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NEWS RELEASE

iXB 401 NOVEL SEMAGLUTIDE SUBLINGUAL WAFER ACHIEVES 20 TIMES HIGHER BIOAVAILABILITY THAN RYBELSUS® (ORAL SEMAGLUTIDE TABLET) IN PRECLINICAL STUDY

Singapore, 19 November 2024 — iX Biopharma Ltd. (the "**Company**"), a specialty pharmaceutical company specializing in drug delivery systems and a leader in innovative healthspan nutraceuticals, today announced positive results from a single-dose pharmacokinetic study demonstrating that iXB 401, a novel semaglutide sublingual wafer, achieved significantly greater bioavailability—approximately 20 times higher—than the oral semaglutide tablet Rybelsus® in a preclinical study conducted in 12 Sprague-Dawley rats.

Semaglutide, a GLP-1 receptor agonist, is a highly effective treatment for both diabetes and obesity. The iXB 401 wafer employs iX Biopharma's patented wafer sublingual drug delivery technology, and contains a proprietary formulation of permeation enhancers and mucoadhesive components designed to enhance sublingual absorption and systemic bioavailability of semaglutide. By bypassing the gastrointestinal tract, iXB 401 may offer a more consistent and effective alternative to the existing oral semaglutide tablet, Rybelsus®.

Results showed that iXB 401 achieved a substantially higher area under the plasma concentration-time curve (AUC) over 8 hours compared to Rybelsus®. The $AUC_{0\text{-}8h}$ for iXB 401 was 11,000 ng*h/mL, vastly surpassing the 553 ng*h/mL AUC seen with Rybelsus® ($p < 0.005$). Furthermore, iXB 401 exhibited lower variability in plasma concentration (mean CV of 87%) compared to Rybelsus® (mean CV of 141%), highlighting the potential for a superior non-invasive sublingual option with potentially lower doses and side effects.

"This study represents a significant breakthrough in the potential for sublingual delivery of semaglutide, offering an alternative that could reshape how semaglutide and other GLP-1 analogues and peptides are administered," **said Dr. Janakan Krishnarajah**, Chief Operating Officer and Chief Medical Officer of iX Biopharma. *"By delivering semaglutide through a sublingual wafer, we address key patient needs: avoiding injections, which enhances preference and compliance, and potentially offering a better side effect profile. Beyond patient benefits, this technology can also ease manufacturing and supply constraints, supporting scalability for next-generation treatments."*

These findings are highly encouraging for the continued development of iXB 401, indicating the potential for efficacy outcomes with a lower dose of semaglutide in this innovative, non-invasive, and convenient dosage form. This approach could offer new possibilities for enhancing accessibility and sustainability in semaglutide treatments.

Conducted by Eurofins Advinus Biopharma Services, the pharmacokinetic study was carried out in accordance with protocols approved by the Committee for the Control and Supervision of Experiments on Animals (CCSEA) and the Institutional Animal Ethics Committee (IAEC).

About Semaglutide

Semaglutide is marketed by Novo Nordisk as Ozempic® and Wegovy® in injection pens and Rybelsus® as an oral tablet. The global market for semaglutide and other GLP-1 therapies is rapidly expanding, with GlobalData forecasting the GLP-1 drug market to reach US$125 billion[1] by the end of the decade, driven by strong demand and the increasing prevalence of diabetes and obesity. New studies continue to show potential benefits beyond weight loss, such as reduction in risk of major adverse cardiovascular events, liver fibrosis and chronic kidney disease. GLP-1 drugs have catapulted Eli Lilly and Novo Nordisk to become the world's two largest pharmaceutical company by market capitalization.

However, existing injectables and oral semaglutide face limitations in patient preference, and bioavailability and variability, respectively. Moreover, the growing demand for injectable GLP-1 medications is outstripping supply, and increased production and disposal of these injectables poses environmental challenges. There is now a growing demand for patient-friendly solutions that enhance compliance and reduce adverse effects from these treatments.

About iX Biopharma Ltd

iX Biopharma is a specialty pharmaceutical and nutraceutical company listed on the Catalist board of the Singapore Exchange Securities Trading Limited (SGX-ST), operating a fully integrated business model from drug development to manufacturing and supply, with facilities in Australia. The Group is focused on the development and commercialisation of pharmaceutical drugs and innovative nutraceuticals using novel, patent-protected formulations for sublingual delivery.

iX Biopharma has developed a number of drug delivery platform technologies, including WaferiX, WaferlogiX and NADiX, which deliver small molecule and biologics sublingually via the mucosa for better absorption, faster onset of action and predictable effect. The drug delivery platforms are particularly useful for drug repurposing, where existing approved drugs are developed into new drugs targeting different indications or a different route of administration, at a lower development cost and risk. iX Biopharma's portfolio includes among others, ketamine, dexmedetomidine, medicinal cannabis and nutraceuticals designed to improve healthspan and longevity.

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1 https://www.globaldata.com/media/pharma/glp-1r-agonists-type-2-diabetes-obesity-market-reach-125-billion-7mm-2033-forecasts-globaldata/