its determination usually requires some days. Leukocyte count, CRP and ESR cannot discriminate SLE from infectious processes. Calprotectin could be a good biomarker to assess lupus activity since it is more specific than CRP and ESR and faster to analyse than anti(ds)DNA.

**Objectives:**

- A total of 148 patients were included. All patients included fulfilled the SLE criteria (SLICC 2012). A quantitative ELISA analysis was performed to assess levels of serum calprotectin (CALPRO AS, Norway).

**Methods:**

- Biomarkers of lupus disease activity were also assessed (levels of anti(ds)DNA, hypocomplementemia, ESR and CRP). Clinical variables and activity/damage index (SLEDAI/SLICC) were also evaluated. The study was approved by the Clinical Research Ethics Committee of the hospital and all patients signed an informed consent. The results were compared with a healthy control group of similar age and sex (n=20).

**Results:**

- 134 patients (92%) were women with a mean age of 46±12 years and an average SLE evolution of 12±7 years. Mean SLEDAI was 2±2 (105 inactive [-3], 43 mild [4-12], 0 severe [-13]). Mean SLICC was 0.31±0.70. No significant differences were observed in serum calprotectin levels between patients with SLE and healthy controls (2.93±2.35 vs 2.17±1.49 µg/mL; p=0.160). Calprotectin was positively correlated with CRP (r=0.447, p<0.001) and leukocyte count (r=0.462, p<0.001). Additionally, patients with higher anti(ds)DNA levels (>100U/mL) had higher calprotectin compared to patients with lower anti(ds)DNA (3.20±2.63 vs 2.42±1.57 µg/mL; p=0.027), however this pattern was not observed with hypocomplementemia.

**Conclusion:**

- Serum calprotectin levels were positively correlated with CRP levels and leukocyte count. Patients with higher anti(ds)DNA levels had higher calprotectin levels, however we did not observe significant differences depending on SLEDAI index or the presence of arthritis, serositis or glomerulonephritis. Even that calprotectin determination is faster than CRP and ESR and could be helpful in assessing inflammatory activity. There is an interesting relation between antiphospholipid antibodies and calprotectin. This study should be continued in a larger sample of active SLE patients to assess its utility in clinical practice as a discriminating biomarker for flares and even infection.

**Disclosure of Interests:** None declared

**REFERENCES**


**Disclosure of Interests:** None declared

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MCD for each treatment was stored at ambient temperature for 7 and 14 days or frozen. RNA from PAX tubes and MCD was extracted and GE performed by Perkin Elmer and DoxDirect, respectively. Interferon-inducible gene signature was compared between the two platforms. In addition, RNASeq was performed on immediately frozen PAX and MCD to examine suitability for broad transcriptomics.

**Results:** IFN-GE was comparable between PAX and MCD samples when frozen directly after collection. Stability of MCD IFN-GE was largely unchanged by 7 and 14 days of ambient storage while PAX IFN-GE decreased over storage period. Comprehensive QC of RNA-Seq showed no significant differences in the two platforms in terms of RNA quality and integrity. Transcriptional diversity and levels were comparable with an overall correlation between PAX and MCD > 95%.

**Conclusion:** MCD showed greater stability at ambient temperature and required minimal blood collection volumes. Downstream GE data from MCD finger stick blood collected was comparable to current PAX method. MCD in clinical trials may enable better resolution of temporal transcriptional changes and the ability to capture unpredictable events such as disease flare through ad hoc home collections allowing high frequency transcriptomic assessment. MCD coupled with a gene expression platform could become an opportunity for diagnostic development in the growing field of precision medicine.

**REFERENCES**

None

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**Background:** Osteoporosis in patients with systemic lupus erythematosus (SLE) is always thought to be GIOP (induced by glucocorticoid). Yet in our practice, there were some patients who developed osteoporosis at the onset of SLE, before the use of glucocorticoid and immunosuppressants. The clinical feature of these patients were not known by us clearly.

**Objectives:** This study aimed to investigate the BMI (bone marrow density) status and clinical characteristics of treatment-naive patients with newly diagnosed SLE.

**Methods:** Patients admitted to Peking University Third Hospital from 2009-2016, who were newly diagnosed as SLE and had no previous medical history that would have affected their BMD, were enrolled in this study. Demographic and clinical data were recorded. BMD of the lumbar vertebral (Lumbar T-score and T-score), total hip, and thigh were measured using GE devices. The clinical feature of these patients were not known by us clearly.

**Results:** Eighty-nine SLE patients with a mean age of 28.7 ± 8.9 years were included in the study (Table1).

**Abstract AB0501 Table 1. Demographics of newly diagnosed SLE patients**

<table>
<thead>
<tr>
<th>Variables</th>
<th>SLE patients (n=89)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (year)</td>
<td>28.7±8.9</td>
</tr>
<tr>
<td>Menarche age (year)</td>
<td>13±1.3</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>21.7±3.8</td>
</tr>
<tr>
<td>Male</td>
<td>7%</td>
</tr>
<tr>
<td>Smoking history</td>
<td>3%</td>
</tr>
<tr>
<td>Fracture history</td>
<td>0%</td>
</tr>
<tr>
<td>SLEDAI</td>
<td>10.0±5.0</td>
</tr>
</tbody>
</table>

Approximately 36% of these patients had normal BMI, 49% had osteopenia, and 15% had osteoporosis. The SLE Disease Activity Index (SLEDAI) of the abnormal BMD group was lower than that of the normal BMD group (9.4 ± 4.5 vs 12.1 ± 5.8, P = 0.028). The body mass index (BMI) was significantly lower in the abnormal than normal BMD group (20.5±3.5 kg/m² vs 24.2±3.2 kg/m², P = 0.00). The total cholestenone (TC) and low density lipoprotein (LDL) were lower in the abnormal than normal BMD group (4.3±1.7 mmol/L vs 4.2±1.2 mmol/L, P = 0.04; 4.9±1.3 mmol/L vs 2.9±0.9 mmol/L, P = 0.03). The multisystem damage and...