

Table 2. US Food and Drug Administration–Approved Biologic and Oral Systemic Treatments for Psoriasis (continued)

Systemic treatment	Structure of biologic or target of oral systemic	Dosing for plaque psoriasis <sup>a</sup>	Efficacy at primary end point <sup>b</sup>	Safety considerations
Oral systemics				
Methotrexate	Dihydrofolate reductase inhibitor	Dose: 15-20 mg once weekly with folic acid supplementation	Adults: 36% achieve PASI 75 at week 16 (placebo, 19%) <sup>65</sup> Subcutaneous methotrexate may confer greater efficacy and bioavailability <sup>85</sup>	Increased risk of hepatic, pulmonary, hematologic, and renal toxicity Check complete blood counts, liver and kidney function, and hepatitis serology
Apremilast	Phosphodiesterase-4 inhibitor	Day 1: 10 mg in the morning Day 2: 10 mg twice per day Day 3: 10 mg in the morning; 20 mg in the evening Day 4: 20 mg twice per day Day 5: 20 mg in the morning; 30 mg in the evening Day 6 onward (maintenance dose): 30 mg twice per day	Adults: 33% achieve PASI 75 at week 16 (placebo, 5%) <sup>86</sup>	Gastrointestinal disturbances in 15%-20% and weight loss Renal adjustment for creatinine clearance <30 mL/min/1.73m <sup>2</sup>
Acitretin	Retinoid (vitamin-A derivative)	Dose: 25 mg-50 mg daily	Adults: 47% achieve PASI 75 at week 12 <sup>87</sup>	Hair loss and xerosis (worse at higher doses), hypertriglyceridemia, hepatotoxicity, and teratogenicity Check liver function and lipids
Cyclosporine	Calcineurin inhibitor	Dose: 5 mg/kg as a twice-daily divided dose; taper when psoriasis is controlled	Adults: 65% achieve IGA 0/1 at week 8 (placebo, 0%) <sup>88</sup> Two formulations are available: lipid or microemulsified (the latter is better absorbed)	Nephrotoxicity with long-term use Hypertension and hyperlipidemia nonmelanoma skin cancer risk in patients with prior PUVA Check renal function levels, electrolytes (magnesium and potassium), and blood pressure

Abbreviations: IGA, Investigator's Global Assessment scale; PASI, Psoriasis Area Severity Index; PUVA, psoralen and UV-A; TNF, tumor necrosis factor.

<sup>a</sup> All doses are for adults unless otherwise specified.

<sup>b</sup> The IGA score range is 0 through 5 (0, clear; 1, almost clear; 2, mild; 3, moderate; and 4, severe). PASI is a

validated instrument that enables clinicians to assess psoriasis disease severity. It combines the assessment of session severity (erythema, induration, and scale) and the affected areas into a single score between 0 (no disease) and 72 (maximal disease). PASI scores of 75, 90, and 100 indicate a 75%, 90%, and 100% reduction in PASI score compared with baseline.