results of our ALL trial are a strong validation of our encapsulation technology and are forming the basis for leveraging the technology in other indications and regions. The successful financing round has secured the financial means for our ambitious value creation strategy. With one product in registration and four clinical trials ongoing, the year will be rich in news flow” comments Gil Beyen, Chairman and CEO of ERYTECH.

Business Update

Positive Phase III results from pivotal study with GRASPA® in ALL

At the end of September, ERYTECH reported positive top-line results of its Phase II/III clinical trial in Acute Lymphoblastic Leukemia (ALL). Additional positive data were communicated in December. The GRASPIVOTALL (GRASPALL2009-06) clinical trial met both of its co-primary endpoints, and the secondary safety and efficacy endpoints confirmed the favorable profile of GRASPA®. The study also showed favorable results in patients with prior hypersensitivities to L-asparaginase.

The GRASPIVOTALL study was a controlled, multicenter Phase II/III trial with 80 children and adults suffering from relapsed or refractory ALL with three arms. The first two arms are randomized arms comparing GRASPA® to native *E. Coli* L-asparaginase, each in combination with standard chemotherapy (COOPRALL), in a 1-to-1 randomization in patients without prior allergies to L-asparaginase. The third arm was a single arm assessment of GRASPA® for patients who have experienced allergic reactions related to asparaginase in their first line treatment.

The two co-primary endpoints, in accordance with CHMP¹ advice, consisted of: a) superior safety, expressed as a significant reduction of the incidence of allergic reactions with GRASPA® compared to the control group, and b) non-inferior duration of asparaginase activity above the threshold of 100 IU/l during the induction phase. Both endpoints needed to be met for the study to be considered positive. The main secondary efficacy endpoints included the assessment of clinical parameters such as complete remission rate (CR), minimal residual disease (MRD), event-free survival (EFS) and overall survival (OS).

The study has met its pre-planned primary endpoints with high statistical superiority and the secondary endpoints pointed at a favorable overall safety profile and improved clinical benefit.

Based on the results of the GRASPALL study and the earlier studies performed with GRASPA®, ERYTECH intends to submit its application dossier for European Marketing Authorization mid 2015.

Positive DSMB on first 60 patients and international sites opened in Phase IIb study in AML

The GRASPA-ML study is a multicenter, randomized Phase IIb trial evaluating the clinical activity and tolerability of GRASPA® in the treatment of newly diagnosed AML patients over 65 years old who are unfit for intensive chemotherapy. In this 123 patient study, one-third of the patients receive the current standard treatment (low-dose cytarabine) and two-thirds receive low-dose cytarabine plus GRASPA®.

In August 2014, an external assessment of the safety of the product was performed by a Data Safety Monitoring Board (DSMB) on the first 60 patients included in the study. The DSMB unanimously recommended continuation of the trial without modification. A DSMB is an external committee of independent clinical research experts who review data in ongoing clinical trials with particular attention to safety.

Today, two-thirds of the 123 patients have been enrolled in the study. A total of 25 centers have been initiated, of which 6 international sites (2 in Germany, 2 in Spain, 1 in Italy and 1 in Finland). First international patients have been treated. Another DSMB assessment is foreseen when 60 patients will have experienced an event (progression of the disease or death). This is expected to take place in Q2 of this year.

The study is being performed in collaboration with Orphan Europe (Recordati Group), ERYTECH's partner for the commercialization of GRASPA® in ALL and AML in 38 European countries, under a licensing and distribution agreement that was signed at the end of 2012.

¹ Based on Scientific Advice obtained from the Scientific Advice Working Party (SAWP) of the Commission for Human Medicinal Products (CHMP) at the European Medicines Agency (EMA)

Phase I/II study in ALL launched in the US and first dose completed

In July 2014, ERYTECH recruited the first patient in its Phase I/II of ERY-ASP newly diagnosed ALL patients, 40 years old or older, with newly-diagnosed ALL. The objective of the study is to assess safety in escalating doses. The patients receiving the first dose have been treated and a safety review by a DSMB is expected in Q2.

Prof. Richard A. Larson, Director of the Hematological Malignancies Clinical Research Program at the University of Chicago and former Chairman of the Leukemia Committee of the Cancer and Leukemia Group B (CALGB), is the principal investigator of the study.

Phase II trial launched in pancreatic cancer

After the completion of a Phase I study in late stage pancreas cancer, in which the tolerability of ERY-ASP was found acceptable in this fragile patient population, ERYTECH in 2014 launched a Phase II study in second line treatment of patients with progressive metastatic pancreas cancer. Clinical trial authorization was received in April by the ANSM, the French authority for drug safety. The first patient was enrolled in July 2014.

The study is planned for 90 patients whereby ERY-ASP in addition to the standard of care is compared to the standard of care alone (Gemcitabine or Folfox) in a 2-to-1 randomization. The primary endpoint is progression-free survival (PFS) at 4 months. Professor Pascal Hammel, gastro-enterologist specialized in digestive oncology at Hôpital Beaujon (Clichy-Paris, France), is the principal investigator of the study.

The study foresees analyses of the safety of ERY-ASP in combination with the standard treatments (Gemcitabine or Folfox) by a DSMB on the first three patients in each group and on the first 24 patients treated (all treatment groups). The analysis on the first three patients treated with ERY-ASP in combination with Gemcitabine revealed no safety concerns and the DSMB has already recommended the continuation of the study in the Gemcitabine treatment group. The safety evaluation in combination with Folfox is expected in Q2. A larger DSMB assessment on the first 24 patients is expected for mid 2015 as planned.

Expanded Access Program launched in France for ALL patients intolerant to current asparaginases

ERYTECH launched in 2014 an open label Expanded Access Program (EAP) for ALL patients who do not tolerate any of the other available forms of asparaginase. These patients often developed allergies to both the *E. Coli*-derived and the *Erwinia*-derived asparaginase products. The objective of this study is to assess safety of GRASPA® in these patients.

The results in the first four patients were presented at the ASH (American Society of Hematologists) meeting in San Francisco. None of these patients had experienced severe allergic reactions. To date, 12 patients have been treated in this EAP, most of them having received multiple doses of GRASPA®.

Orphan drug designation granted to ERY-ASP in AML in the USA

In March 2014, ERYTECH received Orphan Drug Designation by the FDA in AML. In the USA, Orphan Drug Designation (ODD) is generally granted to drugs or biologics intended for treatment of rare diseases and disorders of high unmet medical need, affecting fewer than 200,000 people. This designation conveys special incentives to the sponsor, including seven years of US market exclusivity for the drug or biologic upon FDA approval, a prescription drug user fee waiver, and certain tax credits.

In 2013, the European Medicines Agency (EMA) had already granted GRASPA® orphan drug status for the treatment of AML. GRASPA®/ERY-ASP now benefits from ODD in all three of its lead indications, ALL, AML and pancreas cancer, both in Europe and the USA.

New product candidate added and preclinical development programs on track

Progress has been made in the preclinical development in the field of oncology:

- The work done in the government co-funded TEDAC program to broaden the use of ERYTECH's encapsulation technology to other enzymes has led to the identification of a promising new drug candidate, ERY-MET, methionine- γ -lyase (MGL) encapsulated inside red blood cells. Using its proprietary encapsulation technology, ERYTECH has succeeded the encapsulation of MGL with a good stability and an extended half-life. Based on these promising preclinical results, the Company will continue with the preclinical development to the stage of clinical trials. The industrial scale-up of the manufacturing has been initiated to enable the launch of a first-in-man Phase I study by the end of 2015/early 2016;

- In view to potentially launching additional studies with ERY-ASP in solid tumors, different indications have been evaluated for their sensitivity to asparaginase: next to pancreas cancer, opportunities are being investigated in Non Hodgkin lymphoma, liver cancer, bladder cancer and ovarian cancer. A Phase II study in Diffuse Large B-Cell Lymphoma, representing ca 30-40% of all Non Hodgkin lymphomas is being prepared for launch during 2015.
- ERYTECH is also investigating its encapsulation technology in the field of immuno-therapy. Its proprietary technology in this field (Vaccin'ERY) consists in encapsulating specific antigens that can trigger an immunological response against cancer cells and steering these antigen-loaded red blood cells antigen presenting cells in the spleen.

IP portfolio reinforced

During the first half of 2014, ERYTECH received notice of allowance from the European Patent Office of a key patent covering its lead product ERY-ASP for the treatment of pancreas cancer. The patent entitled "Medicament for the Treatment of Cancer of the Pancreas" was already granted in Australia, Israel and Singapore.

ERYTECH's core process patent was also recently granted in India. This patent entitled "Lysis/Resealing Process for Preparing Erythrocytes" was already granted in Europe, US, Japan, China, Hong-Kong, Australia and South-Korea.

Another patent entitled "Test for predicting neutralization of asparaginase activity" protecting the process and the methods for the detection of factors neutralizing the activity of asparaginase in patients, notably anti-asparaginase antibodies, has also been granted in the US during the second half of 2014.

As of end 2014 ERYTECH was the holder of 12 patent families, covering the technology platform and applications thereof in and outside oncology, as well as an exclusive license from the National Institutes of Health (USA), covering a diagnostic method to predict the efficacy of L-asparaginase.

Board of Directors strengthened with three new independent members

At the General Shareholder's meeting in June 2014, two new independent members have been appointed to the Board of Directors:

- Martine George, M.D. is an experienced, US based clinical research, medical affairs and regulatory affairs executive, both in large and small oncology companies. Until recently, Dr George was Vice President Global Medical Affairs, Oncology at Pfizer in New York. Her previous functions before Pfizer included Chief Medical Officer at GPC Biotech in Princeton and Head of oncology at Johnson & Johnson in New Jersey. Martine is a board certified Medical Oncologist and Gynecologist, trained in France and Montréal. She started her career as a clinician as Service Chief at Institut Gustave Roussy in France and as Visiting Professor at Memorial Sloan Kettering Cancer Center in New York.
- Hilde Windels has over 20 years' experience in corporate finance, capital markets and strategic initiatives. She is the Chief Financial officer of Biocartis, a molecular diagnostics and immunodiagnostics company based in Belgium and Switzerland. Before Biocartis, Hilde was Devgen's CFO (Euronext: DEVG) from 1999 until the end of 2008 and member of Devgen's board from 2001 until the end of 2008. From early 2009 until mid 2011, she worked as independent CFO for a few private biotechnology companies, and she was on the board of MDX Health (Euronext: MDXH) from June 2010 until end of August 2011.

Kurma Life Science Ventures, represented by Mrs Vanessa Malier and representing Idinvest on the ERYTECH board has resigned from the Board in July 2014, and Pierre-Olivier Goineau, co-founder, COO and Director of ERYTECH has resigned from his functions in January 2015.

At the board meeting of March 26, 2015, Luc Dochez was coopted by the Board of Directors. The board will propose his appointment as board member to the General Assembly in June 2015.

- Luc Dochez has been the Chief Business Officer of Dutch based Prosensa (NASDAQ: RNA) until its recent acquisition by Biomarin. In this function he has been the architect of a €500M+ licensing deal with GSK, he has been heavily involved in Prosensa's IPO on NASDAQ, and he has led the sale of the company to Biomarin for 860M\$. Before Prosensa, Luc has been VP Business Development at TiGenix (Euronext: TIG), Director Business Development at Methexis Genomics and consultant at Arthur D. Little.

Winner of EuropaBio's Most Innovative European Biotech SME Award 2014.

In October 2014, ERYTECH was awarded EuropaBio's Most Innovative European Biotech SME Award in recognition of ERYTECH's pioneering role in developing an innovative concept to starve cancer cells in specific nutrients and of its clinical achievements.

Financial Update

€30 million raised in a successful capital increase with specialized international investors

On October 23, 2014, ERYTECH announced the successful completion of a capital increase for a total amount of €30 million. Building on the positive Phase III data in ALL, the use of proceeds of this capital increase are essentially to support ERYTECH's strategy to further increase the potential of this product toward other indications such as lymphomas and solid tumors and speed up its development in the US.

A total of 1,224,489 new shares were issued representing around 18% of the number of shares in circulation (after capital increase). In total, 80% of the operation was executed internationally, with 68% in the U.S.

Net result maintained notwithstanding the increased activity level

Revenues for the year 2014 increased with €0.22 million (up 12%) to reach €2.03 million in 2014. These revenues are composed of tax credits (€1.52 million) and grants.

The net loss for the full year 2014 amounted to € 8.86 million. This represents an increase of approximately € 0.72 million or 9% compared with the same period last year. This increase is essentially the result of an increase in the cost of clinical development and general & administrative costs (G&A), partly offset by an increase in revenues and a decrease in research and development (R&D) costs and interest expenses.

The cost of the clinical studies increased by 57% to reach €3.59 million. This reflects the increased number of clinical studies with the launch of an Expanded Access Program in ALL in France, the Phase I/II study in the US, and the Phase II study in pancreas cancer in France. The European Phase IIb study in AML is paid for by our partner Orphan Europe (Recordati). Total (preclinical) R&D expenses decreased by €0.26 million to €2.44 million, compared to €2.50 million for 2013, thanks to concentration of the efforts on the TEDAC and the ERY-MET programs. G&A expenses increased by €0.77 million or 22% and are mainly linked to the valuation of the stock based compensation of management and increased costs related to our listing on Euronext Paris. 2014 was the first full year as a listed company for ERYTECH.

The financial result improved with €1.17 million thanks to the conversion in 2013 of outstanding loans.

The table below summarizes ERYTECH's key financial figures for 2014 compared with the previous year.

Key figures (in thousands of euros): IFRS

| | 2014 | 2013 |
|-------------------------|---------------|---------------|
| Sales | 0 | 0 |
| Other income | 2,026 | 1,802 |
| Operating income | 2,026 | 1,802 |
| R&D expenses | 2,244 | 2,503 |
| Clinical trial costs | 3,875 | 2,462 |
| IP expenses | 493 | 363 |
| SG&A expenses | 4,361 | 3,587 |
| Other operating costs | | -28 |
| Total operating costs | 10,973 | 8,887 |
| Operating result | -8,948 | -7,085 |
| Financial result | 68 | -1,100 |
| Taxes | 20 | 40 |
| Net result | -8,860 | -8,144 |

Solid cash balance of € 37 million

As a result of the above, ERYTECH has a strong balance sheet with cash and cash equivalents of €37 million at the end of 2014 compared with €15.1 million on December 31, 2013.

The full financial report for the year ending December 31, 2014, as approved by the Board of Directors on March 26, 2015, is available on ERYTECH's website (www.erytech.com). The report has been subject to a full review procedure by the company's statutory auditors.

Conference call and webcast:

On Tuesday, March 31st at 15:00pm CET (14:00pm GMT/9:00am EST), ERYTECH will conduct a conference call with webcast.

Please dial the following number to participate:

France: +33 172001510

USA (Free): + 1 8778874163

Germany: +49 69222229031

Switzerland: +41 225809022

The Netherlands: + 31 107138194

Belgium: +32 24029640

United Kingdom: +44 2030432440

Sweden: +46 850334664

Finland: +358 942599700

Followed by confirmation code 433073#

The webcast can be followed live on line via the link:

<http://anywhereconference.com?UserAudioMode=DATA&Name=&Conference=135293239&PIN=433073>

The press release and the webcast slides will be available on the Company's website. A replay of the webcast will be posted on the Company's website shortly after the call.

Next financial updates:

- Financial highlights for the 1st quarter of 2015: May 5, 2015 (after market)
- Financial highlights for the 2nd quarter of 2015: July 8, 2015 (after market)
- Business update and financial highlights for the 1st semester of 2015: September 28, 2015 (after market)

Upcoming participations at investor conferences:

- Portzampnac Forum PEA-PME, April 1 in Paris
- BioEquity Europe, May 19-20 in Vienna
- Gilbert Dupont Midcap Healthcare Forum, May 21 in Paris
- Jefferies Global Healthcare Conference, June 1-4 in New York
- French Life Sciences Day, June 20 in New York

About ERYTECH and ERY-ASP/GRASPA®: www.erytech.com

Created in Lyon in 2004, ERYTECH is a French biopharmaceutical company providing new prospects for cancer patients, particularly those with acute leukemia and selected solid tumors.

By encapsulating the asparaginase enzyme in red blood cells, ERYTECH has developed ERY-ASP/GRASPA®, an original treatment that targets cancer cells through “tumor starvation” while significantly reducing the side effects for patients. ERY-ASP/GRASPA® has recently announced positive Phase III data in Acute Lymphoblastic Leukemia (ALL) and is in Phase IIb clinical trial in Acute Myeloid Leukemia (AML) in Europe. The product is also in Phase I/II clinical development in ALL in the USA.

Every year about 50,000 patients are diagnosed with Acute Lymphoblastic Leukemia (ALL) or Acute Myeloid Leukemia (AML), the two forms of acute leukemia. Today, for about 80% of these patients, mainly adults and relapsing patients, current forms of asparaginase cannot be used due to their toxicity. With a presumed improved safety profile, ERY-ASP/GRASPA® is being developed to allow all leukemia patients to be treated, even the most fragile ones, representing a market opportunity of more than EUR 1 billion.

The Company is also developing other indications in solid tumors and certain orphan indications outside oncology. A Phase II study in pancreas cancer is ongoing and the Company is exploring other solid tumor indications for ERY-ASP.

ERYTECH has obtained orphan drug designations for ERY-ASP/GRASPA® in ALL, AML and pancreas cancer, both in Europe and the USA, and has its own GMP-approved and operational manufacturing site in Lyon (France), and a site for clinical production in Philadelphia (USA).

The Company has concluded licensing and distribution partnership agreements for ALL and AML in Europe with Orphan Europe (Recordati Group), and for ALL with TEVA in Israel.

ERYTECH is listed on Euronext regulated market in Paris (ISIN code: FRO011471135, ticker: ERYP – Compartment B) 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 US under an ADR level 1 program (OTC, ticker EYRY).

CONTACTS

ERYTECH

Gil Beyen

Chairman and CEO

Tel: +33 4 78 74 44 38

investors@erytech.com

NewCap

Julien Perez / Emmanuel Huynh

Investor relations

Nicolas Merigeau

Press relations

Tel: +33 1 44 71 98 52

erytech@newcap.fr



Forward-looking information

This document may contain forward-looking statements and estimates with respect to the financial situation, the results of operations, the strategy, the project and to the 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 Company's control. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will prove to be commercially successful. Therefore, actual results, the financial condition, performance or achievements of ERYTECH, or industry results, may turn out to be materially different from any 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 our 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. ERYTECH disclaims any obligation to update any such forward-looking statement. 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 Company'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 French law.