VibrantWellness

Neural Zoomer Plus

Key Clinical Messages

What is the Neural Zoomer Plus?

The Neural Zoomer Plus analyzes an array of neurological protein antigens associated with neural tissues, receptors, and cells, as well as various viral and bacterial antigens linked to acute and chronic nervous system infections.

The test measures the immune system's antibody response to these antigens, which can lead to brain damage and contribute to neurological inflammation, infection, and autoimmune disorders.[1]

Why Order the Neural Zoomer Plus?

Neural Zoomer Plus aims to reduce the prevalence of neurological conditions by empowering patients and practitioners with a vital resource for early risk detection and an enhanced focus on personalized primary prevention.

References

1. Diamond, B., Honig, G., Mader, S., Brimberg, L., & Volpe, B. T. (2013). Brain-reactive antibodies and disease. Annual Review of Immunology, 31, 345–385. https://doi.org/10.1146/annurev-immunol-020711-075041

Which Patients Will Benefit from This Test?

Neural Zoomer Plus may be beneficial for patients experiencing symptoms & conditions such as:

- Ataxia/balance problems
- Sensory loss
- Neuropathic pain
- Optical decline
- Photosensitivity
- Muscle pain/spasms
- Muscle weakness/atrophy
- Orthostatic hypertension
- Chronic pain or fibromyalgia
- Memory loss or brain fog
- Autoimmune disease
- Attention deficit/ADHD
- Traumatic brain injury/history of concussion
- Cognitive decline
- Alzheimer’s disease
- Multiple sclerosis or demyelinating diseases
- Encephalitis
- Huntington’s disease
- Epilepsy
- Parkinson’s disease
- Dementia
- Myasthenia gravis
- Muscle stiffness/rigidity
- Neuromyelitis optica
- Autism
- PANDAS/PANS/OCD

What Tests Pair Well with The Neural Zoomer Plus?

- **Intestinal Permeability Panel:** Rebuilding and strengthening the intestinal barrier can be an effective way to reverse or reduce symptoms of autoimmune diseases. The intestinal permeability syndrome is linked to autoimmune diseases, and healing the gastrointestinal tract lining can help to accelerate the reversal of autoimmune disease symptoms.

- **Gut Zoomer:** A growing number of studies suggest that the gut microbiota play a significant role in maintaining the integrity of the blood-brain barrier. Although the exact mechanisms remain unclear, current research indicates the involvement of the vagus and sympathetic nerves, immune and endocrine systems, and intestinal metabolites such as short-chain fatty acids and lipopolysaccharide.

- **Wheat Zoomer + Food Sensitivity (IgG, IgA):** Certain food antibodies can cross-react with neurological antigens, leading to autoimmune reactions in the nervous system. Identifying and removing these antigenic foods may help to reduce the risk of neurological autoimmunity.

- **Lectin Zoomer:** Given the association between antibodies to aquaporins and neurological autoimmunity, particularly aquaporin 4 (AQP-4), it may be beneficial to assess reactivity to individual food aquaporins as part of a personalized nutritional elimination plan.

- **Connective Tissue Disease Panel:** Connective tissue disorders have been linked to the presence of anti-dsDNA and anti-NMDA receptor antibodies. Therefore, it may be beneficial to screen for these antibodies using the Vibrant Connective Tissue Disease panel when indicated.

Why Vibrant?

Lab Methodology

Vibrant is a CLIA-certified lab that utilizes reliable, high-quality methodologies to measure the immune system's antibody response to neurological protein antigens.

Our technology uses **multiplex chemiluminescent assay** for antibody detection to all antigens tested, including our **proprietary enhanced IgM binding assay methodology**, which strips excess IgG antibodies from the sera to enhance the detection of IgM antibodies.

Vibrant Wellness testing is run on a 3D-dense microarray platform which offers highly sensitive, specific, and reproducible results with several advantages that include:

- Higher sensitivity than ELISA
- Broader dynamic range
- Higher sensitivity for detecting low analyte concentration

Test Preparation

Fasting: Not required.

Diet Restrictions: Not required.

Supplement Restrictions: Not required.

Medication Restrictions: None. However, taking steroids, immunosuppressive medications, biologic agents, or other immunomodulating medications (e.g., IV IgG therapy) may affect total immunoglobulin levels, resulting in false low or false high specific immunoglobulin results.

To ensure accurate results, you can order Total Immunoglobulins (at no additional charge) when ordering the Neural Zoomer Plus for patients on these medications. This will enable you to examine the Neural Zoomer Plus results critically, compare them to the Total Immunoglobulins results, and determine if the results reflect a true antigen-antibody reaction or if the results are affected by medication interference.

Reference Ranges

References ranges have been established using 192 healthy individuals. The results are displayed as High Risk (>97.5 percentile), Moderate Risk (92.5-97.5) and In Control (<92.5% percentile), or In Control (<95 percentile). IgG + IgA antibodies are pooled together and reported as a combined value, while IgM antibodies are reported independently.

What Markers Are Included in the Neural Zoomer Plus?

Demyelination Antigens

- Anti-MAG
- Anti-Neurofascin
- Anti-Myelin oligodendrocyte glycoprotein
- Anti-Myelin basic Protein
- Anti-Myelin proteolipid protein
- Anti-Tubulin

Blood Brain Barrier Disruption

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

Optical and Autonomic Nervous System Disorders

- Anti-Neuron specific enolase
- Anti-Aquaporin4
- Anti-Recoverin
- Anti-CVX

Peripheral Neuropathy

- Anti-GM1
- Anti-Gm2
- Anti-Hu
- Anti-Ri
- Anti-Amphiphysin

Neuromuscular Disorders

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

Brain Autoimmunity

- Anti-Cerebellum
- Anti-Purkinje cell
- Anti-Yo
- Anti-Amyloid beta (1-42)
- Anti-Tau
- Anti-Glutamate
- Anti-Dopamine
- Hydroxytryptamine
- Anti-Alpha-synuclein
- Anti-alpha1 and beta2 adrenergic receptors
- Anti-Endothelin A receptor
- Anti-Amyloid beta (25-35)
- Anti-RAGE peptide

Brain Inflammation

- Anti-NMDA receptor
- Anti-AMPA receptor
- Anti-Dopamine receptor 1
- Anti-Dopamine receptor 2
- 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 (AntiLGI1)
- Anti-Ma

Infections

- Anti-HSV1
- Anti-HSV2
- Anti-EBV
- Anti-CMV
- Anti-HHV 6
- Anti-HHV 7
- Anti-Streptococcal A

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