Press release

Orexo announces positive results from pivotal trial for its leading pharmaceutical pipeline asset OX124

- **The pivotal trial OX124-002 meets the primary endpoints in the 4-period crossover, comparative bioavailability study in healthy volunteers**
- **OX124 showed a significantly faster and higher absorption of naloxone compared to intramuscular dosing with the injection reference product**
- **OX124 is designed to help in the fight against overdoses caused by the most powerful synthetic opioids that are behind the vast majority of fatal overdoses in the US**
- **Upon approval Orexo will, along with ZUBSOLV® and MODIA™, have the most comprehensive range of treatment options for people suffering from opioid use disorder on the US market**

Uppsala, Sweden – November 16, 2021 – Orexo AB (publ.), **(STO:ORX) (OTCQX:ORXOY)** today announces that the company has successfully completed the pivotal trial (OX124-002) for its lead pharmaceutical pipeline asset, OX124. The study met its primary endpoints with naloxone exposure within the targeted interval. OX124 showed a significantly faster and higher absorption of naloxone compared to intramuscular dosing with the injection reference product. Furthermore, OX124 was found to be well tolerated. Based on the successful outcome of the study, Orexo is expecting to file a New Drug Application with the US Food and Drug Administration (FDA) in H2 2022, when results from the ongoing, required stability study is available. Following FDA approval, a US launch will be initiated in H2 2023.

OX124 is a powerful high-dose naloxone rescue medication, designed to reverse opioid overdoses, including those from highly potent synthetic opioids, such as fentanyl. To meet the target profile for a more potent rescue medication, Orexo has developed a unique and patented powder formulation technology that allows for rapid and efficient delivery of active ingredients through the intranasal route. In a previous exploratory clinical study (OX124-001) in healthy volunteers, OX124 showed more rapid absorption, substantially higher plasma concentrations of naloxone, and sustained duration of elevated plasma concentrations when compared to the current market leader.[1]

The use of synthetic opioids is the leading cause of death in fatal overdoses in the US, a trend that has seen further acceleration in the wake of the Covid-19 pandemic. For the twelve-month period leading up to March 2021, the number of reported overdose deaths surpassed 96,000 for the first

[1] https://orexo.com/investors/regulatory-press-releases/2019-01-07-positive-results-from-human-pk-study-assessing-orexo-s-new-intranasal-naloxone-formulations-for-opioid-overdose-reversal

time in history, an increase of 30 percent versus the previous year. Approximately 75 percent of these deaths were caused by opioids, and within the opioid-related deaths, synthetic opioids accounted for the vast majority,[2] underlining the need for more powerful and faster-acting rescue medications.[3]

Nikolaj Sørensen, President and CEO of Orexo AB, said: *"The successful result from the pivotal trial for OX124 is a critical milestone for Orexo. I am looking forward to making this life-saving medication as widely available as possible so treatment is on hand when needed. Together with ZUBSOLV® and our new digital therapy MODIA™ for opioid use disorder, Orexo will soon be the company offering the most comprehensive range of treatment options for patients suffering from opioid addiction in the US and continues to be at the forefront of fighting this devastating disease."*

The market for naloxone rescue medication in the US is dominated by one player that commercializes the first FDA approved nasal naloxone rescue medication. With the rapid increase in overdoses in the US, the market has grown significantly during 2021 and the sales from the current market leader increased 50 percent versus the same quarter last year.[4] As a response to increased utilization of synthetic opioids and that other high-dose entrants are entering the market the expectations are that the high-dose alternatives will gain increasing market share. With Orexo's established networks in the opioid use disorder (OUD) market and broad product offering for patients with OUD, Orexo has a strong foundation to reach the patients who need these products the most.

The commercial manufacturing of OX124 is established and the regulatory stability study is ongoing. Orexo will now continue to document the functionality of the nasal product, conduct a usability study (human factor study) and ensure OX124 meets the reliability requirements from the FDA.

For further information, please contact:

Orexo AB (publ.)
Nikolaj Sørensen, President and CEO
Tel: +46 (0)18 780 88 00
E-mail: ir@orexo.com

Lena Wange, IR & Communications Director
Tel: +46 (0)18 780 88 00
E-mail: ir@orexo.com

About Orexo

Orexo develops improved pharmaceuticals and digital therapies addressing unmet needs within the growing space of substance use disorders and mental illness. The products are commercialized by Orexo in the US or via partners worldwide. The main market today is the US market for

[2] All numbers are taken from https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm
[3] N Volkow "Scientific Solutions for the Opioid Crisis" (2018) https://www.nichd.nih.gov/sites/default/files/2018-01/201801_volkow_nichd_opioids.pdf
[4] Emergent BioSolutions

buprenorphine/naloxone products, where Orexo commercializes its lead product, ZUBSOLV®, for treatment of opioid use disorder. Total net sales for Orexo in 2020 amounted to SEK 664 million and the number of employees was 138. Orexo is listed on the Nasdaq Stockholm Mid Cap (ORX) and is available as ADRs on OTCQX (ORXOY) in the US. The company is headquartered in Uppsala, Sweden, where research and development activities are performed.

For more information about Orexo please visit, **www.orexo.com**. You can also follow Orexo on Twitter, @orexoabpubl, LinkedIn and YouTube.