

TABLE 378-5 MEDICATIONS FOR THE MANAGEMENT OF SLE

Medication	Dose Range	Drug Interactions	Serious or Common Adverse Effects
NSAIDs, salicylates (Ecotrin <sup>a</sup> and St. Joseph's aspirin <sup>a</sup> approved by FDA for use in SLE)	Doses toward upper limit of recommended range usually required	A2R/ACE inhibitors, glucocorticoids, fluconazole, methotrexate, thiazides	NSAIDs: Higher incidence of aseptic meningitis, elevated liver enzymes, decreased renal function, vasculitis of skin; entire class, especially COX-2-specific inhibitors, may increase risk for myocardial infarction Salicylates: ototoxicity, tinnitus Both: GI events and symptoms, allergic reactions, dermatitis, dizziness, acute renal failure, edema, hypertension
Topical glucocorticoids	Mid potency for face; mid to high potency for other areas	None known	Atrophy of skin, contact dermatitis, folliculitis, hypopigmentation, infection
Topical sunscreens	SPF 15 at least; 30+ preferred	None known	Contact dermatitis
Hydroxychloroquine <sup>a</sup> (quinacrine can be added or substituted)	200–400 mg qd (100 mg qd)	None known	Retinal damage, agranulocytosis, aplastic anemia, ataxia, cardiomyopathy, dizziness, myopathy, ototoxicity, peripheral neuropathy, pigmentation of skin, seizures, thrombocytopenia. Quinacrine usually causes diffuse yellow skin coloration.
DHEA (dehydroepiandrosterone)	200 mg qd	Unclear	Acne, menstrual irregularities, high serum levels of testosterone
Methotrexate (for dermatitis, arthritis)	10–25 mg once a week, PO or SC, with folic acid; decrease dose if CrCl <60 mL/min	Acitretin, leflunomide, NSAIDs and salicylates, penicillins, probenecid, sulfonamides, trimethoprim	Anemia, bone marrow suppression, leukopenia, thrombocytopenia, hepatotoxicity, nephrotoxicity, infections, neurotoxicity, pulmonary fibrosis, pneumonitis, severe dermatitis, seizures.
Glucocorticoids, oral <sup>a</sup> (several specific brands are approved by FDA for use in SLE)	Prednisone, prednisolone: 0.5–1 mg/kg per day for severe SLE 0.07–0.3 mg/kg per day or qod for milder disease	A2R/ACE antagonists, antiarrhythmics class III, cyclosporine, NSAIDs and salicylates, phenothiazines, phenytoins, quinolones, rifampin, risperidone, thiazides, sulfonamides, warfarin	Infection, VZV infection, hypertension, hyperglycemia, hypokalemia, acne, allergic reactions, anxiety, aseptic necrosis of bone, cushingoid changes, CHF, fragile skin, insomnia, menstrual irregularities, mood swings, osteoporosis, psychosis
Methylprednisolone sodium succinate, IV <sup>a</sup> (FDA approved for lupus nephritis)	For severe disease, 1 g IV qd × 3 days	As for oral glucocorticoids	As for oral glucocorticoids (if used repeatedly); anaphylaxis
Cyclophosphamide <sup>b</sup> IV	Low dose (for whites of northern European backgrounds): 500 mg every 2 weeks for 6 doses, then begin maintenance with MMF or AZA. High dose: 7–25 mg/kg q month × 6; consider mesna administration with dose	Allopurinol, bone marrow suppressants, colony-stimulating factors, doxorubicin, rituximab, succinylcholine, zidovudine	Infection, VZV infection, bone marrow suppression, leukopenia, anemia, thrombocytopenia, hemorrhagic cystitis (less with IV), carcinoma of the bladder, alopecia, nausea, diarrhea, malaise, malignancy, ovarian and testicular failure. Ovarian failure is probably not a problem with low dose.
Oral	1.5–3 mg/kg per day; decrease dose for CrCl <25 mL/min		
Mycophenolate mofetil (MMF) <sup>b</sup> or mycophenolic acid (MPA)	MMF: 2–3 g/d PO for induction therapy, 1–2 g/d for maintenance therapy; max 1 g bid if CrCl <25 mL/min MPA: 360–1080 mg bid; caution if CrCl <25 mL/min	Acyclovir, antacids, azathioprine, bile acid-binding resins, ganciclovir, iron, salts, probenecid, oral contraceptives	Infection, leukopenia, anemia, thrombocytopenia, lymphoma, lymphoproliferative disorders, malignancy, alopecia, cough, diarrhea, fever, GI symptoms, headache, hypertension, hypercholesterolemia, hypokalemia, insomnia, peripheral edema, elevated liver enzymes, tremor, rash
Azathioprine (AZA) <sup>b</sup>	2–3 mg/kg per day PO for induction; 1–2 mg/kg per day for maintenance; decrease frequency of dose if CrCl <50 mL/min	ACE inhibitors, allopurinol, bone marrow suppressants, interferons, mycophenolate mofetil, rituximab, warfarin, zidovudine	Infection, VZV infection, bone marrow suppression, leukopenia, anemia, thrombocytopenia, pancreatitis, hepatotoxicity, malignancy, alopecia, fever, flulike illness, GI symptoms
Belimumab	10 mg/kg IV wks 0, 2, and 4, then monthly	IVIg	Infusion reactions, allergy, infections probable
Rituximab (for patients resistant to above therapies)	375 mg/m <sup>2</sup> q wk × 4 or 1 g q 2 wks × 2	IVIg	Infection (including PML), infusion reactions, headache, arrhythmias, allergic responses

<sup>a</sup>Indicates medication is approved for use in SLE by the U.S. Food and Drug Administration. <sup>b</sup>Indicates the medication has been used with glucocorticoids in the trials showing efficacy.

**Abbreviations:** A2R, angiotensin II receptor; ACE, angiotensin-converting enzyme; CHF, congestive heart failure; CrCl, creatinine clearance; FDA, U.S. Food and Drug Administration; GI, gastrointestinal; IVIg, intravenous immunoglobulin; NSAIDs, nonsteroidal anti-inflammatory drugs; PML, progressive multifocal leukoencephalopathy; SLE, systemic lupus erythematosus; SPF, sun protection factor; VZV, varicella-zoster virus.