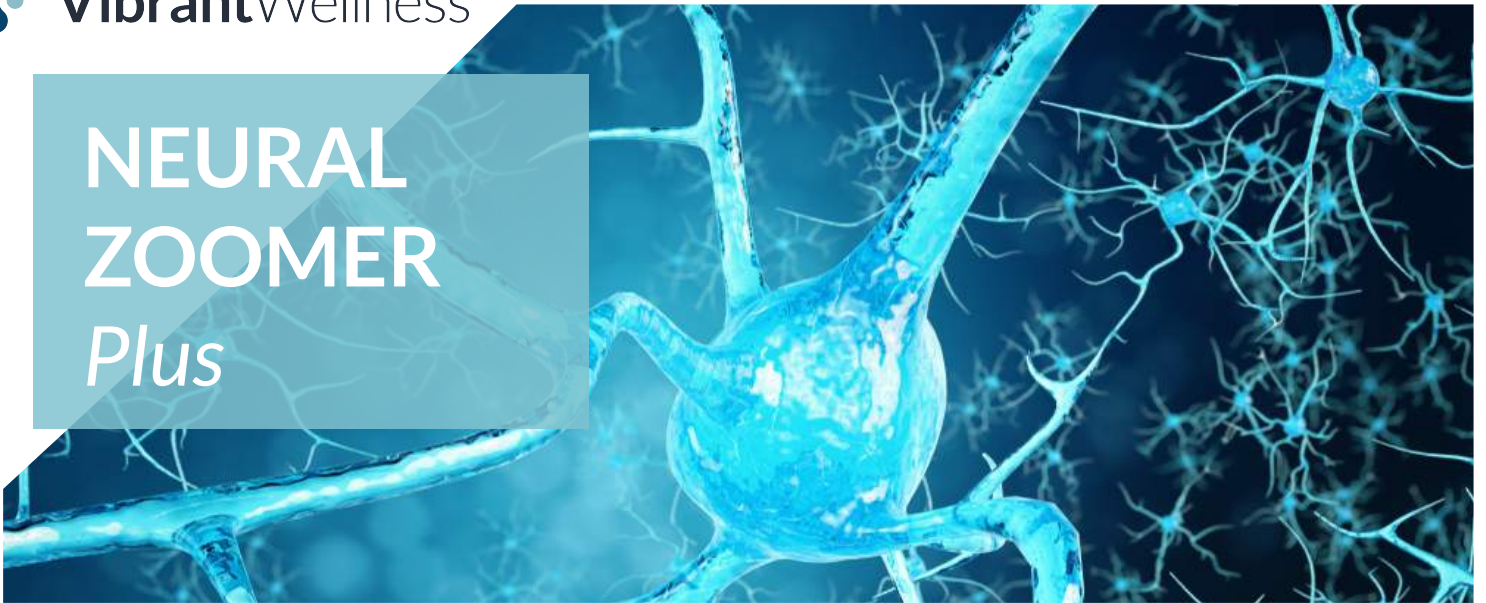


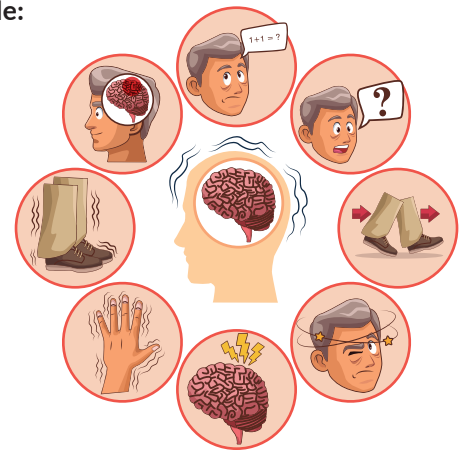
NEURAL ZOOMER *Plus*



Which Patients Need the Neural Zoomer *Plus*?

Symptoms and Conditions Associated with Neurological Autoimmunity Include:

- | | |
|---|--|
| <input type="checkbox"/> Cognitive decline | <input type="checkbox"/> Parkinson's disease |
| <input type="checkbox"/> Memory loss | <input type="checkbox"/> Dementia |
| <input type="checkbox"/> Ataxia | <input type="checkbox"/> Myasthenia gravis |
| <input type="checkbox"/> Balance problems | <input type="checkbox"/> Muscle stiffness/rigidity |
| <input type="checkbox"/> Neuropathy | <input type="checkbox"/> Optical decline |
| <input type="checkbox"/> Alzheimer's disease | <input type="checkbox"/> Neuromyelitis optica |
| <input type="checkbox"/> Multiple sclerosis | <input type="checkbox"/> History of concussion |
| <input type="checkbox"/> Encephalitis | <input type="checkbox"/> Autism |
| <input type="checkbox"/> Muscle spasms | <input type="checkbox"/> PANDAS/ANDAS/OCD |
| <input type="checkbox"/> Huntington's disease | <input type="checkbox"/> Demyelinating diseases |
| <input type="checkbox"/> Epilepsy | |



Facts About Neurological Autoimmunity

- ✓ Autoimmune disorders affect **5-10%** of the general population and can target virtually any structure within the central or peripheral nervous system in a highly specific way
- ✓ **Genome-wide association studies** have demonstrated an association between Alzheimer's disease (AD) and the ε4 allele of APOE as a strong genetic risk factor for AD
- ✓ Treatments that rebuild and fortify a hyper-permeable intestinal barrier can aid in reversing or reducing autoimmune disease symptoms. Intestinal permeability syndrome is associated with autoimmune diseases and reversing symptoms of autoimmune diseases is accelerated with healing the lining of the gastrointestinal tract. Consider running a **Vibrant Wheat Zoomer** along with the **Neural Zoomer Plus** for comprehensive testing.
- ✓ When assessing a patient for blood brain barrier permeability, consider that this is associated with **intestinal permeability**; it is highly recommended to assess the intestinal barrier via zonulin, anti-zonulin, anti-actin, and anti-LPS, such as on the **Vibrant Wheat Zoomer** and the **blood brain barrier via anti-s100b, anti-glial fibrillary acidic protein, anti-microglia, anti-Glucose regulated protein 78**, such as on the **Vibrant Neural Zoomer**
- ✓ Because antibodies to aquaporins are associated with neurological autoimmunity, consider assessing reactivity to individual food aquaporins as part of a customizable nutritional elimination based on the **Vibrant Lectin Zoomer**
- ✓ Anti-dsDNA and anti-NMDA receptor antibodies are associated with connective tissue disorders; consider screening your patients with the **Vibrant Connective Tissue Disease panel (ENA-11)** for the most comprehensive and sensitive detection of CTD available
- ✓ **Viral infections** can induce neurological autoimmunity via molecular mimicry to different proteins in the brain, such as myelin basic protein, and lead to transient or permanent neurologic or psychiatric dysfunction. The Vibrant Neural Zoomer detects **a panel of common viral antigens** that can cause neurological defects, thus providing rapid identification that could minimize or prevent neurological manifestations.





What Does the Neural Zoomer *plus* Include?

Demyelination Antigens

Anti-Tubulin
Anti-Myelin basic protein
Anti-Myelin oligodendrocyte
glycoprotein (MOG)
Anti-Myelin proteolipid protein
Anti-Neurofascin
Anti-MAG

Neuromuscular disorders

Anti-Acetylcholine receptors
Anti-Muscle specific kinase
Anti-Voltage gated calcium channels
Anti-Voltage gated potassium
channels
Anti-Titin

Blood Brain Barrier Disruption

Anti-s100b
Anti-Glial fibrillary acidic protein
Anti-Microglia
Anti-Glucose regulated protein 78

Peripheral Neuropathy

Anti-GM1
Anti-GM2
Anti-Hu
Anti-Ri
Anti-Amphiphysin

Optical and Autonomic Nervous System

Anti-Neuron specific enolase
Anti-Aquaporin 4
Anti-Recoverin
Anti-CV2

Infections

Anti-HSV-1
Anti-HSV-2
Anti-EBV
Anti-CMV
Anti-HHV-6
Anti-HHV-7
Anti-Streptococcal A

Brain Autoimmunity

Anti-Purkinje cell
Anti-Yo
Anti-Amyloid beta (25-35)
Anti-Amyloid beta (1-42)
Anti-RAGE peptide
Anti-Tau
Anti-Glutamate
Anti-Dopamine
Anti-Hydroxytryptamine
Anti-Alpha-synuclein
Anti- α 1 and β 2 adrenergic receptors
Anti-Endothelin A receptor

Brain Inflammation

Anti-NMDA receptor
Anti-AMPA receptor
Anti-Dopamine receptors
Anti-GABA receptors
Anti-Dipeptidyl aminopeptidase-like protein 6
Anti-Glycine receptor
Anti-Neurexin 3
Anti-Contactin-associated protein-like 2
Anti-Leucine-rich glioma-inactivated protein 1
Anti-Ma

Regulatory Statement

The general wellness test intended uses relate to sustaining or offering general improvement to functions associated with a general state of health while making reference to diseases or conditions. This test has been laboratory developed and its performance characteristics determined by Vibrant Genomics LLC, a CLIA-certified laboratory performing the test. The test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Although FDA does not currently clear or approve laboratory-developed tests in the U.S., certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.