Autoimmune

Providing solutions with the potential to improve treatment and outcomes for patients with Systemic Sclerosis

Autoimmune diseases can be tough to diagnose – especially in the early stages. With systemic sclerosis (SSc; scleroderma), the disease can manifest in multiple ways, including affecting multiple organ systems, the skin, blood vessels, lungs, or gastrointestinal (GI) tract.

Thermo Scientific has added a new tool to its EliA Connective Tissue Disease (CTD) menu to aid in the diagnosis of systemic sclerosis, (SSc). Thermo Scientific™ EliA™ RNA Pol III is the first fully automated test of its kind available in the U.S. market. And with its addition, our EliA familly of tests are even more robust.

A fully automated panel of tests to aid in the diagnosis of systemic sclerosis

Classification criteria for SSc (diffuse cutaneous and CREST syndrome) calls out considerable advances made in the diagnosis of the disease including specific serum autoantibodies such as centromere, Scl-70 and RNA Pol III.[1]

Thermo Scientific's EliA CTD offering includes these clinically relevant autoantibodies. Our EliA Scl-70^{S} test has higher sensitivity, compared to similar tests[2] and our fully automated EliA RNA Pol III test is a game changer.

Enhance Your CTD Menu

With the new EliA RNA Pol III test, now is the time to evaluate your current connective tissue disease (CTD) menu offering. Our fully automated EliA CTD menu provides reliable diagnostic confidence, and when combined with HEp-2 indirect immunoflourescence, has the potential to provide a truly comprehensive clinical picture. Consider adding EliA RNA Pol III to your algorithm or build a separate SSc specific panel to aid in the diagnosis of this complex disease.

RNA Pol III

- In more than 60% of patients, RNA Pol III antibodies may be present as the sole marker of SSc antibodies.[3]
- These autoantibodies are more frequently associated with the diffuse cutaneous form of SSc (up to 45%).[3]
- Detection of RNA Pol III antibodies can prompt clinicians to continually monitor patients for renal crisis and associated cancer.[3]

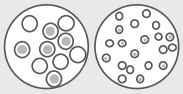
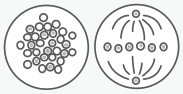
Scl-70

- Scl-70 antibodies are found in up to 60% of SSc patients and detection of these autoantibodies signifies an increased risk of interstitial lung disease.[4]
- Our EliA Scl-70^{S} test leverages an optimized coating technique, which allows for improved epitope presentation, leading to enhanced sensitivity.

Centromere

- Centromere antibodies occur in 20-25% of SSc patients, and are more closely associated with CREST syndrome.[4]

Systemic Sclerosis[5]

Antigen	Diffuse Cutaneous Systemic Sclerosis	CREST Syndrome	ANA Pattern
RNA Pol III	✓		Nucleolar 
Scl-70	✓		Speckled 
CENP (A-E)		✓	Centromere 
U1RNP*	✓	✓	Nucleolar/ Speckled 

*Not included in the 2013 Systemic Sclerosis classification criteria

Why Thermo Scientific?

We have optimized sensitivity and specificity across our EliA tests to provide the best diagnostic value.

EliA RNA Pol III is the only nucleolar antigen available as a solid phase assay, and Phadia is the only manufacturer to offer this on a fully automated platform in the U.S.

We can help increase clinician confidence in diagnostic results by building out a clinical picture with our EliA solid phase tests, that more accurately supports the diagnosis and differentiation of patients with SSc.

Learn more at **thermofisher.com/CTD**

1. van den Hoogen, Frank et al. "2013 classification criteria for systemic sclerosis: an American college of rheumatology/European league against rheumatism collaborative initiative." Annals of the rheumatic diseases vol. 72,11 (2013): 1747-55. **2.** Internal study - data on file **3.** Wielosz E, Dryglewska M, Majdan M. Clinical consequences of the presence of anti-RNA Pol III antibodies in systemic sclerosis. Postepy Dermatol Alergol. 2020;37(6):909-914. doi:10.5114/ada.2020.102107 **4.** Domsic, R.T., Medsger, T.A., 2016. Autoantibodies and Their Role in Sclerosis Clinical Care. Current Treatment Options in Rheumatology 2, 239–251.. doi:10.1007/s40674-016-0050-y **5.** Kumar Y, Bhatia A, Minz RW. Antinuclear antibodies and their detection methods in diagnosis of connective tissue diseases: a journey revisited. Diagn Pathol. 2009;4:1. Published 2009 Jan 2. doi:10.1186/1746-1596-4-1