Labcorp to Present Multiple Abstracts across Precision Oncology at the 2024 ASCO Annual Meeting

May 30, 2024

Abstracts offer insights into precision oncology diagnostics for triple-negative breast cancer, liquid biopsy and machine learning for tumor profiling

BURLINGTON, N.C., May 30, 2024 /PRNewswire/ -- Labcorp (NYSE: LH), a global leader of innovative and comprehensive laboratory services, will present several abstracts at the 2024 American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago (May 31 – June 4, 2024).

Labcorp's oncology research highlights the company's dedication to advancing meaningful and actionable insights that enhance the understanding of tumor biology and immune system mechanisms. These insights will contribute to facilitating patient access to novel targeted therapies with the end goal of improving patient outcomes.

"Labcorp is committed to deepening the understanding of cancer biology and enhancing therapeutic strategies. Through our presentations at the ASCO Annual Meeting investigating critical aspects of triple-negative breast cancer, liquid biopsy, and employing advanced machine learning algorithms for tumor profiling, we are paving the way for more accurate diagnostics and effective treatments," said Shakti Ramkissoon, M.D., Ph.D., MBA, vice president, medical lead for oncology at Labcorp. "These studies exemplify Labcorp's deep scientific and medical expertise enabling delivery of compelling evidence through internal and external collaborations to drive advancements in precision oncology."

Of the eight abstracts to be presented at the ASCO Meeting, four were internal studies by Labcorp researchers and four were conducted in collaboration with research partners from premier academic institutions and medical centers.

Among those being presented by Labcorp researchers, the findings of two studies examine various aspects of triple-negative breast cancer (TNBC) to provide a deeper understanding of the factors causing tumor progression and therapy resistance in the disease. Triple-negative breast cancer accounts for approximately 10-15% of all breast cancers but disproportionately impacts Black women in the U.S., who have almost twice the rate of the disease compared to white women.

Session: Breast Cancer-Metastatic
Abstract: 1096 - *Interaction between VEGF-A and immune checkpoint targets in triple-negative breast cancer suggests a mechanism of immune evasion and tumor progression.*
Poster Board: 74
Date: Sunday, June 2**,** 9:00 a.m. – 12:00 p.m. CDT
Vascular endothelial growth factor (VEGF) promotes angiogenesis and potentially modulates tumor immune evasion in breast cancer. Labcorp researchers performed comprehensive genomic and immune profiling on 143 formalin-fixed paraffin-embedded breast cancer samples to investigate the interaction between VEGF and immune gene expression. In triple-negative breast cancer (TNBC) samples, VEGF was co-expressed with immune checkpoint genes such as PD-1 and PD-L1. Labcorp's findings support that angiogenesis mediators may enhance immunosuppression, leading to immune evasion and tumor progression in TNBC.

Session: Breast Cancer—Metastatic
Abstract: 1095 – *Novel HLA-IIlo/HLA-IIhi phenotype and immune evasion in triple-negative breast cancer.*
Poster Board: 73
Date: Sunday, June 2, 9:00 a.m. – 12:00 p.m. CDT
Resistance and non-response to immunotherapy remain an unmet clinical need for patients with triple-negative breast cancer (TNBC). Aberrant expressions of human leukocyte antigens (HLAs) are one mechanism by which cancer cells evade immune response. Labcorp researchers performed a targeted RNA-sequence-based assay on 143 breast cancer patient samples, demonstrating that concurrent loss of HLA class I with increased HLA class II expression was associated with co-expression of biomarkers indicative of immune escape but not survival outcomes. These data offer an opportunity for developing novel approaches to overcome immunotherapy resistance in TNBC.

Session: Care Delivery/Models of Care
Abstract: 1554 - *A machine learning algorithm based on multi-omics biomarkers for the detection of tumor microsatellite instability*
Poster Board: 425
Date: Saturday, June 1**,** 9:00 a.m. – 12:00 p.m. CDT
Labcorp researchers will present data on an innovative machine learning model developed to predict microsatellite instability (MSI) status in patients with solid tumors using comprehensive genomic and immune profiling, independent of direct sequencing data from microsatellite sites. Researchers analyzed genomic and gene expression data from over 2,000 colorectal cancer samples to generate and test a model for predicting MSI status, which was confirmed using MSI status from The Cancer Genome Atlas (TCGA) studies of colorectal and endometrial carcinoma. This study highlights an algorithmic method to identify patients with potential MSI-high status for orthogonal screening when current methodologies fall short.

Session: Developmental Therapeutics-Molecularly Targeted Agents and Biology
Abstract: 3063 - *Analytical Validation of the Labcorp® Plasma Complete™ Test to Enable Precision Oncology Through Solid Tumor Liquid Biopsy Comprehensive Genomic Profiling*
Poster Board: 208
Date: Saturday, June 1, 9:00 a.m. – 12:00 p.m. CDT
The Labcorp® Plasma Complete™ test is a next-generation-sequencing, cell-free DNA comprehensive genomic profiling test that identifies actionable

and clinically relevant variants in advanced and metastatic solid cancers across 521 genes. In this validation study, test performance demonstrated highly specific (>99.99%), accurate (97.3% positive percent agreement and >99.99% negative percent agreement) and sensitive (down to 0.35% or 1.63-fold) variant detection. Plasma samples from a broad range of solid tumors demonstrated that this assay offers a highly precise, accurate, and robust comprehensive genomic and immune profiling assay to complement tissue-based testing and inform clinical decision-making.

To connect with Labcorp at the 2024 ASCO Annual Meeting in Chicago, visit https://oncology.labcorp.com/ASCO24.

About Labcorp
Labcorp (NYSE: LH) is a global leader of innovative and comprehensive laboratory services that helps doctors, hospitals, pharmaceutical companies, researchers and patients make clear and confident decisions. We provide insights and advance science to improve health and improve lives through our unparalleled diagnostics and drug development laboratory capabilities. The company's more than 67,000 employees serve clients in approximately 100 countries, provided support for 84% of the new drugs and therapeutic products approved in 2023 by the FDA, and performed more than 600 million tests for patients around the world. Learn more about us at www.labcorp.com.

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Media: Kimbrel Arculeo, 336-436-8263, Media@Labcorp.com; Investors: Christin O'Donnell, 336-436-5076, Investor@Labcorp.com