

Quanterix' Ultra-Sensitive Technology Creates Breakthroughs in Brain Health of Military and Veterans

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New research advances the diagnosis of concussions and PTSD for those in the line of duty

LEXINGTON, Mass.--(BUSINESS WIRE)--Jul. 23, 2018-- Quanterix Corporation (NASDAQ:QTRX), a company digitizing biomarker analysis with the goal of advancing the science of precision health, today announced that researchers have uncovered novel links between several blood-based biomarkers and the diagnosis of brain injuries and chronic neuropsychological symptoms in military personnel and veterans, using its flagship <u>Simoa</u> technology. With unprecedented levels of sensitivity, Simoa is giving researchers the ability to achieve never-before-seen insights into the diagnosis of brain injuries and the relationship between these conditions and PTSD in our military.

According to the <u>Defense and Veterans Brain Injury Center</u>, nearly 800,000 veterans have been diagnosed with traumatic brain injuries (TBIs) since 2000 and more than 80 percent are considered to be mild (mTBI). Previously, researchers lacked the sensitivity needed to examine mTBIs, which often do not present symptoms and frequently go undiagnosed, potentially leading to neurological complications later in life.

A recent study published in *Brain Injury* showed that elevated levels of exosomal tau, amyloid-beta (Aβ42) and IL-10, now measurable with the Simoa technology in blood, are associated with mTBIs and chronic symptoms in military personnel. The findings suggest that measuring these exosomal markers may provide a way to detect mTBIs prior to the onset of symptoms, and therefore allow a wider range of potential treatments. The study also advances our understanding of the relationship between mTBIs and PTSD, correlating inflammation of the brain following an mTBI with progression of chronic PTSD symptoms.

"The health and safety of our military personnel and veterans are a top concern. These men and women risk their lives to protect our country and we owe it to them to fight just as hard to protect their health," said Kevin Hrusovsky, CEO, President and Chairman of Quanterix and the Founder of Powering Precision Health. "Our ability to finally see concussions and other neurological injuries with a blood test means our soldiers could soon benefit from the immediate diagnosis of even the mildest concussions. Science-based evidence is essential to advancing precision health, bringing us closer to preventing mental health disorders such as PTSD, and widening our addressable market in neurology, a therapeutic category with some of the most lethal diseases."

Another study published in *Brain Injury* sought to examine plasma and exosomal levels of tau, phosphorylated tau (p-tau), Aβ42 and Aβ40 in veterans with historical mTBIs and chronic neuropsychological symptoms. The findings indicate that elevations of exosomal tau and exosomal p-tau significantly correlate with post-traumatic and post-concussive symptoms in veterans with repetitive mTBIs (rTBIs). The findings also suggest that blood-based exosomes may provide another reliable biomarker source for remote mTBIs and that rTBIs may contribute to chronic neuropsychological symptoms.

"These findings are pivotal to understanding biomarker pathology with relation to mTBIs and post-concussive symptoms, which has never before been possible to this degree," said Dr. Jessica Gill, Senior Investigator in the Tissue Injury Branch, National Institutes of Health and one of the leading authors of both studies. "Furthermore our ability to see a link between PTSD and mTBIs indicates that we could soon be able to diagnose the disease through a non-invasive blood test, which would be incredibly groundbreaking."

About Quanterix

Quanterix is a company that's digitizing biomarker analysis with the goal of advancing the science of precision health. The company's digital health solution, Simoa, has the potential to change the way in which healthcare is provided today by giving researchers the ability to closely examine the continuum from health to disease. Quanterix' technology is designed to enable much earlier disease detection, better prognoses and enhanced treatment methods to improve the quality of life and longevity of the population for generations to come. The technology is currently being used for research applications in several therapeutic areas, including oncology, neurology, cardiology, inflammation and infectious disease. The company was established in 2007 and is located in Lexington, Massachusetts. For additional Information, please visit https://www.guanterix.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements. Forward-looking statements in this news release are based on Quanterix' expectations and assumptions as of the date of this press release. Each of these forward-looking statements involves risks and uncertainties. Factors that may cause Quanterix' actual results to differ from those expressed or implied in the forward-looking statements in this press release are discussed in Quanterix' filings with the U.S. Securities and Exchange Commission, including the "Risk Factors" sections contained therein. Except as required by law, Quanterix assumes no obligation to update any forward-looking statements contained herein to reflect any change in expectations, even as new information becomes available.

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