

Quanterix

Quanterix Launches Multiplexed Single Molecule Immunoassay Technology to Improve Diagnosis and Potential Treatment of Complex Diseases

Simoa releases study on the first single molecule immunoassay capable of measuring multiple proteins at subfemtomolar concentrations

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LEXINGTON, Mass.--(BUSINESS WIRE)--[Quanterix Corporation](#), delivering the world's most sensitive single molecule immunoassay measurement for the benefit of human health, today announced its recently published [Multiplexed Single Molecule Immunoassays](#) study that successfully demonstrated the ability to measure multiple proteins simultaneously at the single molecule level using its [Simoa](#) technology. The study, published in May by the [Royal Society of Chemistry](#), was funded in part by a grant from the National Cancer Institute.

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Quanterix developed an approach that combined the single molecule sensitivity of digital ELISA with bead encoding techniques to provide highly sensitive, multiplexed detection of proteins. Digital ELISA works by capturing proteins on microscopic beads, labeling the proteins with an enzyme, isolating the beads in arrays of 50-fL wells (Single Molecule Arrays, or Simoa), and detecting bead-associated enzymatic activity using fluorescence imaging. This method is being used to simultaneously measure four cytokines in plasma down to low subfemtomolar concentrations, facilitating greater understanding of inflammatory diseases.

“The ability to precisely measure multiple proteins simultaneously is important in several fields, including clinical diagnostics, donated blood screening, and in research across a broad range of therapeutic areas,” said Paul Chapman, President and Chief Executive Officer of Quanterix. “We set out to develop an

approach for multiplexed protein measurement in order to provide richer information on the biological status of a sample compared to single protein measurements. For example, multiplex detection of cytokine status in chronic inflammatory diseases, like Crohn's disease, could lead to a better understanding of the molecular basis and lead to improved diagnostics and treatment options for patients.”

To read the full study, please visit: www.quanterix.com/publications

About Quanterix

Quanterix is a developer of ground-breaking tools in high definition diagnostics. Its Simoa platform uses single molecule measurements to access previously undetectable proteins. With this unprecedented sensitivity and full automation, Simoa offers significant benefits to both research and clinical testing applications. Quanterix was established in 2007 and is located in Lexington, Massachusetts. To learn more about Quanterix and Simoa, please visit: www.quanterix.com.

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