TABLE 215e-1 ANTIVIRAL CHEMOTHERAPY AND CHEMOPROPHYLAXIS

Infection	Drug	Route	Dosage	Comment
Influenza A and B: treatment	Oseltamivir	Oral	Adults: 75 mg bid × 5 d Children 1–12 years: 30–75 mg bid, depending on weight,[a] × 5 d	When started within 2 d of onset in uncomplicated disease, zanamivir and oseltamivir reduce symptom duration by 1.0–1.5 and 1.3 d, respectively. Their effectiveness in prevention or treatment of complications is unclear, although some analyses suggest that oseltamivir may reduce the frequency of respiratory tract complications and hospitalizations. Oseltamivir's side effects of nausea and vomiting can be reduced in frequency by drug administration with food. Zanamivir may exacerbate bronchospasm in patients with asthma. Amantadine and rimantadine are not recommended for routine use unless antiviral susceptibilities are known because of widespread resistance in A/H3N2 viruses since 2005–2006 and in pandemic A/H1N1 viruses in 2009–2010. Their efficacy in treatment of uncomplicated disease caused by sensitive viruses has been similar to that of neuraminidase inhibitors.
	Zanamivir	Inhaled orally	Adults and children ≥7 years: 10 mg bid × 5 d	
Influenza A: treatment	Amantadine[b]	Oral	Adults: 100 mg qd or bid × 5–7 d Children 1–9 years: 5 mg/kg per day (maximum, 150 mg/d) × 5–7 d	
	Rimantadine[b]	Oral	100 mg qd or bid × 5–7 d in adults	
Influenza A and B: prophylaxis	Oseltamivir	Oral	Adults: 75 mg/d Children ≥1 year: 30–75 mg/d, depending on weight[a]	Prophylaxis must be continued for the duration of exposure and can be administered simultaneously with inactivated vaccine. Unless the sensitivity of isolates is known, neither amantadine nor rimantadine is currently recommended for prophylaxis or therapy.
	Zanamivir	Inhaled orally	Adults and children ≥5 years: 10 mg/d	
Influenza A: prophylaxis	Amantadine[b] or rimantadine[b]	Oral	Adults: 200 mg/d Children 1–9 years: 5 mg/kg per day (maximum, 150 mg/d)	
RSV infection	Ribavirin	Small-particle aerosol	Administered 12–18 h/d from a reservoir containing 20 mg/mL × 3–6 d	Use of ribavirin is to be considered for treatment of infants and young children hospitalized with RSV pneumonia and bronchiolitis, according to the American Academy of Pediatrics.
CMV disease	Ganciclovir	IV	5 mg/kg bid × 14–21 d; then 5 mg/kg per day as maintenance dose	Ganciclovir, valganciclovir, foscarnet, and cidofovir are approved for treatment of CMV retinitis in patients with AIDS. They are also used for colitis, pneumonia, or "wasting" syndrome associated with CMV and for prevention of CMV disease in transplant recipients.
	Valganciclovir	Oral	900 mg bid × 21 d; then 900 mg/d as maintenance dose	Valganciclovir has largely supplanted oral ganciclovir and is frequently used in place of IV ganciclovir.
	Foscarnet	IV	60 mg/kg q8h × 14–21 d; then 90–120 mg/kg per day as maintenance dose	Foscarnet is not myelosuppressive and is active against acyclovir- and ganciclovir-resistant herpesviruses.
	Cidofovir	IV	5 mg/kg once weekly × 2 weeks, then once every other week; given with probenecid and hydration	
	Fomivirsen	Intravitreal	330 mg on days 1 and 15 followed by 330 mg monthly as maintenance	Fomivirsen has reduced the rate of progression of CMV retinitis in patients in whom other regimens have failed or have not been well tolerated. The major form of toxicity is ocular inflammation.
Varicella: immunocompetent host	Acyclovir	Oral	20 mg/kg (maximum, 800 mg) 4 or 5 times daily × 5 d	Treatment confers modest clinical benefit when administered within 24 h of rash onset.
	Valacyclovir	Oral	Children 2–18 years: 20 mg/kg tid (not to exceed 1 g tid) × 5 d	
Varicella: immunocompromised host	Acyclovir	IV	10 mg/kg q8h × 7 d	A change to oral valacyclovir can be considered once fever has subsided if there is no evidence of visceral involvement.
Herpes simplex encephalitis	Acyclovir	IV	10 mg/kg q8h × 14–21 d	Results are optimal when therapy is initiated early. Some authorities recommend treatment for 21 d to prevent relapses.
Neonatal herpes simplex	Acyclovir	IV	20 mg/kg q8h × 14–21 d	Serious morbidity is common despite therapy. Prolonged oral administration after initial IV therapy has been suggested because of long-term sequelae associated with cutaneous recurrences of HSV infection.

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