Supplementary material

Supplementary Table S1. Search strategy

Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R): 1946 to 20 May 2020	**Population** exp lupus erythematosus, systemic/ OR (lupus adj3 (erythematosus or erythematous or erythematosis) adj3 (disseminatus or systemic)).ti,ab,kf. OR (libman sacks adj3 (disease or endocarditis or syndrom*)).ti,ab,kf. OR lupus.ti. OR (SLE and (lupus or autoimmun* or auto-immun*)).ti,ab,kf,hw. **AND** **Outcomes** cerebrovascular disorders/ or exp basal ganglia cerebrovascular disease/ or exp brain ischemia/ or exp carotid artery diseases/ or exp intracranial arterial diseases/ or exp intracranial hemorrhages/ or stroke/ or exp brain infarction/ or exp vertebral artery dissection/ OR exp "Intracranial Embolism and Thrombosis"/ OR (stroke or cerebrovasc* or brain vasc* or cerebral vasc* or cva* or apoplex*).ti,ab,kf. OR ((brain* or cerebr* or cerebell* or vertebrobasilar or hemispher* or intracran* or intracerebral or infratentorial or supratentorial or MCA or anterior circulation or posterior circulation or basal ganglia) adj5 (isch?emi* or infarct* or thrombo* or emboli*)).ti,ab,kf. OR ((brain* or cerebr* or cerebell* or intracerebral or intracran* or parenchymal or intraventricular or infratentorial or supratentorial or basal gangli*) adj5 (haemorrhage* or hemorrhage* or haematoma* or hematoma* or bleed*)).ti,ab,kf. OR exp myocardial infarction/ OR heart failure/ OR myocardial ischemia/ OR ((myocardi* adj2 (infarct* or isch?emi*)) or (heart adj2 (attack? or failure? or infarct* or isch?emi*)) or (cardiovascular adj2 (stroke? or thrombosis*))).ti,ab,kf. OR coronary artery disease/ OR (coronary adj (heart or arter*) adj disease).ti,ab,kf. OR exp Cardiovascular Diseases/ OR ((cardio* or cardiac or heart or vascular) adj3 (abnormal* or accident? or burden? or complication? or comorbid* or co-morbid* or disease? or dysfunction* or event? or manifest* or risk? or hospitali#ation?)).ti,ab,kf. OR Angina Pectoris/ OR angina, unstable/ or angina pectoris, variant/ Or (angina? adj2 (unstable or preinfarction or pre-infarction or variant?)).ti,ab,kf. OR angina, stable/ OR (angina? adj2 (pectoris or stable or stabilised)).ti,ab,kf. OR angina?.ti,kf. (19985) OR *Heart Disease/ OR exp Heart Failure/ OR ((heart or cardiac or myocardi*) adj2 (failure or decompensation)).ti,ab,kf. OR ((renocardiac or reno-cardiac or cardiorenal or cardio-renal) adj1 syndrome?).ti,ab,kf. OR ((cardiac adj (asthma or edema? or oedema?)) or paroxysmal dyspnea?).ti,ab,kf. OR *brain ischemia/ OR ischemic attack, transient/ OR (transient isch?emi* attack? or (transient adj2 (brain stem or brainstem or cerebral) adj2 isch?emi*) or TIA).ti,ab,kf. Or exp Percutaneous Coronary Intervention/ OR exp Myocardial Revascularization/ OR Cerebral Revascularization/ OR revasculari#ation?.ti,ab,kf,hw. OR (angioplast* or atherectom* or bypass* or CABG).ti,ab,kf,hw. OR peripheral arterial disease/ OR (acute and ((limb or vascular) adj2 isch?emi*)).ti,ab,kf,hw. OR (peripheral arter* and (event? or thrombo*)).ti,ab,kf. OR *Peripheral Vascular Diseases/ OR Peripheral Vascular Diseases/co, et, pa OR *Arterial Occlusive Diseases/ OR Arterial Occlusive Diseases/co, et, pa [Complications, Etiology, Pathology] OR thromboembolism/ OR Venous Thromboembolism/ OR ((thromboemboli* or thrombo-emboli*) adj3 event*).ti,ab,kf. OR ((vein? or venous) adj2 (thrombo*

	or thrombus or emboli*)).ti,ab,kf. OR (VTE or DVT).ti,ab,kf. OR exp Pulmonary Embolism/ OR ((pulmonary or lung?) adj2 (thrombo* or thrombus or emboli*)).ti,ab,kf. **AND** **Outcome measures** risk factors/ OR risk assessment/ OR (incidence or prevalence or prediction or prognosis).ti,kf,hw. OR mortality/ or death/ or "cause of death"/ or survival rate/ OR (survival or morbidit* or comorbid* or co-morbid*).ti,kf,hw. OR (death? or mortality or fatal*).ti,kf. OR ((death? or mortalit* or fatal*) adj3 (cause? or causal or compar* or ratio or rate? or register* or registries or statistic* or lupus or SLE)).ti,ab,kf. OR Life Tables/ **AND** **Study design** epidemiologic studies/ or case-control studies/ or cross-sectional studies/ or cohort studies/ or follow-up studies/ or longitudinal studies/ or prospective studies/ or retrospective studies/ OR (registry or registries).ti,ab,kf,hw. OR ((epidemiologic or prospective or retrospective or cross-sectional or case control* or cohort or longitudinal) adj3 (study or studies)).ti,ab,kf. OR (case control* or cross-sectional or cohort? or follow-up or followup or longitudinal or prospective or retrospective or observational or population).ti. OR ((cohort? adj2 (analys* or compar* or data or study or studies or lupus or SLE)) or (population adj2 (based or data* or study or studies or register? or registry or registries or survey? or surveillance))).ab. OR (compar* and (study or risk?) and population).ti,ab,kf. OR ((chart? adj (audit? or review?)) or ((autopsy or hospital*) adj2 (report? or record?)) or death certificate?).ti,ab,kf. OR hospitali#ation?.ti,kf,hw OR (systematic or structured or evidence or studies).ti. and ((review or overview or look or examination or update* or summary).ti. or review.pt.) OR (0266-4623 or 1366-5278 or 1530-440X or 2046-4053).is. OR meta-analysis.pt. or (meta-analys* or meta analys* or metaanalys* or meta synth* or meta-synth* or metasynth*).ti,ab,kf,hw. OR ((systematic or meta) adj2 (analys* or review)).ti,kf. or ((systematic* or quantitativ* or methodologic*) adj5 (review* or overview*)).ti,ab,kf,sh. or (quantitativ$ adj5 synthesis$).ti,ab,kf,sh. OR (integrative research review* or research integration).ti,ab,kf. or (review.ti,kf,pt. and (trials as topic or studies as topic).hw.) OR review.pt. and ((medline or medlars or embase or pubmed or scisearch or psychinfo or psycinfo or psychlit or psyclit or cinahl or electronic database* or bibliographic database* or computeri#ed database* or online database* or pooling or pooled or mantel haenszel or peto or dersimonian or der simonian or fixed effect or ((hand adj2 search*) or (manual* adj2 search*))).tw,hw. or (retraction of publication or retracted publication).pt.) and (cohort? or observational or studies).mp. **Limitations:** No animals, case reports, editorials, or letters; no children
Ovid Embase: 1974 to 2020 Week 20	**Population** systemic lupus erythematosus/ or (lupus adj3 (erythematosus or erythematous or erythematosis) adj3 (disseminatus or systemic)).ti,ab,kw. OR (libman sacks adj3 (disease or endocarditis or syndrom*)).ti,ab,kw. OR (lupus

	or SLE).ti. **AND** **Outcomes** cerebrovascular disease/ or exp basal ganglion hemorrhage/ or exp brain hematoma/ or exp brain hemorrhage/ or exp brain infarction/ or exp brain ischemia/ or exp carotid artery disease/ or cerebral artery disease/ or exp cerebrovascular accident/ or exp intracranial aneurysm/ or exp occlusive cerebrovascular disease/ or vertebrobasilar insufficiency/ or stroke/ or stroke patient/ or stroke unit/ OR (stroke or poststroke or cerebrovasc* or brain vasc* or cerebral vasc* or cva* or apoplex*).ti,kw. OR ((brain* or cerebr* or cerebell* or vertebrobasilar or hemispher* or intracran* or intracerebral or infratentorial or supratentorial or MCA or anterior circulation or posterior circulation or basal ganglia) adj5 (isch?emi* or infarct* or thrombo* or emboli* or occlus*)).ti,kw. OR ((brain* or cerebr* or cerebell* or intracerebral or intracran* or parenchymal or intraventricular or infratentorial or supratentorial or basal gangli*) adj5 (haemorrhage* or hemorrhage* or haematoma* or hematoma* or bleed*)).ti,kw. OR ((lupus or SLE) adj3 (stroke? or brain* or cerebr* or cerebell* or intracerebral or intracran* or apoplex*)).ti,ab,kw. OR *systemic lupus erythematosus/ or (lupus or SLE).ti. OR exp *heart infarction/ OR exp *ischemic heart disease/ OR exp *coronary artery disease/ OR ((myocardi* adj2 (infarct* or isch?emi*)) or (heart adj2 (attack? or failure? or infarct* or isch?emi*)) or (cardiovascular adj2 (stroke? or thrombosis*))).ti,kw. OR ((lupus or SLE) adj3 (heart or cardiac or cardiovascular or coronary or myocardi*)).ti,ab,kw. OR exp *cardiovascular disease/ OR ((cardio* or cardiac or heart or vascular) adj3 (abnormal* or accident? or burden? or complication? or comorbid* or co-morbid* or disease? or dysfunction* or event? or manifest* or risk? or hospitali#ation?)).ti,kw. OR (lupus or SLE).af. and (cardiovascular mortality/ or heart death/) OR angina pectoris/ OR angina pectoris/ or exp unstable angina pectoris/ or exp variant angina pectoris/ OR (angina? adj2 (unstable or preinfarction or pre-infarction or variant? or revasculari*)).ti,ab,kw. OR angina?.ti,kw. OR *Heart Disease/ OR exp *heart failure/ OR ((heart or cardiac or myocardi*) adj2 (failure or decompensation)).ti,kw. OR ((renocardiac or reno-cardiac or cardiorenal or cardio-renal) adj1 syndrome?).ti,ab,kw. OR ((cardiac adj (asthma or edema? or oedema?)) or paroxysmal dyspnea?).ti,ab,kw. exp *brain ischemia/ transient ischemic attack/ OR (transient isch?emi* attack? or (transient adj2 (brain stem or brainstem or cerebral) adj2 isch?emi*) or TIA).ti,ab,kw. OR percutaneous coronary intervention/ or transluminal coronary angioplasty/ OR heart muscle revascularization/ or *coronary artery surgery/ OR cerebral revascularization/ or cerebrovascular surgery/ OR revasculari#ation?.ti,kw. OR (angioplast* or atherectom* or bypass* or CABG).ti,ab,kw,hw. OR peripheral occlusive artery disease/ or exp artery occlusion/ or exp claudication/ OR (acute and ((limb or vascular) adj2 isch?emi*)).ti,ab,kw,hw. OR (peripheral arter* and (event? or thrombo*)).ti,ab,kw. OR peripheral vascular disease/ OR *thromboembolism/ OR venous thromboembolism/ or deep vein thrombosis/ or lower extremity deep vein thrombosis/ or lung embolism/ or upper extremity deep vein thrombosis/ OR lung embolism/ OR (thrombo* or thrombus or emboli* or DVT or VTE).ti. OR ((lupus or SLE) adj5 (thrombo* or thrombus or emboli* or DVT or

	VTE)).ti. **AND** **Outcome measures** risk factors/ OR risk assessment/ OR (incidence or prevalence or prediction or prognosis).ti,kw,hw. OR mortality/ or all cause mortality/ or hospital mortality/ or exp mortality rate/ or premature mortality/ or standardized mortality ratio/OR *death/ or "cause of death"/ or survival rate/OR (death? or mortality or fatal*).ti,kw. OR ((death? or mortalit* or fatal*) adj3 (cause? or causal or compar* or ratio or rate? or register* or registries or statistic* or lupus or SLE)).ti,ab,kw. OR life table/OR *survival/ or *morbidity/ or *comorbidity/ **AND** **Study design** prospective study/ or retrospective study/ or longitudinal study/ or cohort analysis/ or cross-sectional study/ or case control study/ or population based case control study/OR (registry or registries).ti,ab,kw,hw. OR ((epidemiologic or prospective or retrospective or cross-sectional or case control* or cohort or longitudinal) adj3 study).ti,ab,kw. OR (case control* or cross-sectional or cohort? or follow-up or followup or longitudinal or prospective or retrospective or observational or population).ti. OR ((cohort? adj2 (analys* or compar* or data or study or studies or lupus or SLE)) or (population adj2 (based or data* or study or studies or register? or registry or registries or survey? or surveillance))).ab,kw. OR ((compar* adj3 (study or risk?)) and population).ti,ab,kw. OR ((chart? adj (audit? or review?)) or ((autopsy or hospital*) adj2 (report? or record?)) or death certificate?).ti,ab,kw. OR hospitali#ation?.ti,kw,hw. OR systematic review/ or meta analysis/ or network meta-analysis/ OR ((systematic or structured or evidence or trials or studies) and (review or overview or look or examination or update* or summary)).ti. OR (0266-4623 or 1469-493X or 1366-5278 or 1530-440X or 2046-4053).is. OR (systematic review? or evidence report* or technology assessment?).jw. OR (meta-analys* or meta analys* or metaanalys* or meta synth* or meta-synth* or metasynth*).ti,ab,kw,hw. OR ((systematic or meta) adj2 (analys* or review)).ti,kw. or ((systematic* or quantitativ* or methodologic*) adj5 (review* or overview*)).ti,ab,kw,sh. or (quantitativ* adj5 synthes*).ti,ab,kw,hw. OR exp "clinical trial (topic)"/ and review.ti,kw,pt. OR (integrative research review* or research integration).ti,ab,kw. or scoping review?.ti,kw. or (evidence adj3 review*).ti,ab,kw. OR review.pt. and (medline or medlars or embase or pubmed or scisearch or psychinfo or psycinfo or psychlit or psyclit or cinahl or electronic database* or bibliographic database* or computeri#ed database* or online database* or pooling or pooled or mantel haenszel or peto or dersimonian or der simonian or fixed effect or ((hand adj2 search*) or (manual* adj2 search*))).ti,ab,kw,hw. OR review.pt. and ((evidence based adj (medicine or practice)) or (outcome? adj (assessment or research)) or treatment outcome).hw. **Limitations** No animals, case reports, editorials, or letters; no children

Supplementary Table S2. 12-point scale developed for studying observational studies in SLE and CVD risk

Domains	12-point scale	Score
The source of the study sample*	Community-based	2
	Clinic-based	1
	Undefined	0
Cohort type**	Inception	2
	Non-inception	1
Definition of SLE	Use of the ACR classification criteria for SLE[1, 2]	2
	Other validated criteria	1
	Other pre-defined but non-validated criteria	0
SLE exposure	10 years or more	2
	Less than 10, more than 5 years	1
	Less than 5 years or not defined	0
Assessment of individual outcome		
CVD death	Validated criteria	2
	Non-validated but clearly defined criteria (e.g., death certificates)	1
	Not mentioned	0
MI	Validated criteria	2
	Non-validated but clearly defined criteria (e.g., death certificates)	1
	Not mentioned	0
Stroke	Validated criteria	2
	Non-validated but clearly defined criteria (e.g. death certificates)	1
	Not mentioned	0

*Community-based is defined as a study using data from a geographically defined area (e.g., north Italy, national registry). Clinic-based is defined as a study using data from a number of single clinics or hospital registries.

**An inception cohort is defined as a study that follows patients prospectively from the time of first SLE diagnosis, therefore only includes incident cases of SLE and explicitly states that prevalent cases were excluded.

ACR, American College of Rheumatology; CVD, cardiovascular disease; MI, myocardial infarction; SLE, systemic lupus erythematosus.

Supplementary Table S3. Newcastle-Ottawa Scale[3]

Cohort studies
Selection
1. Representativeness of the exposed cohort a. Truly representative of the average _____ (describe) in the community ✸✸ b. Somewhat representative of the average _____ in the community ✸ c. Selected group of users e.g., nurses, volunteers d. No description of the derivation of the cohort
2. Selection of the non-exposed cohort a. Drawn from the same community as the exposed cohort ✸ b. Drawn from a different source c. No description of the derivation of the non-exposed cohort
3. Ascertainment of exposure a. Secure record (e.g., surgical records) ✸ b. Structured interview ✸ c. Written self-report d. No description
4. Demonstration that outcome of interest was not present at start of study a. Yes ✸ b. No
Comparability
1. Comparability of cohorts on the basis of the design or analysis a. Study controls for _____ (select the most important factor) ✸ b. Study controls for any additional factor ✸ (this criterion could be modified to indicate specific control for a second important factor)
Outcome
1. Assessment of outcome a. Independent blind assessment ✸ b. Record linkage ✸ c. Self-report d. No description
2. Was follow up long enough for outcomes to occur a. Yes (select an adequate follow-up period for outcome of interest) ✸ b. No
3. Adequacy of follow up of cohorts a. Complete follow up – all subjects accounted for ✸ b. Subjects lost to follow up unlikely to introduce bias – small number lost – > ____ % (select an adequate %) follow up, or description provided of those lost) ✸ c. Follow-up rate < ____% (select an adequate %) and no description of those lost d. No statement

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Supplementary Table S4. Excluded studies

Study	Reference	Reason for exclusion
Abramovich 2018	Incidence and variables associated with short and long-term mortality in patients with systemic lupus erythematosus and sepsis admitted in intensive care units. *Lupus* 2018;27(12):1936–43.	Wrong comparison
Abu-Shakra 1995	Mortality studies in systemic lupus erythematosus. Results from a single center. I. Causes of death. *J Rheumatol* 1995:22(7):1259–64.	Wrong outcome
Adwan 2020	In-hospital mortality in patients with systemic lupus erythematosus: a study from Jordan 2002–2017. *Rheumatol Int* 2020;40(5):711–7.	Wrong comparison
Afeltra 2005	Thrombosis in systemic lupus erythematosus: congenital and acquired risk factors. *Arthritis Care Res (Hoboken)* 2005;53(3):452–9.	No usable data
Aguero 2015	Prevalence of lower extremity peripheral arterial disease in individuals with chronic immune mediated inflammatory disorders. *Atheroscler* 2015;242(1):1–7.	Wrong population
Ahlehoff 2017	Cutaneous lupus erythematosus and the risk of deep venous thrombosis and pulmonary embolism: a Danish nationwide cohort study. *Lupus* 2017;26(13):1435–9.	Did not report on stroke or MI
Ahn 2018	Prevalence, risk factors, and impact on mortality of neuropsychiatric lupus: a prospective, single-center study. *Lupus* 2018;27(8):1338–47.	Wrong comparison
Alessandri 2017	Anti-mutated citrullinated vimentin antibodies in antiphospholipid syndrome: diagnostic value and relationship with clinical features. *Immunol Res* 2017;65(2):524–31.	Too few patients of interest
Alian 2019	Charlson Comorbidity Index in patients with systemic lupus erythematosus in Egypt and its relation with disease characteristics. *Indian J Rheumatol* 2019;14(4):277.	Wrong comparison
Alliu 2020	Outcomes of percutaneous coronary intervention (PCI) among patients with connective tissue disease: propensity match analysis. *Int J Cardiol* 2020;304:29–34.	Wrong population
Ando 2019	Acute myocardial infarction outcomes in systemic lupus erythematosus (from the nationwide inpatient sample). *Am J Cardiol* 2019;123(2):227–32.	Wrong population
Annangi 2017	Prevalence of pulmonary embolism among systemic lupus erythematosus discharges: a decade of analysis of the National Hospital Discharge Survey. *J Clin Rheumatol* 2017;23(4):200–6.	No usable data
Anver 2019	Changing trends in mortality in systemic lupus erythematosus? An analysis of SLE inpatient mortality at University Hospital Coventry and Warwickshire NHS Trust from 2007 to 2016. *Rheumatol Int* 2019;39(12):2069–75.	No usable data
Arkema 2015	Cohort profile: systemic lupus erythematosus in Sweden: the Swedish Lupus Linkage (SLINK) cohort. *BMJ Open* 2015;5(8):14.	Wrong outcome
Arkema 2016	What to expect when expecting with systemic lupus erythematosus (SLE): a population-based study of maternal and fetal outcomes in SLE and pre-SLE. *Arthritis Care Res (Hoboken)* 2016;68(7):988–94.	Wrong comparison
Atta 2018	Clinical and laboratory aspects of dyslipidemia in Brazilian women with systemic lupus erythematosus. *Clin Rheumatol*	Wrong comparison

	2018;37(6):1539–46.	
Avina-Zubieta 2015	The risk of pulmonary embolism and deep venous thrombosis in systemic lupus erythematosus: a general population-based study. *Semin Arthritis Rheum* 2015;45(2):195–201.	Did not report on stroke or MI
Babazade 2017	Systemic lupus erythematosus is associated with increased adverse postoperative renal outcomes and mortality: a historical cohort study using administrative health data. *Anesth Analg* 2017;124(4):1118–26.	Wrong comparison
Barber 2012	Evaluation of clinical outcomes and renal vascular pathology among patients with lupus. *Clin J Am Soc Nephrol* 7(5):757–64.	Wrong outcome
Barbhaiya 2019	Racial/ethnic variation in stroke rates and risks among patients with systemic lupus erythematosus. *Semin Arthritis Rheum* 2019;48(5):840–6.	Wrong comparison
Barnado 2018	Phenome-wide association study identifies marked increased in burden of comorbidities in African Americans with systemic lupus erythematosus. *Arthritis Res Ther* 2018;20(1):69.	Did not report on stroke or MI
Bartels 2014	Mortality and cardiovascular burden of systemic lupus erythematosus in a US population-based cohort. *J Rheumatol* 2014;41(4):680–7.	No usable data
Belfeki 2018	Thrombophilia in systemic lupus erythematosus: a case-control study. *J Med Vasc* 2018;43(6):347–53.	Non-English
Ben-Zvi 2016	The impact of inflammatory rheumatic diseases on the presentation, severity, and outcome of acute coronary syndrome. *Clin Rheumatol* 2016;35(1):233–7.	Wrong population
Bertolaccini 2003	Antibodies directed to protein S in patients with systemic lupus erythematosus: prevalence and clinical significance. *Thromb Haemost* 2003;90(4):636–41.	No usable data
Bertolaccini 2005	Antiprothrombin antibodies detected in two different assay systems. Prevalence and clinical significance in systemic lupus erythematosus. *Thromb Haemost* 2005;93(2):289–97.	Wrong outcome
Bertolaccini 2007	Factor XII autoantibodies as a novel marker for thrombosis and adverse obstetric history in patients with systemic lupus erythematosus. *Ann Rheum Dis* 2007;66(4):533–6.	Wrong outcome
Bessant 2004	Risk of coronary heart disease and stroke in a large British cohort of patients with systemic lupus erythematosus. *Rheumatology* 2004;43(7):924–9.	Wrong comparison
Bleau 2016	Risk of venous thromboembolic events in pregnant patients with autoimmune diseases: a population-based study. *Clin Appl Thromb Hemost* 2016;22(3):285–91.	Wrong comparison
Bohensky 2014	Statin initiation and treatment non-adherence following a first acute myocardial infarction in patients with inflammatory rheumatic disease versus the general population. *Arthritis Res Ther* 2014;16(5):443.	Wrong outcome
Brouwer 2004	[The contribution of inherited and acquired thrombophilic defects, alone or combined with antiphospholipid antibodies, to venous and arterial thromboembolism in patients with systemic lupus erythematosus]. [French]. *Rev Med Interne* 2004;26(2):163–4.	Wrong comparison
Bruce 2003	Risk factors for coronary heart disease in women with systemic lupus erythematosus: the Toronto Risk Factor study. *Arthritis Rheum* 2003;48(11):3159–67.	Wrong outcome
Bultink 2014	Elevated risk of clinical fractures and associated risk factors in	Wrong

	patients with systemic lupus erythematosus versus matched controls: a population-based study in the United Kingdom. *Osteoporos Int* 2014;25(4):1275–83.	outcome
Burgos 2009	Peripheral vascular damage in systemic lupus erythematosus: data from LUMINA, a large multi-ethnic U.S. cohort (LXIX). *Lupus* 2009;18(14):1303–8.	Wrong comparison
Busch 2018	Hospitalizations among Danish SLE patients: a prospective study on incidence, causes of admission and risk factors in a population-based cohort. *Lupus* 2018;27(1):165–71.	Wrong comparison
Butkiewicz 2014	Associations between the incidence of antiphosphatidylserine and antiphosphatidylethanolamine antibodies and clinical manifestations of systemic lupus erythematosus. *Pol Arch Med Wewn* 2014;124(11):573–8.	No usable data
Cadaval 2009	[Assessment of the risk of coronary heart disease in women with systemic lupus erythematosus]. [Portuguese, English]. *Rev Bras Rheumatol* 2009;49(6):658–69.	Wrong comparison
Cassano 2007	Accrual of organ damage over time in Argentine patients with systemic lupus erythematosus: a multi-centre study. *Clin Rheumatol* 2007;26(12):2017–22.	Wrong comparison
Cervera 2009	Morbidity and mortality in the antiphospholipid syndrome during a 5-year period: a multicentre prospective study of 1000 patients. *Ann Rheum Dis* 2009;68(9):1428–32.	Wrong comparison
Cervera 2015	Morbidity and mortality in the antiphospholipid syndrome during a 10-year period: a multicentre prospective study of 1000 patients. *Ann Rheum Dis* 2015;74(6):1011–8.	Wrong population
Chang 2018	High health care utilization preceding diagnosis of systemic lupus erythematosus in youth. *Arthritis Care Res* 2018;70(9):1303–11.	Wrong comparison
Chen 2011	Predictors of long-term mortality in patients with and without systemic lupus erythematosus on maintenance dialysis: a comparative study. *J Rheumatol* 2011;38(11):2390–4.	Wrong comparison
Chen 2014	Onset age affects mortality and renal outcome of female systemic lupus erythematosus patients: a nationwide population-based study in Taiwan. *Rheumatology (Oxford)* 2014;53(1):180–5.	No usable data
Chen 2019	Incidence and survival impact of pulmonary arterial hypertension among patients with systemic lupus erythematosus: a nationwide cohort study. *Arthritis Res Ther* 2019;21(1):82.	Wrong comparison
Chen 2019	Heart failure risk in systemic lupus erythematosus compared to diabetes mellitus and general medicaid patients. *Semin Arthritis Rheum* 2019;49(3):389–95.	Wrong outcome
Chuang 2015	Risk of peripheral arterial occlusive disease in patients with systemic lupus erythematosus: a nationwide population-based cohort study. *Medicine (Baltimore)* 2015;94(46): e2121.	Wrong outcome
Chung 2014	Systemic lupus erythematosus increases the risks of deep vein thrombosis and pulmonary embolism: a nationwide cohort study. *J Thromb Haemost* 2014;12(4):452–8.	Did not report on stroke or MI
Ciccaci 2014	A multilocus genetic study in a cohort of Italian SLE patients confirms the association with STAT4 gene and describes a new association with HCP5 gene. *PLoS One* 2014;9(11):e111991.	Wrong outcome
Crosslin 2009	The impact of race and ethnicity on disease severity in systemic lupus erythematosus. *Ethn Dis* 2009;19(3):301–7. [Summary for patients in *Ethn Dis* 2009;19(3):365].	Wrong comparison

Crozier 1990	Cardiac involvement in systemic lupus erythematosus detected by echocardiography. *Am J Cardiol* 1990;65(16):1145–8.	Wrong outcome
Dave 2014	Atherosclerotic cardiovascular disease in hospitalized patients with systemic sclerosis: higher mortality than patients with lupus and rheumatoid arthritis. *Arthritis Care Res (Hoboken)* 2014;66(2):323–7.	Wrong outcome
Davey 2010	The role of endothelial dysfunction in the pathogenesis of neuropsychiatric systemic lupus erythematosus. *Lupus* 2010;19(7):797–802.	Wrong comparison
Demina 2005	[Causes of death in patients with rheumatic diseases in Moscow]. [Russian]. *Ter Arkh* 2005;77(4):77–82.	Non-English
Dhital 2020	All-cause hospitalizations and mortality in systemic lupus erythematosus in the US: results from a national inpatient database. *Rheumatol Int*. 2020;40(3):393–7.	No usable data
Di 2019	Framingham, ACC/AHA or QRISK3: which is the best in systemic lupus erythematosus cardiovascular risk estimation? [published online ahead of print, 2019 Oct 28]. *Clin Exp Rheumatol* 2019.	Wrong comparison
Dubois 1974	Duration and death in systemic lupus erythematosus. An analysis of 249 cases. *JAMA* 1974;227(12):1399–1402.	Wrong comparison
Duman 2019	Cerebral venous sinus thrombosis as a rare complication of systemic lupus erythematosus: subgroup analysis of the VENOST study. *J Stroke Cerebrovasc Dis* 2019;28(12):104372.	Wrong comparison
Elfving 2014	Mortality and causes of death among incident cases of systemic lupus erythematosus in Finland 2000-2008. *Lupus* 2014;23(13):1430–4.	No usable data
Esdaile 2001	Traditional Framingham risk factors fail to fully account for accelerated atherosclerosis in systemic lupus erythematosus. *Arthritis Rheum* 2001;44(10):2331–7.	Wrong comparison
Falasinnu 2017	Impact of sex on systemic lupus erythematosus-related causes of premature mortality in the United States. Journal of Women's Health. 2017 Nov 1;26(11):1214-21.	Wrong outcome
Falasinnu 2018	Do death certificates underestimate the burden of rare diseases? The example of systemic lupus erythematosus mortality, Sweden, 2001-2013. *Public Health Rep* 2018;133(4):481–8.	Wrong outcome
Fasano 2018	The incidence of cardiovascular events in Italian patients with systemic lupus erythematosus is lower than in North European and American cohorts: implication of disease-associated and traditional risk factors as emerged by a 16-year retrospective GIRRCS study: GIRRCS= Gruppo Italiano di Ricerca in Reumatologia Clinica e Sperimentale. *Medicine* 2018;97(15).	Wrong outcome
Fesmire 2010	Effects of autoimmune antibodies anti-lipoprotein lipase, anti-low density lipoprotein, and anti-oxidized low density lipoprotein on lipid metabolism and atherosclerosis in systemic lupus erythematosus. *Rev Bras Rheumatol* 2010;50(5):545–51.	Wrong outcome
Fischer 2004	Effect of rheumatoid arthritis or systemic lupus erythematosus on the risk of first-time acute myocardial infarction. *Am J Cardiol* 2004;93(2):198–200.	Wrong outcome
Fischer 2007	[Significance of antiphospholipid syndrome and antiphospholipid antibodies in patients with systemic lupus erythematosus in estimation of risk of subclinical atherosclerosis development]. [Polish]. *Pol Arch Med Wewn* 2007;117:13–7.	Non-English

Goldberg 2009	Risk factors for development of coronary artery disease in women with systemic lupus erythematosus. *J Rheumatol* 2009;36(11):2454–61.	Wrong outcome
Goldstein 1996	MHC studies of the primary antiphospholipid antibody syndrome and of antiphospholipid antibodies in systemic lupus erythematosus. *J Rheumatol* 1996;23(7):1173–9.	No usable data
Greco 2009	Association between depression and coronary artery calcification in women with systemic lupus erythematosus. *Rheumatology* 2009;48(5):576–81.	Wrong outcome
Greenstein 2019	Burden of comorbidities in South Africans with systemic lupus erythematosus. *Clin Rheumatol* 2019;38(8):2077–82.	Wrong comparison
Han 2017	Comorbid conditions are associated with emergency department visits, hospitalizations, and medical charges of patients with systemic lupus erythematosus. *J Clin Rheumatol* 2017;23(1):19–25.	Non-comparative
Hanly 2018	Cerebrovascular events in systemic lupus erythematosus: results from an international inception cohort study. *Arthritis Care Res* 2018;70(10):1478–87.	Wrong comparison
Haque 2018	Progression of subclinical and clinical cardiovascular disease in a UK SLE cohort: the role of classic and SLE-related factors. *Lupus Sci Med* 2018;5(1):e000267.	Wrong comparison
Hawro 2015	Intractable headaches, ischemic stroke and seizures are linked to the presence of anti-beta2GPI antibodies in patients with systemic lupus erythematosus. *PLoS One* 2015:10(3):e0119911	Wrong outcome
Hesselvig 2017	Cutaneous lupus erythematosus and systemic lupus erythematosus are associated with clinically significant cardiovascular risk: A Danish nationwide cohort study. *Lupus* 2017;26(1):48–53.	No usable data
Ingvarsson 2019	Good survival rates in systemic lupus erythematosus in southern Sweden, while the mortality rate remains increased compared with the population. *Lupus* 2019;28(12):1488–94.	Wrong outcome
Jacobsen 1999	Mortality and causes of death of 513 Danish patients with systemic lupus erythematosus. Scandinavian *J Rheumatol* 1999;28(2):75–80.	No usable data
Jimenez 2008	Double heterozygosity polymorphisms for platelet glycoproteins Ia/IIa and IIb/IIIa increases arterial thrombosis and arteriosclerosis in patients with the antiphospholipid syndrome or with systemic lupus erythematosus. *Ann Rheum Dis* 2008;67(6):835–40.	Wrong comparison
Johannesdottir 2012	Autoimmune skin and connective tissue diseases and risk of venous thromboembolism: a population-based case-control study. *J Thromb Haemost* 2012;10(5):815–21.	Did not report on stroke or MI
Jonsson 1989	Outcome of neuropsychiatric systemic lupus erythematosus within a defined Swedish population: increased morbidity but low mortality. *Rheumatology* 1989;41(11):1308–12.	No usable data
June 2013	Peripheral vascular disease in systemic lupus patients. *J Clin Rheumatol* 2013;19(7):367–72.	Wrong outcome
Karp 2012	Longitudinal evolution of risk of coronary heart disease in systemic lupus erythematosus. *J Rheumatol* 2012;39(5):968–73.	Wrong outcome
Katz 2019	Systemic lupus erythematosus and increased prevalence of atherosclerotic cardiovascular disease in hospitalized patients. *Mayo Clin Proc* 2019;94(8):1436–43.	Wrong outcome
Kaul 2013	Association of systemic lupus erythematosus with angiographically defined coronary artery disease: a retrospective cohort study.	Wrong comparison

	Arthritis Care Res (Hoboken) 2013;65(2):266–73.	
Ke 2019	Systemic lupus erythematosus is associated with poor outcome after acute myocardial infarction. *Nutr, Metab Cardiovasc Dis* 2019;29(12):1400–7.	Wrong comparison
Kedves 2020	Large-scale mortality gap between SLE and control population is associated with increased infection-related mortality in lupus. *Rheumatology*. 2020;keaa188.	Wrong comparison
Khamashta 1990	Association of antibodies against phospholipids with heart valve disease in systemic lupus erythematosus. *Lancet* 1990;335(8705):1541–4.	Wrong outcome
Kim 2017	Elevated levels of soluble CD40 ligand are associated with antiphospholipid antibodies in patients with systemic lupus erythematosus. *Clin Exp Rheumatol* 2017;35(5):823–30.	Non-comparative
Kishore 2019	Systemic lupus erythematosus is associated with a high risk of venous thromboembolism in hospitalized patients leading to poor outcomes and a higher cost: results from nationwide inpatient sample database 2003-2011. *ACR Open Rheumatol* 2019;1(3):194–200.	Wrong comparison
Lai 2015	Outcomes of coronary artery bypass grafting in patients with inflammatory rheumatic diseases: An 11-year nationwide cohort study. *J Thorac Cardiovasc Surg* 2015;149(3):859–66.e2.	Wrong comparison
Lai 2016	Outcomes of percutaneous coronary intervention in patients with rheumatoid arthritis and systemic lupus erythematosus: an 11-year nationwide cohort study. *Ann Rheum Dis* 2016;75(7):1350–6.	Wrong comparison
Lai 2020	Outcomes of acute cardiovascular events in rheumatoid arthritis and systemic lupus erythematosus: a population-based study. *Rheumatology* 2020;59(6):1355–63.	Wrong comparison
Leonard 2018	Novel gene variants associated with cardiovascular disease in systemic lupus erythematosus and rheumatoid arthritis. *Ann Rheum Dis* 2018;77(7):1063–9.	No usable data
Lerang 2014	Mortality and years of potential life loss in systemic lupus erythematosus: a population-based cohort study. *Lupus* 2014;23(14):1546–52.	Did not report on stroke or MI
Lim 2019	Racial disparities in mortality associated with systemic lupus erythematosus—Fulton and DeKalb Counties, Georgia, 2002–2016. *MMWR* 2019;68(18):419.	No usable data
Lim 2019	Pulmonary arterial hypertension in a multi-ethnic Asian population: characteristics, survival and mortality predictors from a 14-year follow-up study. *Respirology* 2019;24(2):162–70.	Wrong population
Lin 2014	Adverse outcomes after major surgery in patients with systemic lupus erythematosus: a nationwide population-based study. *Ann Rheum Dis* 2014;73(9):1646–51.	Wrong comparison
Lood 2017	Decreased platelet size is associated with platelet activation and anti-phospholipid syndrome in systemic lupus erythematosus. *Rheumatology* 2017;56(3):408–16.	Wrong outcome
López 2017	Serum levels of anti-PON1 and anti-HDL antibodies as potential biomarkers of premature atherosclerosis in systemic lupus erythematosus. *Thromb Haemost* 2017;117(11):2194–206.	No usable data
Lu 2015	Thrombopoietin levels in systemic lupus erythematosus are linked to inflammatory cytokines, but unrelated to thrombocytopenia or thrombosis. *Lupus* 2015;24(1):18–24.	Wrong outcome

Lundstrom 2013	HLA-DRB1*04/*13 alleles are associated with vascular disease and antiphospholipid antibodies in systemic lupus erythematosus. *Ann Rheum Dis* 2013;72(6):1018–25.	Wrong outcome
Magder 2012	Incidence of and risk factors for adverse cardiovascular events among patients with systemic lupus erythematosus. *Am J Epidemiol* 2012;176(8):708–19.	Wrong comparison
Mageau 2019	The burden of chronic kidney disease in systemic lupus erythematosus: a nationwide epidemiologic study. *Autoimmun Rev* 2019;18(7):733–7.	Wrong comparison
Maksimowicz-McKinnon 2008	Poor 1-year outcomes after percutaneous coronary interventions in systemic lupus erythematosus: report from the National Heart, Lung, and Blood Institute Dynamic Registry. *Circulation* 2008;(3):201–8.	Wrong comparison
Martinez 2020	Percutaneous coronary intervention outcomes in patients with rheumatoid arthritis, systemic lupus erythematosus and systemic sclerosis. *Rheumatology* 2020;kez639.	Wrong population
Mehta 2008	Platelet C4d is associated with acute ischemic stroke and stroke severity. *Stroke* 2008;39(12):3236–41.	Wrong population
Mok 2010	Venous thromboembolism in southern Chinese patients with systemic lupus erythematosus. *Clin Rheumatol* 2010;29(6):599–604.	Did not report on stroke or MI
Mok 2011	Epidemiology and survival of systemic lupus erythematosus in Hong Kong Chinese. *Lupus* 2011;20(7):767–71.	Review article
Mok 2011	Life expectancy, standardized mortality ratios, and causes of death in six rheumatic diseases in Hong Kong, China. *Arthritis Rheum* 2011;63(5):1182–9.	No usable data
Molad 2000	Renal outcome and vascular morbidity in systemic lupus erythematosus (SLE): Lack of association with the angiotensin-converting enzyme gene polymorphism. *Semin Arthritis Rheum* 2000;30(2):132–7.	Wrong comparison
Morgan 1993	Clinical analysis of 125 patients with the lupus anticoagulant. *Aust N Z J Med* 1993;23(2):151–6.	Wrong comparison
Moss 2002	Outcome of a cohort of 300 patients with systemic lupus erythematosus attending a dedicated clinic for over two decades. *Ann Rheum Dis* 2002;61(5):409–13.	No usable data
Mu 2018	Mortality and prognostic factors in Chinese patients with systemic lupus erythematosus. *Lupus* 2018;27(10):1742–52.	No usable data
Munoz-Rodriguez 2000	Prevalence and clinical significance of antiprothrombin antibodies in patients with systemic lupus erythematosus or with primary antiphospholipid syndrome. *Haematologica* 2000;85(6):632–7.	Wrong comparison
Munoz-Rodriguez 2002	Clinical significance of acquired activated protein C resistance in patients with systemic lupus erythematosus. *Lupus* 2002;11(11):730–5.	Wrong comparison
Nakamura 2006	Autoantibody to CD40 ligand in systemic lupus erythematosus: Association with thrombocytopenia but not thromboembolism. *Rheumatology (Oxford)* 2006;45(2):150–6.	Wrong comparison
Nasonov 1992	The prediction of thrombosis development in patients with systemic lupus erythematosus: the role of antibodies to cardiolipin. [Russian]. *Ter Arkh* 1992;64(5):25–30.	Non-English
Nikpour 2009	Myocardial perfusion imaging in assessing risk of coronary events in patients with systemic lupus erythematosus. *J Rheumatol*	Wrong comparison

	2009;36(2):288–94.	
Norby 2017	Outcome in biopsy-proven Lupus nephritis: Evaluation of biopsies from the Norwegian Kidney Biopsy Registry. *Lupus* 2017;26(8):881–5.	Wrong outcome
Oh 2003	Acquired activated protein C resistance, high tissue factor expression, and hyper-homocysteinemia in systemic lupus erythematosus. *Am J Hematol* 2003;72(2):103–8.	Wrong outcome
Ostanek 2006	Antiphospholipid syndrome and antiphospholipid antibodies as a risk factors of ischaemic heart disease and myocardial infarction in patients with systemic lupus erythematosus. [Polish]. *Pol Arch Med Wewn* 2006;115(5):407–13.	Non-English
Panafidina 2006	The significance of cardiovascular risk factors and C-reactive protein to the development of atherosclerosis in women with systemic lupus erythematosus. [Russian]. *Klin Med (Mosk)* 2006;84(10):49–54.	Non-English
Perez-Villa 2005	Severe valvular regurgitation and antiphospholipid antibodies in systemic lupus erythematosus: A prospective, long-term, followup study. *Arthritis Care Res (Hoboken)* 2005;53(3):460–7.	Wrong comparison
Petri 1987	The frequency of lupus anticoagulant in systemic lupus erythematosus. A study of sixty consecutive patients by activated partial thromboplastin time, Russell viper venom time, and anticardiolipin antibody level. *Ann Intern Med* 1987;106(4):524–31.	Wrong outcome
Petri 2019	Development of a systemic lupus erythematosus cardiovascular risk equation. *Lupus Sci Med* 2019;6(1):e000346.	No usable data
Plasín-Rodríguez 2018	The H1 haplotype of the endothelial protein C receptor protects against arterial thrombosis in patients with antiphospholipid syndrome. *Thromb Res* 2018;169:128–34.	No usable data
Ramagopalan 2011	Risk of venous thromboembolism in people admitted to hospital with selected immune-mediated diseases: record-linkage study. *BMC Med* 2011;9:1.	Did not report on stroke or MI
Reid 2020	High genetic risk score is associated with early disease onset, damage accrual and decreased survival in systemic lupus erythematosus. *Ann Rheum Dis* 2020;79(3):363–9.	No usable data
Reshetniak 2008	[Subclinical and clinical manifestations of atherosclerosis in antiphospholipid syndrome]. [Russian]. *Ter Arkh* 2008;80(10):60–7.	Non-English
Reshetniak 2013	[Plasminogen activator inhibitor type 1 gene polymorphism and thromboses in patients with antiphospholipid syndrome]. [Russian]. *Ter Arkh* 2013;85(1):76–84.	Non-English
Rodríguez-Carrio 2019	Clinical and subclinical cardiovascular disease in female SLE patients: interplay between body mass index and bone mineral density. *Nutr, Metab Cardiovasc Dis* 2019;29(2):135–43.	No usable data
Roldan 1996	An echocardiographic study of valvular heart disease associated with systemic lupus erythematosus. *New Engl J Med* 1996;335(19):1424–30.	Wrong comparison
Roldan 2013	Libman-sacks endocarditis and embolic cerebrovascular disease. *JACC: Cardiovasc Imaging* 2013;6(9):973–83.	Wrong comparison
Roldan 2015	Lambls excrescences: association with cerebrovascular disease and pathogenesis. *Cerebrovasc Dis* 2015;40(1):18–27.	Wrong outcome
Rossides 2017	Mortality and functionality after stroke in patients with systemic lupus erythematosus. *J Rheumatol* 2017;44(11):1590–6.	Wrong comparison

Sairam 2003	Analysis of risk factors and comorbid diseases in the development of thrombosis in patients with anticardiolipin antibodies. *Clin Rheumatol* 2003;22(1):24–9.	Wrong comparison
Sanmarco 1997	Prevalence and clinical significance of IgG isotype anti-beta 2-glycoprotein I antibodies in antiphospholipid syndrome: a comparative study with anticardiolipin antibodies. *J Lab Clin Med* 1997;129(5):499–506.	Wrong outcome
Sarabi 2005	Incidence rates of arterial and venous thrombosis after diagnosis of systemic lupus erythematosus. *Arthritis Care Res (Hoboken)* 2005;53(4):609–12.	Non-comparative
Sartori Vieira 2019	Mortality profile related to the spectrum of systemic connective tissue diseases: a retrospective, population-based, case–control study. *Lupus* 2019;28(12):1498–500.	Letter
Scalzi 2010	Racial disparities in age at time of cardiovascular events and cardiovascular-related death in patients with systemic lupus erythematosus. *Arthritis Rheum* 2010;62(9):2767–75.	No usable data
Shafi 2007	Risk of vascular access thrombosis in patients with systemic lupus erythematosus on hemodialysis. *J Vasc Access* 2007;8(2):103–8.	Too few patients of interest
Shah 2009	Poor outcomes after acute myocardial infarction in systemic lupus erythematosus. *J Rheumatol* 2009;36(3):570–5.	Wrong comparison
Shang 2012	SLICC/ACR Damage Index independently associated with left ventricular diastolic dysfunction in patients with systemic lupus erythematosus. *Lupus* 2012;21(10):1057–62.	Wrong outcome
Shi 2017	Clinical characteristics and laboratory findings of 252 Chinese patients with anti-phospholipid syndrome: comparison with Euro-Phospholipid cohort. *Clin Rheumatol* 2017;36(3):599–608.	Wrong comparison
Singh 2016	Risk of cerebrovascular accidents and ischemic heart disease in cutaneous lupus erythematosus: a population-based cohort study. *Arthritis Care Res (Hoboken)* 2016;68(11):1664–70.	Wrong population
Smilowitz 2018	Systemic lupus erythematosus and the risk of perioperative major adverse cardiovascular events. *J Thromb Thrombolysis* 2018;45(1):13–7.	Wrong comparison
Soh 2015	Association between pregnancy outcomes and death from cardiovascular causes in parous women with systemic lupus erythematosus: a study using Swedish population registries. *Arthritis Rheumatol* 2015;67(9):2376–82.	Wrong comparison
Soh 2015	Brief report: association between pregnancy outcomes and death from cardiovascular causes in parous women with systemic lupus erythematosus: a study using Swedish population registries. *Arthritis Rheumatol* 2015;67(9):2376–82.	Wrong comparison
Soltesz 2003	Evaluation of clinical and laboratory features of antiphospholipid syndrome: a retrospective study of 637 patients. *Lupus* 2003;12(4):302–7.	Wrong comparison
Stahl-Hallengren 2000	Incidence studies of systemic lupus erythematosus in Southern Sweden: increasing age, decreasing frequency of renal manifestations and good prognosis. *J Rheumatol* 2000;27(3):685–91.	No usable data
Sun 2019	Association of lupus nephritis with coronary artery disease by ISN/RPS classification: results from a large real-world lupus population. *ACR Open Rheumatol* 2019;1(4):244–50.	Wrong comparison

Svenungsson 2010	A STAT4 risk allele is associated with ischaemic cerebrovascular events and anti-phospholipid antibodies in systemic lupus erythematosus. *Ann Rheum Dis* 2010;69(5):834–40.	Wrong outcome
Svenungsson 2015	Decreased levels of autoantibodies against apolipoprotein B-100 antigens are associated with cardiovascular disease in systemic lupus erythematosus. *Clin Exp Immunol* 2015;181(3):417–26.	Wrong outcome
Tassies 2000	The 4G/5G polymorphism of the type 1 plasminogen activator inhibitor gene and thrombosis in patients with antiphospholipid syndrome. *Arthritis Rheum* 2000;43(10):2349–58.	Wrong outcome
Tektonidou 2016	Brief report: trends in hospitalizations due to acute coronary syndromes and stroke in patients with systemic lupus erythematosus, 1996 to 2012. *Arthritis Rheumatol* 2016;68(11):2680–5.	No usable data
Thorburn 2003	Hospitalizations for coronary artery disease among patients with systemic lupus erythematosus. *Arthritis Rheum* 2003;48(9):2519–23.	Wrong comparison
Tkachenko 2020	Profiling of non-criteria antiphospholipid antibodies in patients with SLE: differentiation of thrombotic SLE patients and risk of recurrence of thrombosis. *Lupus* 2020;29(5):490–8.	Wrong comparison
Toloza 2004	Systemic lupus erythematosus in a multiethnic US cohort (LUMINA). XXIII. Baseline predictors of vascular events. *Arthritis Rheum* 2004;50(12):3947–57.	Non-comparative
Tselios 2017	Evolution of risk factors for atherosclerotic cardiovascular events in systemic lupus erythematosus: a longterm prospective study. *J Rheumatol* 2017;44(12):1841–9.	No usable data
Tselios 2019	All-cause, cause-specific and age-specific standardised mortality ratios of patients with systemic lupus erythematosus in Ontario, Canada over 43 years (1971–2013). *Ann Rheum Dis* 2019;78(6):802–6.	Wrong outcome
Tuta 2006	[Clinical outcome of lupus nephritis in Constanta County]. [Romanian]. *Rev Med Chir Soc Med Nat Iasi* 2006;110(2):299–304.	Non-English
Tyden 2013	Increased serum levels of S100A8/A9 and S100A12 are associated with cardiovascular disease in patients with inactive systemic lupus erythematosus. *Rheumatology (Oxford)* 2013;52(11):2048–55.	Wrong outcome
Tziomalos 2017	Arterial stiffness and peripheral arterial disease in patients with systemic lupus erythematosus. *Rheumatol Int* 2017;37(2):293–8.	Wrong outcome
Ungprasert 2016	Epidemiology of mixed connective tissue disease, 1985-2014: a population-based study. *Arthritis Care Res (Hoboken)* 2016;68(12):1843–8.	Wrong outcome
Unlu 2019	The impact of systemic lupus erythematosus on the clinical phenotype of antiphospholipid antibody–positive patients: results from the AntiPhospholipid Syndrome Alliance for Clinical Trials and InternatiOnal Clinical Database and Repository. *Arthritis Care Res* 2019;71(1):134–41.	Wrong comparison
Urowitz 2008	Accumulation of coronary artery disease risk factors over three years: data from an international inception cohort. *Arthritis Care Res (Hoboken)* 2008;59(2):176–80.	Non-comparative
Van Doornum 2015	Increased 30-day and 1-year mortality rates and lower coronary revascularisation rates following acute myocardial infarction in patients with autoimmune rheumatic disease. *Arthritis Res Ther* 2015;17:38.	Wrong comparison

Vaya 2008	Thrombotic events in systemic lupus erythematosus. Its association with acquired and inherited thrombophilic defects. *Clin Hemorheol Microcirc* 2008;40(2):79–87.	Wrong outcome
Vikerfors 2013	Clinical manifestations and anti-phospholipid antibodies in 712 patients with systemic lupus erythematosus: evaluation of two diagnostic assays. *Rheumatology* 2013;52(3):501–9.	Wrong outcome
Voss 2013	Survival in systemic lupus erythematosus, 1995-2010. A prospective study in a Danish community. *Lupus* 2013;22(11):1185–91.	No usable data
Ward 2000	Cardiovascular and cerebrovascular morbidity and mortality among women with end-stage renal disease attributable to lupus nephritis. *Am J Kidney Dis* 2000;36(3):516–25.	Wrong comparison
Ward 2004	Outcomes of hospitalizations for myocardial infarctions and cerebrovascular accidents in patients with systemic lupus erythematosus. *Arthritis Rheum* 2004;50(10):3170–6.	Wrong comparison
Watad 2017	Association between ischemic heart disease and systemic lupus erythematosus-a large case-control study. *Immunol Res* 2017;65(2):459–63.	Wrong outcome
Watad 2017	The association between systemic lupus erythematosus and valvular heart disease: an extensive data analysis. *Eur J Clin Invest* 2017;47(5):366–71.	Wrong outcome
Weng 2011	A retrospective study of pulmonary infarction in patients with systemic lupus erythematosus from southern Taiwan. *Lupus* 2011;20(8):876–85.	Non-comparative
Wu 2014	Major adverse cardiovascular events and mortality in systemic lupus erythematosus patients after successful delivery: a population-based study. *Am J Med Sci* 2014;347(1):42–9.	Wrong comparison
Wu 2019	Causes of death in hospitalized patients with systemic lupus erythematosus: a 10-year multicenter nationwide Chinese cohort. *Clin Rheumatol* 2019;38(1):107–15.	No usable data
Yang 2012	Prevalence and correlation of conventional and lupus-specific risk factors for cardiovascular disease in Chinese systemic lupus erythematosus patients. *J Eur Acad Dermatol Venereol* 2012;26(1):95–101.	Wrong outcome
Yap 2012	Survival analysis and causes of mortality in patients with lupus nephritis. *Nephrol Dial Transplant* 2012;27(8):3248–54.	Did not report on stroke or MI
Yasmeen 2001	Pregnancy outcomes in women with systemic lupus erythematosus. *J Matern Fetal Med* 2001;10(2):91–6.	Wrong comparison
Yazdanyar 2013	Short-term perioperative all-cause mortality and cardiovascular events in women with systemic lupus erythematosus. *Arthritis Care Res (Hoboken)* 2013;65(6):986–91.	Wrong comparison
Yip 2009	Disease chronicity and activity predict subclinical left ventricular systolic dysfunction in patients with systemic lupus erythematosus. *Heart* 2009;95(12):980–7.	Wrong outcome
You 2020	Characteristics and risk factors of pulmonary embolism in patients with systemic lupus erythematosus: a case control study. [published online ahead of print, 2020 Jan 20]. *Clin Exp Rheumatol* 2020.	Wrong comparison
Yusuf 2014	Risk of venous thromboembolism among hospitalizations of adults with selected autoimmune diseases. *J Thromb Thrombolysis*	Did not report on

	2014;38(3):306–13.	stroke or MI
Yusuf 2015	Risk of venous thromboembolism occurrence among adults with selected autoimmune diseases: a study among a U.S. cohort of commercial insurance enrollees. *Thromb Res* 2015;135(1):50–7.	Did not report on stroke or MI
Zaccagni 2004	Soluble adhesion molecule levels, neuropsychiatric lupus and lupus-related damage. *Front Biosci* 2004;9:1654–9.	Wrong comparison
Zhao 2017	Clinical characteristics and survival of pulmonary arterial hypertension associated with three major connective tissue diseases: a cohort study in China. *Int J Cardiol* 2017;236:432–7.	Non-comparative
Zirkzee 2014	Mortality in neuropsychiatric systemic lupus erythematosus (NPSLE). *Lupus* 2014;23(1):31–8.	Wrong outcome
Zöller 2012	Risk of subsequent coronary heart disease in patients hospitalized for immune-mediated diseases: a nationwide follow-up study from Sweden. *PloS One* 2012;7(3):e33442.	Wrong outcome
Zöller 2012b	Risk of pulmonary embolism in patients with autoimmune disorders: a nationwide follow-up study from Sweden. *Lancet* 2012;379(9812):244–9.	Did not report on stroke or MI
Zuily 2013	Superficial vein thrombosis, thrombin generation and activated protein C resistance as predictors of thromboembolic events in lupus and antiphospholipid patients. A prospective cohort study. *Thromb Res* 2013;132(1):e1–7.	Wrong comparison

MI, myocardial infarction.

Supplementary Table S5. Quality assessment of the studies included in the meta-analysis that report the risk of stroke and MI in adult patients with SLE compared with the general population or healthy controls

Author/year	NOS			12-point scale							
	Selection (5 stars)	Comparability (2 stars)	Outcome (3 stars)	1. Source of the study sample	2. Cohort type (inception cohort)	3. Definition of SLE	4. Length of SLE exposure (years)	5. Assessment of outcome	6. Adjustment for confounders	Total 12-point SLE-specific scale	Overall estimate risk of bias
Arkema 2017[4]	4	2	3	Community	No	ICD-10	≥5 <10	Clearly defined	≥5 risk factors	8	Low risk
Avina-Zubieta 2017[5]	4	2	3	Community	No	ICD-9	≥5 <10	Clearly defined	<5 risk factors	8	Low risk
Barnado 2018[6]	5	1	3	Community	No	ICD-10	≥5 <10	Clearly defined	≥5 risk factors	11	Low risk
Bengtsson 2012[7]	3	2	3	Community	No	≥4 ACR	≥5 <10	Validated criteria	<5 risk factors	10	Low risk
Bernatsky 2006a[8]	3	2	3	Clinic based	Yes	≥4 ACR	≥10	Validated criteria	<5 risk factors	9	Low risk
Bernatsky 2006b[9]	3	2	3	Clinic based	No	≥4 ACR	≥10	Clearly defined	<5 risk factors	7	Moderate
Bjornadal 2004[10]	3	2	3	Clinic based	No	ICD-9	≥10	Clearly defined	<5 risk factors	7	Moderate
Chang 2013[11]	5	1	3	Community	No	ICD-9	≥5 <10	Validated criteria	<5 risk factors	9	Low risk
Chiu 2012[12]	4	2	3	Community	No	ICD-9	≥5 <10	Clearly defined	None	10	Low risk
Cook 2018[13]	1	0	2	Community	No	Self-report	NR	Self-report	≥5 risk factors	6	High risk
Dregan 2017[14]	2	2	2	Community	No	Clinician	<5	Not clear	≥5 risk factors	5	High risk
Faurschou 2011[15]	3	2	3	Clinic based	No	≥4 ACR	≥10	Validated criteria	<5 risk factors	8	Low risk
Hak 2009[16]	5	2	3	Community	Yes	≥4 ACR	≥10	Validated criteria	≥5 risk factors	12	Low risk
Hermansen 2017[17]	5	2	3	Community	Yes	ICD-10	≥10	Validated criteria	<5 risk factors	10	Low risk
Kim 2017[18]	3	2	3	Community	No	Unclear	≥10	Clearly defined	≥5 risk factors	8	Low risk
Krishnan 2005[19]	3	2	2	Community	No	ICD-9	NR	Clearly defined	<5 risk factors	5	High risk
Lim 2018[20]	4	2	3	Community	No	ICD-10	≥5 <10	Clearly defined	≥5 risk factors	11	Low risk

Lin 2014[21]	3	2	3	Community	Yes	ICD-9	≥5 <10	Validated criteria	<5 risk factors	10	Low risk
Liou 2014[22]	5	2	3	Community	No	≥4 ACR	≥10	Validated criteria	≥5 risk factors	11	Low risk
Manzi 1997[23]	4	2	3	Clinic based	No	≥4 ACR	≥10	Clearly defined	≥5 risk factors	9	Low risk
Mok 2009[24]	1	0	3	Clinic based	No	≥4 ACR	≥5 <10	Clearly defined	None	5	High risk
Ramagopalan 2013[25]	3	2	3	Community	No	ICD-9	≥10	Validated criteria	≥5 risk factors	9	Low risk
Rees 2016[26]	5	2	3	Community	Yes	Read codes	≥10	Clearly defined	≥5 risk factors	8	Low risk
Wang 2012[27]	5	2	3	Community	Yes	ICD-9	≥10	Validated criteria	<5 risk factors	11	Low risk
Ward 1999[28]	2	2	2	Community	No	ICD-9	<5	Clearly defined	≥5 risk factors	7	High risk
Zoller 2012[29]	5	2	3	Community	No	ICD-7–10	≥10	Clearly defined	≥5 risk factors	8	Low risk

ACR, American College of Rheumatology; ICD, International Classification of Diseases; MI, myocardial infarction; NOS, Newcastle-Ottawa Scale; NR, not reported; SLE, systemic lupus erythematosus.

Supplementary Table S6. Types of stroke and MI and definition reported by each study

Author/year	Ischaemic stroke	Intracerebral haemorrhage	Subarachnoid haemorrhage	Haemorrhagic stroke	Unspecified stroke	Composite stroke	MI
Arkema 2017[4]	ICD-8 432-434; ICD-9 433-434; ICD-10 I63	ICD-8 431; ICD-9 431; ICD-10 I61	ICD-8 430; ICD-9 430; ICD-10 I60		ICD-8 436; ICD-9 436; ICD-10 I64	ICD-8 430-434, 436; ICD-9 430-431, 433-434, 436; ICD-10, I60-I61, I63-I64	
Avina-Zubieta 2017[5]	ICD-9 433-434; ICD-10 I63-I66						ICD-9 410; ICD-10 I21
Barnado 2018[6]							I21, I22 ,I23 ,I24, I25, I51
Bengtsson 2012[7]						ICD-10 I61-6, I61.8-9, I62.9, I63.0-6, I63.8-9, I64	ICD-10 I21.0-9, I22.0-1, I22.8-9
Bernatsky 2006a[8]						ICD-9 430-459	
Bernatsky 2006b[9]	ICD-9 433-434		ICD-9 430			ICD-9 430-438	
Bjornadal 2004[10]						ICD-7 330-334; ICD-8 430-438; ICD-9 430-438	
Chang 2013[11]			ICD-9 430				
Chiu 2012[12]	Claims data						
Cook 2018[13]						Reported as stroke/ischaemic stroke. Biobank database based on ICD-10 codes	Reported as MI Biobank database based on ICD-10 codes
Dregan 2017[14]						ICD-10 and self-report	
Faurschou 2011[15]							ICD-8 410; ICD-10 I21
Hak 2009[16]						National Survey of Stroke	WHO criteria plus in hospital measurements or autopsy evidence for both
Hermansen 2017[17]						ICD-8 431-434; ICD-10 I61, I62.9, I63-I64	ICD-8 410; ICD-10 I21
Kim 2017[18]							NR
Krishnan 2005[19]	ICD-9 434	ICD-9 431	ICD-9 430		ICD-9 436	ICD-9 430-431, 434, 436	
Lim 2018[20]						Stroke ICD-10 I63,	ICD-10 (I21–22)

						I64	
Lin 2014[21]							ICD-9 410
Liou 2014[22]	ICD-9 unspecified					ICD-9 430-438	
Manzi 1997[23]							Cardiovascular Health Study. Documentation required hospital data
Mok 2009[24]	Physician diagnosis	Physician diagnosis				Physician diagnosis	
Ramagopalan 2013[25]			ICD-9 430; ICD-10 I60				
Rees 2016[26]						Read code available on request	
Wang 2012[27]	ICD-9 unspecified	ICD-9 unspecified	ICD-9 unspecified	ICD-9 unspecified		ICD-9 430-438	
Ward 1999[28]						ICD-9 431 or 434	ICD-9 410
Zoller 2012[29]	ICD-9 433-435, 437; ICD-10 I63, I65-I67	ICD-9 431-432; ICD-10 I61-I62					

ICD, International Classification of Diseases; MI, myocardial infarction; NR, not reported; WHO, World Health Organization.

Supplementary Table S7. Risk ratios and 95% confidence intervals for stroke and MI in adult patients with SLE compared with the general population or healthy controls: main meta-analysis and sensitivity analyses

Composite stroke								
Authors	**Main analysis**	**Least adjusted**	**Published during or after 2014**	**Published before 2014**	**Only studies with low risk of bias**	**Fatal/non-fatal**	**Non-fatal**	**Excluding cross-sectional studies**
Arkema 2017[4]	2.1 (1.7 to 2.6)	2.3 (1.8 to 2.8)	2.1 (1.7 to 2.6)	-	2.1 (1.7 to 2.6)	2.1 (1.7 to 2.6)	-	2.1 (1.7 to 2.6)
Bengtsson 2012[7]	-	-	-	1.6 (0.69 to 3.14)	-	-	-	-
Bernatsky 2006a[8]	1.1 (0.7 to 1.7)	1.1 (0.7 to 1.7)	-	1.1 (0.7 to 1.7)	1.1 (0.7 to 1.7)	-	-	1.1 (0.7 to 1.7)
Bernatsky 2006b[9]	-	-	-	-	-	-	-	-
Bjornadal 2004[10]	2.06 (1.74 to 2.43)	2.06 (1.74 to 2.43)	-	2.06 (1.74 to 2.43)	-	-	-	2.06 (1.74 to 2.43)
Cook 2018[13]	3.3 (1.8 to 5.9)	3.3 (1.8 to 5.9)	3.3 (1.8 to 5.9)	-	-	-	3.3 (1.8 to 5.9)	3.3 (1.8 to 5.9)
Dregan 2017[14]	5.34 (3.82 to 7.45)	5.34 (3.82 to 7.45)	5.34 (3.82 to 7.45)	-	-	5.34 (3.82 to 7.45)	-	-
Hak 2009[16]	2.29 (0.85 to 6.15)	2.51 (0.94 to 6.69)	-	2.29 (0.85 to 6.15)	2.29 (0.85 to 6.15)	2.29 (0.85 to 6.15)	-	2.29 (0.85 to 6.15)
Hermansen 2017[17]	2.4 (1.8 to 3.2)	2.4 (1.8 to 3.2)	2.4 (1.8 to 3.2)	-	2.4 (1.8 to 3.2)	2.4 (1.8 to 3.2)	-	2.4 (1.8 to 3.2)
Krishnan 2005[19]	1.67 (1.46 to 1.92)	1.54 (1.34 to 1.77)	-	1.67 (1.46 to 1.92)	-	-	1.67 (1.46 to 1.92)	-
Lim 2018[20]	3.31 (2.84 to 3.86)	3.61 (3.10 to 4.19)	3.31 (2.84 to 3.86)	-	3.31 (2.84 to 3.86)	-	3.31 (2.84 to 3.86)	3.31 (2.84 to 3.86)
Liou 2014[22]	-	-	1.88 (1.08 to 3.27)	-	-	-	-	-
Mok 2009[24]	2.02 (1.3 to 3.81)	2.02 (1.3 to 3.81)	-	2.02 (1.3 to 3.81)	-	2.02 (1.3 to 3.81)	-	2.02 (1.3 to 3.81)
Rees 2016[26]	1.47 (1.2 to 1.8)	1.81 (1.49 to 2.19)	1.47 (1.2 to 1.8)	-	1.47 (1.2 to 1.8)	-	1.47 (1.2 to 1.8)	1.47 (1.2 to 1.8)
Wang 2012[27]	2.9 (2.52 to 3.33)	3.17 (2.79 to 3.61)	-	2.9 (2.52 to 3.33)	2.9 (2.52 to 3.33)	-	2.9 (2.52 to 3.33)	2.9 (2.52 to 3.33)
Ward 1999[28]	-	-	-	-	-	-	-	-
Intracerebral haemorrhage								
Authors	**Main analysis**	**Least adjusted**	**Published during or after 2014**	**Published before 2014**	**Only studies with low risk of bias**	**Fatal/non-fatal**	**Non-fatal**	**Excluding cross-sectional studies**
Arkema 2017[4]	1.4 (0.7 to 2.9)	1.6 (0.8 to 3.2)	1.4 (0.7 to 2.9)	-	1.4 (0.7 to 2.9)	1.4 (0.7 to 2.9)	-	1.4 (0.7 to 2.9)
Krishnan 2005[19]	1.56 (1.11 to 2.21)	1.26 (0.89 to 1.77)	-	1.56 (1.11 to 2.21)	-	-	1.56 (1.11 to 2.21)	-
Mok 2009[24]	1.03 (0.26 to 4.11)	1.03 (0.26 to 4.11)	-	1.03 (0.26 to 4.11)	-	1.03 (0.26 to 4.11)	-	1.03 (0.26 to 4.11)
Wang 2012[27]	2.91 (2.12 to 3.99)	3.5 (2.64 to 4.64)	-	2.91 (2.12 to 3.99)	2.91 (2.12 to 3.99)	-	2.91 (2.12 to 3.99)	2.91 (2.12 to 3.99)
Zoller 2012[29]	-	-	-	2.65 (1.81 to 3.74)	-	-	2.65 (1.81 to 3.74)	-
Ischaemic stroke								
Authors	**Main analysis**	**Least adjusted**	**Published during or after 2014**	**Published before 2014**	**Only studies with low risk of bias**	**Fatal/non-fatal**	**Non-fatal**	**Excluding cross-sectional studies**

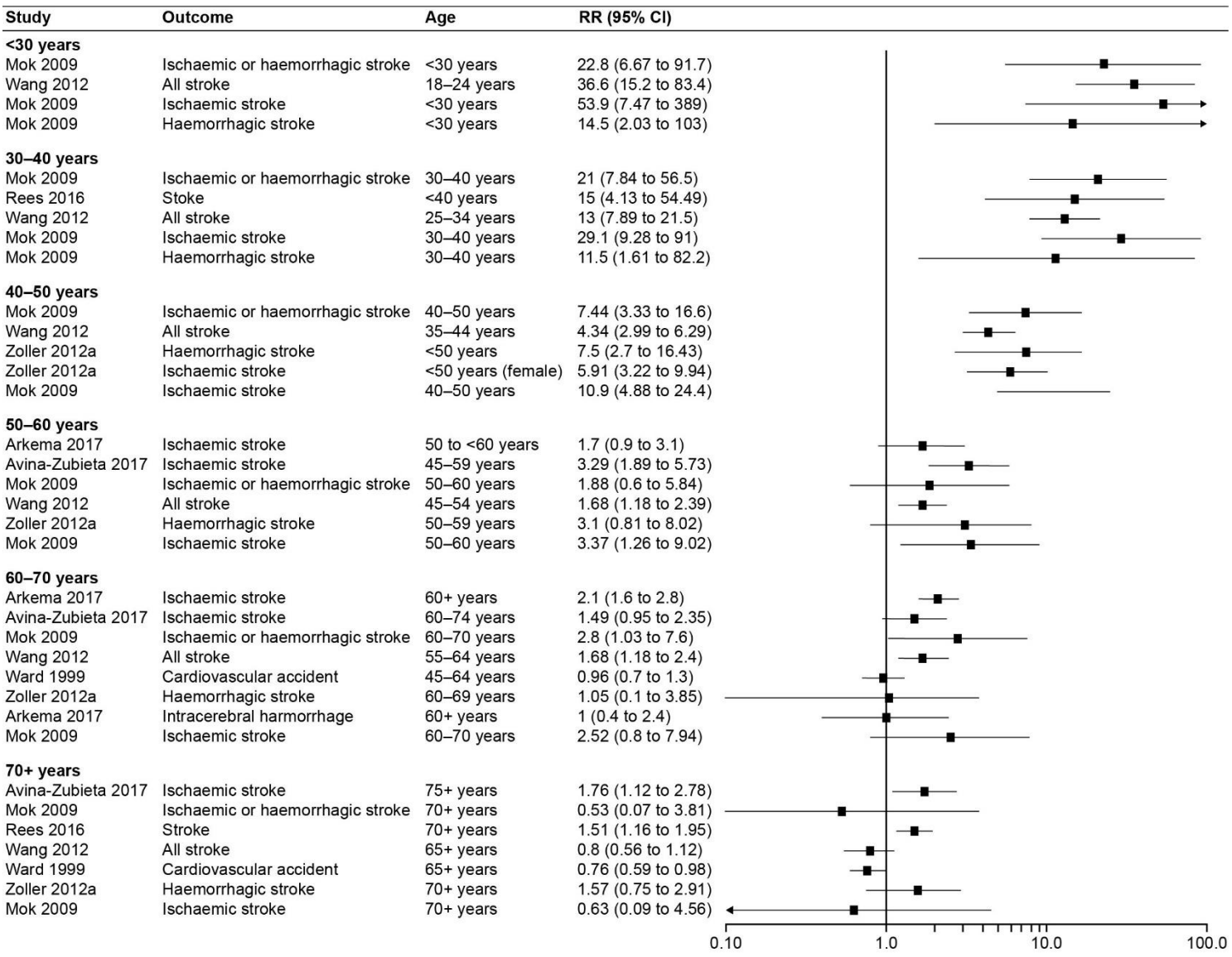
Arkema 2017[4]	2.2 (1.8 to 2.8)	2.4 (1.9 to 3.0)	2.2 (1.8 to 2.8)	-	2.2 (1.8 to 2.8)	2.2 (1.8 to 2.8)	-	2.2 (1.8 to 2.8)
Avina-Zubieta 2017[5]	2.14 (1.64 to 2.79)	2.81 (2.24 to 3.53)	2.14 (1.64 to 2.79)	-	2.14 (1.64 to 2.79)	2.14 (1.64 to 2.79)	-	2.14 (1.64 to 2.79)
Chiu 2012[12]	1.67 (1.45 to 1.91)	1.61 (1.39 to 1.87)	-	1.67 (1.45 to 1.91)	1.67 (1.45 to 1.91)	-	1.67 (1.45 to 1.91)	1.67 (1.45 to 1.91)
Krishnan 2005[19]	2.27 (1.89 to 2.73)	2.01 (1.67 to 2.42)	-	2.27 (1.89 to 2.73)	-	-	2.27 (1.89 to 2.73)	
Mok 2009[24]	3.72 (2.34 to 5.91)	3.72 (2.34 to 5.91)	-	3.72 (2.34 to 5.91)	-	3.72 (2.34 to 5.91)	-	3.72 (2.34 to 5.91)
Zoller 2012[29]	-	-	-	1.94 (1.68 to 2.24)	-	-	1.94 (1.68 to 2.24)	-
Wang 2012[27]	-	-	-	-	-	-	-	-
Liou 2014[22]	-	-	-	-	-	-	-	-
Bernatsky 2006b[9]	-	-	-	-	-	-	-	-
Subarachnoid haemorrhage								
Authors	**Main analysis**	**Least adjusted**	**Published during or after 2014**	**Published before 2014**	**Only studies with low risk of bias**	**Fatal/non-fatal**	**Non-fatal**	**Excluding cross-sectional studies**
Arkema 2017[4]	1.4 (0.5 to 3.9)	1.6 (0.6 to 4.3)	1.4 (0.5 to 3.9)	-	1.4 (0.5 to 3.9)	1.4 (0.5 to 3.9)	-	1.4 (0.5 to 3.9)
Krishnan 2005[19]	0.53 (0.32 to 0.89)	0.57 (0.34 to 0.96)	-	0.53 (0.32 to 0.89)	-	-	0.53 (0.32 to 0.89)	-
Ramagopalan 2013[25]	3.76 (3.08 to 4.55)	3.76 (3.08 to 4.55)	3.76 (3.08 to 4.55)	-	3.76 (3.08 to 4.55)	3.76 (3.08 to 4.55)	-	3.76 (3.08 to 4.55)
Wang 2012[27]	4.8 (2.66 to 8.67)	5.16 (2.97 to 8.95)	-	4.8 (2.66 to 8.67)	4.8 (2.66 to 8.67)	-	4.8 (2.66 to 8.67)	4.8 (2.66 to 8.67)
Chang 2013[11]	-	-	-	-	-	-	-	-
Bernatsky 2006b[9]	-	-	-	-	-	-	-	-
Myocardial infarction								
Authors	**Main analysis**	**Least adjusted**	**Published during or after 2014**	**Published before 2014**	**Only studies with low risk of bias**	**Fatal/non-fatal**	**Non-fatal**	**Including studies only reporting LN**
Avina-Zubieta 2017[5]	2.61 (2.12 to 3.2)	3.04 (2.5 to 3.69)	2.61 (2.12 to 3.2)	-	2.61 (2.12 to 3.2)	2.61 (2.12 to 3.2)	-	2.61 (2.12 to 3.2)
Barnado 2018[6]	2.26 (1.53 to 3.35)	2.26 (1.53 to 3.35)	2.26 (1.53 to 3.35)	-	2.26 (1.53 to 3.35)	-	2.26 (1.53 to 3.35)	2.26 (1.53 to 3.35)
Bengtsson 2012[7]	-	-	-	2.13 (1.34 to 3.7)	-	-	-	-
Cook 2018[13]	2.9 (1.5 to 5.3)	2.9 (1.5 to 5.3)	2.9 (1.5 to 5.3)	-	-	-	2.9 (1.5 to 5.3)	2.9 (1.5 to 5.3)
Faurschou 2011[15]	-	-	-	-	-	-	-	7.9 (3.8 to 15)
Hak 2009[16]	1.81 (0.75 to 4.37)	1.81 (0.75 to 4.37)	-	1.81 (0.75 to 4.37)	1.81 (0.75 to 4.37)	1.81 (0.75 to 4.37)	-	1.81 (0.75 to 4.37)
Hermansen 2017[17]	3 (2 to 4.5)	3 (2 to 4.5)	3 (2 to 4.5)	-	3 (2 to 4.5)	3 (2 to 4.5)	-	3 (2 to 4.5)
Kim 2017[18]	4.1 (3.9 to 4.1)	4.1 (3.9 to 4.1)	4.1 (3.9 to 4.1)	-	4.1 (3.9 to 4.1)	-	4.1 (3.9 to 4.1)	4.1 (3.9 to 4.1)
Lim 2018[20]	2.74 (2.28 to 3.37)	3.13 (2.63 to 3.73)	3.13 (2.63 to 3.73)	-	3.13 (2.63 to 3.73)	-	3.13 (2.63 to 3.73)	3.13 (2.63 to 3.73)

Lin 2014[21]	5.11 (2.63 to 9.92)	5.11 (2.63 to 9.92)	5.11 (2.63 to 9.92)	-	5.11 (2.63 to 9.92)	5.11 (2.63 to 9.92)	-	5.11 (2.63 to 9.92)

In the case of population overlap, an additional analysis was performed for each overlap study replacing the study used in the main analysis with the overlapping study.

LN, lupus nephritis; MI, myocardial infarction; SLE, systemic lupus erythematosus.

Supplementary Figure S1. Forest plot of risk ratios and stroke/MI in adult patients with SLE compared with the general population or healthy controls by age at SLE diagnosis, for stroke and subtypes



Descriptive analysis. No meta-analysis or synthesis was conducted.

CI, confidence interval; MI, myocardial infarction; RR, risk ratio; SLE, systemic lupus erythematosus.

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