TABLE 135.3 Antiviral Chemotherapy for HSV Infection

	Dosage/Regimen	Comment
Mucocutaneous HSV Infections		
Infections in Immunosuppressed Patients		
Acute symptomatic first or recurrent episodes	Oral acyclovir, 400 mg qid, famciclovir, 500 mg PO tid, or valacyclovir, 1 mg PO bid, for 7–10 days is effective. In severe cases, IV acyclovir, 5 mg/kg q8h, is given.	Treatment duration may be 7–14 days.
Suppression of reactivation disease	IV acyclovir, 5 mg/kg q8h, valacyclovir, 500 mg PO bid, or oral acyclovir, 400–800 mg 2–3 times per day, prevents recurrences during the immediate 30-day posttransplantation period.	Suppression of clinical HSV-2 is routine for patients undergoing stem cell and organ transplant. Valacyclovir, 2 g 4 times daily, is also effective in preventing CMV infection. Valacyclovir, 4 g 4 times daily, has been associated with TTP after extended use in HIV-positive patients. In HIV-infected patients, oral famciclovir, 500 mg bid, is effective in reducing clinical and subclinical reactivations of HSV-1 and HSV-2. If using acyclovir in HIV-infected patients, we generally start with the lower dose of 400 mg twice daily and increase to 800 mg twice daily if breakthrough recurrences occur. *Note:* Once-daily dosing of valacyclovir, 500 mg to 1 g, should be avoided in HIV-infected patients owing to concerns regarding lower efficacy.
Symptomatic recurrent genital herpes in HIV-1–infected patients	Oral acyclovir, 400 mg tid × 5–10 days Valacyclovir, 1000 mg bid × 5–10 days Famciclovir, 500 mg PO bid × 5–10 days	
Infections in Immunocompetent Patients		
Genital Herpes		
First episodes	Oral acyclovir, 400 mg tid (V) or 200 mg 5 times per day (I) × 7–10 days Oral valacyclovir, 1000 mg bid × 7–10 days (I) Famciclovir, 250 mg tid × 7–10 days (I) IV acyclovir, 5 mg/kg q8h for 5 days, is given for severe disease or neurologic complications such as aseptic meningitis.	Treatment can be extended if healing is incomplete after 10 days of therapy.
Symptomatic recurrent genital herpes	**Oral acyclovir,** 400 mg tid × 5 days (V), **800 mg PO tid × 2 days** or bid × 5 days (II) **Valacyclovir, 500 mg bid × 3 days** (I) or 1 g daily × 5 days (I) **Famciclovir,** 125 mg bid for 5 days (I), **1 g bid for 1 day** (I), or **500 mg once then 250 mg PO bid × 3 doses** (I)	All these therapies are effective in shortening lesion duration. Short-course options (1, 2, or 3 days of therapy) should be considered based on increased convenience, likelihood of adherence, and reduced cost and are **listed in bold.** Given the brief period of viral replication and rapid evolution of lesions, patients should be given drugs for self-administration when prodromal symptoms occur.
Suppression of recurrent genital herpes	Oral acyclovir, 400 mg bid (I) Valacyclovir, 500 mg daily (I) or 1000 mg daily (I) or 250–500 mg bid (I) prevents symptomatic reactivation. Patients with frequent reactivation (<9 episodes/yr) can take valacyclovir 500 mg daily; patients with >9 episodes/yr should take valacyclovir 1000 mg/daily or 500 mg bid. Famciclovir, 250 mg bid (I)	Consider in patients with frequent (>6 episodes) or severe recurrences, in immunocompromised patients, or as an adjunct to prevent transmission.
Orolabial HSV Infections		
First episode	Oral acyclovir, 15 mg/kg (up to 200 mg) 5 times per day (II) or 400 mg tid (V) × 7 days Famciclovir, 500 mg bid (V) Valacyclovir, 1000 mg bid (V) × 7 days	
Recurrent episodes	Oral acyclovir, 400 mg 5 times per day × 5 days (II) **Valacyclovir, 2000 mg bid × 1 day** (I) **Famciclovir, 1500 mg once** (I)	Self-initiated therapy with topical 1% penciclovir cream q2h during waking hours (I); topical acyclovir cream, 5% 5 times per day × 4 days (I). Short-course options should be considered based on increased convenience and likelihood of adherence and are **listed in bold.** Given the brief period of viral replication and rapid evolution of lesions, patients should be given drugs for self-administration when prodromal symptoms occur.
Suppression of reactivation of orolabial HSV	Oral acyclovir, 400 mg bid (II), or valacyclovir, 500 mg or 1000 mg daily (II), or famciclovir, 500 mg bid (V)	Consider in patients with frequent (>6 episodes) or severe recurrences, in immunocompromised patients, or as an adjunct to prevent transmission.

TABLE 135.3 Antiviral Chemotherapy for HSV Infection—cont'd

	Dosage/Regimen	Comment
Herpetic Whitlow		
	Oral acyclovir, 200 mg 5 times daily for 7–10 days	
HSV Proctitis		
	Oral acyclovir, 400 mg 5 times per day, is useful in shortening the course of infection.	In immunosuppressed patients acyclovir, 5 mg/kg q8h, may
Herpetic Eye Infections		
		In acute keratitis, topical triflu acyclovir, penciclovir, and int may be required; topical cor Chapter 113).
CNS HSV Infections		
HSV encephalitis	IV acyclovir, 10 mg/kg q8h (30 mg/kg/day) for 14–21 days	
HSV aseptic meningitis	IV acyclovir, 30 mg/kg/day for 7–10 days	No studies of systemic antivira
Autonomic radiculopathy		No studies are available.
Neonatal HSV Infections		
	Acyclovir, 60 mg/kg/day divided into 3 doses × 21 days	Monitoring for relapse should recommend continued supp 3–4 mo.
Visceral HSV Infections		
HSV esophagitis	IV acyclovir, 15 mg/kg/day	In some patients with milder f therapy with valacyclovir or
HSV pneumonitis		No controlled studies exist. IV considered.
Disseminated HSV Infections		
		No controlled studies exist. IV should be given. No definite decreases risk of death.
Erythema Multiforme–Associated HSV		
		Anecdotal observations sugge or valacyclovir, 500 mg bid,
Surgical Prophylaxis		
		Several surgical procedures su nerve root decompression, a associated with HSV reactiva acyclovir, 800 bid, valacyclov effective in reducing reactiva before surgery and continue
Infections With Acyclovir-Resistant HSV		
	IV foscarnet, 40 mg/kg q8h, should be given until lesions heal. IV cidofovir, 5 mg/kg once weekly, may also be effective.	Imiquimod is a topical alternat is not commercially available pharmacy. These topical pre once daily for 5 consecutive

[a]Note: I, II, III, IV, and V in parentheses represent level of evidence.
CMV, Cytomegalovirus; *CNS,* central nervous system; *HIV,* human immunodeficiency virus; *HSV,* herpes simplex virus; *IV,* intraveno thrombocytopenic purpura.
Modified from Cernik C, Gallina K, Brodell RT. The treatment of herpes simplex infections: an evidence-based review. Arch Intern *S, Aoki FY, Tyring S, et al. Short-course therapy for recurrent genital herpes and herpes labialis: entering an era of greater conven reduced cost.* J Fam Pract. *2007;56:30–36.*