



Pharming Announces US FDA Acceptance for Priority Review of its New Drug Application for Leniolisib

September 28, 2022

The FDA has assigned a PDUFA goal date of March 29, 2023 for the NDA submission based on randomized-controlled and long-term extension data for leniolisib as a treatment for APDS, a rare primary immunodeficiency

LEIDEN, The Netherlands, Sept. 28, 2022 /PRNewswire/ -- Pharming Group N.V. ("Pharming" or "the Company") (Euronext Amsterdam: PHARM) (NASDAQ: PHAR) announces that the US Food and Drug Administration (FDA) has accepted for priority review its New Drug Application (NDA) for leniolisib, an oral, selective phosphoinositide 3-kinase delta (PI3K δ) inhibitor, to treat the rare primary immunodeficiency activated phosphoinositide 3-kinase delta syndrome (APDS) in adults and adolescents 12 years of age and older in the US. The FDA has assigned a Prescription Drug User Fee Act (PDUFA) goal date of March 29, 2023, aligned with a Priority Review classification.



Submitted by Pharming on July 29, 2022, the NDA was supported by positive data from a Phase II/III study of leniolisib, which met its co-primary endpoints of reduction in index lymph node size and correction of immunodeficiency in the target population. Those results demonstrated the efficacy of leniolisib over placebo with a statistically significant reduction from the baseline size of participants' index lymphadenopathy lesions ($p=0.006$) and normalization of their immune function, as evidenced by an increased proportion of naïve B cells from the baseline ($p=0.002$). Those findings indicate a reduction in disease markers associated with APDS, whose clinical hallmarks include significant lymphoproliferation and immune dysfunction, as well as increased risk of lymphoma. Furthermore, safety data from the study showed that leniolisib was well tolerated by participants. Also submitted as part of the application were data from a long-term, open-label extension clinical trial including 38 patients with APDS who were treated with leniolisib for a median of 102 weeks.

Anurag Relan, MD, MPH, Chief Medical Officer of Pharming, commented:

"The FDA's acceptance for priority review of Pharming's New Drug Application for leniolisib is a milestone that demonstrates our commitment to addressing unmet needs for patients with rare diseases. With FDA's review, leniolisib moves further along the regulatory pathway as a potential disease-modifying targeted treatment for APDS in adults and adolescents 12 years of age and older in the US, who currently rely on supportive therapies such as antibiotics and immunoglobulin replacement therapy. We look forward to continuing to work closely with the FDA, as well as with regulatory authorities across the globe, to make leniolisib available to immunologists, hematologists, and their APDS patients."

About Activated Phosphoinositide 3-Kinase δ Syndrome (APDS)

APDS is a rare primary immunodeficiency that affects approximately 1 to 2 people per million. It is caused by variants in either of two genes, *PIK3CD* or *PIK3R1*, that regulate maturation of white blood cells. Variants of these genes lead to hyperactivity of the PI3K δ (phosphoinositide 3-kinase delta) pathway.^{1,2} Balanced signaling in the PI3K δ 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} Because these symptoms can be associated with a variety of conditions, including other primary immunodeficiencies, people with APDS are frequently misdiagnosed and suffer a median 7-year diagnostic delay.⁶ As APDS is a progressive disease, this delay may lead to an accumulation of damage over time, including permanent lung damage and lymphoma.⁴⁻⁷ The only way to definitively diagnose this condition is through genetic testing.

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 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 (neutrophils, 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 been well tolerated during both the Phase 1 first-in-human trial in healthy subjects and the Phase II/III registration-enabling study.

About Pharming Group N.V.

Pharming Group N.V. (Euronext Amsterdam: PHARM) (NASDAQ: PHAR) is a global biopharmaceutical company dedicated to transforming the lives of patients with rare, debilitating, and life-threatening diseases. Pharming is commercializing and developing an innovative portfolio of protein replacement therapies and precision medicines, including small molecules, biologics, and gene therapies that are in early to late-stage development. Pharming is headquartered in Leiden, Netherlands, and has employees around the globe who serve patients in over 30 markets in North America, Europe, the Middle East, Africa, and Asia-Pacific.

For more information, visit www.pharming.com and find us on [LinkedIn](#)

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 2021 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2021 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.

References

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