predictive benefit while Cr at 1 year predicted long-term renal outcome with an AUC of 0.82 (Figure 2).

Conclusions Proteinuria of 0.6 g/d at 1 year and Cr at 1 year post-LN diagnosis best predicted good long-term renal outcome. uRBCs did not offer any prognostic benefit.

**Background and aims** The aim of this study was to evaluate retrospective data of Vitamin D levels in SLE patients, at the beginning of the disease and mean values during 10-years follow-up, and correlate them with severe flares frequency.

**Methods** We selected, from a cohort of 675 SLE patients, 112 patients who had baseline Vitamin D levels at SLE diagnosis and 68 patients with at least three evaluations of Vitamin D levels during the last 10-years follow-up. The number of severe flares (defined by the SELENA-SLEDAI flare composite index) was required for all patients. We correlated the baseline Vitamin D levels with severe flare number and with patients with three or more and less than three severe flares. We also correlated severe flares with mean Vitamin D value in the last 10-years follow-up.

**Results** We observed a higher number of flares in patients with low disease baseline Vitamin D levels (p=0.045). We also observed that patients with three or more flares have significant lower baseline Vitamin D levels (p=0.004). The mean Vitamin D levels in the previous 10-years of disease, were lower in patients with more severe flares, although not significant (p=0.178). However, if we divide them in two subgroups (patients with three or more and less than three severe flares), the difference is significant (p=0.044).

**Conclusions** Vitamin D levels at the beginning of the disease and the vitamin D burden during disease are related to the number of severe flares and so resulting in more aggressive phenotypes.

**446** RELATION OF VITAMIN D LEVELS IN SLE NUMBER OF SEVERE FLARES

A Marinho, D Boleixa, C Carvalho, A Bettencourt, B Martins da Silva, C Vasconcelos.

**Background and aims** Gaps exist in SLE patient care at Ochsner Health System (Ochsner) related to both A) monitoring and management of comorbidities and treatment-related toxicities and, B) monitoring and management of disease activity. The uncovered gaps suggested a lack of well-defined systems of care in SLE within Ochsner that lead to a “looser” overall management of SLE patients than is optimal. Our hypothesis was that a more time-structured, IT-enhanced, and QI indicator-driven approach to SLE patient management would translate into a more frequent, more comprehensive, and guideline-adherent interaction with the patient (i.e. “tighter” management). This “tighter” management, we hypothesised, would manifest as improved patient outcomes.

**Methods** In order to prompt “tighter” management, we implemented the following interventional modalities:

- Lupus Management Module: An SLE-specific management dashboard programmatically embedded into the Epic EHR system in use at Ochsner. The dashboard incorporates SLE-management-specific reminders, alerts, historical test result tracking, and customised assessment (SLEDAI, SLICC) programming.

**447** IMPROVING THE QUALITY OF CARE IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) THROUGH TIME-STRUCTURED, INFORMATION TECHNOLOGY-ENHANCED, QUALITY IMPROVEMENT INDICATOR-DRIVEN PATIENT MANAGEMENT

R Quinet, W Davis, D Wray, T Hilbun, M Budziakowska, M Migliore.

**Background and aims** Gaps exist in SLE patient care at Ochsner Health System (Ochsner) related to both A) monitoring and management of comorbidities and treatment-related toxicities and, B) monitoring and management of disease activity. The uncovered gaps suggested a lack of well-defined systems of care in SLE within Ochsner that lead to a “looser” overall management of SLE patients than is optimal. Our hypothesis was that a more time-structured, IT-enhanced, and QI indicator-driven approach to SLE patient management would translate into a more frequent, more comprehensive, and guideline-adherent interaction with the patient (i.e. “tighter” management). This “tighter” management, we hypothesised, would manifest as improved patient outcomes.

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- Lupus Management Module: An SLE-specific management dashboard programmatically embedded into the Epic EHR system in use at Ochsner. The dashboard incorporates SLE-management-specific reminders, alerts, historical test result tracking, and customised assessment (SLEDAI, SLICC) programming.
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.

Bone marrow megakaryocytes may predict therapeutic response of severe thrombocytopenia in patients with systemic lupus erythematosus

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 ×10⁹/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.

Effect of disease remission on organ damage and quality of life in Chinese patients with systemic lupus erythematosus

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 and were admitted to the hospital between 2006 and 2015 were included. The ACR damage index and QOL were assessed at each visit.