Abstract 447 Table 1

<table>
<thead>
<tr>
<th>Metric</th>
<th>1/1/2010 to 6/31/2010</th>
<th>1/1/2016 to 6/31/2016</th>
<th>Z-Test for Proportions (Independent Groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric 1</td>
<td>Rate of SLE patients having office visits at least 1x/6 months.</td>
<td>42.0%</td>
<td>40.7%</td>
</tr>
<tr>
<td>Metric 2</td>
<td>Rate of SLEDAI application at least 1x/6 months.</td>
<td>13.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Metric 3</td>
<td>Rate of administration of immunosuppressant in the last 12 months</td>
<td>13.8%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Metric 4</td>
<td>Rate of administration of pneumococcal vaccination (ever)</td>
<td>30.4%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Metric 5</td>
<td>Rate of patients with prednisone dose ≥ 7.5 mg/d</td>
<td>11.5%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

Abstract 447 Table 2

<table>
<thead>
<tr>
<th>Metric</th>
<th>1/1/2010 to 6/31/2010</th>
<th>1/1/2016 to 6/31/2016</th>
<th>Z-Test for Proportions (Independent Groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric 2</td>
<td>Rate of hospitalization among all lupus patients</td>
<td>4.2%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

- Patient Campaigning: Identification of patients who are due for various SLE-specific testing or management activities and proactive contact in order to prompt an office visit.

**Results** We demonstrated a “tighter” management of SLE patients through statistically significant improvement in the rate of key SLE management behaviours (95% CI).

“Tighter” management, in turn, prompted statistically significant improvement in hospitalisation (85% CI).

**Conclusions** Time-structured, IT-enhanced, and QI indicator-driven interventional modalities prompted a more frequent, more comprehensive, and guideline-adherent point of care interaction with SLE patients (i.e. “tighter” management). “Tighter” management manifested as improved patient outcomes in the form of a diminished rate of hospitalisation among SLE patients.

---

448 BONE MARROW MEGAKARYOCYTES MAY PREDICT THERAPEUTIC RESPONSE OF SEVERE THROMBOCYTOPENIA IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

W Mo*, L Zhao, X Zhang. Beijing peking union medical college hospital, rheumatology, Beijing, China

10.1136/lupus-2017-000215.448

**Background and aims** To analyse the predictive value of megakaryocyte counts in bone marrow (BM-MK) for determining the therapeutic response of severe thrombocytopenia (TP) in patients with systemic lupus erythematosus (SLE).

**Methods** Thirty-five patients with SLE with severe TP (platelet count ≤50 ×10^9/l) from the Peking Union Medical College Hospital admitted between 2007 and 2014 with appreciable bone marrow aspiration results were analysed retrospectively. The associations between therapeutic response and clinical manifestations, laboratory findings including BM-MK counts, were evaluated.

**Results** Seventeen (49%) and 8 (23%) patients achieved a complete response (CR) and a partial response (PR), respectively, and 10 had no response (NR). The BM-MK counts in each group were 102±25 (0–322), 136±48 (2–419), and 28±12 (0–105) per slide, respectively. Significant differences were observed in the counts of BM-MK between patients who achieved a clinical response (CR + PR) and those who did not (NR; p=0.007). Patients in the NR group exhibited fewer BM-MK compared with those in the CR and PR groups (p=0.017 and p=0.006, respectively). A receiver-operation characteristic analysis identified that a cutoff value of BM-MK counts at 20 performed pretty well in discriminating patients with differential responses to immunotherapy, with sensitivity and specificity and area under the curve of 88%, 70%, and 0.798, respectively.

**Conclusions** BM-MK count may serve as a good predicting factor for immunotherapeutic response in patients with SLE with severe TP. Patients with BM-MK counts <20 per slide tend to exhibit poor clinical response.

449 EFFECT OF DISEASE REMISSION ON ORGAN DAMAGE AND QUALITY OF LIFE IN CHINESE PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

1CC Mok*, 2SM Tse, 3KL Chan, 3LY Ho. 1Hong Kong S.A.R; 2Tuen Mun Hospital, Medicine, Hong Kong, Hong Kong S.A.R

10.1136/lupus-2017-000215.449

**Background and aims** To study the effect of disease remission on organ damage and quality of life (QOL) in Chinese patients with SLE.

**Methods** Adult patients who fulfilled the ACR criteria for SLE were identified and their remission status at last visits was...
determined by the European consensus criteria (complete/clinical remission ± immunosuppressive drugs). The increase in SLE damage index (SDI) in the preceding 5 years was compared between patients who were and were not in remission for ≥5 years. QOL of patients as assessed by the validated Chinese version of the SF36 and the LupusPRO.

Results 769 SLE patients were studied (92% women; age 46.4 ± 14.6 years, SLE duration 12.6 ± 8.1 years). Clinical remission (serologically active) was present in 259 (33.7%) patients (median 43 months) and complete remission (clinically and serologically inactive) was present in 280 (36.4%) patients (median 51 months). Clinical and complete remission for ≥5 years was achieved in 64 (8.3%) and 129 (16.8%) of the patients, respectively. 53 (6.9%) patients in remission ≥5 years were taken off all medications including HCQ. Patients remitted for ≥5 years were older, and had significantly lower prevalence of renal and haematological disease. Moreover, these patients had significantly less SDI increment than those who did not remit (0.17 ± 0.53 vs 0.67 ± 1.10; p < 0.001). Among 453 patients who had QOL assessment within 6 months of last visits, remission for ≥5 years was associated with significantly better SF36 and the health-related scores of the LupusPRO.

Conclusions Durable drug-free remission in SLE is uncommon. Patients with complete or clinical remission for ≥5 years have significantly less damage accrual and better QOL.

450 SERUM 25-HYDROXYVITAMIN D3 LEVELS AND FLARES OF SYSTEMIC LUPUS ERYTHEMATOSUS: A LONGITUDINAL COHORT ANALYSIS

CC Mok, 1*R Singh, 2 P Jannetto. 1 Hong Kong S.A.R; 2 Mayo Clinic, Laboratory Medicine and Pathology, Rochester, USA

Results 276 SLE patients were studied (94% women; age 41.0 ± 13.8 years; SLE duration 8.7 ± 6.6 years). 25-hydroxyvitamin D3 levels (group I: <15 ng/ml, deficiency; group II: 15–30 ng/ml, insufficiency; and group III: >30 ng/ml, adequate) and were serially assessed for disease activity and flares. Baseline and summed SLEDAI over time, and the annual incidence of lupus flares was compared among these groups.

Results 276 SLE patients were studied (94% women; age 41.0 ± 13.8 years; SLE duration 8.7 ± 6.6 years). 25-hydroxyvitamin D3 levels (group I: <15 ng/ml, deficiency; group II: 15–30 ng/ml, insufficiency; and group III: >30 ng/ml, adequate) and were serially assessed for disease activity and flares. Baseline and summed SLEDAI over time, and the annual incidence of lupus flares was compared among these groups.

Conclusions Serum 25-hydroxyvitamin D3 levels were significantly lower in patients with flares compared to those without flares. Furthermore, patients with higher serum 25-hydroxyvitamin D3 levels had a significantly lower annual incidence of flares. These findings suggest a possible role for 25-hydroxyvitamin D3 in the prevention of lupus flares.