

Pharming announces first patient enrolled in Phase III clinical trial of leniolisib for the treatment of APDS in Japan

Single-arm Phase III study in Japan evaluating leniolisib in patients aged 12 years and older with APDS, a rare primary immunodeficiency

Leiden, The Netherlands, August 9, 2023: Pharming Group N.V. (“Pharming” or “the Company”) (EURONEXT Amsterdam: PHARM/Nasdaq: PHAR) announces that the first patient has been enrolled in its Phase III clinical trial in Japan evaluating leniolisib for the treatment of activated phosphoinositide 3-kinase delta syndrome (APDS) in adult and pediatric patients 12 years of age and older.

Pharming’s single-arm, open-label clinical trial will evaluate the safety, tolerability, and efficacy of leniolisib in three patients 12 years of age and older who have a confirmed APDS diagnosis. Each patient will receive weight-based dosing up to 70mg of leniolisib twice daily for 12 weeks. The study’s primary efficacy endpoints and secondary endpoints mirror those used to evaluate the clinical outcomes in each of the leniolisib APDS trials.

Pharming plans to include data from the trial in a future registration application for the approval of leniolisib to be filed with Japan’s Pharmaceuticals and Medical Devices Agency (PMDA). Eligible patients enrolled in the trial will continue to receive the investigational drug for at least one year through an open-label extension trial.

Hirokazu Kanegane, Professor of the Department of Child Health and Development, Tokyo Medical and Dental University, commented:

“The initiation of this clinical study is a positive step for the APDS community in Japan. With patients currently reliant on supportive treatments, the prospect of a disease-modifying treatment for this rare primary immunodeficiency could represent an exciting new treatment option for patients, their families, caregivers and their doctors in Japan.”

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

“Building on the success of our multinational Phase II/III study of leniolisib in patients with APDS 12 years of age and older, I am pleased to confirm the initiation of our Phase III trial supporting the same population in Japan. By conducting this study, Pharming’s goal is to introduce an oral treatment option that has the potential to alter the course of disease for patients with APDS, a rare and progressive disease, in Japan. Following the FDA’s recent approval of Joenja® in the U.S., we are working with regulatory authorities to expand access to this targeted treatment for patients across the globe through additional market authorizations.”

In May 2023, leniolisib was granted orphan drug designation (ODD) by the Ministry of Health, Labour and Welfare of Japan (MHLW) for the treatment of APDS. There is currently no approved therapy in Japan for this complex and progressive disease.

The MHLW's ODD system promotes the research and development of investigational drugs designed to treat diseases associated with significant unmet medical need and which affect fewer than 50,000 patients across Japan. Investigational drugs granted ODD in Japan benefit from additional guidance and subsidies for research and development activities, consultation for clinical development, and priority review of marketing authorization applications.

Leniolisib received regulatory approval from the United States Food and Drug Administration (FDA) for the treatment of APDS in patients 12 years of age or older in March 2023 and was commercially launched under the brand name Joenja® in the U.S. in April 2023.

About Activated Phosphoinositide 3-Kinase δ Syndrome (APDS)

APDS is a rare primary immunodeficiency that was first characterized in 2013. APDS is caused by variants in either one of two identified genes known as *PIK3CD* or *PIK3R1*, which are vital to the development and function of immune cells in the body. Variants of these genes lead to hyperactivity of the PI3K δ (phosphoinositide 3-kinase delta) pathway, which causes immune cells to fail to mature and function properly, leading to immunodeficiency and dysregulation^{1,2,3} APDS is characterized by a variety of symptoms, including 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, it has been reported that 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 A definitive diagnosis can be made through genetic testing. APDS affects approximately 1 to 2 people per million worldwide.

About Joenja® (leniolisib)

Joenja® (leniolisib) is an oral small molecule phosphoinositide 3-kinase delta (PI3K δ) inhibitor approved in the US as the first and only targeted treatment of activated phosphoinositide 3-kinase delta (PI3K δ) syndrome (APDS) in adult and pediatric patients 12 years of age and older. Joenja® inhibits the production of phosphatidylinositol-3-4-5-trisphosphate, which serves as an important cellular messenger and regulates a multitude of cell functions such as proliferation, differentiation, cytokine production, cell survival, angiogenesis, and metabolism. Results from a randomized, placebo-controlled Phase II/III clinical trial demonstrated clinical efficacy of Joenja® in the coprimary endpoints; demonstrating statistically significant impact on immune dysregulation and normalization of immunophenotype within these patients, and interim open label extension data has supported the safety and tolerability of long-term Joenja® administration.⁸ Leniolisib is currently under regulatory review by the European Medicines Agency, with plans to pursue further regulatory approvals in the UK, Canada, Australia and Japan. Leniolisib is also being evaluated in a Phase III clinical trial in children aged 4 to 11 with APDS, with a further trial planned in children aged 1 to 6 years with APDS. For information about Joenja®, visit: Joenja.com

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 may contain forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance, or events to differ materially from those expressed or implied in these statements. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "milestones", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. Examples of forward-looking statements may include statements with respect to timing and progress of Pharming's preclinical studies and clinical trials of its product candidates, Pharming's clinical and commercial prospects, 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 2022 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2022, 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. All forward-looking statements contained in this press release are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. 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. Pharming does not undertake any obligation to publicly update or revise any.

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

1. Lucas CL, et al. *Nat Immunol.* 2014;15(1):88-97.
2. Elkaim E, et al. *J Allergy Clin Immunol.* 2016;138(1):210-218.
3. Nunes-Santos C, Uzel G, Rosenzweig SD. *J Allergy Clin Immunol.* 2019;143(5):1676-1687.
4. Coulter TI, et al. *J Allergy Clin Immunol.* 2017;139(2):597-606.
5. Maccari ME, et al. *Front Immunol.* 2018;9:543.
6. Jamee M, et al. *Clin Rev Allergy Immunol.* 2019;May 21.
7. Condliffe AM, Chandra A. *Front Immunol.* 2018;9:338.
8. Rao VK, et al. *Blood.* 2023 Mar 2;141(9):971-983.

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