Paraneoplastic Neurological Syndromes Testing

**INDICATIONS FOR TESTING**
Patient presenting with symptoms that are suspicious for paraneoplastic neurological syndromes (PNS)

- **Known malignancy**
  - **No**
    - Test for antibodies suggested by clinical symptoms
      - Well characterized onconeuronal antibodies present
        - **No**
          - PNS possible but evaluate for other disorders associated with neurologic symptoms (e.g., chronic infections, metabolic encephalopathy)
            - None
              - Evaluate with other neurologic testing (EMG, muscle biopsy, CT, MRI) to look for tumor and/or neurologic diagnosis
                - **Negative**
                  - Reevaluate in 6 months or sooner depending on symptoms
                - **Positive**
                  - PNS probably present, antibody negative syndrome
          - **Yes**
            - PNS confirmed
        - **Yes**
          - Evaluate for most common tumors associated with the syndrome based on age, sex
            - Antibodies present
              - **No**
                - PNS possible but evaluate for other disorders associated with neurologic symptoms (e.g., chronic infections, metabolic encephalopathy)
                  - None
                    - Evaluate with other neurologic testing (EMG, muscle biopsy, CT, MRI) to look for tumor and/or neurologic diagnosis
                      - **Negative**
                        - Reevaluate in 6 months or sooner depending on symptoms
                      - **Positive**
                        - PNS probably present, antibody negative syndrome
              - **Yes**
                - PNS confirmed
          - **Yes**
            - Evaluate for other possible complications related to cancer
              - Consider CSF and electrolyte testing, EMG, muscle biopsy, MRI/PET

**Antibody Testing Available**
- Paraneoplastic Antibodies (PCCA/ANNA) by IFA with Reflex to Titer and Immunoblot*
  - Panel includes the following
    - Purkinje Cell/Neuronal Nuclear IgG Screen
    - Neuronal Nuclear Antibody (ANNA) IFA Titer, IgG
    - Purkinje Cell Antibody, Titer
    - Neuronal Nuclear Antibodies (Hu, Ri, Yo) IgG by Immunoblot*
  - Neuronal Nuclear Antibodies (Hu, Ri, Yo) IgG by Immunoblot*
  - Amphiphysin Antibody, IgG
  - Voltage-Gated Potassium Channel (VGKC) Antibody with Reflex to LGI1 and CASPR2 Screen and Titer
  - Voltage-Gated Calcium Channel (VGCC) Antibody
  - Voltage-Gated Potassium Channel (VGKC) Antibody
  - Leucine-Rich, Glioma-Inactivated Protein 1 Antibody, IgG and Contactin-Associated Protein-2 Antibody, IgG with Reflex to Titers
  - Leucine-Rich, Glioma-Inactivated Protein 1 Antibody, IgG with Reflex to Titer

* Well-characterized antibodies