Antinuclear Antibody Disease Testing

**Indications for Testing**
Patient with systemic symptoms
(arthritis, arthralgias, skin rashes, anemia, renal dysfunction, pleuritis, pericarditis)

**Anti-Nuclear Antibodies (ANA), IgG by ELISA with Reflex to ANA, IgG by IFA**

- **Negative**
  - No connective tissue disease (CTD)
  - False-negative result – consider SSC, PM/DM or inactive SLE
  - If suspicion for CTD is strong, consider disease-specific antibody tests or panels

- **Positive**
  - False-positive results may be induced by age, certain infections, cancers, and drugs
  - ANA may be positive in inflammatory diseases such as autoimmune liver diseases

**Antibody Key**

- **RNP**
  - RNP (U1) (Ribonucleic Protein) (ENA) Antibody, IgG
- **Scl-70**
  - Scleroderma (Scl-70) (ENA) Antibody, IgG
- **Sm**
  - Smith (ENA) Antibody, IgG
- **SS-A**
  - SSA (Ro) (ENA) Antibody, IgG
- **SS-B**
  - SSB (La) (ENA) Antibody, IgG

**Disease legend**

- **CREST**
  - CREST syndrome (calcinosis, Raynaud phenomenon, esophageal dysmotility, sclerodactyly and telangiectasia)
- **DIL**
  - Drug-induced lupus erythematosus
- **dcSSc**
  - Diffuse cutaneous scleroderma
- **icSSc**
  - Limited cutaneous scleroderma
- **MCTD/UCTD**
  - Mixed connective tissue disease/Undifferentiated connective tissue disease
- **PM/DM**
  - Polymyositis/Dermatomyositis
- **SJS**
  - Sjögren syndrome
- **SLE**
  - Systemic lupus erythematosus
- **SSc**
  - Systemic sclerosis (scleroderma)

**Note:** Overlap may occur among the antibodies and diseases. Associations between ANA IFA pattern and disorders such as autoimmune hepatitis (AIH) and primary biliary cirrhosis (PBC) are not indicated.