

Zeteo Biomedical Introduces CygnusMR™ and CygnusSDX™ Delivery Devices for Nasal Administration of Dry Powder Drugs and Biologics

Innovative Needle-Free Nasal Powder Delivery Systems Enhance Drug and Vaccine Development

Cedar Park, TX – 19 February 2025 – [Zeteo Biomedical LLC](#) today announced the launch of its ZTech-P CygnusMR™ and CygnusSDX™ delivery devices, designed for precise, metered-unit dosing of dry powder drugs and biologics via systemic nasal and nose-to-brain administration. These innovative needle-free delivery systems provide pharmaceutical and biotech companies with advanced solutions to accelerate the development, clinical evaluation, and commercial deployment of dry powder nasal combination products for a broad range of therapeutic applications.

Intranasal dry powder formulations offer significant advantages, including enhanced stability, extended shelf life, and improved bioavailability. Systemic nasal administration enables rapid, needle-free drug uptake, while nose-to-brain delivery bypasses the blood-brain barrier, allowing direct therapeutic access to the brain. The CygnusMR and CygnusSDX devices are designed for both patient self-administration and caregiver-assisted use, with configurations available for both adult and pediatric patients as well as a variety of animal species.



CygnusMR Multi-Dose Reloadable Nasal Device



CygnusSDX Single-Use Disposable Nasal Device

“The CygnusMR nasal delivery device is the industry’s first cartridge-reloadable nasal powder delivery system, featuring onboard storage for up to six unit doses and a replaceable nasal tip,” said Timothy Sullivan, CEO of Zeteo Biomedical. “Both the CygnusMR and CygnusSDX devices have undergone extensive analytical and in-vivo preclinical testing over the past several years to ensure optimal performance and reliability.”

Zeteo’s intranasal delivery devices leverage proprietary packaging technology that utilizes a Form Fill Seal (FFS) flexible foil blister system, eliminating the supply chain constraints associated with traditional drug packaging methods such as syringes and glass vials. This innovative approach provides superior protection for pharmaceuticals and biologics while allowing for storage under room temperature, refrigerated, or frozen conditions. The scalable ZTech FFS packaging platform enables the high-volume production of millions of doses per day—a critical capability for the rapid, cost-effective deployment of vaccines and medical countermeasures on a global scale.

About Zeteo Biomedical LLC

Zeteo Biomedical™ is a leading biomedical device technology company headquartered in Cedar Park, Texas. The company provides novel technology and technical services supporting the development and commercialization of drug/device combination products, and fill/finish packaging solutions for pharmaceuticals, biopharmaceuticals, biologics, and botanicals. Zeteo’s technology applications include drug/device combination products for intranasal, nose-to-brain, ophthalmic, sublingual, and animal care applications. For more information please visit the Zeteo website at:

<https://www.zeteobiomed.com/>