In addition, the performance of the newly proposed criteria was evaluated including patients with more than 10 points, but negative ANA. This led to an increase of sensitivity to 90% (95% CI 86-94%), but also did not influence specificity.

**Proposed 2017 ACR-EULAR classification criteria in SLE patients with NP symptoms**

<table>
<thead>
<tr>
<th>With adjusted</th>
<th>Including ANA negative patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity (95% CI)</td>
<td>Specificity (95% CI)</td>
</tr>
<tr>
<td>87% (83-91%)</td>
<td>74% (62-84%)</td>
</tr>
<tr>
<td>90% (86-94%)</td>
<td>74% (62-84%)</td>
</tr>
</tbody>
</table>

**Table 1.** Performance of the proposed 2017 ACR-EULAR classification criteria for SLE

Conclusion: In a cohort of SLE patients with NP symptoms, the proposed 2017 ACR-EULAR classification criteria showed similar sensitivity as the 1997 ACR and the SLICC 2012 criteria, but lower specificity. Including ANA negative patients improved sensitivity.

**REFERENCES:**


**Disclosure of Interests:** Rory Monahan: None declared, H.J.J. Beart: None declared, Maika Gegevane: None declared, E.G. Brilmann: None declared, L.J.J. Beart-van de Voorde: None declared, César Magro Checa: None declared, Thomas Huizinga Consultant for: Merck, UCB, Bristol Myers Squibb, Biotech AG, Pfizer, GSK, Novartis, Roche, Sanofi-Aventis, Abbott, Crescendo Bioscience Inc., Nycomed, Boehringer, Takeda, Zyus, Epirus, Eli Lilly, G.M. Steup-Beekman: None declared


**THU0246**

**ASYMPTOMATIC MYOCARDIAL DYSFUNCTION DETECTED BY SPECKLED TRACKING ECHOCARDIOGRAPHY (STE) IN ACTIVE SLE PATIENTS**

Dhiren Ravali1, Muzaffar Bindroo2, Gayatri Ekbote3, Natasha Nagalur1, Lucky Sharma4, Naval Mendiratta1, Shrut Bijal1, Vinay Singal1, Vinyak Agarwa1, Rajiv Gupta1, Medanta - The Medicity, Rheumatology and clinical immunology, Gurugram, India; Medanta The Medicity, Rheumatology and clinical immunology, Gurugram, India; Medanta The Medicity, Rheumatology and clinical immunology, Gurugram, India; Medanta The Medicity, Cardiology, Gurugram, India

**Background:** Clinical myocarditis is seen in 10% of SLE patients, but autopsy studies have shown myocardial involvement in up to 50% of patients. Lupus myocarditis may be silent and can be detected by newer echocardiographic technique like STE especially when SLE is active.1,2

**Objectives:** To study asymptomatic myocardial dysfunction by STE in active SLE patients.

**Methods:** All consecutive active SLE patients having a SLEDAI score ≥ 6 without any cardiac symptoms with disease duration ≤ 5 years aging between 18-45 years, who attended the Rheumatology and Clinical Immunology department (Outpatient and Inpatient) of Medanta, The Medicity, Gurugram, from May 2016 to March 2018, were enrolled. They were evaluated for myocardial dysfunction by using a novel ultrasound technique - STE, which was reviewed by one observer cardiologist. Global longitudinal systolic strain (GLSS) was calculated by STE in all patients. GLSS< -19.7 was considered as an indicator of myocardial dysfunction.2

**Age** and sex matched controls in the form of thirty healthy volunteers, age and sex matched controls in the form of thirty healthy volunteer subjects were enrolled and their echocardiography findings were compared with active lupus patients. Atherosclerotic risk factors like hypertension, Diabetes Mellitus and age >45 years were excluded to avoid confounding effects.

**Results:** Fifty eight active lupus patients were analysed. In the cohort female: male ratio was 8.8:1, median duration of disease was 22 months (0.5 - 120) and mean SLEDAI was 11.02 ± 2.30. GLSS was significantly low in active lupus patients compared to healthy controls (p<0.0001) suggestive of myocardial dysfunction.

In active lupus patients, abnormal echocardiographic findings (myocarditis, non-bacterial thromboendarcoiditis, pulmonary arterial hypertension and pericarditis) were seen in 62.1%. Myocardial dysfunction was found in 27 (46.6%), 20 (34.5%) patients had low GLSS with normal left ventricular ejection fraction (LVEF) and these were significantly associated with APLA and anti Sm/RNP antibodies. Multivariate Logistic Regression analysis of myocardial dysfunction with SLEDAI and other system parameters showed that muscularkeletal, CNS, haematological and nephritis were associated with increased risk for developing higher disease activity and myocardial dysfunction, although it was not statistically significant.

**Table 1.** Comparison of GLSS and LVEF between active SLE patients and healthy control group patients

**Table No.1 Comparison of GLSS and LVEF between active SLE patients and healthy control group patients**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>No. of patients (n=54)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLSS &lt; -19.7</td>
<td>27</td>
<td>46.6</td>
</tr>
<tr>
<td>&lt; LVEF 50%</td>
<td>7</td>
<td>12.1</td>
</tr>
<tr>
<td>Both low</td>
<td>7</td>
<td>12.1</td>
</tr>
<tr>
<td>GLSS &lt; -19.7 with normal LVEF</td>
<td>20</td>
<td>34.5</td>
</tr>
</tbody>
</table>

**Table 2.** Myocardial dysfunction in active SLE based GLSS < -19.7 %.

Conclusion: Almost half of active lupus patients have silent myocarditis. GLSS is more sensitive in detecting asymptomatic myocardial dysfunction than LVEF. Regular Echocardiography with Speckled tracking should be performed in Lupus patients especially when disease is active.

**REFERENCES:**


**Disclosure of Interests:** None declared


**THU0247**

**LRRA4: A NOVEL PROGNOSTIC BIOMARKER OF RENAL OUTCOME IN LUPUS NEPHRITIS PATIENTS**

Heng Cao, Jin Lin, The First Affiliated Hospital, College of Medicine, Zhejiang University, Hangzhou, China

**Background:** Lupus nephritis (LN) is the most common organ-threatening manifestation of systemic lupus erythematosus (SLE) and can result in kidney deterioration and end-stage renal disease (ESRD). Newly discovered biomarkers exhibit qualities of disease activity and damage, predict long term preservation of renal function.

**Objectives:** Combine the transcriptomics profile of kidney with long-term renal outcome in LN patients, to explore the novel non-invasive predictive biomarker for renal outcome.

**Methods:** The transcriptomics profile of kidney in 24 LN patients was obtained by using Affymetrix human HTA 2.0 gene expression chip. Random Forest method was used to screen the candidate mRNA biomarkers by correlate the gene expression profile with eGFR slope during the follow-up (Mean time 5.2±1.2 years). In addition, in an independent LN cohort enrolled 45 patients, qRT-PCR and immunochemistry staining was performed to validate the correlation of mRNA level and protein level of candidate gene with renal outcome.