Antinuclear Antibody Disease Testing

INDICATIONS FOR TESTING
Patient with systemic symptoms
(arthritis, arthralgias, skin rashes, anemia, renal dysfunction, pleuritis, pericarditis)

Antinuclear antibody (ANA) testing

Negative
- No SARD
- False-negative result – consider SSc, PM/DM, or inactive SLE
- If suspicion for SARD is strong, consider disease-specific antibody tests or panels

Possible scenarios

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

Nuclear Antibody (ANA) by IFA, IgG

Centromere pattern
- CREST, lcSSc

Cytoplasmic pattern
- ARS, ILD, MCTD, PM/DM, SJS, SLE, and SSc

Nuclear dots
- DM, PM, SJS, SLE, and SSc

Nucleolar pattern
- SJS, SSc, SSc/PM overlap

Homogeneous pattern
- DIL, SLE

Speckled pattern
- MCTD, SLE, SJS, SSc, PM, DM, PM/SSc overlap

Disease Legend

ARS    Antisynthetase syndrome
CREST  CREST syndrome (calcinosis, Raynaud phenomenon, esophageal dysmotility, sclerodactyly and telangiectasia)
DIL    Drug-induced lupus erythematosus
dcSSc  Diffuse cutaneous scleroderma
ILD    Interstitial lung disease
lcSSc  Limited cutaneous scleroderma
MCTD/UCTD Mixed connective tissue disease/undifferentiated connective tissue disease
PM/DM  Polymyositis/dermatomyositis
SARD   Systemic autoimmune rheumatic disease
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.