

Agilent and Singapore's NATi partner to advance lipid-conjugated oligonucleotide research

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Collaboration expands research of new delivery platform beyond liver tissues



Agilent Technologies Inc. has announced a two-year research collaboration agreement with Singapore's Nucleic Acid Therapeutics Initiative (NATi), hosted by Agency for Science, Technology and Research (A*STAR), to accelerate research into complex oligonucleotide (oligo) candidates, a promising frontier in precision therapeutics with potential applications across cardiovascular-metabolic, rare and infectious diseases.

The global oligo therapeutics market exceeded \$7 billion in 2025 and is projected to reach \$18 billion by 2030, driven by clinically validated DNA- and RNA-based therapies that continue to face analytical challenges beyond liver-targeted delivery.

Under this agreement, the collaboration will focus on developing end-to-end analytical and preparative workflows to support ligand-conjugated strategies, a new platform designed to extend oligo delivery beyond the liver tissues, unlock access to extrahepatic tissues and expand the therapeutic addressable market.

By combining NATi's extensive expertise in nucleic acid and chemical modifications with Agilent's 1290 Infinity III Bio UHPLC system, InfinityLab Pro iQ Plus mass detector, Preparative HPLC system, 6545XT AdvanceBio Quadrupole Time of Flight LC/MS, and Seahorse XF technologies, the collaboration will enable precise characterisation, purification and quality assessment of lipid-modified oligo, a key modality to accelerating more efficient preclinical development.

The agreement includes structured training and access to advanced analytical capabilities at Agilent's Global Solution Development Center (GSDC) in Singapore, along with a broader suite of Agilent analytical instruments.