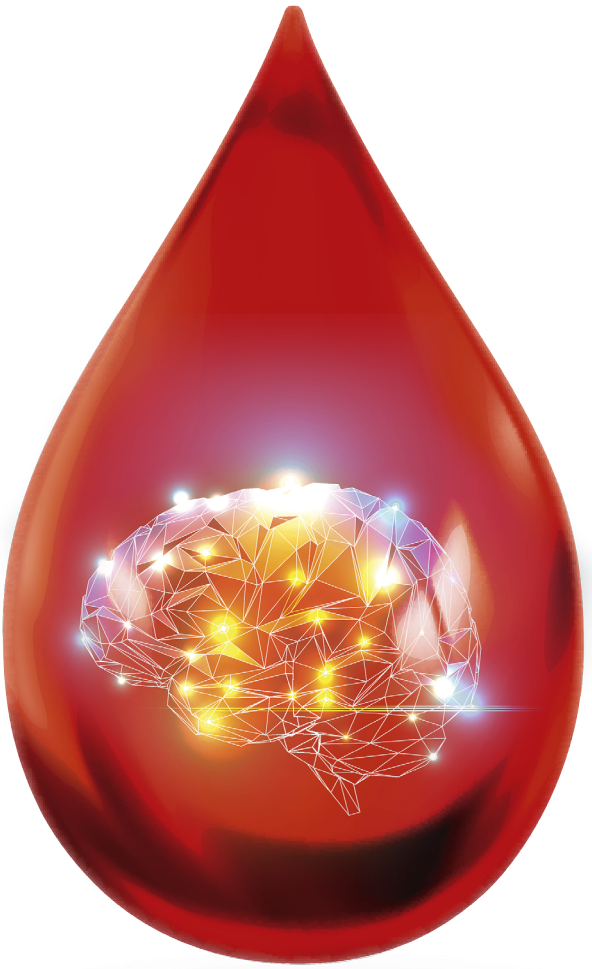
NEUROLOGY



Blood will tell.

The Simoa™ Platform—Detecting CNS biomarkers in serum and plasma with ultra-sensitivity.

Quanterix™

The Science of Precision Health

Quanterix
The Science of Precision Health

simoa

It's more than a *better* way to detect CNS biomarkers. It's a *1,000 times better* way.

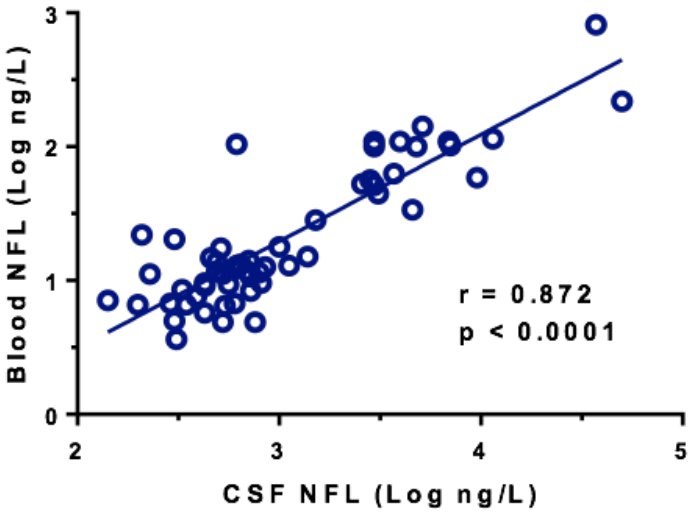
With a sensitivity more than 1,000 times greater than traditional ELISA methods, the Simoa Platform is so sensitive it can detect biomarkers in blood, offering you another dimension of data from a readily available, non-invasive source.

Suddenly new areas of research become practical. Your productivity will increase. Most important, you'll have access to CNS biomarker data at a level never before possible.

Now you can:

- Use serum or plasma to detect CNS biomarkers at both acute and normal levels
- Understand a neurological disorder's long-term effects by measuring associated biomarkers earlier in its progression
- Achieve better, more efficient, patient stratification
- Understand the taxonomy of neurological disorders by detecting multiple biomarkers simultaneously
- Help enroll the best subjects for clinical trials by quickly and non-invasively detecting associated biomarkers

Measuring Neurofilament light in blood and CSF



The Simoa Platform detects CNS biomarkers in serum, plasma and CSF with high sensitivity and precision. Correlation between blood and CSF levels has been demonstrated for a number of biomarkers, including Neurofilament light chain (Gisslén M et al., EBioMedicine. 2015 Nov 22;3:135-40).

Great accuracy and dynamic range.

Because of our digital approach, and an automated system that reduces human error, the Simoa Platform delivers very precise results—with coefficient of variations below 10%. The platform also offers a large dynamic range >4 logs by using an algorithm the takes advantage of digital measurements at low concentrations and analog measurements at higher concentrations.

Simoa HD-1 Analyzer™

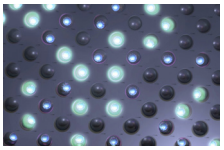
In the past, running immunoassays was a time consuming, largely manual technique. No more.

The HD-1 Analyzer simplifies the process by performing every step of the assay, improving efficiencies while providing consistent, reliable results. It is a fully automated solution that traps single molecules in femtoliter-sized wells, giving you a digital readout of every bead that is bound to the target analyte.

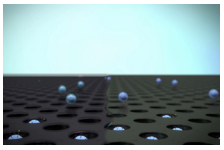
Sample in. Results out.

Using an intuitive control panel, the user selects the appropriate assay.

Users simply load their sample (serum, plasma or cerebrospinal fluid) and assay-specific reagents into the HD-1 Analyzer.

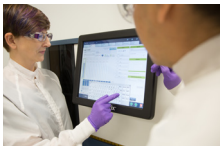


The fully automated system captures the immunocomplexes onto antibody-coated paramagnetic beads.



The captured immunocomplexes receive enzyme labels and individual beads are isolated and sealed in wells in the presence of a fluorogenic enzyme substrate.

The Simoa Platform detects down to a single molecule with first results in 30 minutes and subsequent results every 45 seconds thereafter.



Results are analyzed using our proprietary algorithms and can be viewed right on the touchscreen, or exported to commonly used software and LIMS systems.

Performance

- **Throughput:** 68 tests/hour, >500 data points per day
- **Sample Input:** 96-well plate or tubes
- **Total Assay Time:** <2.5 hours per 96-well plate
- **Hands on Time:** Startup time <20 minutes
- **Multiplex Capability:** Up to 4-plex

Assays designed around your needs.

Whether you are working in neurodegeneration, neuroinflammation, traumatic brain injuries (TBI) or multiple sclerosis (MS), the Simoa Platform has a full range of assays—including those detecting Tau and Neurofilament light chain. If you have specialized needs, the Simoa Platform includes easy-to-use reagent kits and protocols for custom assay development.

Using our assays, you can:

- Detect biomarkers associated with Alzheimer's, Parkinson's disease and other neurological disorders
- Measure plasma and exosomal derived protein biomarkers to differentiate neurodegenerative disorders
- Support PK/PD studies during therapeutic development
- Measure even small changes in biomarker concentration during clinical trials
- Predict clinical outcomes of TBI and concussions

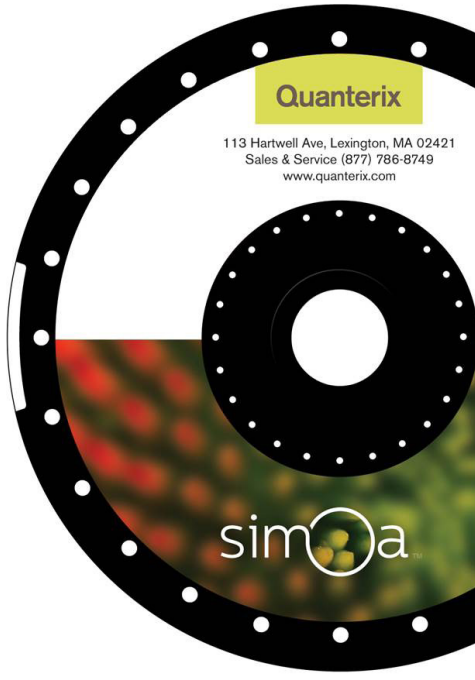
Ultra-sensitive Simoa assays for neurology.

	Aß40	Aß42	α-Synuclein	BDNF	GFAP	Inflammatory Cytokines	NF-light®	NSE	Tau	P-Tau	TNF-α	TDP43	UCH-L1*
Alzheimer's Disease	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓
Epilepsy						✓	✓		✓	✓			
Fronto-temporal Dementia	✓					✓	✓		✓	✓		✓	
Major Depressive Disorder				✓		✓		✓			✓		
Motor Neuron Disease (ALS)					✓	✓	✓					✓	
Multiple Sclerosis					✓	✓	✓				✓		
Parkinson's Disease			✓			✓	✓		✓	✓		✓	
Stroke					✓	✓			✓				✓
Traumatic Brain Injury	✓		✓	✓	✓	✓	✓		✓	✓			✓

The Simoa Accelerator—
your easy-to-access link to the Simoa Platform

All of the benefits of The Simoa Platform are available to you through the Simoa Accelerator. By using this service, you gain access to a dedicated laboratory and trained professionals ready to help you with custom assay development, reagent development, formulation and sample testing. There is simply no easier, faster way of accelerating and improving CNS biomarker detection.

Visit quanterix.com or email info@quanterix.com to learn what the Simoa Accelerator can do for you.



Quanterix
The Science of Precision Health

simoa

The Simoa Platform in action.

Serum Tau levels predict neurological outcome after hypoxic brain injury from cardiac arrest.*

The Simoa Platform is fulfilling an unmet clinical need by objectively measuring the severity of brain injuries and predicting clinical outcomes. In a study, blood samples were collected from 25 cardiac arrest patients that had been resuscitated. Time-dependent elevations of serum Tau were observed in all patients. These measurements were highly predictive of neurological outcome after 6 months, predicting poor and good outcomes with 91% sensitivity and 100% specificity, respectively.

*Complete details can be found in the whitepaper "Ultrasensitive Tau Assay Enables Quantification of Neuronal Biomarker in Blood for the First Time," available at www.quanterix.com

Blood-based NfL: A biomarker of differential diagnosis of parkinsonian disorders.*

Recent research shows that the blood Neurofilament light chain protein can be used to distinguish Parkinson's disease from atypical parkinsonism disorders, such as multiple system atrophy and corticobasal degeneration. Early distinction is important because atypical parkinsonism disorders generally progress much faster and are more likely cause death than Parkinson's disease. Using the Simoa Platform, researchers determined that the level of blood Neurofilament light chain protein is increased in patients with atypical parkinsonism disorders when compared with healthy controls and patients with Parkinson's Disease.

*The complete article, "Blood-Based Biomarkers in Alzheimer Disease: Current State of the Science and a Novel Collaborative Paradigm for Advancing from Discovery to Clinic, published in *Neurology*, is available at www.quanterix.com

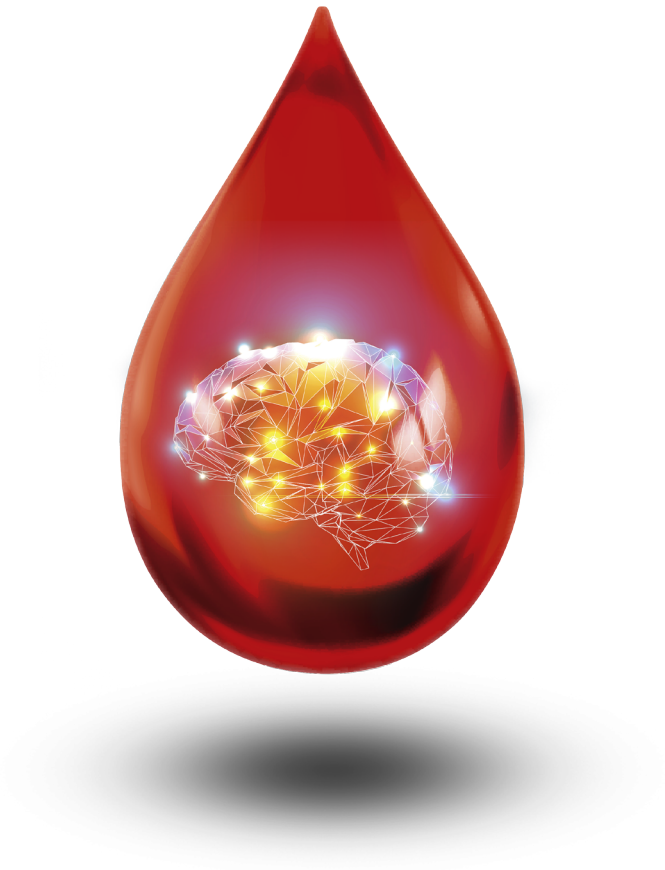
Ultra-sensitive measurement of Aß1–42 peptide associated with Alzheimer's disease.*

Researchers, working with experts from the Simoa Accelerator, were able to measure Aß1–42 peptide in plasma using the Simoa platform. The intra- and inter-assay coefficients of variation were both ≤10% and the assay was able to quantify the target in all 84 clinical samples tested. Their work indicates that the Simoa Platform has potential utility in clinical applications for quantification of Aß1–42 in plasma where high sensitivity and precision are required.

*The complete article, "A Digital Enzyme-Linked immunosorbent Assay for Ultrasensitive Measurement of Amyloid-B 1-42 Peptide in Human Plasma with Utility for Studies of Alzheimer's Disease Therapeutics," published in *Alzheimer's Research & Therapy*, is available at www.quanterix.com

Learn more about how the Simoa Platform can advance your CNS biomarker detection.

Visit **www.quanterix.com**
or email **info@quanterix.com**



About Quanterix

Quanterix is on a mission to change the way healthcare is provided by giving researchers the ability to closely examine the continuum from health to disease. In order to make this vision a reality, we brought together the most experienced management team, renowned scientists, leading investors and expert advisors to form a collaborative ecosystem, united through the common goal of advancing the science of precision health.

Quanterix Corporation
113 Hartwell Avenue, Lexington, MA 02421
quanterix.com

Quanterix™
The Science of Precision Health