

Patients receiving **high-dose corticosteroids** are at increased risk of opportunistic infection, osteoporosis, gastrointestinal complications, metabolic complications, and vaccine-preventable disease. The need for prophylaxis depends on the **dose, duration, and presence of additional immunosuppressive agents or comorbidities**.

Risk	When to consider	Prophylaxis	Comments
Pneumocystis jirovecii pneumonia (PJP)	Prednisone ≥20 mg/day (or equivalent) for ≥4 weeks, especially with another immunosuppressant or inflammatory disease / vasculitis	Trimethoprim-sulfamethoxazole DS 800/160 mg 3×/week or SS daily	Greatest evidence. Continue until steroid reduced below ~15–20 mg/day and immune recovery.
	Sulfa allergy	Atovaquone, Dapsone (after G6PD testing), or inhaled Pentamidine	Less effective than TMP-SMX.
Osteoporosis	Prednisone ≥5–7.5 mg/day for ≥3 months	Calcium (1000–1200 mg/day dietary preferred), vitamin D (800–1000 IU/day), exercise; consider Alendronic acid or Zoledronic acid according to fracture risk	Arrange baseline DEXA if prolonged therapy anticipated.
Peptic ulcer disease	Only if concomitant NSAIDs, previous ulcer, anticoagulation or significant GI risk	Omeprazole or other PPI	Steroids alone are a relatively weak ulcer risk factor. Routine PPIs are not recommended for everyone.
Vaccination	Before or during immunosuppression	Annual influenza, COVID boosters, pneumococcal vaccination, recombinant zoster vaccine if eligible	Avoid live vaccines during significant immunosuppression.
Tuberculosis	Risk factors or biologics planned	Screen with Tuberculosis testing (IGRA/TST)	Particularly important if adding TNF inhibitors.
Hepatitis B	Moderate/high-risk patients or biologics	HBsAg, anti-HBc, anti-HBs	Reactivation risk increases with rituximab and prolonged steroids.
Strongyloides	Born/travelled in endemic regions before steroids	Serology ± empiric Ivermectin	Important because hyperinfection can be fatal.
Metabolic monitoring	All	BP, glucose/HbA1c, weight, lipids	Steroid diabetes is common.
Eye complications	Long-term therapy	Periodic ophthalmology review	Cataracts and glaucoma.

When is PJP prophylaxis recommended?

Most guidelines recommend prophylaxis when patients have:

- Prednisone **≥20 mg/day for ≥4 weeks, and**
- One or more additional risk factors:
 - another immunosuppressive drug (e.g. Methotrexate, Azathioprine, Cyclophosphamide, Rituximab)
 - vasculitis
 - connective tissue disease
 - malignancy
 - transplant
 - lymphopenia

For **steroids alone**, the absolute risk is lower, but many clinicians still prescribe prophylaxis when prednisone is **≥30 mg/day for several weeks**, particularly in older patients.