BIOMARKER FOR SJÖGREN’S SYNDROME PATHOLOGIES
PROJECT TEAM

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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.

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Identification of novel non-Ro/La autoantibodies could aid in Sjögren’s Disease classification without a lip biopsy

Classification by ACR/EULAR 2016 criteria is hindered by:

- Heterogeneity of clinical presentation
- Access to lip biopsy (invasive)
- Lack of biomarkers specific to SjD (non-invasive)

A non-invasive test is required to capture the approximately 40% patients that do not meet ACR criteria.
FINDINGS

Subjects positive for objective ocular/oral dryness measure

Ro positive

Meet ACR 2016 criteria for SjD classification

Ro negative

Not classified as SjD without lip biopsy

Novel biomarker assay

46% Ro Neg subjects now classified as SjD

GRAMD1A
ISG15
KLHDC8A
MAPRE1
NUP50
POLR3H
RPAP3
RCAN3
SKIL
GMNN
ZBTB46
TCP10

Subjects positive for objective ocular/oral dryness measure
Dr. Farris has identified a set of autoantibodies that classifies 46% Ro Neg patients as SjD resulting in reduced lip biopsies.

Additionally, SjD classification of these patients via the novel antigens will improve treatment and patient stratification in clinical trials.

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