

“My doctor ordered the *Cunningham Panel*™ for my son and that painted a much clearer picture of what was taking place and gave us a direction for moving forward with treatment. After receiving treatment, *we are finally seeing the son we remember.*”



Do you find yourself asking  
**“Why are the treatments we have tried not working?”**

Any of the following symptoms may suggest an infection-triggered autoimmune encephalopathy:

**BEHAVIORAL:**

- Anxiety or unusual fears (particularly separation anxiety)
- Emotional lability and/or depression
- Irritability, aggression or rage
- Oppositional/defiant behaviors
- Behavioral (or developmental) regression
- Deterioration in school or work performance
- Changes in handwriting
- Obsessions/Compulsions
- Inability to concentrate
- Impulsivity/Distraction

**PHYSICAL:**

- Vocal/motor tics of any type, severity or duration
- Sensory or motor abnormalities
- Sleep disturbances
- Enuresis/urinary issues
- Anorexia/restrictive eating

**Other considerations:**

A family or personal history of autoimmune disorders (e.g. Celiac, Type 1 Diabetes, Multiple Sclerosis, Lupus, Fibromyalgia)

History of chronic or current bacterial, viral, parasitic or fungal infections.

# THE CUNNINGHAM PANEL™

**Specialized testing to help  
diagnose post-infectious  
autoimmune encephalopathies**

***Passionate about testing  
for the right treatment***

**CLINICIAN BROCHURE**



**BECAUSE YOU NEED  
ANSWERS & UNDERSTANDING**



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## Treat the root ... Not just the symptoms.

Studies suggest that in some cases, certain neuropsychiatric symptoms such as obsessive/compulsive behaviors, tics, attention deficit-hyperactivity, restrictive eating, and depression may be caused by an infection-driven autoimmune dysfunction.

In some patients, antibodies mistakenly attack normal receptors and antigens in the brain, resulting in neurological and behavioral abnormalities, such as those seen in **Pediatric Acute-onset Neuropsychiatric Syndrome (PANS)** and **Pediatric Autoimmune Neuropsychiatric Disorder Associated with Streptococcal Infections (PANDAS)**.

This molecular mimicry-based attack can be directed against dopamine receptors, lysoganglioside, tubulin, and other neurologic targets, interfering with neuronal functioning and triggering dramatic behavioral changes.

Differentiating between an autoimmune etiology and other neuropsychiatric causes is critical when deciding upon treatment.

## The *Cunningham Panel*<sup>™</sup> of Tests

**The *Cunningham Panel*<sup>™</sup> identifies the levels of certain autoantibodies directed against specific neurologic targets, and the ability of those autoantibodies to stimulate neurologic and/or psychiatric symptoms.**

The Panel consists of 5 separate tests. Four of these include Enzyme-Linked Immunosorbent Assays (ELISA), which measure antibody titers against four neuronal antigens in the brain associated with specific neuropsychiatric symptoms.

These antigens include Dopamine D1 Receptor, Dopamine D2L Receptor, Lysoganglioside-GM1, and Tubulin.

The 5th assay, CaM Kinase II, is a numeric score that indicates an autoantibody's ability to stimulate CaM Kinase activity above baseline in a human neuronal cell line. CaMKII is involved in the up-regulation of neurotransmitters dopamine, epinephrine and norepinephrine. Elevated activity may indicate that a patient's symptoms could be correlated with an autoimmune encephalopathy.

Identifying the elevation of these autoantibodies can assist clinicians in making an accurate and timely diagnosis.

## How to Create an Account

1. Go to **moleculera.com**
2. Click on the **PRESCRIBER PORTAL LOGIN** button at the top of the page
3. Click on the **SIGN UP** button
4. Enter your email address and select **SIGN UP**
5. Enter the following information:  
  
Clinician's First and Last Name, Degree, NPI number, Clinic Name, Specialty, Address, Phone, Fax, and Email
6. You will receive a confirmation email with a temporary password. Please click on the link in the email and change the password in order to complete your registration.

Should you have any questions or problems when creating an account, ordering for a patient, or interpreting the results please contact Moleculera at 405-239-5250.



## How to **ORDER THE CUNNINGHAM PANEL**<sup>™</sup>

1. Go to moleculera.com
2. Click on the PRESCRIBER PORTAL LOGIN button at the top of the page
3. Input your email address and password
4. Read and accept the consent form
5. Select REQUEST NEW TEST
6. Follow the prompts to input patient information
7. Click NEXT

Be sure to have and verify your patient's or their guardian's email address to input when prompted. This is how we reach the patient and request their insurance and payment information.

After the test requisition has been initiated by the physician or physician's representative, the patient/parent/guardian will receive an email with the patient ID number and will be able to click on a link to input insurance/deposit information.