

Pharming receives positive EMA decision on paediatric investigation plan (PIP) for leniolisib in Europe

An agreed PIP is the regulatory pathway to market authorization for leniolisib as a treatment of activated phosphoinositide 3-kinase delta syndrome in children

Leiden, The Netherlands, 06 January, 2022: Pharming Group N.V. ("Pharming" or "the Company") (Euronext Amsterdam: PHARM/NASDAQ: PHAR) announces that a positive decision has been made by the European Medicines Agency (EMA) on the Paediatric Investigation Plan (PIP) for leniolisib, a phosphoinositide 3-kinase (PI3K) inhibitor, currently in development for the treatment of activated phosphoinositide 3-kinase delta syndrome (APDS).

The ongoing registration-enabling Phase II/III study has enrolled patients ages 12 years and older. Since APDS also affects younger children, Pharming, as part of the agreed PIP, has developed a clinical plan to include children as young as one year old in future studies.

For the registration of new medicines in Europe, biopharmaceutical companies are required to provide a PIP which outlines the strategy for investigation of a new medicinal product in the paediatric population. The positive PIP opinion from the Paediatric Committee (PDCO) is an endorsement of the clinical program to evaluate the safety and efficacy of leniolisib in patients from 1 year of age to less than 18 years of age with APDS; and the subsequent positive PIP decision of EMA thus paves the way for the potential submission of a Marketing Authorisation Application (MAA) in Europe for leniolisib in the treatment of APDS in adults and adolescents in 2022.

Upon successful completion of the agreed PIP, leniolisib would be eligible for up to an additional two years of marketing exclusivity in the EU, on top of the ten-year EU market exclusivity after market approval as result of its EU Orphan Drug Designation.

Pharming remains on track to announce top-line data from the Phase II/III registration enabling clinical trial of leniolisib for the treatment APDS in Q1 2022.

Chief Medical Officer of Pharming, Anurag Relan, commented:

"We are pleased to have received a positive PIP decision from EMA and accomplish this important regulatory milestone as we continue to advance leniolisib for the treatment of APDS in Europe as well as globally. The approval of the PIP further supports our confidence in the potential of leniolisib to address this orphan disease and population and provides us with a pathway towards marketing approval in Europe, in parallel with our US regulatory strategy. Moving forward, we look forward to continuing to work with the regulatory authorities to bring leniolisib to the European market as expeditiously as possible".



About the Paediatric Committee (PDCO)

The Paediatric Committee (PDCO) is the European Medicines Agency's (EMA) scientific committee responsible for activities on medicines for children and to support the development of such medicines in the European Union by providing scientific expertise and defining paediatric needs.

About the Paediatric Investigation Plan (PIP)

A paediatric investigation plan (PIP) is a development plan aimed at ensuring that the necessary data are obtained through studies in children, to support the authorisation of a medicine for children in Europe. All applications for marketing authorisation for new medicines have to include the results of studies as described in an agreed PIP, unless the medicine is exempt because of a deferral or waiver.

About Activated phosphoinositide 3-kinase δ syndrome (APDS)

APDS is an ultra-rare primary immunodeficiency disease that is caused by variants in either of two genes, PIK3CD or PIK3R1. Variants of these genes lead to hyperactivity of the PI3Kδ (phosphoinositide 3-kinase delta) pathway.^{1,2} Balanced signaling in the PI3Kδ pathway is essential for physiological immune function. When this pathway is hyperactive, immune cells fail to mature and function properly, leading to immunodeficiency and dysregulation.^{1,3} APDS is characterized by severe, recurrent sinopulmonary infections, lymphoproliferation, autoimmunity, and enteropathy.^{4,5} Patients with APDS suffer a median 7-year diagnostic delay.⁶ Because APDS is a progressive disease, this delay may lead to an accumulation of damage over time, including permanent lung damage and lymphoma.⁴⁻⁷

About leniolisib

Leniolisib is a small molecule inhibitor of the delta isoform of the 110 kDa catalytic subunit of class IA PI3K with immunomodulating and potentially anti-neoplastic activities. Leniolisib inhibits the production of phosphatidylinositol-3-4-5-trisphosphate (PIP3). PIP3 serves as an important cellular messenger specifically activating AKT (via PDK1) and regulates a multitude of cell functions such as proliferation, differentiation, cytokine production, cell survival, angiogenesis, and metabolism. Unlike PI3K α and PI3K β which are ubiquitously expressed, PI3K δ and PI3K γ are expressed primarily in cells of hematopoietic origin. The central role of PI3K δ in regulating numerous cellular functions of the adaptive immune system (B-cells and to a lesser extent T cells) as well as the innate immune system (neutrophil, mast cells, and macrophages) strongly indicates that PI3K δ is a valid and potentially effective therapeutic target for several immune diseases.

To date, leniolisib has proven to be safe and well tolerated during the Phase 1 first-in-human trial in healthy subjects, and in the 12-week dose-escalation study in APDS patients

About Pharming Group N.V.

Pharming Group N.V. is a global, commercial stage biopharmaceutical company developing innovative protein replacement therapies and precision medicines for the treatment of rare diseases and unmet medical needs.



The flagship of our portfolio is our recombinant human C1 esterase inhibitor (rhC1INH) franchise. C1INH is a naturally occurring protein that down regulates the complement and contact cascades in order to control inflammation in affected tissues.

Our lead product, RUCONEST®, is the first and only plasma-free rhC1INH protein replacement therapy. It is approved for the treatment of acute hereditary angioedema (HAE) attacks. We are commercializing RUCONEST® in the United States, the European Union and the United Kingdom through our own sales and marketing organization, and the rest of the world through our distribution network.

In addition, we are investigating the clinical efficacy of rhC1INH in the treatment of further indications, including pre-eclampsia, acute kidney injury and severe pneumonia as a result of COVID-19 infections.

We are also studying our oral precision medicine, leniolisib (a phosphoinositide 3-kinase delta, or PI3K delta, inhibitor), for the treatment of activated PI3K delta syndrome, or APDS, in a registration enabling Phase 2/3 study in the United States and Europe.

Additionally, we entered into a strategic collaboration with Orchard Therapeutics to research, develop, manufacture and commercialize OTL-105, a newly disclosed investigational ex-vivo autologous hematopoietic stem cell (HSC) gene therapy for the treatment of HAE.

Furthermore, we are leveraging our transgenic manufacturing technology to develop nextgeneration protein replacement therapies, most notably for Pompe disease, which is currently in preclinical development.

Forward-looking Statements

This press release contains forward-looking statements, including with respect to timing and progress of Pharming's preclinical studies and clinical trials of its product candidates, Pharming's clinical and commercial prospects, Pharming's ability to overcome the challenges posed by the COVID-19 pandemic to the conduct of its business, and Pharming's expectations regarding its projected working capital requirements and cash resources, which statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to the scope, progress and expansion of Pharming's clinical trials and ramifications for the cost thereof; and clinical, scientific, regulatory and technical developments. In light of these risks and uncertainties, and other risks and uncertainties that are described in Pharming's 2020 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2020 filed with the U.S. Securities and Exchange Commission, the events and circumstances discussed in such forward-looking statements may not occur, and Pharming's actual results could differ materially and adversely from those anticipated or implied thereby. Any forward-looking statements speak only as of the date of this press release and are based on information available to Pharming as of the date of this release.

Inside Information

This press release relates to the disclosure of information that qualifies, or may have qualified, as inside information within the meaning of Article 7(1) of the EU Market Abuse Regulation.

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