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Hummingbird collaborates with Tempus to harness AI-driven precision medicine

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Accelerates clinical development of HMBD-001 in HER3 driven cancers including NRG1-fusions



Hummingbird Bioscience, an innovative clinical-stage biotech company in Singapore and US focused on developing revolutionary therapies for hard-to-drug targets, on 15 Dec 2020 announced a collaboration with Tempus, a leader in artificial intelligence and precision medicine, to drive the development of Hummingbird's lead clinical program, HMBD-001, as it advances into clinical trials in HER3-driven cancers, including those that harbor neuregulin 1 (NRG1) fusions. As part of the collaboration, Hummingbird will be leveraging Tempus' AI-enabled platform and proprietary data, as well as joining its TIME Trial® Network, for rapid identification, site activation and efficient enrollment of cancer patients who have NRG1 fusions and meet eligibility criteria for HMBD-001 clinical trials.

NRG1 fusions are a rare genetic mutation that are increasingly recognized as a driver of multiple tumor malignancies, and an actionable target for HER3 targeted therapy. NRG1 fusions cause the overproduction of NRG1 ligands, resulting in increased HER3 activation and tumor growth. Up to 1% of all solid tumors harbor NRG1 fusions, therefore, it is important to identify this patient population and develop therapies that can treat them.

HMBD-001 is a uniquely differentiated anti-HER3 neutralizing antibody that was developed using Hummingbird's proprietary Rational Antibody Discovery platform. HMBD-001 has been immune-engineered to bind with high affinity to the HER3 dimerization interface and block HER3 growth signals to cancer. Most importantly, HMBD-001 uniquely blocks HER3 in both open and closed conformations, and in the presence or absence of high concentrations of NRG1. Pre-clinical studies have shown that these differentiated properties of HMBD-001 lead to robust and sustained tumor growth inhibition in multiple HER3 cancer models, including those with NRG1-fusions.