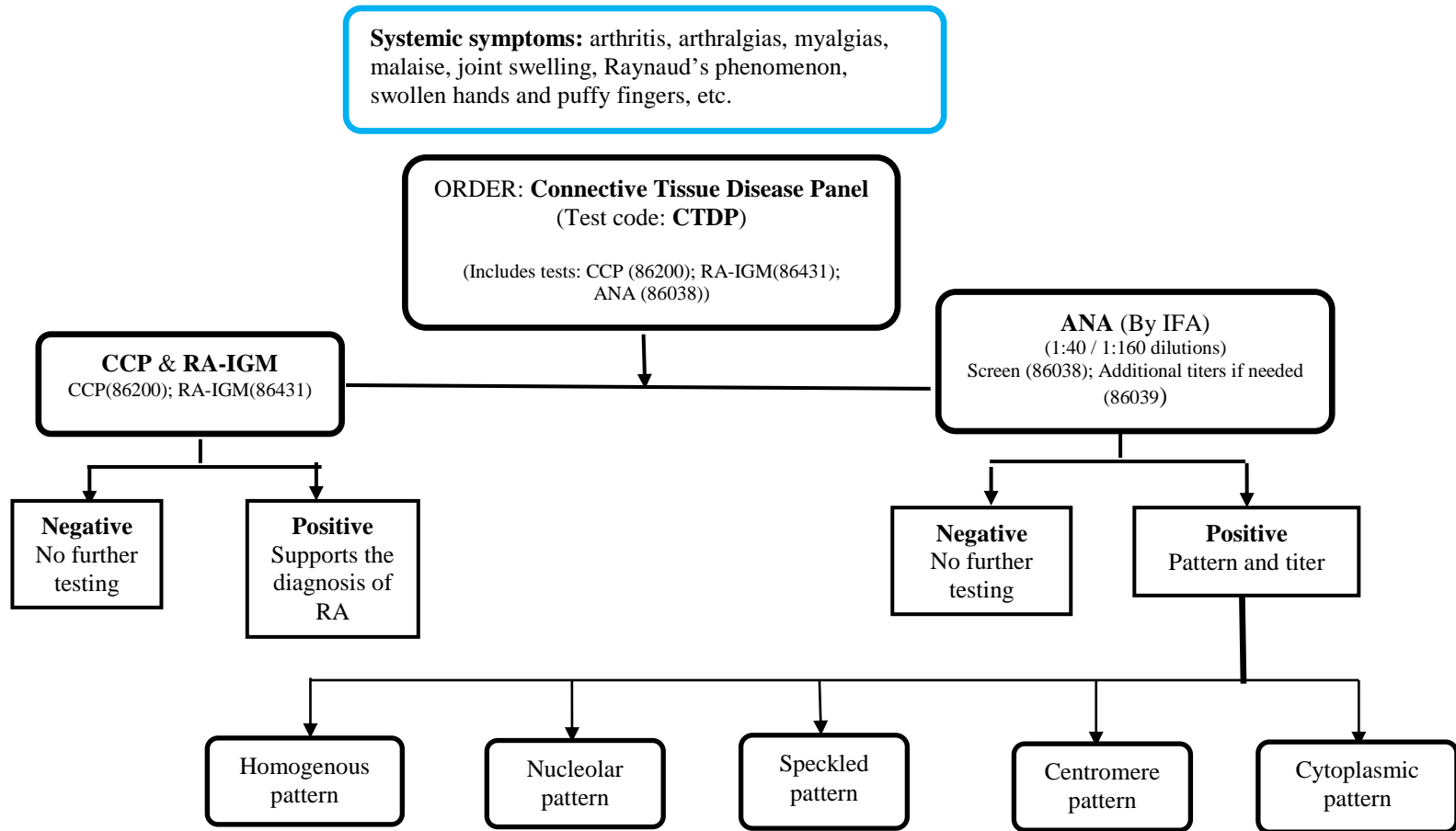
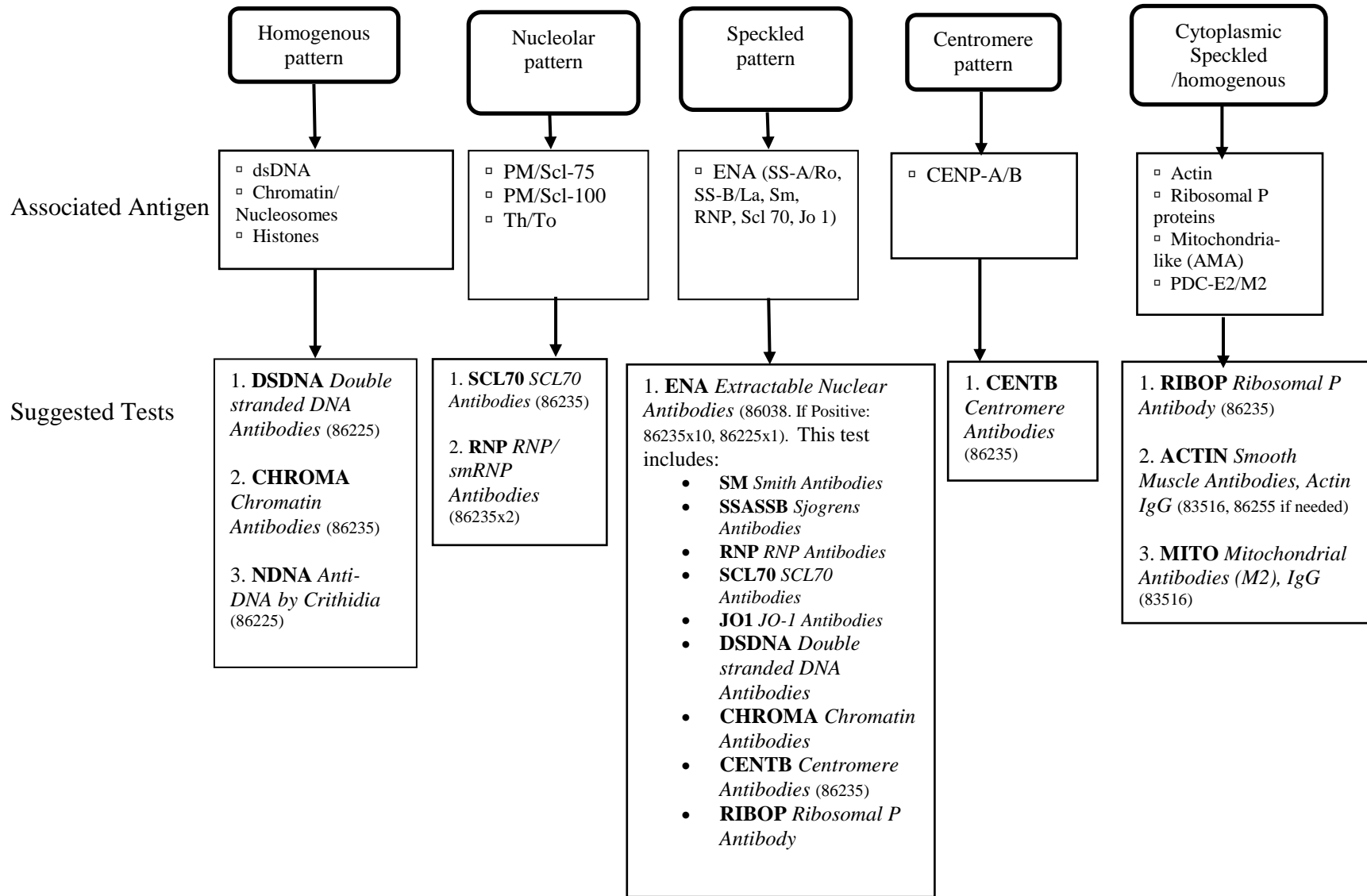


Mixed Connective Tissue Disease Panel Algorithm (MCTD)



Suggested Follow-Up Testing Based on Initial ANA IFA Pattern detected



Disease legend

CREST	CREST (Calcinosis cutis, Raynaud's phenomenon, Esophageal dysmotility, Sclerodactyly, and Telangiectasia) Syndrome
DIL	Drug-induced lupus erythematosus
MCTD	Mixed connective tissue disease
RA	Rheumatoid arthritis
PM	Polymyositis
DM	Dermatomyositis
SLE	Systemic lupus erythematosus
SSc	Scleroderma (systemic sclerosis)
UCTD	Undifferentiated connective tissue disease
SjS	Sjogren syndrome
PM/SSc	Polymyositis/systemic scleroderma overlap

ANA Specific autoantibody	Disease Association
Double –stranded DNA (dsDNA)	SLE , DIL, juvenile idiopathic arthritis
Chromatin	SLE , DIL, juvenile idiopathic arthritis
Smith (Sm)	Most specific antibody in SLE, lupus nephritis
SSA	SLE, SjS, Skin involvement, Congenital Heart Block (CHB)
SSB	SLE, SjS, Skin involvement, Congenital Heart Block (CHB)
RNP	SLE, MCTD, RA, SSc, UCTD
SmithRNP (SmRNP)	SLE, MCTD, RA, SSc, UCTD
Scl-70	SSc
Jo-1	PM
Centromere	CREST
Ribosomal P	SLE, neuropsychiatric SLE

References

1. Agmon-Levin N, et al. International recommendations for the assessment of autoantibodies to cellular antigens referred to as anti-nuclear antibodies. *Ann Rheum Dis* 2014;73:17-23.
2. Didier K, et al. Autoantibodies associated with connective tissue diseases: what meaning for clinicians? *Frontiers in Immunology* March 2018, volume 9, 1-20.
3. Benito-Garcia E, et al. Guidelines for immunologic laboratory testing in the rheumatic diseases: anti-Sm and anti-RNP antibody tests. *Arthritis Rheum* 2004;51(6) 1030-1044.