

Supplementary Data S1. Definitions:

1. Hispanic ethnicity was first defined by reports on Hispanic ethnicity and Latino origin in medical records. Secondly, a validated search was used to examine maiden name in cases without specified Latinx origin.¹ Lastly, a surname search was performed.^{1,2} In cases, where Hispanic ethnicity was reported but Latino origin was not reported, patients were classified into two other categories: 1) Hispanic NOS (evidence besides surname, for example, Maiden name or other evidence supporting Hispanic ethnicity) n = 7. 2) Spanish surname only (no other evidence of Latino origin besides patient's surname), n = 2. Similar methods were used in another study that highlighted that adding surname match to reported ethnicity which improved accuracy of ethnic representation in large datasets.^{1,2} We identified 14 White people with Hispanic origin, and two Black people with Hispanic origin. We analyzed groups by race only given that less than 5% Hispanic ethnicity was recorded by any method. Further, we performed sensitivity analysis, excluding these two other categories, and found similar predictors of CVD risk with Black racial group as the strongest predictor of CVD occurrence.

2. We identified all CVD-related hospitalizations and CV deaths following published algorithms using the first three codes for reported cause of admission or death (high predictive probability, C-statistic = 0.87).³ Further, CVD event were defined as: 1) ischemic heart disease including myocardial infarction, coronary artery revascularization, abnormal stress test, $\geq 50\%$ abnormal angiogram and events documented by a cardiologist, 2) cerebrovascular disease and transient ischemic attack (TIA), and 3) peripheral vascular disease (PVD) (such as abnormal ankle-brachial index, abnormal peripheral angiography, limb ischemia undergoing bypass or angioplasty, or documented by surgeon).⁴⁻⁷

References:

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4. Sacco RL, Kasner SE, Broderick JP, et al. An updated definition of stroke for the 21st century: a statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke* 2013;44:2064-89.
5. Hirsch AT, Haskal ZJ, Hertzler NR, et al. ACC/AHA 2005 Practice Guidelines for the management of patients with peripheral arterial disease (lower extremity, renal, mesenteric, and abdominal aortic): a collaborative report from the American Association for Vascular Surgery/Society for Vascular Surgery, Society for Cardiovascular Angiography and Interventions, Society for Vascular Medicine and Biology, Society of Interventional Radiology, and the ACC/AHA Task Force on Practice Guidelines (Writing Committee to Develop Guidelines for the Management of Patients With Peripheral Arterial Disease): endorsed by the American Association of Cardiovascular and Pulmonary Rehabilitation; National Heart, Lung, and Blood Institute; Society for Vascular Nursing; TransAtlantic Inter-Society Consensus; and Vascular Disease Foundation. *Circulation* 2006;113:e463-654.
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7. Anderson JL, Adams CD, Antman EM, et al. ACC/AHA 2007 guidelines for the management of patients with unstable angina/non ST-elevation myocardial infarction: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Revise the 2002 Guidelines for the Management of Patients With Unstable Angina/Non ST-Elevation Myocardial Infarction): developed in collaboration with the American College of Emergency Physicians, the Society for Cardiovascular Angiography and Interventions, and the Society of Thoracic Surgeons: endorsed by the American Association of Cardiovascular and Pulmonary Rehabilitation and the Society for Academic Emergency Medicine. *Circulation* 2007;116:e148-304.

Supplementary Table S1. Demographics and manifestations of 336 people with incident systemic lupus erythematosus from the Georgia Lupus Registry, 2002-2004, by racial group

Characteristic	All people n (%)	Black people n (%)	Non-Black people n (%)
Demographics		253 (75.2)	83 (24.8)
Age at SLE diagnosis, mean years \pm SD	40 \pm 17	39 \pm 16	45 \pm 18
<19	28 (8)	25 (10)	3 (4)
19 to <35	104 (31)	82 (32)	22 (27)
35 to <50	113 (34)	84 (33)	29 (35)
50 to <65	63 (19)	47 (19)	16 (19)
\geq 65	28 (8)	15 (6)	13 (16)
Sex			
Female	292 (87)	221 (87)	71 (86)
Male	44 (13)	32 (13)	12 (15)
ACR criteria within one year of diagnosis*			
Malar rash	64 (20)	47 (19)	17 (21)
Discoid rash	48 (14)	37 (15)	11 (13)
Photosensitivity	61 (19)	36 (14)	25 (30)
Oral ulcers	75 (22)	54 (21)	21 (25)
Arthritis	220 (66)	162 (64)	58 (70)
Serositis	118 (35)	94 (37)	24 (29)
Renal disorder	103 (31)	88 (35)	15 (18)
Neurologic disorder	31 (9)	24 (10)	7 (8)
Hematologic disorder	282 (84)	215 (85)	67 (81)
Immunological disorder	231 (69)	183 (72)	48 (58)
Antinuclear antibody	321 (96)	245 (97)	76 (92)
Other			
End stage renal disease (as of 2015)	36 (11)	33 (13)	3 (4)

Supplementary Table S2. Rates of CVD & CVD subtypes in the GLR by age-group and sex* compared with healthy population with a 4-year follow-up

Age Group	SLE Patients (4 years)				Healthy Population** (4 years)		
	All CVD	IHD***	Stroke		IHD****	Stroke	
	All pts.	F	M	F	F	M	F
<40 years	2.3%	0	3.9%	2%	0.6%	0.02%	0.7%
40-59 years	6.1%	1.9%	0	5.9%	5.6%	1.9%	2.2%
60-79 years	2.4%	0	0	2.7%	9.7%	6.1%	5.2%
≥80 years	17%	25%	0	0	19.0%	15.8%	14.0%

*Rates of CVD or CVD subtype = Number of patients with CVD or CVD subtype events / Total number of patients in that specific age group and sex category; **Healthy population comparator was adapted from *Mozaffarian D et al. Circulation. 2015;131:e29-e322 (36)*; ***No IHD event occurred in male patients with lupus; ****Only rates in healthy female population are shown here; F=Female; IHD=Ischemic Heart Disease; M=Male; pts.=patients; SLE=Systemic lupus erythematosus; CVD=Cardiovascular disease.

Supplementary Table S3. Rates of CVD subtypes in the GLR by age-group, race, and sex compared with rates in healthy population

Age Group	Incidence of MI* over 7 years (per 1000 person-years)				Annual rate of Stroke** (per 1000 persons)			
	SLE		Healthy Population**		SLE#		Healthy Population***	
	Black Women	Black Men	Black Women	Black Men	Black Women	Black Men	Black Women	Black Men
<45 years	2.3	0	1	2.2	22	45	N/A	N/A
45-54 years	4.3	0	2.3	3.6	23	0	2.9	3.5
55-64 years	0	0	3.7	5.7	71	0	4.9	5.3
65-74 years	37	0	7.2	8.1	0	0	6.6	8.0
75-84 years	0	0	10.2	12.9	0	0	13.6	8.9
≥85 years	961##	0	N/A	N/A	0	0	20.9	14.7

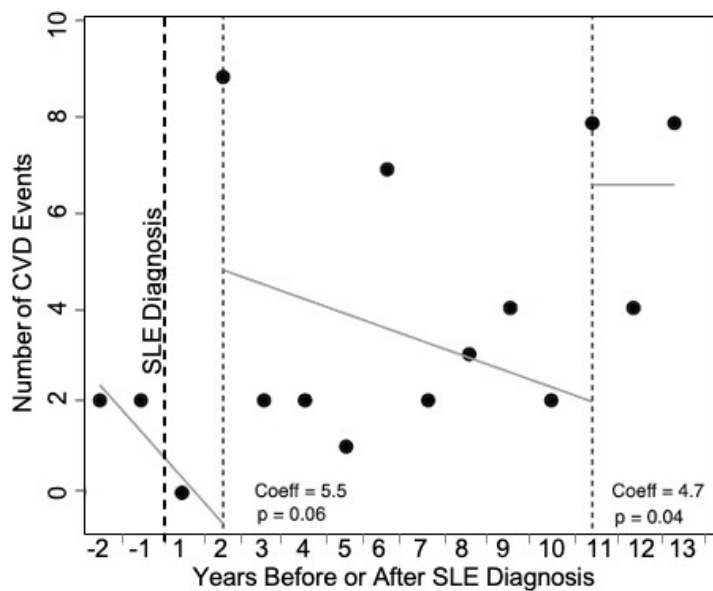
*Rates of MI = Number of patients with MI / Total person-years at-risk in that specific age group and sex and race categories; **Rates of Stroke = Number of patients with Stroke/ Total persons at-risk in that specific age group and sex and race categories X 1000; ***Healthy population comparator was adapted from *Mozaffarian D et al. Circulation. 2015;131:e29-e322 (36)*;

#Second year of lupus diagnosis used to calculate annual rate of stroke in our cohort;

##Unreliable rate due to low numbers; MI=Myocardial infarction; N/A=Not available;

SLE=Systemic lupus erythematosus; CVD=Cardiovascular disease.

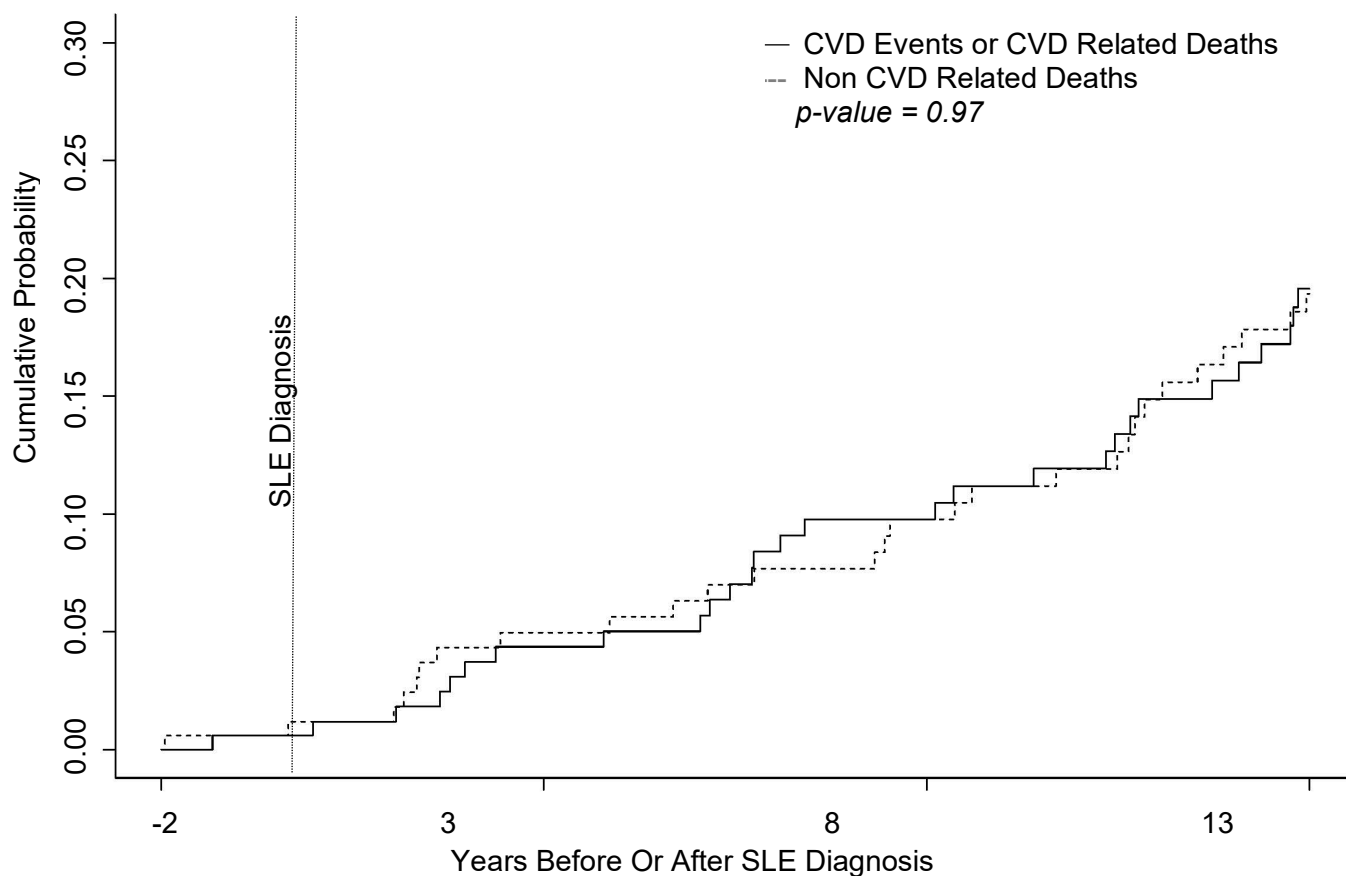
Supplementary Figure S1. Interrupted time series analysis model of incident CVD relative to SLE diagnosis



Footnote: x-axis represents years before or after SLE diagnosis; Coeff = coefficient

Legend: ITSA analysis showed breakpoints in annualized rate of incident CVD at the 11th year after SLE diagnosis as shown by changes in slope and p-values. CVD=Cardiovascular disease; SLE=Systemic lupus erythematosus.

Supplementary File S2. Graph showing cumulative probability of CVD events or CVD related deaths compared with cumulative probability of non-CV related deaths



Cumulative Probability Table:

Time (Years)	3	8	13
CVD Events & Deaths	0.44	0.98	0.198
Non-CVD Related Deaths	0.50	0.98	0.197