"My doctor ordered the Cunningham Panel[®] for my son and that gave him a clearer picture that my child has PANDAS/ PANS. After receiving

Do you find yourself saying

"The treatments we have tried so far aren't working?"

Symptoms that might trigger a clinician to consider **PANDAS/PANS**

PHYSICAL (A sudden onset or departure from the norm of)

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

BEHAVIORAL (A sudden onset or departure from the norm of)

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

In more chronic cases, clinicians may see seemingly unrelated symptom clusters in the patient who is not responding to treatment as the clinician would expect.

PANDAS PANS

PANDAS

PEDIATRIC AUTOIMMUNE NEUROPSYCHIATRIC
DISORDER ASSOCIATED WITH
STREPTOCOCCAL INFECTIONS

PANS

PEDIATRIC ACUTE-ONSET
NEUROPSYCHIATRIC SYNDROME

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BECAUSE YOU NEED
ANSWERS & UNDERSTANDING



What is PANDAS/PANS?

PANDAS/PANS is an infection triggered autoimmune condition that interferes with normal neurologic activity. In PANDAS/PANS patients, antibodies recognize and mistakenly attack normal receptors and antigens found within the brain.

This molecular mimicry based attack can be directed against dopamine receptors, lysoganglioside, tubulin, and other neurologic targets located within the brain. Binding can interfere with, or cause over stimulation of neurologic activity. This can contribute to a whole host of movement and neuropsychiatric disorders, OCD, and abnormal neurologic behavior.

Often, this condition may be treated only symptomatically with neuropsychiatric drugs, but the underlying basis is an infection triggered autoimmune disorder attacking the brain.

The **CUNNINGHAM PANEL**[™] of Tests

PANDAS/PANS is a clinical diagnosis made by a clinician. *The Cunningham Panel*™ is an aid to the clinician in making their diagnosis. *The Cunningham Panel*™ can help identify the level of antibodies and their capability to stimulate and trigger neurological symptoms.

The Cunningham Panel™ consists of 5 assays. The first 4 assays yield results that are expressed as a titer or final dilution at which an endpoint reaction was observed on an Enzyme-Linked Immunosorbent Assay (ELISA) format. These assays measure circulating levels of autoantibodies directed against specific neuronal antigens in the patient including: Dopamine D1 Receptor (DRD1), Dopamine D2L Receptor (DRD2L), Lysoganglioside - GM1, and Tubulin.

The fifth assay, CaM Kinase II Activation, yields a laboratory value (expressed as a numeric score) that reflects the percent of baseline CaM Kinase activity in a human neuronal cell line and is a part of the activation pathway for the production of dopamine. Identification of these autoimmune antibodies directed against specific neurologic receptors may assist the clinician in making an accurate and timely diagnosis.

How to **CREATE AN ACCOUNT**

CREATING AN ACCOUNT

This process takes a clinician or office personnel approximately 5 minutes, or less, and only needs to be done once.

- 1. Go to moleculera.com
- 2. Click on the tab labeled **Physicians**
- Scroll down to the bottom of the page and click on the button labeled **Physician Portal**
- 4. Enter the following information to register:

 Clinician's First and Last Name, Degree, NPI Number

 Clinic Name, Specialty, Address, Phone/Fax/Email
- 5. 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.



How to **ORDER THE CUNNINGHAM PANEL™**

ORDERING A PANEL

- 1. Go to **moleculera.com**
- 2. Click on the tab labeled **Physicians**
- 3. Scroll down to the bottom of the page and click on the button labeled **Physician Portal**
- 4. Input your email address and password
- 5. Read and accept the consent form
- 6. Select Request New Test
- 7. Follow the prompts to input patient information
- 8. 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.