Yes	169 (30)	16 (12)	**<0.001**
No	217 (39)	87 (66)	
Unsure	174 (31)	29 (22)	
8.I would feel more comfortable participating in a research study that involves taking a new drug to see if it works for lupus if members of the research team are the same gender as me.			
Yes	116 (21)	19 (14)	**<0.001**
No	250 (45)	88 (67)	
Unsure	190 (34)	25 (19)	
9.I would feel more comfortable participating in a research study that involves taking a new drug to see if it works for lupus if the study is focused on members of my gender.			
Yes	143 (26)	27 (20)	**<0.001**
No	234 (42)	80 (60)	
Unsure	180 (32)	26 (20)	

Abstract 625 Table 2 Univariable Logistic Regression Models for Willingness to Participate in Clinical Trials Among Black Patients in the Georgians Organized Against Lupus (GOAL) Cohort (n=567*).

Variable	OR (95% CI)	p-value
Age (per 5 year ↓)	**1.07 (1.00-1.15)**	**0.046**
Male sex	**2.96 (1.46-6.02)**	**0.003**
Marital status (ref: never married)	1.22 (0.78-1.93)	0.38
Currently married		
Ever married	1.48 (0.95-2.30)	0.083
Living below poverty level	1.39 (0.94-2.05)	0.097
Work status (ref: employed)	1.17 (0.74-1.84)	0.51
Off work force (student, homemaker, or retired)		
Unemployed or disabled	**1.79 (1.13-2.84)**	**0.013**
Educational attainment (per 3 year ↑)	1.01 (0.83-1.21)	0.96
Insurance type (ref: private insurance)	**1.80 (1.14-**	**0.011**
Federal insurance	**2.83)**	
No insurance	1.61 (0.80-3.26)	0.18
Disease duration (per 5 year ↓)	1.03 (0.94-1.12)	0.57
Disease activity (per 5 unit ↑ in SLAQ)	**1.30 (1.16-1.46)**	**<0.001**
Organ damage (ref: no damage)		
Mild damage (BILD score=1 or 2)	1.64 (0.66-4.10)	0.29
Severe damage (BILD score≥3)	**2.31 (1.00-5.31)**	**0.05**
Experience of racial discrimination in healthcare**	1.27 (0.74-2.19)	0.39
Instrumental support (per 5 unit ↑ in PROMIS-SF)	0.98 (0.89-1.07)	0.61

*Two patients excluded due to missing responses. **Defined as a response of always, usually, or sometimes on the IPC-29: Interpersonal Processes of Care Survey. OR=odds ratio; CI=confidence interval; ref=reference; SLAQ=Systemic Lupus Activity Questionnaire; BILD=-Brief Index of Lupus Damage; PROMIS-SF= Patient Reported Outcome Measurement Information System-Short Form.

compared to White patients, yet Black patients are significantly underrepresented in SLE clinical trials. We assessed racial differences in clinical trial perceptions among the largest cohort of predominantly Black patients with SLE ever assembled in the United States.

Methods Georgians Organized Against Lupus (GOAL) is a prospective cohort of validated patients with SLE living in Atlanta. Participants have been surveyed annually since 2012 regarding demographics, SLE natural history, treatment, healthcare utilization, and psychosocial factors. The 2021 GOAL survey included questions assessing clinical trial knowledge, trustworthy sources of trial information, prior experience with trial recruitment/participation, willingness to participate in trials, and the impact of race and gender on participation. Self-reported race was categorized as Black or Non-Black. Survey responses by race were compared using Chi-squared analyses. Among Black patients, factors associated with willingness to participate in clinical trials were examined using univariable logistic regression.

Results A total of 708 individuals responded to the 2021 GOAL survey, of whom 80% were Black. Among the remaining 20%, 88% were White, 11% were Asian, and 1% were another race. Compared to non-Black respondents, Black respondents were significantly less likely to correctly identify the definition of a clinical trial (34 vs. 72%, p<0.001) and less likely to trust their rheumatologist about clinical trial information (90 vs. 96%, p=0.034); table 1. Black respondents were significantly more likely to trust their lupus support group about clinical trial information (26% vs. 11%, p<0.001) and to prefer clinical trials involving study staff with racial (24% vs. 10%, p<0.001) and gender concordance (21% vs. 14%, p<0.001), as well as trials targeting the respondent's racial (30% vs. 12%, p<0.001) or gender group (26% vs. 20%, p<0.001). There was no significant difference in willingness to participate in clinical trials between Black and non-Black respondents (28% vs. 30%, p=0.10). Younger age, male sex, unemployed or disabled status, federal health insurance, higher disease activity, and severe damage were associated with willingness to participate in clinical trials among Black respondents (table 2).

Conclusion We found that only about 30% of respondents were willing to participate in lupus clinical trials, with similar willingness to participate among Black and non-Black respondents. Efforts must continue to engage those resistant to trial participation. Our findings also indicate that clinical trial education, recruitment through lupus support groups, increased racial and gender diversity of study staff, and race- and gender-specific trials are potential strategies to increase Black patient recruitment. Age, sex, work status, insurance status, and lupus activity and damage may also play important roles in clinical trial participation among Black patients. Further studies are needed to validate these findings in other large populations of Black patients with SLE.

626 THE TRAJECTORY OF MULTIMORBIDITY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN THE UNITED STATES

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Background/Purpose The presence of multiple chronic conditions (multimorbidity) is associated with disability and premature death. We determined the trajectory of multimorbidity in SLE compared to the general population.

Methods An SLE cohort was assembled using OptumLabs Datawarehouse (OLDW) from 1/2006-9/2015. SLE cases were identified using ≥ 3 SLE ICD-9 codes separated by ≥ 30 days; the date of the third SLE code was considered the index date. Incident SLE was identified by requiring 12 months without SLE diagnostic codes. Patients with SLE were matched to non-SLE comparators on age, sex, race, region,

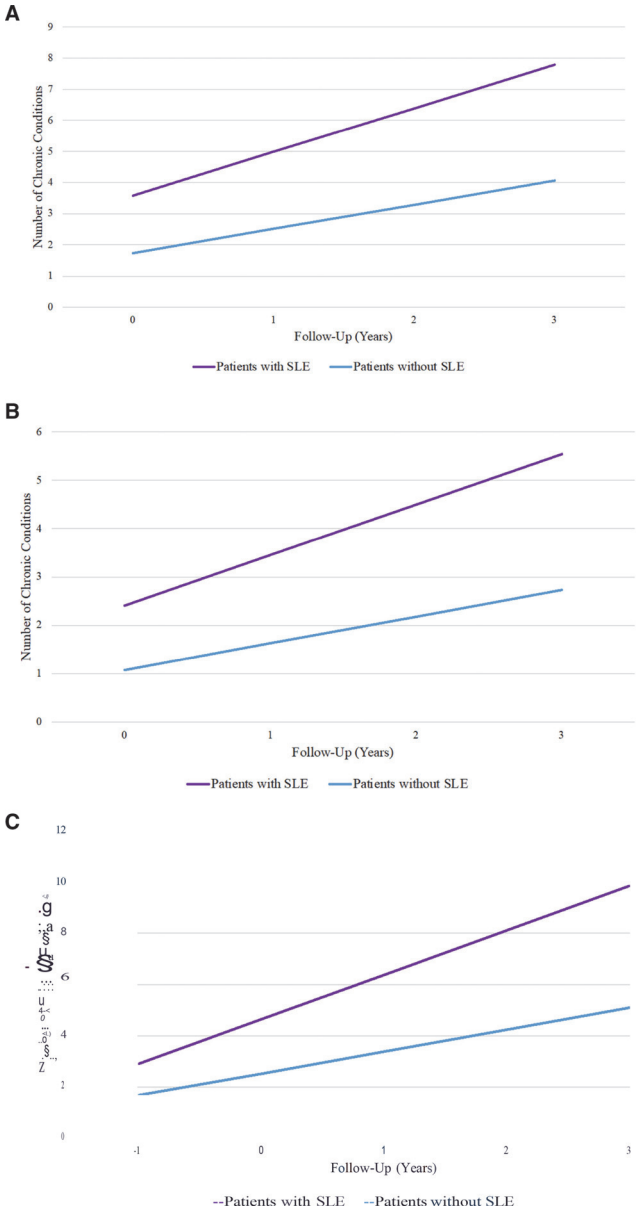
and enrollment date. Diagnosis codes from the period between enrollment and the end of follow-up (disenrollment or 9/30/2015) were used to determine the presence of comorbidities. We assembled 57 chronic condition categories based on previously described 44 categories (England, B. ARD 2020). The 13 additional categories were added based on the SLICC/ACR damage index (SDI) or otherwise considered relevant to SLE. Two or more ICD-9 codes at least 30 days apart were used to define a comorbidity. We defined multimorbidity as the presence of ≥ 2 comorbidities (excluding SLE). Conditional logistic regression models were performed to estimate the prevalence of multimorbidity. The trajectory of multimorbidity in people with SLE (vs without SLE) was estimated utilizing generalized estimating equations. We looked at overall trajectory after index date, expanding the observation time one year before index date, and excluding silent conditions to mitigate surveillance bias (hypertension, hypothyroidism, etc.)

Odds ratios (OR) and estimates of the linear coefficient and 95% confidence intervals (CI) were reported.

Results A total of 34,893 SLE patients were matched to 34,893non-SLE comparators. Of these, 13,531 were incident cases. The mean age was 48 (SD 14.2) years, and 90.6% were female. 66.4% were White, 18.4% Black, 3.4% Asian, and 18.4% Hispanic. From enrollment to the index date, the mean observation time was 2.3 years (SD: 2.4) and 4.4 years (SD: 2.6) for the incident cohort. Multimorbidity was present in 72% of SLE vs. 47% of non-SLE subjects (OR 4.3; 95%CI: 4.1-4.5). Patients with SLE had 4.5 comorbidities compared to 2.4 for non-SLE subjects (OR: 1.91 (1.89-1.94).

Compared to baseline, multimorbidity increased among the incident cases, multimorbidity frequency was higher in incident SLE (vs non-SLE) throughout the follow-up compared to baseline (β: 1.85, 95%CI 1.79, 1.91). The rate of accrual chronic conditions was significantly higher in SLE than in non-SLE (figure 1A; β: 0.63; 95%CI: 0.60, 0.65). Patients with lupus had accelerated multimorbidity accrual after excluding silent conditions (figure 1B). Patients with SLE had increased multimorbidity even one year before SLE onset (figure 1C).

Conclusion In this nationwide commercial database insurance study, patients with SLE were four times more likely to suffer from multimorbidity than the general population. Trajectory analysis shows that multimorbidity progresses more rapidly in patients with SLE than those without SLE and may begin before SLE onset.



Abstract 626 Figure 1 Predicted burden of multimorbidity in incident SLE compared with patients without SLE after diagnosis. Panel A, primary analytical approach requiring 1 year in the data set without SLE diagnostic codes chronic conditions. Panel B, similar analytical approach removing silent conditions. Panel C, restricting the population to individuals with at least 2 years of data prior to index date and beginning follow-up at 1 years before the index date.

Poster

627 **EFFECT OF IMMUNOSUPPRESSION ON COVID VACCINATION**

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Background The risk of COVID-19 infection is increased in patients with systemic lupus erythematosus (SLE), and immunosuppressive medications including corticosteroids impact the risk. Furthermore, immunosuppressive medications may reduce the effectiveness of COVID-19 vaccination. Consensus documents have suggested management strategies on handling immunosuppressive medications to increase vaccine efficacy, but the benefit of such strategies has not been proven.

Methods We collected information on COVID infection, COVID vaccination history, and COVID antibodies in the Hopkins Lupus Cohort, a longitudinal cohort with structured quarterly visits. A cohort of healthcare workers was used for comparison. SARS-CoV-2 IgG was measured by ELISA (Euroimmun). Outcome measures included: SARS-CoV-2 antibody IgG levels after vaccination over time in both cohorts; and