The aim ofthis study is to describe clinical and serologic characteristics of SLE patients according to complement levels.
Methods Our SLE electronic database was analyzed (Jan 2014–Aug 2016). We included patients 18 years, fulfilling ACR 1997/SLICC 2012 classification criteria, with at least one year follow-up and at least two complement levels determinations at different times during follow-up.

Patients were classified in 4 groups, defined as following: Group 1 (normal C3 and C4 on all determinations), Group 2 (C3 and C4 below reference levels on all determinations), Group 3 (only C4 below reference levels on all determinations) and Group 4 (C3 and/or C4 on variable levels, with at least one determination below reference levels).

Demographic data, disease activity by SELENA-SLEDAI, accrual damage by SLICC-DI, presence of anti DNAds and anti Sm antibodies and clinical manifestations were assessed.

Statistical analysis was performed using Epi info v7. Correlation was assessed using chi2 or Fisher´s test appropriate.
Results 149 patients were included. 95.3% female, mean age at diagnosis was 30.6 years (CI: 28,5 32,8), mean disease duration 9.7 years. Mean SLICC-DI by group: Group 1 1.0, Group 2 0.5, Group 3 1.3 and Group 4 0.6.

All groups with hypocomplementaemia showed a higher SLEDAI respecting Group 1 (p=0.0013)(table 1)

Presence of anti DNAds and anti Sm antibodies is shown in table 1.

Respecting clinical manifestations, a significant difference was found in Lupus Nephritis (Group 1 36.8%, Group 2 44.1%, Group 3 78.6% and Group 4 36,4% (p=0.0002)) and hemolytic anemia (Group 3 28.6% and Group 1 17.6% (p: 0.0196))(table 1).
Conclusions An association between C4 persistently below reference levels (Group 4) and anti DNAds antibodies and Lupus Nephritis was found. Group 3 patients may have a worse prognosis due to renal involvement.

Complement levels during follow up could be used as a marker to assess nephritis risk in SLE patients.
Funding Source(s): None

156 SAFETY AND EFFICACY OF BELIMUMAB FOR TREATING SYSTEMIC LUPUS ERYTHEMATOSUS IN THE AFRICAN AMERICAN POPULATION AT LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER IN NEW ORLEANS

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Background The efficacy of belimumab in African American (AA) patients has not been clearly proven. Manufacturer recommends use with caution in AA because efficacy in this population has not been well established. We aim to report clinical outcomes and safety of belimumab therapy in our AA population with Systemic Lupus Erythematosus (SLE) at Louisiana State University Health Sciences Center.
Methods This is a single center, descriptive, retrospective case series report. We used electronic medical records to identify AA patients, 18 years or older, diagnosed with seropositive SLE according to SLICC criteria, who had received belimumab in combination with standard therapies. Demographics, comorbidities, clinical outcomes, laboratory outcomes, medication utilization and adverse events are reported.
Results We identified 15 patients who started belimumab from March 2011 to March 2018. Only 5 met our study criteria. All patients were female with a mean age of 41.4 years at belimumab initiation (baseline). The average time since SLE diagnosis at baseline was 13.5 years. The average time on belimumab at the time of analysis was 19.06

Abstract 156 Table 1

	Patient A		Patient B		Patient C		Patient D		Patient E	
Age when started Belimumab (years)	36.75		26.08		47.08		47.5		49.5	
Time of SLE diagnosis (years)	1		2		12		47.5		5	
Time on Belimumab at of analysis (months)	12.7		8.2		19		47		8.13	
Time on Belimumab when reported benefit (months)	< 1		< 1		< 1		6		5	
Dose of steroids at baseline and analysis (mg/day)	40	0	20	10	10	10	10	10	None	
Steroid Sparing Agent at baseline and analysis	HCQ	HCQ	None	HCQ	HCQ	HCQ	HCQ MMF	HCQ MMF	HCQ MTX MMF 1g	HCQ MTX MMF 0.5g
Adverse Events of Belimumab	Upper Respiratory Infection, Conjunctivitis		Flu – like symptoms		Arthralgia		Infusion reaction: malaise, swollen eyes, myalgia, nausea and vomiting		None	

months. At baseline, 80% had high dsDNA with 75% showing improvement upon analysis. All patients had low C3 or C4 at baseline and 75% had normalized at time of analysis.

The top 3 reasons for starting belimumab were arthritis/arthralgia in 80% of patients, to decrease use of steroids and serositis, both in 40% of the cases. Eighty percent of patients were using prednisone at baseline. Two of them were concomitantly on hydroxychloroquine (HCQ) and a third one was on HCQ and MMF on top of prednisone. A fourth patient was just on prednisone and the last patient was taking HCQ, MMF and MTX without steroids.

At time of assessment, 1 patient had been weaned off of PDN and another one had reduced the dose by 50%. There was a mean steroid dose reduction of 12.5 mg/day. The other two patients remained at same dose. All patients on HCQ continued on it and the medication was started during the observation period in subject who was not on it. Among patients on MMF, one remained on it at same dose and the other was able to reduce dose by 50%. Arthritis/arthralgia resolved in 3 of 4 patients and serositis resolved in 100% of cases.

Conclusions Belimumab is an excellent steroid sparing agent, with a mean dose reduction of 12.5 mg/day. Belimumab normalized or improved most immunological studies and showed great clinical efficacy. More complex SLE cases show a less robust clinical response. Further assessment of belimumab in the AA population will be required.

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157 CONTEMPORARY PRESCRIPTION OPIOID USE AMONG PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A POPULATION-BASED COHORT STUDY

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Background SLE is a chronic illness associated with pain and disability. Opioid use is associated with increased risk of addiction, abuse, and mortality in the general population. We assessed contemporary patterns of opioid prescribing among patients with SLE in a general population context and examined potential associations with opioid prescription use.

Abstract 157 Table 1 Associations with prescription opioid usage among patients with SLE

Characteristics	Ever received a prescription weak opioid			Ever received a prescription for strong opioid		
	N (%)	Crude OR (95% CI)	Multivariable* OR (95% CI)	N (%)	Crude OR (95% CI)	Multivariable* OR (95% CI)
Sex:						
Female	3010 (34)	1.00 (Ref)	1.00 (Ref)	934 (11)	1.00 (Ref)	1.00 (Ref)
Male	488 (25)	0.66 (0.59–0.74)	0.69 (0.61–0.77)	166 (9)	0.80 (0.68–0.95)	0.78 (0.67–0.94)
Age:						
<30 Years	183 (19)	1.00 (Ref)	1.00 (Ref)	44 (5)	1.00 (Ref)	1.00 (Ref)
30–39 Years	478 (29)	1.70 (1.40–2.07)	1.74 (1.43–2.11)	113 (7)	1.51 (1.06–2.16)	1.60 (1.11–2.29)
40–49 Years	759 (33)	2.10 (1.75–2.52)	2.19 (1.82–2.65)	194 (8)	1.92 (1.37–2.69)	2.05 (1.46–2.89)
>50 Years	2078 (35)	2.31 (1.95–2.74)	2.27 (1.91–2.70)	749 (13)	3.03 (2.21–4.13)	2.94 (2.14–4.03)
Duration of SLE:						
<5 years	1641 (31)	1.00 (Ref)	1.00 (Ref)	504 (10)	1.00 (Ref)	1.00 (Ref)
>5 years	1857 (34)	1.14 (1.05–1.23)	1.23 (1.12–1.35)	596 (11)	1.16 (1.02–1.31)	1.35 (1.17–1.55)
Other Medication Use						
DMARD non-user	2059 (29)	1.00 (Ref)	1.00 (Ref)	648 (9)	1.00 (Ref)	1.00 (Ref)
DMARD user	1439 (39)	1.59 (1.46–1.73)	1.55 (1.41–1.69)	452 (12)	1.41 (1.24–1.60)	1.48 (1.29–1.69)
NSAIDs non-user	1076 (27)	1.00 (Ref)	1.00 (Ref)	679 (9)	1.00 (Ref)	1.00 (Ref)
NSAIDs user	1422 (46)	2.32 (2.12–2.53)	2.15 (1.97–2.36)	421 (14)	1.63 (1.44–1.86)	1.57 (1.37–1.80)
Glucocorticoid non-user	2386 (29)	1.00 (Ref)	1.00 (Ref)	646 (1)	1.00 (Ref)	1.00 (Ref)
Glucocorticoid user	1112 (41)	1.69 (1.55–1.85)	1.46 (1.33–1.61)	454 (17)	2.35 (2.06–2.67)	1.92 (1.68–2.21)
Alcohol use:						
Non-user	975 (37)	1.00 (Ref)	1.00 (Ref)	364 (14)	1.00 (Ref)	1.00 (Ref)
Current user	2119 (32)	0.81 (0.74–0.89)	0.89 (0.81–0.99)	614 (9)	0.64 (0.56–0.74)	0.74 (0.64–0.85)
Smoking Status:						
Non-user	2463 (32)	1.00 (Ref)	1.00 (Ref)	736 (9)	1.00 (Ref)	1.00 (Ref)
Current user	990 (36)	1.20 (1.09–1.32)	1.32 (1.20–1.47)	347 (13)	1.38 (1.20–1.59)	1.70 (1.46–1.98)
Deprivation Score:						
0	140 (28)	1.00 (Ref)	1.00 (Ref)	36 (7)	1.00 (Ref)	1.00 (Ref)
1	676 (30)	1.14 (0.91–1.43)	1.06 (0.84–1.34)	209 (9)	1.29 (0.88–1.89)	1.11 (0.75–1.64)
2	569 (31)	1.21 (0.96–1.52)	1.13 (0.89–1.44)	190 (11)	1.50 (1.02–2.21)	1.32 (0.89–1.96)
3	615 (33)	1.29 (1.03–1.63)	1.20 (0.95–1.53)	190 (10)	1.49 (1.02–2.19)	1.31 (0.88–1.94)
4	510 (36)	1.48 (1.17–1.87)	1.36 (1.07–1.74)	153 (11)	1.43 (0.97–2.12)	1.21 (0.81–1.82)
5	376 (35)	1.43 (1.12–1.83)	1.33 (1.03–1.71)	123 (12)	1.66 (1.11–2.47)	1.42 (0.94–2.14)

*Adjusted for age and sex Deprivation Score, measure of socioeconomic status NSAIDs, non-steroidal anti-inflammatory drugs; DMARDs, disease modifying anti-rheumatic drugs.