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**News Release**

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**Janssen Receives Positive CHMP Opinion for BYANLI® (6-monthly Paliperidone Palmitate) for the Maintenance Treatment of Schizophrenia in Adults**

*If approved by the European Commission, 6-monthly paliperidone palmitate (PP6M) will be the first long-acting injectable schizophrenia treatment with a twice-yearly dosing regimen*

*The Committee for Medicinal Products for Human Use (CHMP) Opinion is based on results from the Route 6 Study, which showed that 92.5 percent of patients treated with PP6M were relapse-free at the end of the 12-month double-blind phase<sup>1</sup>*

**BEERSE, BELGIUM, September 17, 2021** – The Janssen Pharmaceutical Companies of Johnson & Johnson announced today that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has issued a Positive Opinion recommending the long-acting atypical antipsychotic therapy BYANLI® (6-monthly paliperidone palmitate; PP6M) for the maintenance treatment of schizophrenia in adult patients who are clinically stable on 1-monthly paliperidone palmitate (PP1M)<sup>2</sup> or 3-monthly paliperidone palmitate (PP3M).<sup>3</sup> If approved by the European Commission, PP6M will provide the first twice-yearly treatment for adults living with schizophrenia and longest available dosing interval for an antipsychotic medication in the European Economic Area.<sup>1,4</sup>

“With only two injections per year, 6-monthly paliperidone palmitate has the potential to reduce the burden of taking medication frequently, giving eligible

patients the opportunity to focus on other aspects of their life,” said Ludovic de Beaucoudrey, Ph.D., EMEA Therapeutic Area Lead, Janssen-Cilag. “Today’s Positive Opinion from the CHMP underscores Janssen’s 60-year commitment to transforming the lives of people living with schizophrenia through rigorous scientific research and product development.”

The marketing authorisation application is based on the Route 6 Study, a randomised, double-blind, non-inferiority Phase 3 global study designed to demonstrate that PP6M is not less effective than PP3M for the prevention of relapse in participants previously stabilised on a shorter-acting formulation of paliperidone palmitate.<sup>1,5,6</sup> The study enrolled 702 adults living with schizophrenia from 20 countries, including Bulgaria, Czech Republic, France, Hungary, Italy, Poland, Russia, Spain and Turkey.<sup>1,5</sup> The results showed non-inferiority of PP6M compared with PP3M on the primary endpoint of time to first relapse at the end of the 12-month period. Results found that 92.5 percent of patients treated with PP6M and 95.1 percent treated with PP3M were relapse-free at 12 months.<sup>1</sup> Relapse was defined as psychiatric hospitalisation, increase in Positive and Negative Syndrome Scale (PANSS) total score, increase in individual PANSS item scores, violent behaviour resulting in self-injury or suicidal/homicidal ideation.

“When it comes to the treatment of schizophrenia, unmet needs remain, including treatment adherence concerns, despite currently available therapies,” said Bill Martin, Ph.D., Global Therapeutic Area Head, Neuroscience, Janssen Research & Development, LLC. “The Positive Opinion received from the CHMP today, enables us to rethink how we manage this chronic disease and brings us one step closer to offering patients and caregivers the potential for a life less defined by medication.”

The safety profile observed for PP6M was consistent with previous studies of PP1M and PP3M with no new safety signals emerging.<sup>1</sup> The most common treatment emergent adverse reactions ( $\geq 5.0$  percent) in the study’s PP6M group were weight increase (8.4 percent), injection site pain (7.7 percent), headache (6.7 percent) and upper respiratory tract infection (5.0 percent). There were no unexpected serious adverse reactions.<sup>1</sup>

“Non-adherence to prescribed drug treatments has been recognised as a challenge for treatment continuity that can potentially have a negative impact on treatment outcomes,” said Professor Silvana Galderisi,\* Route 6 Study Investigator and Professor of Psychiatry and Director of the Emergency Unit of the Department of Mental Health at the University of Campania Luigi Vanvitelli, Italy. “It is therefore essential to provide a variety of treatment options to meet different patient needs. If approved by the European Commission, PP6M’s extended dosing interval may help address a key unmet need within this population.”

Following this Positive CHMP Opinion, the European Commission will now consider approval of a marketing authorisation for PP6M as a long-acting injectable maintenance treatment for adults with schizophrenia who are clinically stable on 1-monthly or 3-monthly paliperidone palmitate injectable products. The European Commission has the authority to grant marketing authorisation for medicines in the European Economic Area.

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### **About the Route 6 Study (PSY3015)**

The Route 6 Study was a randomised, double-blind, non-inferiority global Phase 3 study of 702 adults (ages 18–70) with schizophrenia, designed to demonstrate that injection cycles consisting of a single administration of PP6M (700 or 1000 mg) are not less effective than two sequentially administered injections of PP3M (350 or 525 mg) for the prevention of relapse in subjects with schizophrenia previously stabilised on corresponding doses of PP1M (100 or 150 mg) or PP3M (350 or 525 mg).<sup>1</sup>

The study consisted of four treatment phases: a screening phase (up to 28 days); a transition phase (of 1 to 4 months), applicable to those adult patients who entered the screening phase before being stabilised on PP1M or PP3M; a maintenance phase (of 1 or 3 months), used to stabilise patients on PP1M or PP3M prior to the double-blind phase; and a double-blind phase (of 12 months).

In the double-blind phase all stabilised adult patients (N=702) were randomised in a 2:1 ratio to receive PP6M (n=478) or PP3M (n=224).<sup>1</sup>

Study evaluations included efficacy, pharmacokinetics, pharmacodynamics and safety. The study's duration varied from approximately 13 months to 19 months depending on treatment arm.<sup>1</sup>

### **About Long-Acting Injectables**

Long-acting injectables (LAIs) allow for the slow release of a drug into the blood and have been on the market for more than 50 years.<sup>7</sup> LAI antipsychotics have been demonstrated to offer a number of advantages compared with oral medication, including not having to remember to take drugs daily, improved patient outcomes, improved patient and physician satisfaction, and lower relapse rates.<sup>8</sup>

In 2002, a 1-monthly injectable formulation (PP1M) was approved by the European Commission as a maintenance treatment of schizophrenia in adult patients under the brand name XEPLION®.<sup>2</sup> In 2016, a 3-monthly LAI formulation (PP3M) was approved under the trade name TREVICTA®.<sup>3</sup>

### **About Schizophrenia**

Schizophrenia is a chronic and severe brain disorder affecting approximately 20 million people worldwide<sup>9</sup> and an estimated 3.7 million people in the EU.<sup>10</sup> The disease is characterised by distortions in thinking, perception, emotions, language, sense of self and behaviour leading to neurological impairment, severe disability and increased mortality.<sup>8</sup>

Antipsychotic medication is recognised as an essential component in the treatment of schizophrenia, and adherence to medication plays a critical role in preventing symptoms and relapses.<sup>11</sup> Early intervention in schizophrenia may improve patient outcomes as more than 69 percent of people with schizophrenia do not receive appropriate care.<sup>9</sup>

### **About the Janssen Pharmaceutical Companies of Johnson & Johnson**

At Janssen, we're creating a future where disease is a thing of the past. We're the Pharmaceutical Companies of Johnson & Johnson, working tirelessly to make that future a reality for patients everywhere by fighting sickness with science,

improving access with ingenuity, and healing hopelessness with heart. We focus on areas of medicine where we can make the biggest difference: Cardiovascular & Metabolism, Immunology, Infectious Diseases & Vaccines, Neuroscience, Oncology, and Pulmonary Hypertension.

Janssen Pharmaceutica N.V., Janssen Research & Development, LLC. and Janssen-Cilag are part of the Janssen Pharmaceutical Companies of Johnson & Johnson. Learn more at [www.janssen.com/emea](http://www.janssen.com/emea). Follow us at <https://twitter.com/JanssenEMEA>.

### **Cautions Concerning Forward-Looking Statements**

*This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding 6-monthly paliperidone palmitate (PP6M). The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties materialize, actual results could vary materially from the expectations and projections of Janssen Pharmaceutica N.V., Janssen Research & Development, LLC., Janssen-Cilag and any of the other Janssen Pharmaceutical Companies and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: challenges and uncertainties inherent in product research and development, including the uncertainty of clinical success and of obtaining regulatory approvals; uncertainty of commercial success; manufacturing difficulties and delays; competition, including technological advances, new products and patents attained by competitors; challenges to patents; product efficacy or safety concerns resulting in product recalls or regulatory action; changes in behaviour and spending patterns of purchasers of health care products and services; changes to applicable laws and regulations, including global health care reforms; and trends toward health care cost containment. A further list and descriptions of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended January 3, 2021, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," and in the company's most recently filed Quarterly Report on Form 10-Q, and the company's subsequent*

*filings with the Securities and Exchange Commission. Copies of these filings are available online at [www.sec.gov](http://www.sec.gov), [www.jnj.com](http://www.jnj.com) or on request from Johnson & Johnson. None of the Janssen Pharmaceutical Companies nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.*

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\*Professor Silvana Galderisi has been a paid consultant for Janssen. She has not been compensated for any media work.

## References

1. Data on file. PP6M. Protocol R092670PSY3015: Phase 3 objectives, methods, primary efficacy results, adverse events. September 2021. Document number: RF-185391.
2. European Medicines Agency. Xeplion Summary of Product Characteristics. Available at [https://www.ema.europa.eu/en/documents/product-information/xeplion-epar-product-information\\_en.pdf](https://www.ema.europa.eu/en/documents/product-information/xeplion-epar-product-information_en.pdf). Accessed September 2021.
3. European Medicines Agency. Trevicta Summary of Product Characteristics. Available at: [https://www.ema.europa.eu/en/documents/product-information/trevicta-epar-product-information\\_en.pdf](https://www.ema.europa.eu/en/documents/product-information/trevicta-epar-product-information_en.pdf). Accessed September 2021.
4. Johnson & Johnson Ltd. Press release on November 2020. Available at: <https://www.prnewswire.com/news-releases/janssen-submits-paliperidone-palmitate-6-month-pp6m-supplemental-new-drug-application-to-us-fda-for-treatment-of-schizophrenia-in-adults-301164580.html>. Accessed September 2021.
5. Clinicaltrialsregister.eu. A Double-blind, Randomized, Active-controlled, Parallel-group Study of Paliperidone Palmitate 6 Month Formulation. Identifier: 2017-001941-28. Available at <https://www.clinicaltrialsregister.eu/ctr-search/trial/2017-001941-28/ES>. Accessed September 2021.
6. Clinicaltrials.gov. A Study of Paliperidone Palmitate 6-Month Formulation. Identifier: NCT03345342. Available at: <https://clinicaltrials.gov/ct2/show/NCT03345342>. Accessed September 2021.
7. National Alliance on Mental Illness. Long-Acting Injectables. Available at: <https://www.nami.org/Learn-More/Treatment/Mental-Health-Medications/Long-Acting-Injectables>. Accessed September 2021.
8. Brissos S, *et al.* The role of long-acting injectable antipsychotics in schizophrenia: a critical appraisal. *Ther Adv Psychopharmacol.* 2014 Oct; 4(5):198–219.
9. World Health Organization. Schizophrenia. Available at: <https://www.who.int/news-room/fact-sheets/detail/schizophrenia>. Accessed September 2021.
10. Athanasopoulou C, *et al.* An analysis of online health information on schizophrenia or related conditions: a cross-sectional survey. *BMC Med Inform Decis Mak.* 2013; 13:98.
11. Higashi K, *et al.* Medication adherence in schizophrenia: factors influencing adherence and consequences of nonadherence, a systemic literature review. *Ther Adv Psychopharmacol.* 2013 Aug; 3(4):200–18.
12. Weiden PJ, *et al.* Partial compliance and risk of rehospitalization among California Medicaid patients with schizophrenia. *Psychiatr Serv.* 2004 Aug; 55(8):886–91.