

SUPPLEMENTARY MATERIALS 5 – Search Strategies

2024 American College of Rheumatology (ACR) Guideline for the Screening, Treatment, and Management of Lupus Nephritis

NOTE: The broad searches described below were conducted together for one ACR lupus guideline project that will result in two separate guideline publications (LN and SLE). This LN guideline is the first in this 2-part series.

Original Search 11/13/2023

Records identified from:

Databases (n=13,165)

Ovid MEDLINE (n=10,931)

Ovid Embase (n=2,228)

Duplicate records removed by librarian (n=2,804)

Final records delivered to ACR for screening (n=10,361)

Search Update 06/10/2024

Records identified from:

Databases (n=96)

Ovid MEDLINE(R) ALL (searched from 1946 to November 13, 2023, then updated June 10, 2024)

- 1 exp Lupus Erythematosus, Systemic/ or (systemic lupus erythematosus or SLE).ti,ab,kw,kf.
- 2 Lupus Nephritis/ or (lupus nephritis or "class ii lupus nephritis" or "class iii lupus nephritis" or "class iii/iv lupus nephritis" or "class iv lupus nephritis" or "class v lupus nephritis").ti,ab,kw,kf.
- 3 percutaneous kidney biopsy.ti,ab,kw,kf.
- 4 Proteinuria/ or proteinuria*.ti,ab,kw,kf.
- 5 Hematuria/ or hematuria*.ti,ab,kw,kf.
- 6 exp Renal Insufficiency/ or (renal insufficienc* or kidney insufficienc* or renal impairment or kidney impairment or renal dysfunction* or kidney dysfunction* or renal diseas* or kidney diseas* or impaired kidney function or impaired renal function).ti,ab,kw,kf.
- 7 (1 or 2) and 3 and (4 or 5 or 6)

- 8 (RAAS-I or renin-angiotensin-aldosterone system inhibition or angiotensin converting enzyme inhibitor* or angiotensin II receptor blocker* or mineralocorticoid receptor antagonist*).ti,ab,kw,kf.
- 9 exp Adrenal Cortex Hormones/ or (corticosteroid therap* or corticosteroid injection therap* or corticosteroid* or pulse therap* or methylprednisolone or glucocorticoid* or steroid* or prednisolone).ti,ab,kw,kf.
- 10 Calcineurin Inhibitors/ or (calcineurin inhibitor* or calcineurin antagonist* or calcineurin blocker*).ti,ab,kw,kf.
- 11 Mycophenolic Acid/ or (mycophenolic acid or mycophenolic mofetil or cellcept or myfortic).ti,ab,kw,kf.
- 12 Cyclophosphamide/ or (cyclophosphamide or cyclophosphane or sendoxan or cytoxan or endoxan or neosar or procytox).ti,ab,kw,kf.
- 13 Azathioprine/ or (azathioprine or imurel or imuran or immuran).ti,ab,kw,kf.
- 14 or/11-13
- 15 8 or (8 and 9) or (8 and 9 and 14) or (8 and 10)
- 16 2 and (4 or 6) and 15
- 17 belimumab.ti,ab,kw,kf.
- 18 Antibodies, Monoclonal/ or Rituximab/ or (anti-cd20 or anticd20 or rituximab or obinutuzumab or rituxan or mabthera or afutuzumab or gazyvaro or gazyva).ti,ab,kw,kf.
- 19 8 or 9 or 10 or 11 or 12 or 17 or 18
- 20 2 and 19
- 21 9 or 10 or 11 or 12 or 13 or 17 or 18
- 22 2 and 21
- 23 Anticoagulants/ or (anticoagulant* or anticoagulation).ti,ab,kw,kf.
- 24 8 or 9 or 10 or 11 or 12 or 17 or 18 or 23
- 25 2 and 4 and 24
- 26 9 or 10 or 11 or 12 or 13 or 17 or 18
- 27 2 and 26
- 28 Immunoglobulins, Intravenous/ or (intravenous immune globulin or ivig or intravenous antibodies or iv immunoglobulin* or intravenous immunoglobulin* or flebogamma or globulin or intraglobin or gammagard or gamimmune or gamimmune or privigen or sandoglobulin or venoglobulin or venimmune or iveegam or alphaglobin or endobulin or gammonativ).ti,ab,kw,kf.
- 29 Leflunomide/ or (leflunomide or arava).ti,ab,kw,kf.
- 30 9 or 10 or 11 or 12 or 17 or 18 or 28 or 29

- 31 2 and 30
- 32 Thrombotic Microangiopathies/ or (thrombotic microangiopathy or thrombotic microangiopathies).ti,ab,kw,kf.
- 33 Antibodies, Antiphospholipid/ or Antiphospholipid Syndrome/ or (Hughes syndrome or antiphospholipid antibody syndrome or anti-phospholipid antibody syndrome or anti-phospholipid syndrome or anti phospholipid antibody syndrome or antiphospholipid autoantibod* or phospholipid autoantibod* or antiphospholipid antibod*).ti,ab,kw,kf.
- 34 1 and 23 and 32 and 33
- 35 1 and 4 and 8
- 36 Hydroxychloroquine/ or (hydroxychloroquine or HCQ or oxychlorochin or oxychloroquine or hydorxychlorochin or plaquenil).ti,ab,kw,kf.
- 37 2 and 36
- 38 exp Urinalysis/ or (urinalysis or urinalyses or urine collection or urine or urine protein).ti,ab,kw,kf.
- 39 1 and 38
- 40 (anti-ds-DNA or anti-ds DNA).ti,ab,kw,kf.
- 41 Complement C3/ or exp Complement C4/ or (complement c3 or complement c4).ti,ab,kw,kf.
- 42 2 and 40 and 41
- 43 Renal Dialysis/ or (Renal dialys* or hemodialys* or extracorporeal dialys* or peritoneal dialys*).ti,ab,kw,kf.
- 44 Kidney Failure, Chronic/ or (End-stage kidney disease or end stage kidney disease or chronic kidney failure or end stage renal disease or end-stage renal failure or chronic renal failure or ESRD).ti,ab,kw,kf.
- 45 Kidney Transplantation/ or (Renal transplant* or kidney graft* or kidney transplant*).ti,ab,kw,kf.
- 46 (1 or 2) and 43 and 44 and 45
- 47 (1 or 2) and 43 and 44
- 48 Renal Replacement Therapy/ or Continuous Renal Replacement Therapy/ or Hybrid Renal Replacement Therapy/ or Intermittent Renal Replacement Therapy/ or (renal replacement therap* or kidney replacement therap*).ti,ab,kw,kf.
- 49 Rheumatology/ or rheumatol*.ti,ab,kw,kf.
- 50 2 and 48 and 49
- 51 2 and 36 and 45
- 52 2 and 44 and 45

- 53 Warfarin/ or (Apo-warfarin or aldocumar or gen-warfarin or warfant or coumadin or marevan or warfarin or coumadine or tedicumar).ti,ab,kw,kf.
- 54 2 and 23 and 33 and 53
- 55 Sirolimus/ or (Sirolimus or rapamycin or "I-2190A" or "I 2190A" or "I2190A" or "AY 22-989" or "AY 22 989" or "AY 22989" or rapamune).ti,ab,kw,kf.
- 56 Abatacept/ or ("CTLA-4-Ig" or "cytotoxic T lymphocyte associated antigen 4 immunoglobulin" or "CTLA4-Ig" or "CTLA4-Ig immunoconjugate" or "CTLA4-Fc" or "BMS224818" or "BMS-224818" or "BMS 224818" or belatacept or orenicia or "BMS 188667" or "BMS-188667" or "BMS188667" or "LEA29Y" or Nulojix or abatacept).ti,ab,kw,kf.
- 57 (eculizumab or elizaria or soliris or alexion).ti,ab,kw,kf.
- 58 18 or 28 or 55 or 56 or 57
- 59 2 and 33 and 45 and 58
- 60 7 or 16 or 20 or 22 or 25 or 27 or 31 or 34 or 35 or 37 or 39 or 42 or 46 or 47 or 50 or 51 or 52 or 54 or 59
- 61 exp animals/ not humans.sh.
- 62 60 not 61
- 63 "case report".ti. or "case report*".pt.
- 64 62 not 63
- 65 "meeting abstract*".pt. or ("meeting abstract" or "conference abstract" or "conference proceeding*").ti.
- 66 64 not 65
- 67 (exp adolescent/ or exp child/ or exp infant/ or (infant disease* or childhood disease*).ti,ab,kf. or (adolescen* or babies or baby or boy? or boyfriend or boyhood or girlfriend or girlhood or child* or girl? or infan* or juvenil* or kid? or minors or minors* or neonat* or neo-nat* or newborn* or new-born* or paediatric* or peadiatric* or pediatric* or perinat* or preschool* or puber* or pubescen* or school* or teen* or toddler? or underage? or under-age? or youth*).ti,ab,kf. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).jn,jw. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).in.) not (exp adult/ or adult.ti,ab,kf.)
- 68 66 not 67
- 69 limit 68 to yr="2010 -Current"
- 70 (exp adult/ or adult.ti,ab,kf.) not (exp adolescent/ or exp child/ or exp infant/ or (infant disease* or childhood disease*).ti,ab,kf. or (adolescen* or babies or baby or boy? or boyfriend or boyhood or girlfriend or girlhood or child* or girl? or infan* or juvenil* or kid? or minors or minors* or neonat* or neo-nat* or newborn* or new-born* or paediatric* or peadiatric* or pediatric* or perinat* or preschool* or puber* or pubescen* or school* or teen* or toddler? or underage? or under-age? or youth*).ti,ab,kf. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).jn,jw. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).in.)

- 71 66 not 70
- 72 limit 69 to english language
- 73 limit 71 to english language
- 74 ((assess* adj2 (instrument* or tool*)) or "activity measure*" or "damage measure*").ti,ab,kw,kf.
- 75 1 and 74
- 76 anifrolumab.ti,ab,kw,kf.
- 77 Methotrexate/ or (methotrexate or amethopterin or mexate).ti,ab,kw,kf.
- 78 9 or 10 or 11 or 12 or 13 or 17 or 18 or 76 or 77
- 79 ("pneumocystis jirovecii pneumonia prophylaxis" or "pjp prophylaxis").ti,ab,kw,kf.
- 80 1 and 78 and 79
- 81 Prednisone/ or (prednisone or dehydrocortisone or delta-cortisone or rectodelt or "prednison hexal" or sterapred or ultracorten or winpred or apo-prednisone or cortan or cortancyl or panafcort or cutason or decortin or dacortin or decortisyl or encortone or encorton or enkortolon or kortancyl or "liquid pred" or meticorten or orasone or panasol or "predni tablinen" or prednidib or predniment or "prednison acsis" or pronisone or sone or "prednison galen").ti,ab,kw,kf.
- 82 1 and 81
- 83 1 and 9 and 81
- 84 1 and 36 and 81
- 85 1 and 36
- 86 Remission Induction/ or (remission or "low disease activity").ti,ab,kw,kf.
- 87 discontinu*.ti,ab,kw,kf.
- 88 1 and 86 and 87
- 89 Leukopenia/ or (leukopenia or leukopenias or leukocytopenia or leukocytopenias).ti,ab,kw,kf.
- 90 exp Biological Therapy/ or (biologic* therap* or biotherap*).ti,ab,kw,kf.
- 91 9 or 11 or 13 or 77 or 90
- 92 1 and 89 and 91
- 93 Thrombocytopenia/ or (thrombocytopenia or thrombocytopenias or thrombopenia or thrombopenias).ti,ab,kw,kf.
- 94 1 and 93

- 95 Anemia, Hemolytic, Autoimmune/ or ("autoimmune hemolytic anemia" or "autoimmune hemolytic anemias" or "autoimmune haemolytic anaemias" or "cold agglutinin disease" or "cold agglutinin diseases" or "cold antibody disease" or "cold antibody diseases").ti,ab,kw,kf.
- 96 1 and 95
- 97 Myelitis, Transverse/ or myelitis.ti,ab,kw,kf.
- 98 Fibrinolytic Agents/ or (thrombolytic drug* or fibrinolytic drug* or antithrombotic agent* or antithrombotic drug* or thrombolytic agent* or fibrinolytics or antithrombotics).ti,ab,kw,kf.
- 99 11 or 12 or 18 or 76 or 98
- 100 1 and 9 and 97 and 99
- 101 Neuromyelitis Optica/ or (Optic neuritis or neuromyelitis optica).ti,ab,kw,kf.
- 102 1 and 9 and 99 and 101
- 103 Seizures/ or seizure*.ti,ab,kw,kf.
- 104 1 and 9 and 103
- 105 exp Confusion/ or (confusion or "acute confusional state" or delirium* or disorient* or bewilder*).ti,ab,kw,kf.
- 106 11 or 12 or 17 or 18 or 76
- 107 1 and 9 and 105 and 106
- 108 Psychotic Disorders/ or (psychotic disorder* or psychosis or psychoses).ti,ab,kw,kf.
- 109 11 or 12 or 13 or 17 or 18 or 28 or 76
- 110 1 and 9 and 108 and 109
- 111 Mononeuropathies/ or ("Mononeuritis multiplex" or mononeuropathy or mononeuropathies or mononeuritis or mononeuritides).ti,ab,kw,kf.
- 112 11 or 12 or 17 or 18 or 76 or 98
- 113 1 and 9 and 111 and 112
- 114 Small Fiber Neuropathy/ or ("small fiber neuropathy" or "small fiber neuropathies" or "small fibre neuropathy" or "small fibre neuropathies" or "small nerve fiber neuropathy").ti,ab,kw,kf.
- 115 9 or 11 or 13 or 17 or 28 or 76
- 116 1 and 114 and 115
- 117 Cognitive Dysfunction/ or ("cognitive dysfunction*" or "cognitive impairment*" or "cognitive disorder*" or "cognitive decline" or "mental deterioration*").ti,ab,kw,kf.
- 118 Cognitive Training/ or (cognitive training or cognitive rehabilitation or memory training or brain training).ti,ab,kw,kf.
- 119 9 or 11 or 13 or 18 or 76 or 98

- 120 1 and 117 and 118 and 119
- 121 Ischemic Stroke/ or ("ischemic stroke*" or "ischaemic stroke*" or "cryptogenic stroke*" or "wake-up stroke*" or "cryptogenic embolism stroke*").ti,ab,kw,kf.
- 122 9 or 11 or 13 or 23
- 123 1 and 121 and 122
- 124 Quinacrine/ or (atebrin or mepacrine or quinacrine or atabrine or acrichine).ti,ab,kw,kf.
- 125 Chloroquine/ or (chloroquine or chlorochin or chingamin or khingamin or nivaquine or aralen or arequin or arechine).ti,ab,kw,kf.
- 126 Steroids/ or topical steroid*.ti,ab,kw,kf.
- 127 Lupus Erythematosus, Cutaneous/ or ("cutaneous lupus erythematosus" or ACLE or DLE or SCLE).ti,ab,kw,kf.
- 128 11 or 13 or 17 or 18 or 76 or 77 or 124 or 125
- 129 1 and 36 and 126 and 127 and 128
- 130 Dapsone/ or (dapsone or dadps or sulfonyldianiline or diaphenylsulfone or sulfona or "dapson-fatol" or disulone or avlosulfone or "dapsoderm-x").ti,ab,kw,kf.
- 131 exp Retinoids/ or retinoid*.ti,ab,kw,kf.
- 132 Thalidomide/ or (thalidomide or sedoval or thalomid).ti,ab,kw,kf.
- 133 Lenalidomide/ or (lenalidomide or revlimid or revimid or "cc-5013" or "cc5013" or "cc 5013").ti,ab,kw,kf.
- 134 Janus Kinase Inhibitors/ or ("JAK inhibitor*" or "janus kinase inhibitor*" or "JAK-I").ti,ab,kw,kf.
- 135 11 or 13 or 17 or 18 or 76 or 77 or 124 or 125 or 130 or 131 or 132 or 133 or 134
- 136 1 and 36 and 126 and 127 and 135
- 137 Colchicine/ or colchicine.ti,ab,kw,kf.
- 138 Skin Diseases, Vesiculobullous/ or (vesiculobullous skin disease* or vesiculobullous dermatos* or bullous skin disease* or vesicular skin disease* or subcorneal pustular dermatos* or bullous lupus).ti,ab,kw,kf.
- 139 9 or 130 or 137
- 140 1 and 138 and 139
- 141 Chilblains/ or (chilblain* or pernio or pernios or perniosis or pernioses).ti,ab,kw,kf.
- 142 Calcium Channel Blockers/ or ("calcium channel blocking drug*" or "calcium channel antagonist*" or "calcium channel blocker*" or "calcium inhibitor*" or "calcium antagonist*" or "calcium blockader*" or "calcium agonist*").ti,ab,kw,kf.
- 143 10 or 11 or 13 or 17 or 36 or 76 or 77 or 125 or 126 or 130 or 131 or 132 or 133 or 142

- 144 1 and 141 and 143
- 145 Skin Diseases, Vascular/ or ("vascular skin disease*" or cutaneous vasculitis).ti,ab,kw,kf.
- 146 1 and 143 and 145
- 147 "focal active alopecia".ti,ab,kw,kf.
- 148 Triamcinolone Acetonide/ or (intralesional kenalog or triamcinolone acetonide or "cinonide" or "tricot-40" or "tricot 40" or "tricot40" or "kenalog 40" or "azmacort" or "kenacort a").ti,ab,kw,kf.
- 149 1 and 147 and (126 or 148)
- 150 Oral Ulcer/ or (oral ulcer* or mouth ulcer*).ti,ab,kw,kf.
- 151 1 and 150 and (126 or 148)
- 152 exp Anti-Inflammatory Agents, Non-Steroidal/ or (NSAID or "nonsteroidal anti-inflammatory agent*" or "nonsteroidal anti inflammatory agent*" or "nonsteroidal antiinflammatory agent*" or "non-steroidal anti-inflammatory agent*" or "Non Steroidal Anti Inflammatory Agent*" or Anti-Inflammatory Analgesics" or "Aspirin-Like Agent*").ti,ab,kw,kf.
- 153 ("anti-il-1" or "anti-il 1").ti,ab,kw,kf.
- 154 Pericardectomy/ or (pericardectomy or pericardectomies or pericardotomy or pericardotomies).ti,ab,kw,kf.
- 155 Pericarditis/ or (pericarditis or pleuropericarditis).ti,ab,kw,kf.
- 156 9 or 11 or 12 or 13 or 17 or 18 or 76 or 77 or 125 or 152 or 153 or 154
- 157 1 and 155 and 156
- 158 exp Pleural Diseases/ or (pleural disease* or pleural effusion or pleuritic pain).ti,ab,kw,kf.
- 159 9 or 11 or 12 or 13 or 17 or 18 or 76 or 77 or 125 or 152 or 153
- 160 1 and 158 and 159
- 161 Arthritis/ or (arthritis or "lupus arthritis").ti,ab,kw,kf.
- 162 exp Tendinopathy/ or (tendonitis or tendinopathy or tendinopathies or tendinosis or tendonoses).ti,ab,kw,kf.
- 163 Ultrasonography/ or (diagnostic ultrasound* or ultrasound imaging or echotomography or ultrasonic imaging or medial sonography or ultrasonographic imaging or ultrasonic diagnoses or ultrasonic diagnosis or computer echotomography or ultrasonic tomography).ti,ab,kw,kf.
- 164 exp Magnetic Resonance Imaging/ or (mri or "magnetic resonance imaging" or "nmr imaging" or "mr tomography" or "nmr tomography" or "chemical shift imaging" or "magnetic resonance image" or "mri scan" or "mri scans" or fmri or "functional mri").ti,ab,kw,kf.
- 165 1 and (161 or 162) and (163 or 164)
- 166 9 or 10 or 11 or 13 or 17 or 18 or 29 or 36 or 59 or 76 or 77 or 152

167 1 and 161 and 166

168 tocilizumab.ti,ab,kw,kf.

169 10 or 11 or 12 or 13 or 17 or 18 or 29 or 59 or 76 or 77 or 134 or 168

170 1 and 9 and 36 and 161 and 169

171 ("Jaccoud's arthropathy" or "Jaccoud arthropathy").ti,ab,kw,kf.

172 Surgical Procedures, Operative/ or (surgical or surgery or operat* or arthroplast* or "valvular surgery" or resect*).ti,ab,kw,kf.

173 11 or 13 or 77 or 172

174 1 and 171 and 173

175 Plasmapheresis/ or (plasmapheres* or immunoadsorption or plasma adsorption*).ti,ab,kw,kf.

176 Lupus Vasculitis, Central Nervous System/ or (lupus adj2 vasculitis).ti,ab,kw,kf.

177 9 or 10 or 11 or 12 or 13 or 17 or 18 or 28 or 76 or 77 or 175

178 176 and 177

179 Myocarditis/ or (myocarditis or carditis).ti,ab,kw,kf.

180 9 or 11 or 12 or 13 or 17 or 18 or 28 or 76

181 1 and 179 and 180

182 exp Endocarditis/ or (endocarditis or "libman sacks endocarditis" or "libman-sacks endocarditis").ti,ab,kw,kf.

183 9 or 17 or 18 or 23 or 76 or 172

184 1 and 182 and 183

185 75 or 80 or 82 or 83 or 84 or 85 or 88 or 92 or 94 or 96 or 100 or 102 or 104 or 107 or 110 or 113 or 116 or 120 or 123 or 129 or 136 or 140 or 144 or 146 or 149 or 151 or 157 or 160 or 165 or 167 or 170 or 174 or 178 or 181 or 184

186 185 not 61

187 186 not 63

188 187 not 65

189 limit 188 to english language

Ovid Embase (searched from 1974 to November 13, 2023, then updated June 10, 2024)

1 exp systemic lupus erythematosus/ or (systemic lupus erythematosus or SLE).ti,ab,kw,kf.

- 2 exp lupus nephritis/ or (lupus nephritis or "class ii lupus nephritis" or "class iii lupus nephritis" or "class iii/iv lupus nephritis" or "class iv lupus nephritis" or "class v lupus nephritis").ti,ab,kw,kf.
- 3 percutaneous kidney biopsy.ti,ab,kw,kf.
- 4 proteinuria/ or proteinuria*.ti,ab,kw,kf.
- 5 hematuria/ or hematuria*.ti,ab,kw,kf.
- 6 kidney failure/ or (renal insufficienc* or kidney insufficienc* or renal impairment or kidney impairment or renal dysfunction* or kidney dysfunction* or renal diseas* or kidney diseas* or impaired kidney function or impaired renal function).ti,ab,kw,kf.
- 7 (1 or 2) and 3 and (4 or 5 or 6)
- 8 (RAAS-I or renin-angiotensin-aldosterone system inhibition or angiotensin converting enzyme inhibitor* or angiotensin II receptor blocker* or mineralocorticoid receptor antagonist*).ti,ab,kw,kf.
- 9 exp corticosteroid/ or (corticosteroid therap* or corticosteroid injection therap* or corticosteroid* or pulse therap* or methylprednisolone or glucocorticoid* or steroid* or prednisolone).ti,ab,kw,kf.
- 10 calcineurin inhibitor/ or (calcineurin inhibitor* or calcineurin antagonist* or calcineurin blocker*).ti,ab,kw,kf.
- 11 mycophenolic acid/ or (mycophenolic acid or mycophenolic mofetil or cellcept or myfortic).ti,ab,kw,kf.
- 12 cyclophosphamide/ or (cyclophosphamide or cyclophosphane or sendoxan or cytoxan or endoxan or neosar or procytox).ti,ab,kw,kf.
- 13 azathioprine/ or (azathioprine or imurel or imuran or immuran).ti,ab,kw,kf.
- 14 or/11-13
- 15 8 or (8 and 9) or (8 and 9 and 14) or (8 and 10)
- 16 2 and (4 or 6) and 15
- 17 belimumab.ti,ab,kw,kf.
- 18 monoclonal antibody/ or rituximab/ or (anti-cd20 or anticd20 or rituximab or obinutuzumab or rituxan or mabthera or afutuzumab or gazyvaro or gazyva).ti,ab,kw,kf.
- 19 8 or 9 or 10 or 11 or 12 or 17 or 18
- 20 2 and 19
- 21 9 or 10 or 11 or 12 or 13 or 17 or 18
- 22 2 and 21
- 23 anticoagulant agent/ or (anticoagulant* or anticoagulation).ti,ab,kw,kf.
- 24 8 or 9 or 10 or 11 or 12 or 17 or 18 or 23

- 25 2 and 4 and 24
- 26 9 or 10 or 11 or 12 or 13 or 17 or 18
- 27 2 and 26
- 28 immunoglobulins/ or (intravenous immune globulin or ivig or intravenous antibodies or iv immunoglobulin* or intravenous immunoglobulin* or flebogamma or globulin or intraglobin or gammagard or gamimmune or gamimmune or privigen or sandoglobulin or venoglobulin or venimmune or iveegam or alphaglobin or endobulin or gammonativ).ti,ab,kw,kf.
- 29 leflunomide/ or (leflunomide or arava).ti,ab,kw,kf.
- 30 9 or 10 or 11 or 12 or 17 or 18 or 28 or 29
- 31 2 and 30
- 32 thrombotic microangiopathy/ or (thrombotic microangiopathy or thrombotic microangiopathies).ti,ab,kw,kf.
- 33 phospholipid antibody/ or antiphospholipid syndrome/ or (Hughes syndrome or antiphospholipid antibody syndrome or anti-phospholipid antibody syndrome or anti-phospholipid syndrome or anti phospholipid antibody syndrome or antiphospholipid autoantibod* or phospholipid autoantibod* or antiphospholipid antibod*).ti,ab,kw,kf.
- 34 1 and 23 and 32 and 33
- 35 1 and 4 and 8
- 36 hydroxychloroquine/ or (hydroxychloroquine or HCQ or oxychlorochin or oxychloroquine or hydorxychlorochin or plaquenil).ti,ab,kw,kf.
- 37 2 and 36
- 38 urinalysis/ or (urinalysis or urinalyses or urine collection or urine or urine protein).ti,ab,kw,kf.
- 39 1 and 38
- 40 (anti-ds-DNA or anti-ds DNA).ti,ab,kw,kf.
- 41 complement component C3/ or exp complement component C4/ or (complement c3 or complement c4).ti,ab,kw,kf.
- 42 2 and 40 and 41
- 43 hemodialysis/ or (Renal dialys* or hemodialys* or extracorporeal dialys* or peritoneal dialys*).ti,ab,kw,kf.
- 44 chronic kidney failure/ or (End-stage kidney disease or end stage kidney disease or chronic kidney failure or end stage renal disease or end-stage renal failure or chronic renal failure or ESRD).ti,ab,kw,kf.
- 45 kidney transplantation/ or (Renal transplant* or kidney graft* or kidney transplant*).ti,ab,kw,kf.

- 46 2 and 43 and 44 and 45
- 47 2 and 43 and 44
- 48 renal replacement therapy/ or continuous renal replacement therapy/ or extended daily dialysis/ or intermittent renal replacement therapy/ or (renal replacement therap* or kidney replacement therap*).ti,ab,kw,kf.
- 49 rheumatology/ or rheumatol*.ti,ab,kw,kf.
- 50 2 and 48 and 49
- 51 2 and 36 and 45
- 52 2 and 44 and 45
- 53 warfarin/ or (Apo-warfarin or aldocumar or gen-warfarin or warfant or coumadin or marevan or warfarin or coumadine or tedicumar).ti,ab,kw,kf.
- 54 2 and 23 and 33 and 53
- 55 sirolimus/ or (Sirolimus or rapamycin or "I-2190A" or "I 2190A" or "I2190A" or "AY 22-989" or "AY 22 989" or "AY 22989" or rapamune).ti,ab,kw,kf.
- 56 abatacept/ or ("CTLA-4-Ig" or "cytotoxic T lymphocyte associated antigen 4 immunoglobulin" or "CTLA4-Ig" or "CTLA4-Ig immunoconjugate" or "CTLA4-Fc" or "BMS224818" or "BMS-224818" or "BMS 224818" or belatacept or orenicia or "BMS 188667" or "BMS-188667" or "BMS188667" or "LEA29Y" or Nulojix or abatacept).ti,ab,kw,kf.
- 57 (eculizumab or elizaria or soliris or alexion).ti,ab,kw,kf.
- 58 18 or 28 or 55 or 56 or 57
- 59 2 and 33 and 45 and 58
- 60 7 or 16 or 20 or 22 or 25 or 27 or 31 or 34 or 35 or 37 or 39 or 42 or 46 or 47 or 50 or 51 or 52 or 54 or 59
- 61 exp animals/ not humans.sh.
- 62 60 not 61
- 63 "case report".ti. or "case report*".pt.
- 64 62 not 63
- 65 "meeting abstract*".pt. or ("meeting abstract" or "conference abstract" or "conference proceeding*").ti.
- 66 64 not 65
- 67 (exp adolescent/ or exp child/ or exp infant/ or (infant disease* or childhood disease*).ti,ab,kf. or (adolescen* or babies or baby or boy? or boyfriend or boyhood or girlfriend or girlhood or child* or girl? or infan* or juvenil* or kid? or minors or minors* or neonat* or neo-nat* or newborn* or new-born* or paediatric* or peadiatric* or pediatric* or perinat* or preschool* or puber* or pubescen* or school* or teen* or toddler? or underage? or under-age? or youth*).ti,ab,kf.

or (pediatric* or paediatric* or infan* or child* or adolescen* or young).jn,jw. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).in.) not (exp adult/ or adult.ti,ab,kf.)

68 66 not 67

69 limit 68 to yr="2010-Current"

70 (exp adult/ or adult.ti,ab,kf.) not (exp adolescent/ or exp child/ or exp infant/ or (infant disease* or childhood disease*).ti,ab,kf. or (adolescen* or babies or baby or boy? or boyfriend or boyhood or girlfriend or girlhood or child* or girl? or infan* or juvenil* or kid? or minors or minors* or neonat* or neo-nat* or newborn* or new-born* or paediatric* or peadiatric* or pediatric* or perinat* or preschool* or puber* or pubescen* or school* or teen* or toddler? or underage? or under-age? or youth*).ti,ab,kf. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).jn,jw. or (pediatric* or paediatric* or infan* or child* or adolescen* or young).in.)

71 66 not 70

72 limit 69 to english language

73 limit 71 to english language

74 ((assess* adj2 (instrument* or tool*)) or "activity measure*" or "damage measure*").ti,ab,kw,kf.

75 1 and 74

76 anifrolumab.ti,ab,kw,kf.

77 methotrexate/ or (methotrexate or amethopterin or mexate).ti,ab,kw,kf.

78 9 or 10 or 11 or 12 or 13 or 17 or 18 or 76 or 77

79 ("pneumocystis jirovecii pneumonia prophylaxis" or "ppp prophylaxis").ti,ab,kw,kf.

80 1 and 78 and 79

81 prednisone/ or (prednisone or dehydrocortisone or delta-cortisone or rectodelt or "prednison hexal" or sterapred or ultracorten or winpred or apo-prednisone or cortan or cortancyl or panafcort or cutason or decortin or dacortin or decortisyl or encortone or encorton or enkortolon or kortancyl or "liquid pred" or meticorten or orasone or panasol or "predni tablinen" or prednidib or predniment or "prednison acsis" or pronisone or sone or "prednison galen").ti,ab,kw,kf.

82 1 and 81

83 1 and 9 and 81

84 1 and 36 and 81

85 1 and 36

86 remission/ or (remission or "low disease activity").ti,ab,kw,kf.

87 discontinu*.ti,ab,kw,kf.

88 1 and 86 and 87

- 89 leukopenia/ or (leukopenia or leukopenias or leukocytopenia or leukocytopenias).ti,ab,kw,kf.
- 90 biological therapy/ or (biologic* therap* or biotherap*).ti,ab,kw,kf.
- 91 9 or 11 or 13 or 77 or 90
- 92 1 and 89 and 91
- 93 thrombocytopenia/ or (thrombocytopenia or thrombocytopenias or thrombopenia or thrombopenias).ti,ab,kw,kf.
- 94 1 and 93
- 95 autoimmune hemolytic anemia/ or ("autoimmune hemolytic anemia" or "autoimmune hemolytic anemias" or "autoimmune haemolytic anaemias" or "cold agglutinin disease" or "cold agglutinin diseases" or "cold antibody disease" or "cold antibody diseases").ti,ab,kw,kf.
- 96 1 and 95
- 97 transverse myelitis/ or myelitis.ti,ab,kw,kf.
- 98 fibrinolytic agents/ or (thrombolytic drug* or fibrinolytic drug* or antithrombotic agent* or antithrombotic drug* or thrombolytic agent*).ti,ab,kw,kf.
- 99 11 or 12 or 18 or 76 or 98
- 100 1 and 9 and 97 and 99
- 101 myelo optic neuropathy/ or (Optic neuritis or neuromyelitis optica).ti,ab,kw,kf.
- 102 1 and 9 and 99 and 101
- 103 seizure/ or seizure*.ti,ab,kw,kf.
- 104 1 and 9 and 103
- 105 exp confusion/ or (confusion or "acute confusional state" or delirium* or disorient* or bewilder*).ti,ab,kw,kf.
- 106 11 or 12 or 17 or 18 or 76
- 107 1 and 9 and 105 and 106
- 108 psychosis/ or (psychotic disorder* or psychosis or psychoses).ti,ab,kw,kf.
- 109 11 or 12 or 13 or 17 or 18 or 28 or 76
- 110 1 and 9 and 108 and 109
- 111 mononeuropathy/ or ("Mononeuritis multiplex" or mononeuropathy or mononeuropathies or mononeuritis or mononeuritides).ti,ab,kw,kf.
- 112 11 or 12 or 17 or 18 or 76 or 98
- 113 1 and 9 and 111 and 112

- 114 small fiber neuropathy/ or ("small fiber neuropathy" or "small fiber neuropathies" or "small fibre neuropathy" or "small fibre neuropathies" or "small nerve fiber neuropathy").ti,ab,kw,kf.
- 115 9 or 11 or 13 or 17 or 28 or 76
- 116 1 and 114 and 115
- 117 cognitive defect/ or ("cognitive dysfunction*" or "cognitive impairment*" or "cognitive disorder*" or "cognitive decline" or "mental deterioration*").ti,ab,kw,kf.
- 118 cognitive rehabilitation/ or (cognitive training or cognitive rehabilitation or memory training or brain training).ti,ab,kw,kf.
- 119 9 or 11 or 13 or 18 or 76 or 98
- 120 1 and 117 and 118 and 119
- 121 ischemic stroke/ or ("ischemic stroke*" or "ischaemic stroke*" or "cryptogenic stroke*" or "wake-up stroke*" or "cryptogenic embolism stroke*").ti,ab,kw,kf.
- 122 9 or 11 or 13 or 23
- 123 1 and 121 and 122
- 124 mepacrine/ or (atebrin or mepacrine or quinacrine or atabrine or acrichine).ti,ab,kw,kf.
- 125 chloroquine/ or (chloroquine or chlorochin or chingamin or khingamin or nivaquine or aralen or arequin or arechine).ti,ab,kw,kf.
- 126 steroid/ or topical steroid*.ti,ab,kw,kf.
- 127 skin lupus erythematosus/ or ("Cutaneous lupus erythematosus" or ACLE or DLE or SCLE).ti,ab,kw,kf.
- 128 11 or 13 or 17 or 18 or 76 or 77 or 124 or 125
- 129 1 and 36 and 126 and 127 and 128
- 130 dapsone/ or (dapsone or dadps or sulfonyldianiline or diaphenylsulfone or sulfona or "dapson-fatol" or disulone or avlosulfone or "dapsoderm-x").ti,ab,kw,kf.
- 131 exp retinoid/ or retinoid*.ti,ab,kw,kf.
- 132 thalidomide/ or (thalidomide or sedoval or thalomid).ti,ab,kw,kf.
- 133 lenalidomide/ or (lenalidomide or revlimid or revimid or "cc-5013" or "cc5013" or "cc 5013").ti,ab,kw,kf.
- 134 Janus kinase inhibitor/ or ("JAK inhibitor*" or "janus kinase inhibitor*" or "JAK-I").ti,ab,kw,kf.
- 135 11 or 13 or 17 or 18 or 76 or 77 or 124 or 125 or 130 or 131 or 132 or 133 or 134
- 136 1 and 36 and 126 and 127 and 135
- 137 colchicine/ or colchicine.ti,ab,kw,kf.

- 138 bullous skin disease/ or (vesiculobullous skin disease* or vesiculobullous dermatos* or bullous skin disease* or vesicular skin disease* or subcorneal pustular dermatos* or bullous lupus).ti,ab,kw,kf.
- 139 9 or 130 or 137
- 140 1 and 138 and 139
- 141 (chilblain* or pernio or pernios or perniosis or pernioses).ti,ab,kw,kf.
- 142 calcium channel blocking agent/ or ("calcium channel blocking drug*" or "calcium channel antagonist*" or "calcium channel blocker*" or "calcium inhibitor*" or "calcium antagonist*" or "calcium blockader*").ti,ab,kw,kf.
- 143 10 or 11 or 13 or 17 or 36 or 76 or 77 or 125 or 126 or 130 or 131 or 132 or 133 or 142
- 144 1 and 141 and 143
- 145 skin blood vessel disorder/ or ("vascular skin disease*" or cutaneous vasculitis).ti,ab,kw,kf.
- 146 1 and 143 and 145
- 147 "focal active alopecia".ti,ab,kw,kf.
- 148 triamcinolone acetonide/ or (intralesional kenalog or triamcinolone acetonide or "cinonide" or "tricort-40" or "tricort 40" or "tricort40" or "kenalog 40" or "azmacort" or "kenacort a").ti,ab,kw,kf.
- 149 1 and 147 and (126 or 148)
- 150 mouth ulcer/ or (oral ulcer* or mouth ulcer*).ti,ab,kw,kf.
- 151 1 and 150 and (126 or 148)
- 152 nonsteroid antiinflammatory agent/ or (NSAID or "nonsteroidal anti-inflammatory agent*" or "nonsteroidal anti inflammatory agent*" or "nonsteroidal antiinflammatory agent*" or "non-steroidal anti-inflammatory agent*" or "Non Steroidal Anti Inflammatory Agent*or Anti-Inflammatory Analgesics" or "Aspirin-Like Agent*").ti,ab,kw,kf.
- 153 ("anti-il-1" or "anti-il 1").ti,ab,kw,kf.
- 154 pericardectomy/ or (pericardectomy or pericardectomies or pericardotomy or pericardotomies).ti,ab,kw,kf.
- 155 pericarditis/ or (pericarditis or pleuropericarditis).ti,ab,kw,kf.
- 156 9 or 11 or 12 or 13 or 17 or 18 or 76 or 77 or 125 or 152 or 153 or 154
- 157 1 and 155 and 156
- 158 pleura disease/ or (pleural disease* or pleural effusion or pleuritic pain).ti,ab,kw,kf.
- 159 9 or 11 or 12 or 13 or 17 or 18 or 76 or 77 or 125 or 152 or 153
- 160 1 and 158 and 159
- 161 arthritis/ or (arthritis or "lupus arthritis").ti,ab,kw,kf.

162 exp tendinitis/ or (tendonitis or tendinopathy or tendinopathies or tendinosis or tendonoses).ti,ab,kw,kf.

163 echography/ or (diagnostic ultrasound* or ultrasound imaging or echotomography or ultrasonic imaging or medial sonography or ultrasonographic imaging or ultrasonic diagnoses or ultrasonic diagnosis or computer echotomography or ultrasonic tomography).ti,ab,kw,kf.

164 exp nuclear magnetic resonance imaging/ or (mri or "magnetic resonance imaging" or "nmr imaging" or "mr tomography" or "nmr tomography" or "chemical shift imaging" or "magnetic resonance image" or "mri scan" or "mri scans" or fmri or "functional mri").ti,ab,kw,kf.

165 1 and (161 or 162) and (163 or 164)

166 9 or 10 or 11 or 13 or 17 or 18 or 29 or 36 or 59 or 76 or 77 or 152

167 1 and 161 and 166

168 tocilizumab.ti,ab,kw,kf.

169 10 or 11 or 12 or 13 or 17 or 18 or 29 or 59 or 76 or 77 or 134 or 168

170 1 and 9 and 36 and 161 and 169

171 ("Jaccoud's arthropathy" or "Jaccoud arthropathy").ti,ab,kw,kf.

172 surgery/ or (surgical or surgery or operative or arthroplast* or "valvular surgery").ti,ab,kw,kf.

173 11 or 13 or 77 or 172

174 1 and 171 and 173

175 plasmapheresis/ or (plasmapheres* or immunoadsorption or plasma adsorption*).ti,ab,kw,kf.

176 central nervous system vasculitis/ or (lupus adj2 vasculitis).ti,ab,kw,kf.

177 9 or 10 or 11 or 12 or 13 or 17 or 18 or 28 or 76 or 77 or 175

178 176 and 177

179 myocarditis/ or (myocarditis or carditis).ti,ab,kw,kf.

180 9 or 11 or 12 or 13 or 17 or 18 or 28 or 76

181 1 and 179 and 180

182 endocarditis/ or (endocarditis or "libman sacks endocarditis" or "libman-sacks endocarditis").ti,ab,kw,kf.

183 9 or 17 or 18 or 23 or 76 or 172

184 1 and 182 and 183

185 75 or 80 or 82 or 83 or 84 or 85 or 88 or 92 or 94 or 96 or 100 or 102 or 104 or 107 or 110 or 113 or 116 or 120 or 123 or 129 or 136 or 140 or 144 or 146 or 149 or 151 or 157 or 160 or 165 or 167 or 170 or 174 or 178 or 181 or 184

186	185 not 61
187	186 not 63
188	187 not 65
189	limit 188 to english language