

Table I: Standard treatment dose regimens of anti-influenza antiviral drugs available in the United States.

Drug	Route	Adults	Children	Dose reductions	Principal adverse events	Comment
Oseltamivir	Oral	75mg twice a day	Weight and age-based dosing for children aged ≤ 12 years ¹	CrCl < 30 mL/min; coadministration of probenecid	GI: nausea, emesis Headache Skin rash, sometimes severe Possibly rare neuropsychiatric events	Consult the CDC and WHO guidance for dosing for infants aged < 1 year. Patients with hepatic decompensation may not be able to convert oseltamivir to oseltamivir carboxylate
Oseltamivir ²	Intravenous	100mg over 2 hours (by rate-controlled infusion) every 12 hours	Weight-based dosing for children aged ≤ 12 years ³	CrCl < 60 mL/min	As for oral Hypotension Injection site pain, reactions	Not compatible with dextrose solutions
Zanamivir	Inhaled	10mg twice a day	10mg twice a day for ≥ 5 years ⁴	Not necessary	Bronchospasm, sometimes severe	Not advised in those with underlying

					Allergic reactions, oral or facial edema	reactive airways disease; ability to properly use inhaler device is essential
Zanamivir ²	Intravenous	600mg every 12 hours	Consult manufacturer	CrCl <50mL/min	Under study	Available on compassionate use basis
Amantadine ⁵	Oral	100mg twice a day	5mg/kg per day, not to exceed 150mg, for those aged 1-9 years or weighing <40kg	CrCl <50-70mL/min; ≥65 years (100mg daily)	GI: nausea, emesis CNS: difficulty concentrating, anxiety, insomnia, seizures, coma	Consider further dose reductions in elderly patients weighing <70kg
Rimantadine ⁵	Oral	100mg twice a day or 200mg daily	5mg/kg per day, not to exceed 150mg, for those aged 1-9 years or weighing <40kg	CrCl <10mL/min; severe hepatic insufficiency; ≥65 years (100mg daily)	GI: nausea, emesis CNS: difficulty concentrating, anxiety, insomnia, seizures	Better CNS tolerability than amantadine

Note: The standard duration of therapy is 5 days in uncomplicated influenza. See earlier in this chapter regarding suggestions for more prolonged administration (e.g., 10 days) in seriously ill patients or immunocompromised hosts.

¹The standard treatment dosing for oseltamivir in children aged 1 year or older who weigh 15kg or less is 30mg twice a day; for those who weigh less than 15kg and up to 23kg, the dose is 45mg twice a day; and for those who weigh more than 23kg and up to 40kg, the

dose is 60mg. For children who weigh more than 40kg, the suggested dose is 75mg twice a day. Available as 30mg, 45mg, and 60mg capsules, as well as liquid suspension.

²Currently investigational in United States, but available from manufacturer (Roche for oseltamivir; GlaxoSmithKline for zanamivir) on compassionate use (emergency investigational new drug) basis.

³Consult manufacturer guidelines for children aged 1-12 years and for infants aged less than 1 year.

⁴Currently, FDA-approved for treatment for children aged 7 years or older and for chemoprophylaxis in children aged 5 years or older.

⁵Not currently recommended because of resistance in almost all circulating influenza A viruses.

⁶Rimantadine is FDA-approved for chemoprophylaxis for children aged 1 year or older but not currently for treatment in children aged younger than 10 years.

CDC, US Centers for Disease Control and Prevention; CrCl, creatinine clearance; CNS, central nervous system; FDA, US Food and Drug Administration; GI, gastrointestinal; WHO, World Health Organization.