



TwinStrand Biosciences to Showcase Recent Applications of its Duplex Sequencing Technology at the 2022 AGBT Annual Meeting

Unprecedented accuracy of the company's duplex sequencing technology continues to advance discovery in applications across medicine and life sciences

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SEATTLE--(BUSINESS WIRE)--TwinStrand Biosciences, Inc., the pioneer in duplex sequencing technology, today announced that the company will present several data sets as part of its sponsorship and participation in the annual Advances in Genome Biology and Technology conference in Orlando on June 6-9, 2022. The studies will highlight advances in TwinStrand's innovative technology and share recent research that demonstrates the power of duplex sequencing for some of the most demanding applications in clinical and foundational research.

"At TwinStrand, we continue to make progress and see the impact of our technology in important areas like hematology-oncology, genetic toxicology, and cellular therapies," said Jesse Salk, M.D., Ph.D., TwinStrand's Cofounder, and CEO. "We are pleased to share this progress with the AGBT community and look forward to forming new collaborations that leverage our highly sensitive and specific Duplex Sequencing technology which has consistently demonstrated its potential as a critical decision support tool in medicine, public health, and other fields of science where high-resolution insights are most impactful."

TwinStrand DuplexSeq™ AML-29 Minimal Residual Disease (MRD) Assays offer high-sensitivity detection of ultra-low frequency mutations in acute myeloid leukemia (AML) cases. The 29-gene panel covers loci that are mutated in up to 95% of adult AML patients and is several orders of magnitude more sensitive and specific than other next-generation sequencing-based (NGS) MRD assays. TwinStrand is a member of the [Foundation for the National Institutes of Health Biomarkers Consortium](#), which recently launched a program to validate and standardize methods of detecting and quantifying MRD in AML patients.

TwinStrand DuplexSeq™ Mutagenesis Assays offer a novel NGS-based approach to mutational research that detects, quantifies, and characterizes genome mutagenesis. It is the first NGS technology able to directly measure ultra-rare mutations caused by chemical carcinogens, without requiring biological selection and is applicable *in vitro* and *in vivo*. The final output is comprehensive data on induced mutations including frequency, simple spectrum, and trinucleotide signatures. TwinStrand is collaborating with the Health and Environmental Sciences Institute (HESI), the UK branch of the European Environmental Mutagenesis Society (UKEMS), and the US National Institutes of Standards (NIST) to showcase the value of error-corrected NGS for various preclinical research and regulatory applications.

AGBT attendees can learn more about TwinStrand technology in the Escambia suite. The company will share details from its pioneering work and partnerships in the field of genetic toxicology, which has significant implications for future regulatory mutagenicity and carcinogenicity testing. Other data sets will showcase recent applications of TwinStrand DuplexSeq™ products in acute myeloid leukemia and allogeneic cell therapy, including:

- *Ultra-Sensitive Duplex Sequencing for Quantifying Multi-Individual Cell Therapy Sub-Population Fractions*

Authors from TwinStrand Biosciences and Deverra Therapeutics

- *Duplex Sequencing for Ultra-Low Frequency Measurable Residual Disease Detection in Adult Acute Myeloid Leukemia*

Authors from TwinStrand Biosciences, Fred Hutchinson Cancer Research Center, National Heart, Lung, and Blood Institute – National Institutes of Health, and Children's Hospital Los Angeles

- *Duplex Sequencing Reveals Ubiquitous Clonal Hematopoiesis and Complex Donor-Recipient Clonal Dynamics Following Hematopoietic Stem Cell Transplant*

Authors from TwinStrand Biosciences and Fred Hutchinson Cancer Research Center

- *Longitudinal Monitoring of Pediatric Acute Myeloid Leukemia Using Duplex Sequencing of Patient-Specific Panels Reveals Ultra-Low Frequency MRD that Marks Persistent Carcinogenesis and Complex Clonal Evolution*

Authors from TwinStrand Biosciences, Fred Hutchinson Cancer Research Center, and University of California San Francisco

About TwinStrand Biosciences

TwinStrand Biosciences is leading the way in identifying ultra-low frequency genomic variants that are undetectable by conventional methods. The company's highly sensitive and specific Duplex Sequencing technology delivers clearer insights to researchers and clinicians in applications ranging from residual cancer detection to genetic toxicology. This data can inform critical decisions in clinical medicine, public health, and other fields of science on a faster timescale, where actions are most impactful. TwinStrand's scientist-leaders have authored more than two dozen peer-reviewed articles using Duplex Sequencing technology and have developed a portfolio of more than 175 patents and patent applications. The company has partnered with pharmaceutical companies, academic centers, clinical research networks, and federal regulatory agencies to bring high precision genomics to the forefront of their science. For more information visit www.twinstrandbio.com.

DuplexSeq™ products are for research use only. Not for use in diagnostic procedures.

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