BioSpectrum the business of Bio & Health Sciences ASIA EDITION

Daiichi Sankyo and Nosis Biosciences partner to advance RNA medicines

13 March 2025 | News

RNA-based therapeutics have shown great promise in treating genetic diseases, but their potential has been limited due to delivery challenges

US-based Nosis Biosciences, an AI-driven biotechnology company specialising in RNA therapeutics for challenging cell types, has entered into a Research Collaboration and Option Agreement with Japan's Daiichi Sankyo.

The collaboration will leverage Nosis' Connexa™ platform, an advanced AI-powered drug design and delivery system, to enable therapeutic access to extrahepatic cell types across multiple vital organs affected by chronic diseases.

Nosis' proprietary Connexa platform represents a breakthrough in RNA medicine by offering the ability to silence any gene, in any cell type, throughout the body. This technology significantly expands the reach of RNA-based therapies beyond the liver, enabling targeted treatment for critical organs such as the heart, brain, lungs, kidneys, and muscles - areas where effective treatments are currently lacking.

RNA-based therapeutics have shown great promise in treating genetic diseases, but their potential has been limited due to delivery challenges, primarily focused on liver-targeted therapies. Connexa overcomes this barrier by integrating AI-powered drug design, single-cell receptor biology, and high-throughput chemistry to develop delivery vehicles optimized for in vivo use. The platform has mapped over 2,900 receptor targets across 532 cell types, ensuring precise delivery while optimizing the therapeutic payload for each disease target.