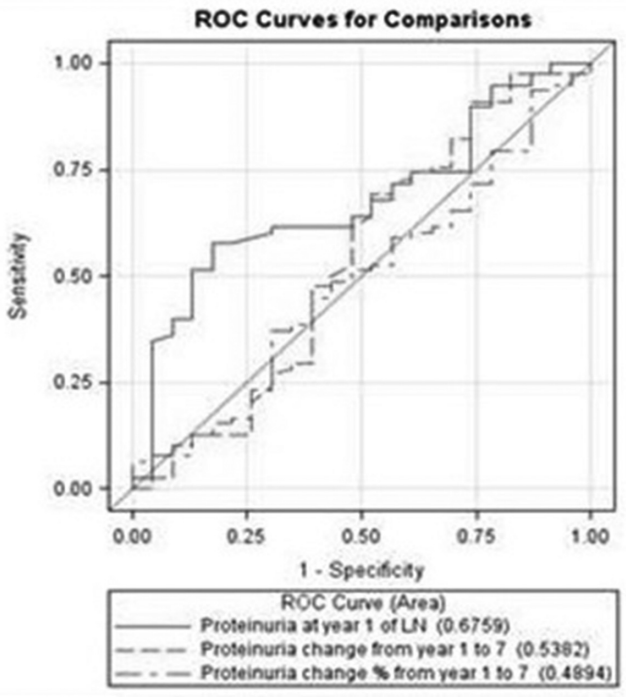
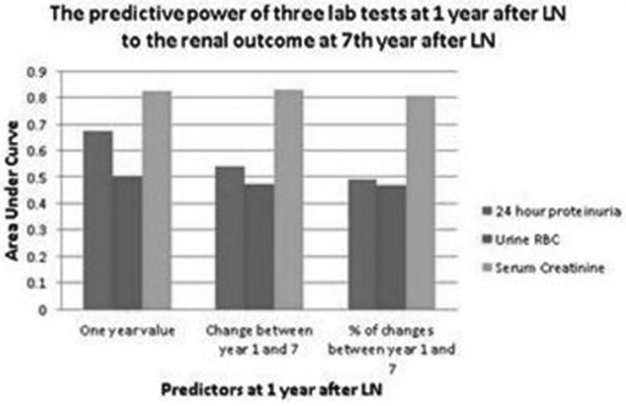


Abstract 445 Figure 1 ROC curve of proteinuria at 1 year, absolute change and percentage of change between year 1 and 7.



Abstract 445 Figure 2

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.

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

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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.

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

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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.

Abstract 447 Table 1

Physician-Behavioral Metrics		1/1/2015 to 6/31/2015	1/1/2016 to 6/31/2016	Z-Test for Proportions (Independent Groups)
Metric 1	Rate of SLE patients having office visits at least 1x/6 months.	42.0%	48.7%	Statistically Significant Difference 95% confidence (p = .0318)
Metric 2	Rate of SLEDAI application at least 1x/6 months.	13.8%	18.7%	Statistically Significant Difference 95% confidence (p = .0341)
Metric 3	Rate of administration of influenza vaccination in the last 12 months.	13.9%	18.0%	Statistically Significant Difference 90% confidence (p = .0740)
Metric 4	Rate of administration of pneumococcal vaccination (ever)	30.4%	31.5%	Not Statistically Significant
Metric 5	Rate of patients with prednisone dose > 7.5 mg/day.	11.5%	7.4%	Statistically Significant Difference 95% confidence (p = .0254)

Abstract 447 Table 2

Patient Outcomes Metrics		1/1/2015 to 6/31/2015	1/1/2016 to 6/31/2016	Z-Test for Proportions (Independent Groups)
Metric 6	Rate of hospitalization among all lupus patients	5.9%	3.7%	Statistically Significant Difference 85% confidence (p = .1006)

- 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

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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.

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

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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