

Guidance on Use of Influenza Antiviral Medications for Treatment and Chemoprophylaxis, 2013-2014

Recommended Dosage and Schedule of Influenza Antiviral Medications[†] for Treatment[†] and Chemoprophylaxis[§]

Antiviral agent		Age group (yrs)				
		1--6	7--9	10--12	13--64	>=65
Zanamivir (Relenza®)	Treatment, influenza A and B	NA	10 mg (2 inhalations) twice daily	10 mg (2 inhalations) twice daily	10 mg (2 inhalations) twice daily	10 mg (2 inhalations) twice daily
	Chemoprophylaxis, influenza A and B	NA for ages 1--4	Ages 5--9 10 mg (2 inhalations) once daily	10 mg (2 inhalations) once daily	10 mg (2 inhalations) once daily	10 mg (2 inhalations) once daily
Oseltamivir[¶] (Tamiflu®)	Treatment,** influenza A and B	Dose varies by child's weight**	Dose varies by child's weight**	Dose varies by child's weight**	75 mg twice daily	75 mg twice daily
	Chemoprophylaxis, influenza A and B	Dose varies by child's weight ^{††}	Dose varies by child's weight ^{††}	Dose varies by child's weight ^{††}	75 mg once daily	75 mg once daily

Abbreviation: NA = not approved

* Zanamivir is manufactured by GlaxoSmithKline (Relenza --- inhaled powder). Zanamivir is approved for treatment of persons aged ≥7 years and approved for chemoprophylaxis of persons aged ≥5 years. Zanamivir is administered through oral inhalation by using a plastic device included in the medication package. Patients will benefit from instruction and demonstration of the correct use of the device. Zanamivir is not recommended for those persons with underlying airway disease. Oseltamivir is manufactured by Roche Pharmaceuticals (Tamiflu --- tablet). Oseltamivir is approved for treatment of persons aged 2 weeks and older and for chemoprophylaxis of persons aged ≥1 year. Oseltamivir is available for oral administration in 30 mg, 45 mg, and 75 mg capsules and liquid suspension. This information is based on data published by the Food and Drug Administration (FDA).

† Recommended duration for antiviral treatment is 5 days. Longer treatment courses can be considered for patients who remain severely ill after 5 days of treatment.

§ Recommended duration of post-exposure chemoprophylaxis for high-risk patients is 7 days after the most recent known exposure if chemoprophylaxis can be started within 48 hours of exposure; however, early treatment if symptomatic is preferred. For control of outbreaks in long-term care facilities and hospitals, CDC recommends antiviral chemoprophylaxis for a minimum of 2 weeks and continuing up to 1 week after the most recent known case was identified.

¶ See the table below for information about use of oseltamivir for infants aged younger than 1 year. A reduction in the dose of oseltamivir is recommended for persons with creatinine clearance <30 mL/min.

** The treatment dosing recommendation for oseltamivir for children aged 2 weeks to younger than 1 year is 3mg/kg twice a day. The treatment dosing recommendation for oseltamivir for children ≥1 year who weigh ≤15 kg is 30 mg twice a day. For children who weigh >15 kg to 23 kg, the dose is 45 mg twice a day. For children who weigh >23 kg to 40 kg, the dose is 60 mg twice a day. For children who weigh >40 kg, the dose is 75 mg twice a day.

†† The chemoprophylaxis dosing recommendation for oseltamivir for children aged ≥1 year who weigh ≤15 kg is 30 mg once a day. For children who weigh >15 kg to 23 kg, the dose is 45 mg once a day. For children who weigh >23 kg and up to 40 kg, the dose is 60 mg once a day. For children who weigh >40 kg, the dose is 75 mg once a day.

Dosing Recommendations for Treatment or Chemoprophylaxis of Children Aged <1 Year Using Oseltamivir*

Age	Recommended treatment dose for 5 days [†]	Recommended chemoprophylaxis dose for 10 days [†]
<3 mos	3 mg/kg/dose twice daily	Not recommended unless situation judged critical because of limited data on use in this age group
3--11 mos	3 mg/kg/dose twice daily	3 mg/kg/dose once daily

* An [Emergency Use Authorization \(EUA\) was issued by the FDA on April 28, 2009](#), and expired on June 23, 2010. This EUA allowed use of oseltamivir for treatment or chemoprophylaxis of 2009 pandemic influenza A (H1N1) virus infection during the pandemic in infants aged <1 year. Currently circulating 2009 H1N1, seasonal influenza A (H3N2), and B viruses are susceptible to oseltamivir.

† Current weight-based dosing recommendations are not appropriate for premature infants. Premature infants might have slower clearance of oseltamivir because of immature renal function, and doses recommended for full-term infants might lead to very high drug concentrations in this age group. Very limited data from a small cohort of premature infants suggested that oseltamivir concentrations among premature infants administered oseltamivir 1 mg/kg twice daily would be similar to those observed with the recommended treatment dose in term infants (3 mg/kg twice daily). Observed drug concentrations were highly variable among premature infants. These data are insufficient to recommend a specific dose of oseltamivir for premature infants.

References:

Centers for Disease Control and Prevention Website: <http://www.cdc.gov/flu/professionals/antivirals/antiviral-dosage.htm>
 Accessed September 24, 2013



Acute Disease Service
Oklahoma State
Department of Health

For further information call or visit us on the World Wide Web
Acute Disease Service
Oklahoma State Department of Health
Phone (405) 271-4060