



## US FDA Approves OPVEE

May 23, 2023  
RNS Number : 3243A  
Indivior PLC  
23 May 2023

### **Indivior Announces U.S. Food and Drug Administration Approval of OPVEE® (nalmefene) Nasal Spray, An Opioid Overdose Rescue Medicine for Natural and Synthetic Opioids Like Fentanyl**

*In the 12-month period ending in December 2022, over 79,000 people in the U.S. were reported to have died of an opioid overdose, of which 90% - approximately 72,000 - were linked to illicit synthetic opioids, mainly fentanyl<sup>1</sup>*

*Approval based on data from a pharmacodynamic study demonstrating that OPVEE provides fast onset of reversal of respiratory depression induced by the synthetic opioid remifentanyl<sup>2</sup>*

Richmond, Va., May 23, 2023 - Indivior PLC (LSE: INDV) today announced that the U.S. Food and Drug Administration (FDA) approved OPVEE® (nalmefene) nasal spray for the emergency treatment of known or suspected opioid overdose induced by natural or synthetic opioids in adults and pediatric patients aged 12 years and older, as manifested by respiratory and/or central nervous system depression.<sup>2</sup> OPVEE contains nalmefene, an opioid receptor antagonist that provides fast onset and long duration reversal of opioid-induced respiratory depression, which is the primary cause of opioid overdose injury and death.<sup>2,3,4</sup> OPVEE was designed to address the challenges of today's opioid crisis.

"OPVEE's FDA approval represents a significant achievement in the development of new treatment options to address today's era of opioid overdoses that are driven by powerful synthetic opioids, such as fentanyl," said Mark Crossley, CEO, Indivior. "OPVEE is an emergency treatment for the fast reversal of respiratory depression triggered by natural or synthetic opioids, including fentanyl, <sup>2,3,4</sup> and we are committed to making this novel rescue medication widely available to those who need it most to help save lives."

OPVEE was approved via the 505(b)(2) pathway. In a first of its kind pharmacodynamic study ([NCT04828005](#)) in 61 opioid-experienced, non-dependent subjects, the effect of 2.7 mg OPVEE was assessed on remifentanyl-induced respiratory depression. Following OPVEE administration, the time to onset of reversal of respiratory depression was observed between 2.5 to 5 minutes and full recovery of respiratory drive was manifested as early as 5 minutes after OPVEE administration. The duration of action of nalmefene is as long as most opioids, including fentanyl. These attributes are well-suited to address the challenges of today's opioid overdose crisis.

"Despite our collective effort to stem opioid abuse in America, addiction can happen to anyone, and millions of people are at risk for not only opioid overdose, but also poisoning from illicit synthetic opioids such as fentanyl," said Jerome Adams, MD, MPH, Executive Director of Health Equity Initiatives, Purdue University. "With OPVEE, first responders will have a fast and long-acting rescue medication option to combat the current opioid epidemic and save lives."

The speed of action, long duration, and high potency of fentanyl and other synthetic opioids are driving unprecedented overdose deaths across a broader range of ages, and they are now a leading cause of death for people ages 18 to 45.<sup>5</sup> For each opioid-induced fatality, it has been estimated that there are

an additional 6.4-8.4 non-fatal overdoses that can lead to long-term physical and mental disability.<sup>6</sup>

"I have seen firsthand the devastating impact of the opioid crisis on college campuses and in emergency rooms," said Madeline Hilliard, Founder, Team Awareness Combating Overdose (TACO) and DopaGE. "The FDA approval of OPVEE is good news for everyone impacted by the overdose crisis. In fact, it uses the same device as currently available nasal overdose reversal agents on the market."

A federally funded contract from the Biomedical Advanced Research and Development Authority (BARDA), part of the Administration for Strategic Preparedness and Response within the US Department of Health and Human Services, for up to \$10.8 million, combined with a \$7.4 million U01 "grand opportunities in medications development" grant received from the National Institute on Drug Abuse (NIDA), supported the development of OPVEE. The contract (number HHSO100201800029C) with BARDA was intended to develop OPVEE for reversal of opioid overdoses in the community and as a medical countermeasure and reversal agent in the event of a chemical attack using synthetic opioids.

OPVEE is expected to be in the market in Q4 of 2023. For more information about OPVEE, including full Prescribing Information visit [www.opvee.com](http://www.opvee.com).

Indivior added OPVEE to its portfolio with the acquisition of Opiant Pharmaceuticals, Inc., which closed March 2, 2023. As previously indicated, Indivior believes the clinical profile of OPVEE supports the potential for this treatment to deliver annual net revenue of \$150 million to \$250 million, with expected earnings accretion from the Opiant acquisition after the second full year of launch of OPVEE.

#### **About OPVEE® (nalmeferene) Nasal Spray**

OPVEE® (nalmeferene) nasal spray is an opioid receptor antagonist approved by the Food and Drug Administration (FDA) to reverse opioid overdose. OPVEE nasal spray is indicated for the emergency treatment of known or suspected opioid overdose induced by natural or synthetic opioids in adults and pediatric patients aged 12 years and older, as manifested by respiratory and/or central nervous system depression.<sup>2</sup>

OPVEE contains the opioid receptor antagonist nalmeferene, which works quickly by blocking the brain opioid receptors. In a clinical model of opioid-induced respiratory depression in opioid-experienced, non-dependent subjects, OPVEE had an onset of action of 2.5 to 5 minutes and fully reversed respiratory depression as early as 5 minutes after OPVEE administration.<sup>2</sup> Other clinical data include a terminal plasma half-life of approximately 11 hours.<sup>2</sup> While the duration of action of nalmeferene is as long as most opioids, a recurrence of respiratory depression is possible.<sup>2</sup> Most common adverse reactions (incidence at least 2%) are nasal discomfort, headache, nausea, dizziness, hot flush, vomiting, anxiety, fatigue, nasal congestion, throat irritation, rhinalgia, decreased appetite, dysgeusia, erythema, and hyperhidrosis.

#### **HIGHLIGHTED SAFETY INFORMATION**

##### **INDICATION**

OPVEE nasal spray is an opioid antagonist indicated for the emergency treatment of known or suspected overdose induced by natural or synthetic opioids in adults and pediatric patients aged 12 years and older, as manifested by respiratory and/or central nervous system depression.

OPVEE nasal spray is intended for immediate administration as emergency therapy in settings where opioids may be present.

OPVEE nasal spray is not a substitute for emergency medical care.

#### **HIGHLIGHTED SAFETY INFORMATION**

##### **CONTRAINDICATIONS**

Hypersensitivity to nalmeferene or to any of the other ingredients.

##### **WARNINGS AND PRECAUTIONS**

**Risk of Recurrent Respiratory and Central Nervous System Depression:** While the duration of action of nalmeferene is as long as most opioids, a recurrence of respiratory depression is possible, therefore, keep patient under continued surveillance and administer repeat doses of OPVEE using a new nasal spray with each dose, as necessary, while awaiting emergency medical

assistance.

Limited Efficacy with Partial Agonists or Mixed Agonist/Antagonists: Reversal of respiratory depression caused by partial agonists or mixed agonists/antagonists, such as buprenorphine and pentazocine, may be incomplete. Larger or repeat doses may be required.

Precipitation of Severe Opioid Withdrawal: Use in patients who are opioid dependent may precipitate opioid withdrawal. In neonates, opioid withdrawal may be life-threatening if not recognized and properly treated. Monitor for the development of opioid withdrawal.

Risk of Cardiovascular (CV) Effects: Abrupt postoperative reversal of opioid depression may result in adverse CV effects. These events have primarily occurred in patients who had preexisting CV disorders or received other drugs that may have similar adverse CV effects. Monitor these patients closely in an appropriate healthcare setting after use of nalmefene hydrochloride.

Risk of Opioid Overdose from Attempts to Overcome the Blockade: Attempts to overcome opioid withdrawal symptoms caused by opioid antagonists with high or repeated doses of exogenous opioids may lead to opioid intoxication and death

#### **ADVERSE REACTIONS**

Most common adverse reactions (incidence at least 2%) are nasal discomfort, headache, nausea, dizziness, hot flush, vomiting, anxiety, fatigue, nasal congestion, throat irritation, rhinalgia, decreased appetite, dysgeusia, erythema, and hyperhidrosis.

For more information about OPVEE and the full Prescribing Information visit [www.opvee.com](http://www.opvee.com).

#### **About Indivior**

Indivior is a global pharmaceutical company working to help change patients' lives by developing medicines to treat substance use disorders (SUD) and serious mental illnesses. Our vision is that all patients around the world will have access to evidence-based treatment for the chronic conditions and co-occurring disorders of SUD. Indivior is dedicated to transforming SUD from a global human crisis to a recognized and treated chronic disease. Building on its global portfolio of OUD treatments, Indivior has a pipeline of product candidates designed to both expand on its heritage in this category and potentially address other chronic conditions and co-occurring disorders of SUD, including alcohol use disorder and cannabis use disorder. In March 2023, Indivior acquired Opiant Pharmaceuticals, Inc., gaining access to a pipeline focused on opioid overdose rescue (OPVEE) and other potential SUD treatments. Opiant Pharmaceuticals entered into the contract with BARDA prior to the acquisition. Headquartered in the United States in Richmond, VA, Indivior employs more than 900 individuals globally and its portfolio of products is available in 39 countries worldwide. Visit [www.indivior.com](http://www.indivior.com) to learn more. Connect with Indivior on LinkedIn by visiting [www.linkedin.com/company/indivior](http://www.linkedin.com/company/indivior).

#### **Cautionary Statement Regarding Forward-Looking Statements**

##### **Important Cautionary Note Regarding Forward-Looking Statements**

This announcement contains certain statements that are forward-looking. Forward-looking statements include, among other things, statements regarding the expected safety and efficacy of OPVEE and the timing of our planned commercial launch of OPVEE, the potential annual revenue of OPVEE and other statements containing the words "believe", "anticipate", "plan", "expect", "intend", "estimate", "forecast", "strategy", "target", "guidance", "outlook", "potential", "project", "priority", "may", "will", "should", "would", "could", "can", "outlook", "guidance", the negatives thereof, and variations thereon and similar expressions. By their nature, forward-looking statements involve risks and uncertainties as they relate to events or circumstances that may or may not occur in the future.

Actual results may differ materially from those expressed or implied in such statements because they relate to future events. Various factors may cause differences between Indivior's expectations and actual results, including, among others, the material risks described in the most recent Indivior PLC Annual Report and in subsequent releases; our ability to commercialize and market acceptance of new products; the substantial litigation and ongoing investigations to which we are or may become a party; our reliance on third parties to manufacture commercial supplies of most of our products, conduct our clinical trials and at times to collaborate on products in our pipeline; our ability to comply with legal and regulatory settlements, healthcare laws and regulations, requirements imposed by regulatory agencies and payment and reporting obligations under government pricing programs; risks related to the manufacture and distribution of our products, some of which are controlled substances; market

acceptance of our products as well as our ability to commercialize our products and compete with other market participants; the uncertainties related to the development of new products, including through acquisitions, and the related regulatory approval process; our dependence on a small number of significant customers; our ability to retain key personnel or attract new personnel; our dependence on third-party payors for the reimbursement of our products and the increasing focus on pricing and competition in our industry; unintended side effects caused by the clinical study or commercial use of our products; our use of hazardous materials in our manufacturing facilities; our import, manufacturing and distribution of controlled substances; our ability to successfully execute acquisitions, partnerships, joint ventures, dispositions or other strategic acquisitions; our ability to protect our intellectual property rights and the substantial cost of litigation or other proceedings related to intellectual property rights; the risks related to product liability claims or product recalls; the significant amount of laws and regulations that we are subject to, including due to the international nature of our business; macroeconomic trends and other global developments such as the COVID-19 pandemic; the terms of our debt instruments, changes in our credit ratings and our ability to service our indebtedness and other obligations as they come due; changes in applicable tax rate or tax rules, regulations or interpretations; and our ability to realize our deferred tax assets.

Forward-looking statements speak only as of the date that they are made and should be regarded solely as our current plans, estimates and beliefs. Except as required by law, we do not undertake and specifically decline any obligation to update, republish or revise forward-looking statements to reflect future events or circumstances or to reflect the occurrences of unanticipated events.

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**References and Notes:**

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Note: Madeline Hilliard has been engaged by Indivior to consult for the purposes of the approval of OPVEE.

Note: Jerome Adams, MD, MPH, has been engaged by Indivior to consult for the purposes of the approval of OPVEE.

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