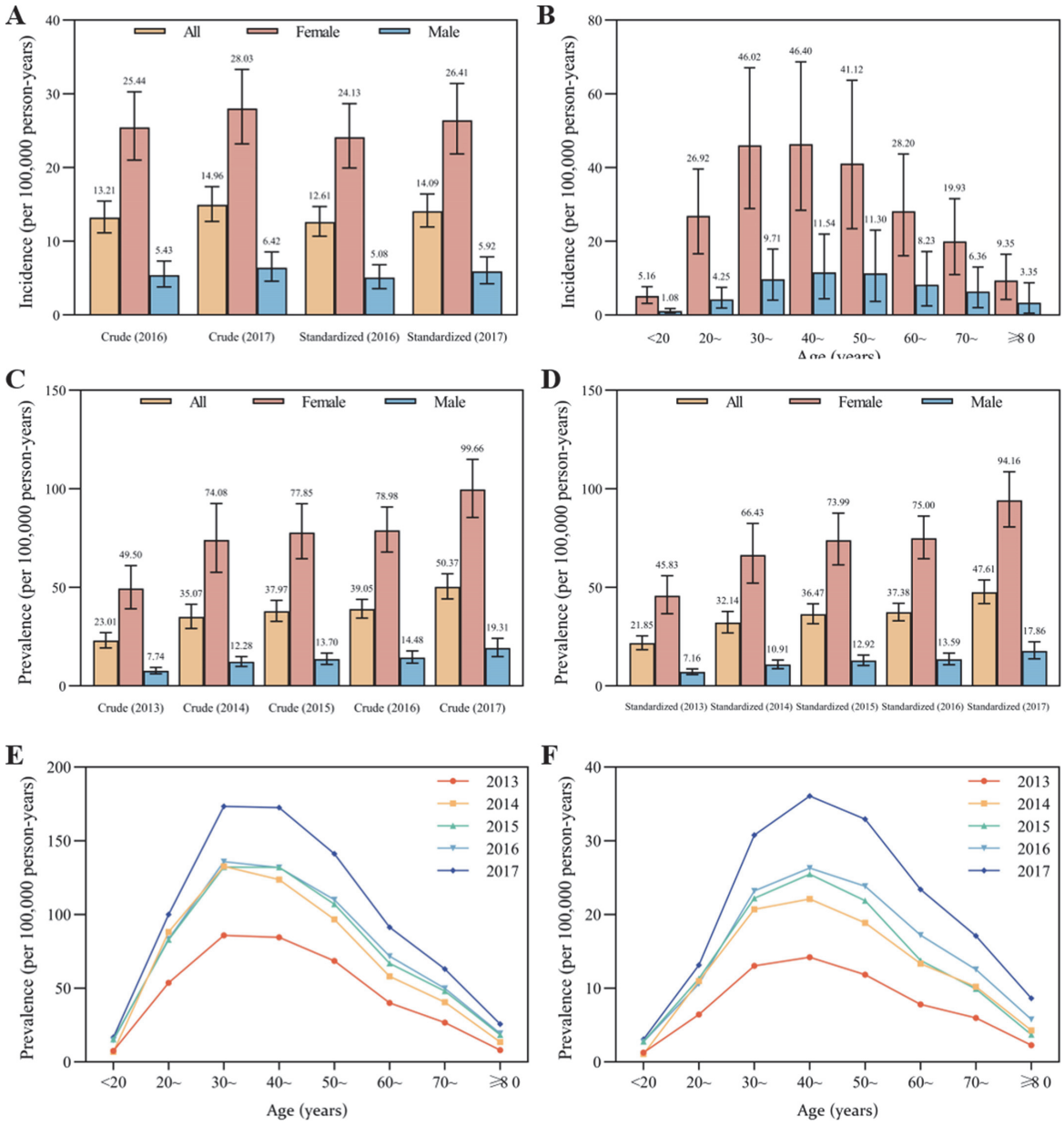

Abstract LSO-048 Figure 1 Figure Incidence and prevalence of SLE in urban China from 2013 to 2017 A: Crude and standardized incidence of SLE (the standardized incidence is based on 2010 China census data) in 2016 and 2017. B: Age- and gender-stratified incidence of SLE in 2017. C: Crude and D: Standardized prevalence of SLE (the standardized prevalence is based on 2010 China census data) from 2013 to 2017. E: Age-stratified prevalence of SLE in female and F: male from 2013 to 2017

LSO-049 GREATER SOCIAL VULNERABILITY ASSOCIATED WITH GREATER GLUCOCORTICOID USE IN PATIENTS WITH SLE

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Background Patients with SLE experience substantial health disparities. Studying the effect of spatial context on health outcomes has become a focus in health disparities research. The CDC Social Vulnerability Index (SVI) identifies communities where social determinants lead to higher levels of morbidity and mortality. We sought to understand the level of social vulnerability where patients with SLE reside and determine if specific dimensions of social vulnerability were associated with disease activity and prednisone utilization.

Methods 272 consented subjects who met either ACR or SLICC classification criteria for SLE were enrolled and longitudinally assessed from April 2014 to August 2020 (demographics in table 1). The census tract code was determined for the address listed for each patient's index visit which corresponds to an SVI. Any tract with an SVI greater than the mean of 0.5 is defined as a socially vulnerable area. Prednisone dosing was organized into none, >0–7.5 mg, 8–20 mg, >20 mg. SLEDAI-2000 Responder Index-50 (S2K RI-50)

Abstract LSO-049 Table 1 Patient demographics

Patient Demographics	N
Gender	
Female	246
Male	26
Race	
Caucasian	120
Black or African American	143
American Indian or Alaska Native	2
Asian	4
Multiple Race	1

assessed SLE disease activity (>4 indicated active SLE). A multinomial logistic regression model analysis was used to determine association.

Results There was no correlation between cumulative SVI and disease activity (OR 1.15, 95% CI=0.67–1.99). Compared to patients with invulnerable cumulative SVI, vulnerable patients were 2.31 times as likely to have higher dose of prednisone (1.36–3.92). Of the specific SVI dimensions, socioeconomic status (2.47, 1.43–4.27) and household composition (2.21, 1.28–3.83) associated with higher prednisone dose, whereas race/ethnicity/language (1.57, 0.92–2.68) and housing/transportation (1.08, 0.65–1.80) had no statistically significant association.

Conclusions Patients who live in more socially vulnerable areas are more likely to be prescribed higher doses of prednisone, specifically patients vulnerable in terms of socioeconomic status and household composition. This is worrisome as this likely will contribute to a higher burden of damage. These data highlight that access to social determinants is associated with health inequities.

LSO-050 MORTALITY-RATE IN JUVENILE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS IN PERSPECTIVE: RESULTS FROM A POPULATION-BASED COHORT STUDY IN NORWAY

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Background There are limited population-based data on mortality in juvenile Systemic Lupus Erythematosus (SLE). Here, we examine standard mortality rate (SMR) in juvenile SLE and compare with young- and adult-onset subsets in a large population-based SLE cohort.

Methods The population-based cohort included all SLE patients who were resident in Southeast Norway 1999 – 2017, had SLE diagnosis confirmed by chart-review and met the 1997 ACR criteria for SLE. Cases with new-onset disease 1999–2017 were defined as inception cases. We stratified the cohort by age at diagnosis, with juvenile SLE diagnosed age <16, young-onset age 16–29 and adult-onset age ≥30. Lupus nephritis (LN) was defined by 1997 ACR criteria for SLE. We compared ratios with X2-test, estimated risk of death by SMR using 15 controls per SLE case (individually matched to case by age, sex and ethnicity) and survival in juvenile inception cases by Kaplan-Meier.

Results The cohort included 1300 SLE cases; of whom 93 (7%) were diagnosed at age<16, 461 (35%) at age 16–29

Abstract LSO-050 Table 1 Patient demographic and mortality in Systemic Lupus Erythematosus; stratified by age at diagnosis

	Age at SLE diagnosis		
	<16 years (juvenile) n=93	16-29 years (young-adult) n=461	≥30 years (adult) n=746
Inception cases, n (%)	37 (40)	197 (43)	439 (59)*
Female, n (%)	78 (84)	421 (91)*	628 (84)
Of European descent, n (%)	77 (83)	386 (92)*	678 (91)*
Cumulative ACR criteria, median (IQR)	6 (5-7)	5 (5-6)	5 (4-6)
Age at diagnosis, median (IQR)	14 (12 - 15)	23 (20 - 26)	44 (37-53)
Lupus nephritis, n (%)	60 (65)	211 (46)**	201 (27)**
Follow-up years, median (IQR)	18 (9-23)	19 (10-23)	16 (10-22)
Deceased, n (%)	12 (12)	55 (12)	234 (31)**
Years from diagnosis to death, median (IQR)	34 (24 - 45)	33 (21 - 41)	17 (10-23)
Age at death, median (IQR)	45 (36 - 56)	55 (44-64)	71 (62-78)
Standard Mortality Rate (95 % CI)	7.2 (3.3 - 14)	3.8 (2.8-5.1)	2.0 (1.8-2.4)

IQR: interquartile range CI: confidence interval *P-value compared to juvenile onset < 0.05 **p-value compared to juvenile onset< 0.01