Background While systemic lupus erythematosus (SLE) disproportionately affects minority women of child-bearing age, 1520% of all patients with SLE are diagnosed as children. Studies have shown that patients with SLE perceive their quality of life as poorer than the general public due to the impact of the disease on aspects of their physical, social, and psychological function. This study compares the health-related quality of life (HRQOL) in childhood-onset SLE (cSLE), defined as diagnosed prior to age 18, to HRQOL in adult-onset SLE (aSLE).

Methods Data was collected as part of an ongoing longitudinal SLE registry at MUSC, including demographics, clinical disease manifestations and patient-reported responses to the Short Form-36 (SF-36) v2 questionnaire. For this study, the initial SF-36 v2 questionnaire completed at time of registry enrollment after age 18 was utilized, excluding patients with less than 4 ACR Classification Criteria for SLE and patients missing SF-36 v2 data. Scores were analyzed across four physical health and four mental health domains. SF-36 v2 mean scores were compared between cSLE patients and aSLE patients.

Results The mean normalized scores for all four SF-36 v2 physical health domains were higher for cSLE patients compared to aSLE patients as seen in table 1. There was statistical significance found in two domains of physical health: physical functioning (52.1±6.1 cSLE vs 38.8±12.4 aSLE, p=0.002) and role physical (50.1±7.1 cSLE vs 38.5±12.5 aSLE, p=0.007). The mean normalized scores for all four SF-36 v2 mental health domains were also higher for cSLE patients compared to aSLE patients, but no statistical significance was found.

Conclusions Despite the association among patients with SLE between childhood-onset and a more severe disease course, our findings showed an overall higher health related quality of life within the cohort. These findings suggest that having been diagnosed at an earlier age and having lived most of their life with a systemic autoimmune disease may contribute to the higher quality of life reported by patients with cSLE.

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155 CHARACTERIZATION OF A SINGLE CENTER SYSTEMIC LUPUS ERYTHEMATOSUS COHORT ACCORDING TO COMPLEMENT LEVELS

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Background Systemic Lupus Erythematosus (SLE) is an autoimmune disease in which inflammation is mediated by complement activation by immune complex deposit, leading to damage. Consumption of C3 and C4 complement fragments is accepted as a disease activity marker.

Abstract 155 Table 1

	(G1) Normal C3 and C4	(G2) Low levels C3 and C4	(G3) Low levels C4	(G4) Variable levels C3 and/or C4	Total n 149	P (value)
Age at diagnosis	32,1 (13,9)	29,5 (10,9)	28,5 (15,4)	29,5 (13,6)	30,6 (13,3)	0004
/SD)						
Disease duration (mean yrs)	10,5	7,8	13,07	8,7	9,7	0002
Female (%)	98,5%	94,1%	92,9	90,9	95,3	0001
SLEDAI (mean/SD)	5,1 (4,5)	9.2 (4 ,75)	8,07 (4)	7,9 (5,4)	6,9 (5.0)	0001
SLICC (average)	1,01	0,5	1,3	0,6	0.8	0031
Leukopenia (%)	27,9	29,4	21,4	27,3	27,5	0.876
Lymphopenia (%)	27,9	32,9	21,4	30.3	28,9	0769
Hemolytic anemia (%)	17,6	5,9	28,6	6,1	13,4	0196
Hypergamma (%)	30,9	30,3	50	44.1	35,6	0.211
LN (%)	36,8	45,5	78,6	35,3	42.3	0,0002
Overlap (%)	11,8	15,2	14,3	11,8	12,8	0,55
DNAds (%)	26,3	39,4	50	26,5	42,3	0011
Sm (%)	14,5	30,3	14,3	38,2	35,4	0,0001
RNP (%)	22,1	33,3	7,1	44,1	42,4	0003
Ro (%)	35,3	48,5	35,7	50	55,9	0,32
La (%)	16,2	15,2	14,3	29,4	29,2	0,16
aPL (%)	12,5	30,4	25	26,3	20,4	0,1415

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	