cell expression is more frequent in SSc (72.7%) and overlap patients (85.7%) in comparison with SjS (58.2% and P=0.004). Additionally, most of the acinar TGF-β1 staining was strong positive in SSC patients (45.5% vs 19.0% and 3.6%). Conclusions: The results of our study showed that mTOR may be one of the common pathways for the pathology/inflammation observed in both SiS and SSc. Thus, there may be a room for mTOR inhibitors for the treatment of both diseases. Additionally PTEN and TGF- $\beta1$  expression, in particular acinar TGF- $\beta1$  might be a distinctive feature of SSc.

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#### THURSDAY, 15 JUNE 2017

## SLE, Sjögren's and APS - clinical aspects (other than treatment)

THU0246 THE IMPACT OF CLASSIFYING SLE PATIENTS WITH THE SLICC-2012 VERSUS THE ACR-1997 CLASSIFICATION CRITERIA ON EARLY DIAGNOSIS, SEVERITY, AND DAMAGE: DATA FROM THE COMMUNITY-BASED CRETAN LUPUS

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Background: Systemic Lupus Erythematosus (SLE) often poses challenges to diagnosis in clinical practice and classification in research. The 2012 SLICC criteria have been recently introduced, with validation studies suggesting greater sensitivity yet equal or lower specificity compared to the 1997 ACR criteria. However, the prognostic significance of classifying SLE patients with the SLICC<sup>2012</sup> versus the ACR<sup>1997</sup> criteria is not known.

**Objectives:** To evaluate the impact of SLICC<sup>2012</sup> versus ACR<sup>1997</sup> SLE classification in terms of clinical characteristics and outcome.

Methods: Both the SLICC<sup>2012</sup> and the ACR<sup>1997</sup> classification criteria were applied to adult SLE patients enrolled in the community-based Cretan Lupus Registry over the period 1999-2013. Classified cases were assessed at the end of 2013 in terms of disease severity (determined by the severity of manifestations and the use of lupus treatments) and organ damage (assessed by the SLICC/ACR damage index). Cases who fulfilled both criteria during the observation period were categorized according to which set of criteria was satisfied first and then compared for the frequency of individual criteria.

Results: At the end of the observation period (year 2013), fewer SLE patients had been classified with the SLICC<sup>2012</sup> (n=602) as compared with the ACR<sup>1997</sup> (n=750) criteria. The female-to-male ratio (12.6:1 versus 13:1) and the mean (±SD) age at the time of diagnosis (42±15 versus 43±15 years) were comparable between SLICC<sup>2012</sup> and ACR<sup>1997</sup>-classified cases, respectively. Lupus was classified as mild, moderate and severe in 50%, 33% and 17% of the ACR<sup>1997</sup>- as compared to 42%, 34% and 23% of the SLICC<sup>2012</sup>-classified patients (p<0.001). Damage occurred in 30.5% of the ACR<sup>1997</sup> versus 36% of the SLICC<sup>2012</sup> cohort (p=0.01) despite comparable disease duration. Patients who fulfilled both sets of criteria (n=512) were categorized into three groups based on which criteria were fulfilled first, i.e. group 0 (concurrently: 87% of cases), group 1 (SLICC<sup>2012</sup> after ACR<sup>1997</sup>: 5%), and group 2 (SLICC<sup>2012</sup> before ACR<sup>1997</sup>: 8%). We found that malar rash and neurologic disorder were significantly more prevalent in group 1 (malar rash: 54.3%, 80.8% and 48.8% in groups 0, 1 and 2, respectively, p=0.02; neurologic disorder: 3.7%, 15.4% and 0%, respectively, p=0.05). Conversely, group 1 patients had significantly lower frequency of non-scarring alopecia (51.3%, 23.1% and 68.3%, respectively, p=0.02) and synovitis (23.9%, 0% and 29.3%, respectively, p=0.012).

Conclusions: Application of the SLICC<sup>2012</sup> criteria may result in classification of SLE patients with more severe disease compared to those who fulfill the ACR<sup>1997</sup> criteria, which may have important implications in terms of trial design; however, these data need to be validated. Lack of inclusion of malar rash in the SLICC<sup>2012</sup> criteria and of non-scarring alopecia in the ACR<sup>1997</sup> criteria may delay the classification of SLE patients.

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#### THU0247 THE PRESENCE OF ANTI-RO AND ANTI-LA ANTIBODIES IS ASSOCIATED WITH TUBULOINTERSTITIAL DAMAGE IN **LUPUS NEPHRITIS**

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Background: Moderate-to-severe tubulointerstitial damage (TID) is associated with poor renal outcomes in lupus nephritis (LN) independent of glomerular pathology<sup>1</sup>. Specific antibody profiles associated with TID in LN have not been identified. Unlike glomerular damage, TID is not associated with anti-dsDNA or complement levels1. An association between TID and the presence of anti-Ro/La antibodies has been proposed in Sjögren's syndrome<sup>2</sup>. Whether these antibodies are associated with TID in LN is not known.

Objectives: To study an association between anti-Ro/La antibodies and moderateto-severe TID in LN

Methods: We identified all patients who fulfilled ACR and/or SLICC criteria for SLE. Patients were included if they had an index renal biopsy consistent with LN between January 2005 and July 2015 and had complete data on TID and anti-Ro/La. Medical history, demographic and laboratory data were ascertained from chart review. TID was defined as the presence of moderate or severe tubular atrophy and/or interstitial fibrosis from the renal biopsy reports.

Results: of the 157 LN patients, 39 (25%) had moderate/severe TID (Table). As expected, moderate/severe TID was associated with older age, class III/IV±V LN and lower estimated glomerular filtration rate (eGFR) at biopsy. Anti-Ro antibodies were present in 55 (47%) of patients with none/mild TID and 17 (44%) of patients with moderate/severe TID (p=0.74). Both anti-Ro and anti-La antibodies were present in 11 (9%) of patients with none/mild TID vs 11 (28%) of patients with moderate/severe TID (p=0.003). In the logistic regression model adjusted for age, eGFR and LN class, the presence of both anti-Ro and anti-La antibodies was associated with a 3-fold increase in the odds of TID, OR 3.1, 95% CI (1.1-9.1),

Baseline characteristics by TID (none/mild vs. moderate/severe)

|   | None/Mild TID<br>(n=118) | Moderate/Severe TID (n=39) | p-value |
|---|--------------------------|----------------------------|---------|
| Age, median (IQR), years                      | 26 (17, 37)              | 41 (25, 53)                | < 0.001 |
| Men, n (%)                                    | 21 (18)                  | 10 (26)                    | 0.29    |
| Black Race, n (%)                             | 55 (47)                  | 22 (56)                    | 0.29    |
| Hispanic ethnicity, n (%)                     | 41 (40)                  | 12 (38)                    | 0.79    |
| Charlson comorbidity index, median (IQR)      | 3 (1, 4)                 | 3 (1, 4)                   | 0.09    |
| Creatinine (mg/dL), median (IQR)              | 0.8 (0.6, 1.2)           | 1.6 (1, 2.6)               | < 0.001 |
| eGFR mL/min/1.73m <sup>2</sup> , median (IQR) | 91 (61, 127)             | 42 (26, 75)                | < 0.001 |
| Protein/Creatinine ratio (mg/mg),             | , ,                      | , , ,                      |         |
| median (IQR)                                  | 2.2 (1.0, 4.9)           | 2.1 (1.5, 5.5)             | 0.68    |
| LN class n (%)                                |                          |                            | 0.008   |
| I/II  | 10 (9)                   | 0                          |         |
| III/IV ± V                                    | 71 (61)                  | 34 (87)                    |         |
| V   | 35 (30)                  | 5 (13)                     |         |
| Low C3, n (%)                                 | 83 (75)                  | 23 (70)                    | 0.51    |
| Low C4, n (%)                                 | 76 (70)                  | 22 (67)                    | 0.69    |
| Elevated dsDNA, n (%)                         | 70 (68)                  | 21 (66)                    | 0.81    |
| Anti-Ro, n (%)                                | 55 (47)                  | 17 (44)                    | 0.74    |
| Anti-Ro and anti-La, n (%)                    | 11 (9)                   | 11 (28)                    | 0.003   |

Conclusions: The presence of anti-Ro and anti-La antibodies is associated with moderate/severe TID, independent of age, LN class and eGFR. Understanding the role of anti-Ro/La in the mechanisms underlying TID in LN may lead to novel preventive and therapeutic strategies.

### References:

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# THU0248 THE ASSOCIATION BETWEEN SYSTEMIC LUPUS ERYTHEMATOSUS TO BIPOLAR DISORDER - A REAL-LIFE

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Background: Systemic Lupus Erythematosus (SLE) is a chronic, autoimmune disease that has a wide variety of physical manifestations, including neuropsychiatric features. Bipolar Disorder (BD) is a chronic, phasic affective disorder that may present as depression or as mania. Neuropsychiatric symptoms in SLE develop in 20%>70% of SLE patients during the course of the disease and in half of these patients they precede the diagnosis of  $SLE^{1-4}$ . In half of the patients, neuropsychiatric manifestations occur prior to the diagnosis of SLE5