Table 3. Recommended Dosage and Duration of Influenza Antiviral Medications forTreatment or Chemoprophylaxis

Antiviral Agent	Use	Children	Adults
Oral Oseltamivir		If younger than 1 yr old ¹ : 3 mg/kg/dose twice daily ^{2,3} If 1 yr or older, dose varies by child's weight: 15 kg or less, the dose is 30 mg twice a day >15 to 23 kg, the dose is 45 mg twice a day >23 to 40 kg, the dose is 60 mg twice a day >40 kg, the dose is 75 mg twice a day	75 mg twice daily
	Chemo- prophylaxis (7 days)	If child is younger than 3 months old, use of oseltamivir for chemoprophylaxis is not recommended unless situation is judged critical due to limited data in this age group. If child is 3 months or older and younger than 1 yr old ¹ 3 mg/kg/dose once daily ² If 1 yr or older, dose varies by child's weight: 15 kg or less, the dose is 30 mg once a day >15 to 23 kg, the dose is 45 mg once a day >23 to 40 kg, the dose is 60 mg once a day >40 kg, the dose is 75 mg once a day	75 mg once daily
Inhaled Zanamivir⁴	(5 davs)	10 mg (two 5-mg inhalations) twice daily (FDA approved and recommended for use in children 7 yrs or older)	10 mg (two 5-mg inhalations) twice daily
	prophylaxis	10 mg (two 5-mg inhalations) once daily (FDA approved for and recommended for use in children 5 yrs or older)	10 mg (two 5-mg inhalations) once daily

Intravenous Peramivir	(1 dav)	(FDA approved and recommended for use in	One 600 mg dose, via intravenous infusion for 15-30 minutes
	Chemo- prophylaxis	N/A	N/A

Abbreviations: N/A = not applicable

¹ Oral oseltamivir is approved by the FDA for treatment of acute uncomplicated influenza with twice-daily dosing in persons 14 days and older, and for chemoprophylaxis with once-daily dosing in persons 1 year and older. Although not part of the FDA-approved indications, use of oral oseltamivir for treatment of influenza in infants less than 14 days old, and for chemoprophylaxis in infants 3 months to 1 year of age, is recommended by the CDC and the American Academy of Pediatrics (Committee on Infectious Diseases, 2014).

² This is the FDA-approved oral oseltamivir treatment dose for infants 14 days and older and less than 1 year old, and provides oseltamivir exposure in children similar to that achieved by the approved dose of 75 mg orally twice daily for adults, as shown in two studies of oseltamivir pharmacokinetics in children (<u>Kimberlin, 2013 [CASG 114], EU study WP22849, FDA</u> <u>Clinical Pharmacology Review</u>). The American Academy of Pediatrics has recommended an oseltamivir treatment dose of 3.5 mg/kg orally twice daily for infants aged 9-11 months for the 2013-14 season, on the basis of data which indicated that a higher dose of 3.5 mg/kg was needed to achieve the protocol-defined targeted exposure for this cohort as defined in the CASG 114 study (Kimberlin, 2013). It is unknown whether this higher dose will improve efficacy or prevent the development of antiviral resistance. However, there is no evidence that the 3.5 mg/kg dose is harmful or causes more adverse events to infants in this age group.

³ Current weight-based dosing recommendations are not appropriate for premature infants. Premature infants might have slower clearance of oral oseltamivir because of immature renal function, and doses recommended for full-term infants might lead to very high drug concentrations in this age group. CDC recommends dosing as also recommended by the American Academy of Pediatrics (Committee on Infectious Diseases, 2014): limited data from the National Institute of Allergy and Infectious Diseases Collaborative Antiviral Study Group provide the basis for dosing preterm infants using their postmenstrual age (gestational age + chronological age): 1.0 mg/kg/dose, orally, twice daily, for those <38 weeks postmenstrual age; 1.5 mg/kg/dose, orally, twice daily, for those 38 through 40 weeks postmenstrual age; 3.0 mg/kg/dose, orally, twice daily, for those <40 weeks postmenstrual age.

⁴ Inhaled zanamivir is approved for treatment of acute uncomplicated influenza with twice-daily dosing in persons aged 7 years and older, and for chemoprophylaxis with once-daily dosing in persons aged 5 years and older.

Table 4. Duration of Treatment or Chemoprophylaxis

Treatment	Recommended duration for antiviral treatment is 5 days for oseltamivir or zanamivir. Longer treatment courses for patients who remain severely ill after 5 days of treatment can be considered. For the treatment of uncomplicated influenza with intravenous peramivir, duration of treatment is 1 day.		
Chemo	Recommended duration is 7 days (after last known exposure).		
prophylaxis	For control of outbreaks in institutional settings (e.g. long-term care facilities for		
	elderly persons and children) and hospitals, CDC recommends antiviral		
	chemoprophylaxis for a minimum of 2 weeks, and continuing up to 1 week after the last		
	known case was identified. Antiviral chemoprophylaxis is recommended for all residents,		
	including those who have received influenza vaccination, and for unvaccinated institutional		
	employees.		