

## Pharming announces positive topline data in pediatric clinical trial of leniolisib

*Multinational Phase III study is evaluating leniolisib tablets in children aged 4 to 11 years with APDS, a rare primary immunodeficiency*

*Data consistent with the improvements seen in the previously reported randomized controlled trial in adolescent and adult APDS patients*

*Global regulatory filings planned to begin in 2025*

**Leiden, the Netherlands, December 11, 2024:** Pharming Group N.V. (“Pharming” or “the Company”) (EURONEXT Amsterdam: PHARM/Nasdaq: PHAR) announces positive topline results of data from its Phase III clinical trial (NCT05438407) evaluating the investigational drug leniolisib, an oral, selective phosphoinositide 3-kinase delta (PI3K $\delta$ ) inhibitor, in children aged 4 to 11 years with activated phosphoinositide 3-kinase delta syndrome (APDS).

Leniolisib, marketed under the brand name Joenja® in the U.S., received approval from the U.S. Food and Drug Administration (FDA) for the treatment of APDS in adult and pediatric patients 12 years of age and older in March 2023. Pharming plans to include data from this 4-11-year-old trial in regulatory filings worldwide for the approval of leniolisib for pediatric patients with APDS, beginning in 2025.

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

*“This is the first data from a clinical trial for younger pediatric patients with APDS, who have a significant unmet need for a disease modifying treatment. Two hallmarks of APDS, lymphoproliferation and abnormal immunophenotype, showed improvement from baseline to 12 weeks in this single arm study. More than a quarter of known APDS patients are below the age of 12, so having a potential treatment option for these patients who suffer from a progressive, serious condition could be very important. We look forward to initiating regulatory filings for these younger pediatric patients in 2025.”*

The study enrolled 21 children with APDS ages 4 to 11 years at sites in the United States, Europe, and Japan. The single-arm, open-label clinical trial is evaluating the safety, tolerability, and efficacy of leniolisib. The study’s primary efficacy endpoints are a reduction in index lymph node size and an increased proportion of naïve B cells out of total B cells from baseline at 12 weeks. Secondary endpoints include an assessment of the ability of leniolisib to modify health-related quality of life based on measures of physical, social, emotional, and school functioning using a validated patient questionnaire. These endpoints mirror those used to evaluate the clinical outcomes in previous leniolisib APDS trials for patients aged 12 and older.

All 21 patients enrolled completed the 12-week treatment period. Lymphoproliferation improved as measured by a mean reduction in index lesion size and immunophenotype correction was demonstrated by an increase in the percent of naïve B cells. The improvement in lymphoproliferation and immunophenotype correction were seen across the four dose levels being

investigated and were consistent with the improvements previously reported in adolescent and adult patients. All treatment emergent adverse events were reported to be mild to moderate in nature. There were no drug related serious adverse events, and all patients completed the 12-week treatment period.

***Manish Butte, MD, PhD, E. Richard Stiehm Endowed Chair and Professor and Division Chief, Department of Pediatrics, Division of Immunology, Allergy and Rheumatology, and Department of Microbiology, Immunology and Molecular Genetics UCLA, commented:***

*“The 12-week data from the first clinical study evaluating leniolisib in pediatric APDS patients is encouraging. These results highlight the potential for leniolisib to help pediatric patients living with APDS and their families. The pediatric APDS community is in need of more treatment options, and we look forward to leniolisib being one of those options.”*

Full results will be presented at an upcoming medical conference and published in a peer-reviewed journal.

Eligible patients enrolled in this study are continuing to receive leniolisib for an additional year through an open-label extension trial to further evaluate the safety, tolerability, and efficacy in these patients. In addition, a separate Phase III clinical trial including children aged 1 to 6 years with APDS is ongoing to evaluate a new pediatric formulation of leniolisib in this younger population.

### **About Activated Phosphoinositide 3-Kinase $\delta$ 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 $\delta$  (phosphoinositide 3-kinase delta) pathway, which causes immune cells to fail to mature and function properly, leading to immunodeficiency and dysregulation<sup>1,2,3</sup> APDS is characterized by a variety of symptoms, including severe, recurrent sinopulmonary infections, lymphoproliferation, autoimmunity, and enteropathy.<sup>4,5</sup> 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.<sup>6</sup> As APDS is a progressive disease, this delay may lead to an accumulation of damage over time, including permanent lung damage and lymphoma.<sup>4,7</sup> A definitive diagnosis can be made through genetic testing. APDS affects approximately 1 to 2 people per million worldwide.

### **About leniolisib**

Leniolisib is an oral small molecule phosphoinositide 3-kinase delta (PI3K $\delta$ ) inhibitor approved in the U.S. and several other countries as the first and only targeted treatment indicated for activated phosphoinositide 3-kinase delta (PI3K $\delta$ ) syndrome (APDS) in adult and pediatric patients 12 years of age and older. Leniolisib 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 III clinical trial demonstrated statistically

significant improvement in the coprimary endpoints, reflecting a favorable impact on the immune dysregulation and deficiency seen in these patients, and interim open label extension data has supported the safety and tolerability of long-term leniolisib administration.<sup>8,9</sup> Leniolisib is currently under regulatory review in the European Economic Area, Canada and Australia for APDS, with plans to pursue further regulatory approvals in Japan and South Korea. Leniolisib is also being evaluated in two Phase III clinical trials in children with APDS and in a Phase II clinical trial in primary immunodeficiencies (PIDs) with immune dysregulation linked to altered PI3K $\delta$  signaling in lymphocytes. The safety and efficacy of leniolisib has not been established for PIDs with immune dysregulation beyond APDS.

### **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 and biologics. Pharming is headquartered in Leiden, the 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](http://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, commercial, competitive and technical developments. In light of these risks and uncertainties, and other risks and uncertainties that are described in Pharming's 2023 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2023, 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*

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## References

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