

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

| Systemic treatment | Structure of biologic or target of oral systemic | Dosing for plaque psoriasis ^a | Efficacy at primary end point ^b | Safety considerations |
|--------------------|---|--|--|---|
| Biologics | | | | |
| Anti-TNF- α | | | | |
| Etanercept | Fusion protein between a TNF- α receptor protein and the crystallizable fragment portion of IgG1 | <p>Loading/induction dose: 50 mg twice weekly for 12 weeks</p> <p>Maintenance dose: 50 mg once weekly</p> <p>Recommended escalated maintenance dose: 50 mg twice weekly</p> <p>Pediatric dose: 0.8 mg/kg once weekly; maximum dose, 50 mg weekly</p> | <p>Adults: 49% achieve PASI 75 at week 12 (placebo, 3%)⁶²</p> <p>Children (aged 4-17 years): 57% achieve PASI 75 at week 12 (placebo, 11%)⁶³</p> | <p>Avoid use in patients with demyelinating diseases or hepatitis B</p> <p>Use is not preferred in patients with a history of latent tuberculosis or advanced congestive heart failure</p> <p>Discontinue during serious infection until the infection resolves</p> |
| Adalimumab | Human monoclonal IgG1 antibody | <p>Loading/induction dose: 80 mg at week 0; 40 mg at week 1</p> <p>Maintenance dose: 40 mg every 2 weeks</p> | <p>Adults: 71% achieve PASI 75 at week 16 (placebo, 7%)⁶⁴</p> <p>Superior to methotrexate at 16 weeks⁶⁵</p> | <p>Avoid use in patients with demyelinating diseases or hepatitis B</p> <p>Use is not preferred in patients with a history of latent tuberculosis or advanced congestive heart failure</p> <p>Antiadalimumab antibodies in 6%-50%</p> <p>Discontinue during serious infection until the infection resolves</p> |
| Certolizumab pegol | Pegylated humanized antibody fragment | <p>Loading/induction dose for patients ≤ 90 kg: 400 mg at weeks 0, 2, and 4</p> <p>Maintenance dose:</p> <p>≤ 90 kg: 200 mg every 2 weeks</p> <p>> 90 kg: 400 mg every 2 weeks</p> | <p>Adults: 83% achieve PASI 75 at week 16 (placebo, 12%)⁶⁶</p> | <p>Preferred in pregnant or breastfeeding women due to minimal placental and breast milk transfer</p> <p>Avoid use in patients with demyelinating diseases or hepatitis B</p> <p>Use is not preferred in patients with a history of latent tuberculosis or advanced congestive heart failure</p> <p>Discontinue during serious infection until the infection resolves</p> |
| Infliximab | Human chimeric monoclonal IgG1 antibody | <p>Loading/induction dose: 5 mg/kg at weeks 0, 2, and 6 (the only intravenously administered biologic)</p> <p>Maintenance dose: 5 mg/kg every 8 weeks</p> <p>Recommended escalated maintenance dose: 5 mg/kg every 4-8 weeks and/or up to 10 mg/kg</p> | <p>Adults: 80% achieve PASI 75 at week 10 (placebo, 3%)⁶⁷; 55% achieve PASI 75 at week 50 (placebo/infliximab, 77%)⁶⁷</p> <p>Superior to methotrexate at 16 weeks⁶⁸</p> | <p>Avoid use in patients with demyelinating diseases or hepatitis B</p> <p>Use is not preferred in patients with a history of latent tuberculosis or advanced congestive heart failure</p> <p>Discontinue during serious infection until the infection resolves</p> |