

# Case Study 2

## 59 Year Old Caucasian Female Chief complaint: arthralgias, dry eyes and hair loss Dr. James Mossell, Tifton GA



A 59 year old Caucasian female was referred to Dr. James Mossell with chief complaint of arthralgias, dry eyes and hair loss. Along with morning stiffness, the patient reported experiencing cough/wheezing and heartburn.

Upon clinical examination, the patient was positive for oral ulcers on hard pallet, negative for alopecia, malar rash or synovitis, however a few healing bullae on upper extremities were found. There was no evidence of cutaneous infection and her vital signs were normal. Medical history revealed a diagnosis of benign chronic pemphigus biopsy, chronic high dose steroids up to 60 mg/day with gradual tapers on and off to help control flares of pemphigus. Given the patient's medical history, SLE or primary Sjogren's syndrome were suspected.



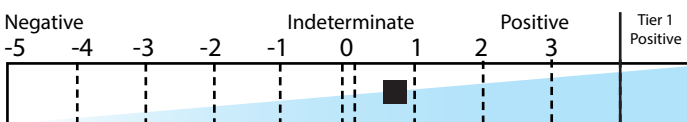
**Patient's Previous Lab Work**

- Normal CBC panel with differential
- Normal CMP
- Normal thyroid functions
- UA had trace protein and 2+ blood but no active sediment
- AM cortisol was 3 when PCP weaned patient off steroids completely and patient was subsequently placed back on prednisone 20 mg PO daily

To help efficiently assess the patient, Dr. Mossell ordered the AVISE CTD test in addition to other lab tests including:

- CBC with diff, CMP, UA, CK, quantitative immunoglobulins, SPEP/UPUP, ESR
- Hepatitis profile - normal
- CRP - elevated at 7
- C3 /C4 - normal
- ANCA - negative

**AVISE CTD Test Results: Positive: Index: 0.9**



Key Assays	Results	Reference Range
<b>ANA by IIF</b>	1:320 (Speckled)	Negative <1:80 Positive ≥1:80
<b>ANA by ELISA</b>	138 Units	<20 Negative 20-59 Positive ≥60 Strong Positive
<b>CB-CAPs - BC4d</b>	61 Net MFI	<61-Negative 61-200 Positive >200 Strong Positive
<b>CB-CAPs- EC4d</b>	2 Net MFI	<15-Negative 15-75 Positive >75 Strong Positive
<b>Anti-SS-A/Ro IgG</b>	>240	<7 Negative 7-10 Positive >10 Positive
<b>Other assays of interest:</b>		
<ul style="list-style-type: none"> <li>• Anti-dsDNA- Negative</li> <li>• Anti-Smith - Negative</li> <li>• APS, RA &amp; Thyroid panel - Negative</li> </ul>		

Based on clinical assessment and with the help of the AVISE CTD test, the patient was diagnosed with SLE due to observation of symptoms and elevated CB-CAPs (BC4d) - even in the presence of a negative anti-dsDNA and anti-smith result. The patient was placed on a taper dose of prednisone followed by hydroxychloroquine (HCQ) as well as artificial tears. The patient, however, did not tolerate HCQ due to GI upset and was placed on Imuran with a gradual taper of prednisone. Skin lesions were controlled, but joint pain as well as dry eyes persisted, and CRP remained elevated. Imuran was discontinued and the patient was placed on Rituximab, which helped to control symptoms.