

Suspect Multiple Sclerosis?



Results Delivered in a Week or Less

Yes

No

Isolate^{MS}™ is a breakthrough diagnostic tool that gives providers the information that can assist in identifying suspected multiple sclerosis in patients at the earliest onset of symptoms.

That means earlier treatment to optimally manage the disease and lessen the long-term damage.

Isolate^{MS}™

Diagnose Faster. Treat Sooner. Improve Lives.



Physician Perspective

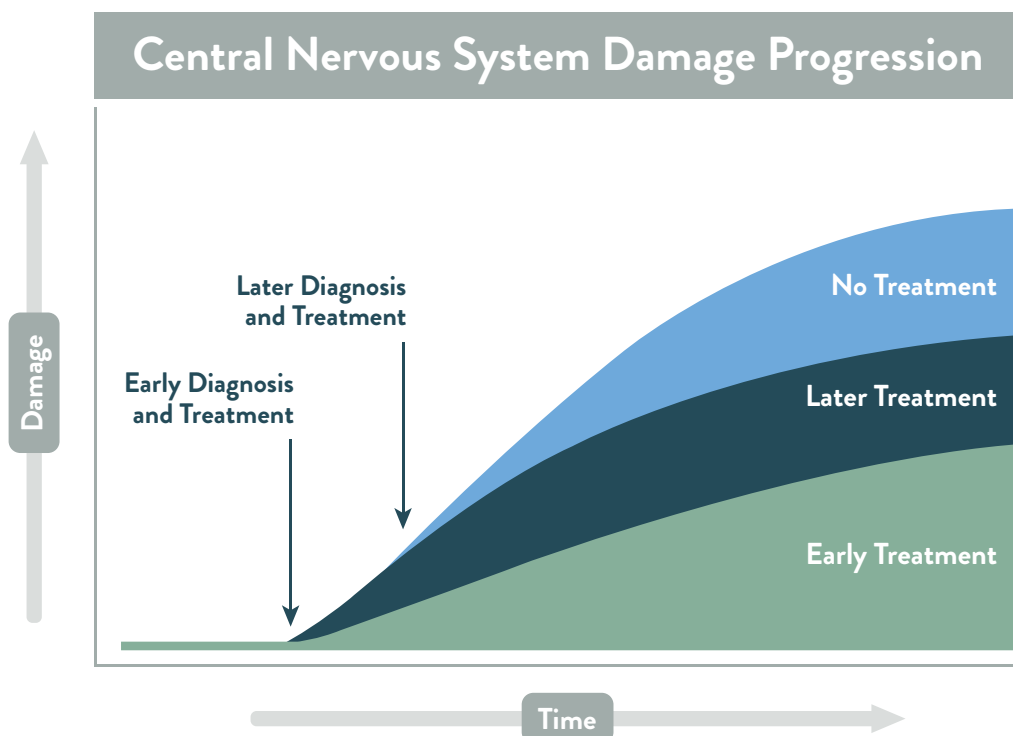
“MS remains a clinical diagnosis, and the certainty of the diagnosis is enhanced by imaging and electrodiagnostic studies. Any test which will increase the certainty of an MS diagnosis is of value to the treating physician. The results are likely to influence both making the diagnosis of MS and in implementing therapies that benefit the patients.”

Subramaniam Sriram, MD, Director, MS Center,
Vanderbilt University Medical Center, Advisor to IQuity, Inc.

IsolateMS is a highly accurate autoimmune diagnostic tool that identifies a gene expression pattern consistent with MS at the earliest onset of symptoms. Analytical sensitivity and specificity are greater than 90%.

90%

Faster diagnosis and treatment leads to reduced long-term CNS damage and disability.



MS
is the leading cause
of non-traumatic
disability in
young adults.

Damage
to the central
nervous system
produces the
symptoms of MS
and leads to
disability.

Research and Development

Test Foundation: IQuity's Research

IQuity's proprietary suite of algorithms, **IQIsolate**, was built on patient samples from around the globe. Using machine learning methods, IQuity was able to distinguish MS among these enrolled subjects:

- Healthy control subjects
- Patients prior to diagnosis who are then followed in the EMR
- Patients with disease prior to treatment
- Patients with established disease
- Patients with other inflammatory and non-inflammatory neurologic diseases

>2,500 patients recruited across multiple branches of medicine – 1,000 samples consisting of healthy subjects and patients with disease were used for IQuity's multiple sclerosis study.



IQIsolate™ – Innovative Technology powering IsolateMS

IQuity's suite of algorithms, **IQIsolate**, is a revolutionary technology that analyzes RNA markers in a blood sample. IQuity's peer-reviewed research revealed that RNA expression patterns detectable in blood samples of patients with autoimmune conditions, such as MS, and non-autoimmune conditions with similar symptoms vary widely. These RNA patterns are present at the onset of symptoms. **IQIsolate** measures the expression of RNA markers that are extracted from a patient's blood sample and matches this RNA profile against healthy and sick patient profiles identified through our research. This analysis determines if the patient's gene expression pattern is consistent with a specific disease.

Research efforts for this novel technology began at Vanderbilt University Medical Center more than 10 years ago with funding from the National Institutes of Health. The scientists involved realized the impact this discovery would make on millions of patients suffering from autoimmune disease. IQuity was formed to commercialize this research and will launch the first test for multiple sclerosis, **IsolateMS**, for clinical use in Spring 2017.

*Peer-Reviewed Publications include:

Journal of Molecular Diagnostics:

Identification of Molecular Biomarkers for Multiple Sclerosis



Genes and Immunity:

Gene-expression Signatures: Biomarkers Toward Diagnosing Multiple Sclerosis



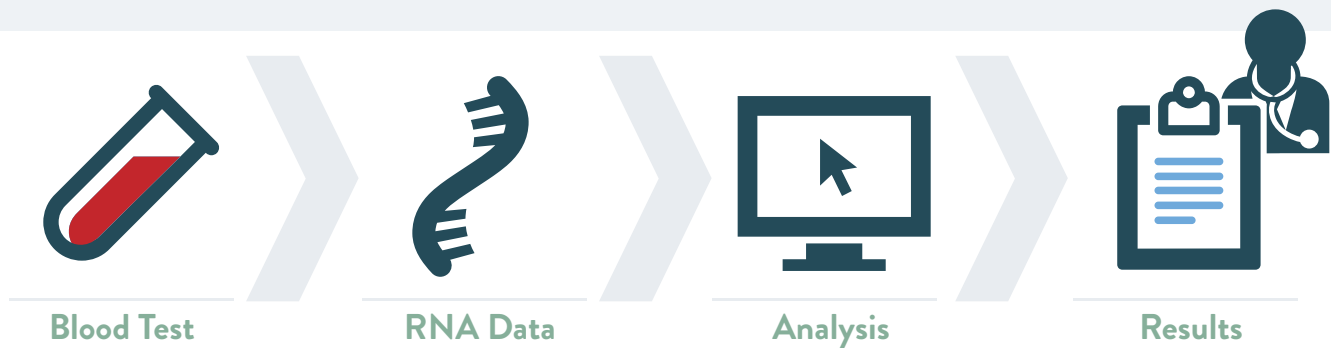
Journal of Clinical Bioinformatics:

Using Biomarkers to Predict Progression from Clinically Isolated Syndrome to Multiple Sclerosis



To learn more about IQuity's research, visit: iquity.com/providers-neuro

How IsolateMS™ Works:



- 1 Draw blood**
 - PAXgene® tubes are used to immediately stabilize RNAs and ensure safe transport.
 - Sample tube is sent to IQuity's CLIA-certified laboratory.
- 2 Lab generates gene expression data.**
- 3 Lab data is analyzed** using our proprietary algorithm that generates a Yes or No result.
- 4 Lab sends report to healthcare provider** in approximately a week.



The Value of Earlier Diagnostic Confirmation

IsolateMS offers healthcare providers a timely, accurate tool to either rule in or rule out a suspected MS diagnosis and provide their patients with the answers they are desperately trying to uncover.

Current methods for diagnosing MS rely on the ability to identify damage that has already occurred in the brain, and final diagnosis demands waiting until the damage has occurred over time. With IsolateMS, the expression of RNA markers extracted from a blood sample are analyzed using a proprietary algorithm that identifies signatures in the blood reflecting inflammation in the central nervous system early in the disease progression.

There is also evidence that when diagnosed and treated in earlier stages, MS relapses that occur are often less severe than when patients begin receiving treatment in later stages of the disease.

To learn more about IQuity, visit iquity.com

