ANTI-VIMENTIN ANTIBODY AS A BIOMARKER FOR SJÖGREN’S DISEASE SEVERITY
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Sjögren’s disease (SjD) is a rheumatic autoimmune disease characterized by focal lymphocytic infiltrates in the lacrimal and salivary glands, severe dry mouth and eyes, pain and debilitation.

In order to fulfill classification criteria, standard diagnosis requires one or more objective dryness measures and either autoantibodies to ubiquitous Ro antigens or a lip biopsy positive for focal lymphocytic infiltrates.

Approximately 38%¹ of SjD patients elude detection using Ro biomarker analysis and subsequently require invasive lip biopsies.

Therefore, novel biomarkers are needed to identify SjD patients at risk for a higher severity of disease.

Anti-vimentin antibody (Ab) in SjD as a biomarker for higher disease severity

SjD patient serum samples → Immunoassay for anti-vimentin Ab → Patient stratification by disease severity
FINDINGS

Increased anti-vimentin positivity in SjD patients correlates with disease severity.

Sera from healthy controls (HC), non-SjD patients and primary SjD patients were analyzed for anti-vimentin Ab levels. Patients stratified as negative (Neg) or positive (Pos) for Schirmer’s test (mm/5 min) and whole unstimulated saliva flow (WUSF; ml/15 min) and levels of anti-vimentin Abs compared between the 2 groups.

Increased anti-vimentin positivity in SjD patients correlates with disease severity.
Dr. Deshmukh has discovered that anti-vimentin Ab is readily detected in the sera of primary SjD patients

Presence of anti-vimentin Ab is associated with higher severity of oral and ocular features of the disease

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