examines the social cognitive theory (SCT) correlates of physical activity in persons with SLE.

Methods The Lupus Intervention Fatigue Trial (LIFT) is a Phase II ongoing study designed to mitigate fatigue by increasing physical activity. Data for the analysis presented here are from LIFT's baseline visit. All participants satisfied American College of Rheumatology or Systemic Lupus International Collaborating Clinics classification criteria for SLE. Participants completed questionnaires to assess physical activity and SCT variables: exercise self-efficacy (EXSE), outcome expectations, exercise goal-setting (EGS), and physical function. Participants wore an ActiGraph GT3X accelerometer for 7 days, and Troiano cutpoints were used for moderate-to-vigorous physical activity (MVPA). Estimated associations between MVPA, Godin Leisure-Time Exercise Questionnaire Health Contribution Score (GLTEQ HCS), and SCT variables were derived using Spearman correlations (r). For regression analyses, we conducted univariate analyses to identify SCT variables for inclusion in multiple regression models of each outcome (selection criterion: $p \leq 0.2$). We then used multivariable regression models to examine associations between selected SCT variables and physical activity outcomes: 1) due to skewness of MVPA, we used log(base10) transformed weekly MVPA minutes in the regression models; 2) logistic regression models were used for analysis of the Sufficiently Active outcome, defined as GLTEQ HCS $\geq$ 24.

Abstract 612 Table 1 Descriptive and clinical characteristics for the sample with SLE.

Variables	SLE Sample (n=83)
Age (years) (mean, SD)	44 (12)
Sex (n,% female)	74 (89%)
Race (self-reported)	
Asian	6 (7%)
Black or African American	28 (34%)
White	44 (53%)
Unknown	5 (6%)
Ethnicity	
Hispanic or Latino	11 (13%)
Not Hispanic or Latino	69 (83%)
Unknown	5 (4%)
Education Level	
High School Diploma/GED	6 (7%)
Some College	10 (12%)
2-Year College Degree	7 (8%)
4-Year College Degree	25 (30%)
Masters' Degree	26 (31%)
Doctoral Degree	4 (5%)
Professional Degree	5 (6%)
SLICC SDI Score (mean, SD)	1.17 (1.45)
SLEDAI Score	
< 6	67 (81%)
>= 6	16 (19%)

Note: SLE = Systemic lupus erythematosus; SD = Standard Deviation; SLICC SDI = Systemic Lupus International Collaborating Clinics Standard Damage Index; SLEDAI = Systemic Lupus Erythematosus Disease Activity Index.

Abstract 612 Table 2 Descriptive statistics for physical activity and social cognitive theory variables for the sample with SLE.

Variables	Mean (SD)	Median (IQR)
GLTEQ HCS	15 (20)	5 (0,27)
MVPA	21 (23)	14 (6,28)
EXSE	70 (27)	78 (50,100)
MOEES Total	60 (9)	61 (56, 67)
EGS	20 (10)	20 (14, 32)
PROMIS physical function	50 (8)	49 (44, 56)

Note: SD = Standard Deviation; IQR = Interquartile Range; GLTEQ = Godin Leisure-Time Exercise Questionnaire; HCS = Health Contribution Score (0-13 = Insufficiently Active/Sedentary, 14-23 = Moderately Active, $\geq$24 = Sufficiently Active); MVPA = average daily minutes, moderate-to-vigorous physical activity; EXSE = Exercise Self-Efficacy Scale; MOEES = Multidimensional Outcome Expectations for Exercise Scale; EGS = Exercise Goal-Setting Scale; PROMIS = Patient Reported Outcomes Measurement Information System.

Abstract 612 Table 3 Correlations between physical activity and social cognitive theory scores for the sample with SLE.

Variables	Spearman Correlations	
	GLTEQ HCS (n=82)	MVPA (n=83)
GLTEQ HCS	1	0.35*
MVPA	0.35*	1
EXSE (0-100)	0.45*	0.22
MOEES total (15-75)	0.11	0.09
EGS (10-50)	0.51*	0.34*
PROMIS physical function (15-75)	0.32*	0.35*

Note: GLTEQ HCS = Godin Leisure-Time Exercise Questionnaire Health Contribution Score; MVPA = moderate-to-vigorous physical activity; EXSE = Exercise Self-Efficacy Scale; MOEES = Multidimensional Outcome Expectations for Exercise Scale; EGS = Exercise Goal-Setting Scale; PROMIS = Patient Reported Outcomes Measurement Information System; *p-value of <0.01.

Results Participant characteristics (n=83) are summarized in table 1. The median (Interquartile range) for average daily accelerometer-measured MVPA was 14 (6, 28) (table 2). According to the self-reported GLTEQ HCS, 28% of participants were classified as Sufficiently Active, 15% Moderately Active, and 57% Insufficiently Active/Sedentary. MVPA was significantly correlated with EXSE (r =0.22), EGS (r =0.34) and physical function (r =0.35). GLTEQ HCS was significantly correlated with EXSE (r =0.45), EGS (r =0.51), and physical function (r=0.32) (table 3). Outcome expectations were not significantly correlated with either accelerometer-measured MVPA or GLTEQ HCS. Adjusting for race and age had limited influence on associations between physical activity and SCT variables. In multivariable models, levels of accelerometer-measured MVPA were positively associated with EGS (p<0.01) and physical function (p<0.001). Being classified as Sufficiently Active was positively associated with EGS (p<0.01).

Conclusion These results suggest that researchers may consider applying intervention strategies that address exercise goal setting and self-perceived levels of physical function for improving MVPA participation among persons with SLE.

613 UNDERREPRESENTATION OF MINORITY PATIENTS IN AN OBSERVATIONAL COHORT STUDY

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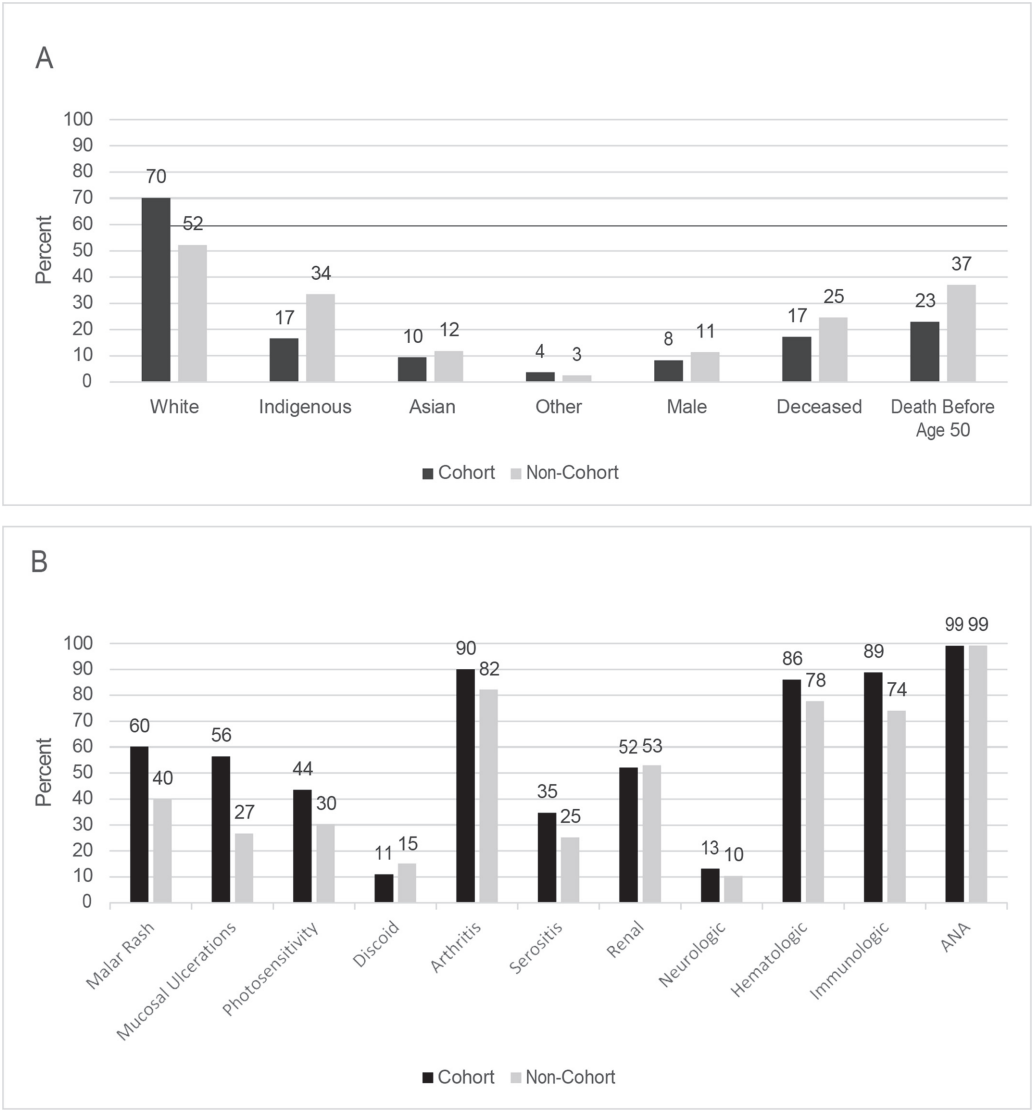
Background Underrepresentation of ethnic minorities in lupus clinical trials has been identified as an important disparity. We

aimed to compare our longitudinal observational lupus cohort participants to our entire lupus clinic population to see if similar disparities exist.

Methods All patients seen at our academic centre were entered into a custom database from 1990 until 2015. Diagnoses, demographics, and disease manifestations were recorded. In 2015 this was supplanted by an electronic health record (EHR). In 2002, our centre began enrolling in a longitudinal observational research cohort; all patients meeting 1997 ACR criteria for SLE were eligible. Participation requires formal written consent. All patients with a diagnosis of SLE were abstracted from the database and EHR; only those seen after 2002, when cohort enrolment began, were included in this analysis.

Demographics including ethnicity, age at onset, and disease duration and clinical manifestations of SLE were compared between Cohort (Co) and non-Cohort (non-Co) patients.

Results 1236 patients were identified; 404 patients were excluded as there were no clinic visits after 2002. Of the remaining 832 patients, 349 (42%) were enrolled in the research cohort, 483 (58%) were not. Age at diagnosis was similar; (Co = 34±14 years vs. non-Co = 36±14 years, p=0.11), while disease duration at last follow-up was longer in Co patients (Co = 17±11 years vs. non-Co = 13±10 years, p<0.001). The ethnic distribution differed between the two groups. Co: White, n= 245 (70.2%); Indigenous n= 58 (16.6%); Asian n = 33 (9.5%); Other n= 13 (3.7%) vs non-Co: White, n= 252 (52.2%); Indigenous n= 162 (33.5%); Asian n = 57 (11.8%); Other n= 12 (2.5%); p<0.001. (figure 1A). Sex distribution was similar: (Co n=29 (8.3%); non-Co n=55 (11.4%), p=0.146). The proportion of patients who had died was higher in non-cohort patients, (Co n= 60 (17.2%); non-Co n= 119 (24.6%), p=0.01); and non-cohort patients were more likely to have died before the age of 50 (Co n=14 (23.3%); non-Co n=44 (37.0%), p=0.07) (figure 1A). Clinical manifestations are shown in figure 1B. While minor mucocutaneous manifestations were more frequent in Co patients, (Malar rash: Co n= 210 (60%); non-Co n= 193 (40%), p<0.001; Photosensitivity: Co n=152 (44%); non-Co n= 146 (30%), p<0.001); Mucosal Ulcerations: Co n= 197 (56%); non-Co n= 129 (28%), p<0.001) there was no difference in renal (Co n= 256 (53%); non-Co n=182 (52%),



Abstract 613 Figure 1 A. Demographic differences between Cohort Participants and Non-Participants. B. Differences in Clinical Manifestations between Cohort Participants and Non-Participants

p=0.81), or neurologic involvement (Co n= 46 (10%); non-Co n= 50 (13%), p=0.21).

Conclusions In this single academic centre study, ethnic minority patients were underrepresented in the observational research cohort, mirroring what is described in clinical trial participation. While disease severity (represented by renal and neurologic involvement) did not appear to differ, the higher death rate, and death rate at an early age among nonparticipants suggests underrepresentation of high-risk vulnerable patients in our observational cohort. Observational cohorts represent an important source of real-world data; without representative participation we are lacking data on those lupus patients with the highest prevalence and worst outcomes. Better engagement of ethnic minority and vulnerable patients in research will be key to improve understanding of lupus.

614 RACIAL DISCRIMINATION AMONG SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) AND CONTROL PARTICIPANTS IN THE SOCIAL FACTORS, EPIGENOMICS AND LUPUS IN AFRICAN AMERICAN WOMEN (SELA) STUDY: PRELIMINARY DESCRIPTION AND EXPLORATORY ANALYSIS

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Background African American women are disproportionately affected by SLE, but remain underrepresented in research studies. To further knowledge about the diversity of this health disparity group, the goal of this study was to investigate sociodemographic, behavioral, clinical characteristics, and their impact on SLE disease outcomes, in African American women from South Carolina.

Methods Adult self-reported African American women meeting the 1997 ACR revised or 2012 SLICC classification criteria for SLE, or controls without any known connective tissue disease, were recruited for the Social Factors, Epigenomics and Lupus in African American Women (SELA) study. SLE activity was self-reported using the Systemic Lupus Activity Questionnaire (SLAQ), and damage was self-reported using the Brief Index of Lupus Damage (BILD). Racial discrimination was measured using the Experiences of Discrimination (EOD) measure. A Welch two sample t-test was computed for the associations between EOD and SLAQ, and Wilcoxon rank sum tests with continuity correction was computed for the associations between EOD and BILD.

Results This preliminary study included 50 female African Americans, including 28 with SLE. In total, 74% of participants had a college degree, 53% had private health insurance, and 45% were employed. The majority were non-smokers (86%), rarely or never drank (76%), and exercised at least weekly (57%). Hypertension (51%), asthma (25%) and depression (18%) were the most prevalent comorbidities. Among those with SLE, the mean (±SD) age of diagnosis was 29±7 years, disease duration at the SELA visit was 22±9 years, and mean SLE activity score was 9.8±5.7. Most patients (86%) had a damage score of 2 or more, with the remaining 14% having damage to 1 organ or system, and overall mean damage score was 3.4±2.2. Half (53%) of all participants reported experiencing racial discrimination. In an exploratory analysis, there was no association between racial discrimination and presence of SLE, level of SLE activity, nor damage. Participant engagement with SELA aims is high, evidenced by 81% of participants wishing to be included in this study's progress, 71% wanting to provide feedback and research suggestions, and all requesting to receive their genetic ancestry estimates.

Conclusions The preliminary results of this exploratory analysis are distinct from those of the Black Women's Experiences Living with Lupus (BeWELL) Study, where most participants reported experiencing racial discrimination, and racial discrimination had a significant relationship with SLE activity. Given the cultural and genetic heterogeneity and disproportionate impact of SLE in African American communities, continued recruitment into this ongoing study will enhance our knowledge about SLE in diverse African Americans.

Clinical Research in SLE

615 A PILOT STUDY TO IMPLEMENT THE TYPE 1 & 2 SLE MODEL INTO CLINICAL CARE

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Background The Type 1 & 2 SLE Model was developed to better explain the signs, symptoms, and management goals of systemic lupus erythematosus (SLE) to patients. We assembled tools to discuss the Type 1 & 2 SLE Model, collectively called SLE@Duke, including patient-reported outcome (PRO) measures, physician global assessments (PGAs) for Type 1 and 2 SLE activity, and a patient handout. In this pilot study, we aimed to implement SLE@Duke into rheumatology care with the goal of increasing the frequency of discussion of the Type 1 & 2 SLE Model.

Methods We conducted a 4-week study in Duke Rheumatology Clinics. Providers received training on SLE@Duke that reviewed each of the tools, summarized approaches to treating Type 2 SLE, and scored case examples of PGAs. During the intervention period, patients with SLE received a questionnaire at check-in that included the Systemic Lupus Activity Questionnaire and the American College of Rheumatology Fibromyalgia Severity Score. After each visit, patients completed an anonymous satisfaction survey. Providers completed baseline and follow-up surveys on their satisfaction with care and acceptability, appropriateness, and feasibility of SLE@Duke. Clinic notes of patients seen during the intervention period and 4-weeks prior to the intervention were reviewed. Providers were invited to participate in interviews about their experience after the intervention period.

Results Sixteen of 25 eligible providers participated (3 APPs, 8 faculty, 5 fellows); 67 patients with SLE were seen (36 pre-intervention and 31 intervention). At follow-up, provider surveys showed high scores for acceptability (4.0/5), appropriateness (4.15/5), and feasibility (4.2/5) of SLE@Duke (table 1). All providers agreed or completely agreed the intervention seemed possible; there was an increase in the proportion who felt the intervention was easy to use (50% to 83%). Type 1 & Type 2 PGAs were documented in 87% of notes. The discussion of Type 2 SLE symptoms increased from 44% to 74% of patients (p=0.02). Importantly, there was not an increase