

# Antiviral Medications for Seasonal Influenza - 2022-2023

## Recommendations for Treatment of Seasonal Influenza

(November 28, 2022 - *The Medical Letter - Antiviral Drugs for Seasonal Influenza 2022-2023*)<sup>1</sup>

- Treatment is recommended for patients with suspected or confirmed influenza who are at high risk for complications, for hospitalized patients and for outpatients with severe, complicated or progressive illness even if it is started >48 hours after illness onset.
- Treatment can be considered for otherwise healthy symptomatic outpatients with suspected or confirmed influenza not at risk for complications if it can be started **within 48 hours of symptom onset**.<sup>1</sup>

Please refer to *The Medical Letter on Drugs and Therapeutics*. 2022. Nov 28:64(1664)

- For outpatients with complications or progressive disease and suspected or confirmed influenza (e.g., pneumonia, or exacerbation of underlying chronic medical conditions), initiation of antiviral treatment with oral oseltamivir is recommended as soon as possible.<sup>2</sup>
- For outpatients with suspected or confirmed uncomplicated influenza, oral baloxavir [oral oseltamivir](#), [inhaled zanamivir](#), [intravenous peramivir](#), or [oral baloxavir](#) may be used for treatment, depending upon approved age groups and contraindications.<sup>2</sup>
- Oral oseltamivir is the recommended antiviral for pregnant women.<sup>2</sup>

### Antiviral Drugs for Prophylaxis and Treatment of Seasonal Influenza 2022-2023<sup>1</sup>

Drug	Tamiflu (oseltamivir)	Relenza (zanamivir)	Rapivab (peramivir)	Xofluza (baloxavir) <sup>3</sup>
Formulations	30mg, 45mg, 75mg caps 6mg/mL oral suspension	5mg/blister for inhalation	200mg/20mL single dose vials	40mg, 80mg tablets, 40mg/20mL oral suspension**
<b>Prophylaxis of Influenza</b>				
Adult Dose	≥13 years: 75mg PO once daily x 7 days	2 inhalations once daily x 7 days	Not FDA approved for prophylaxis	≥5 years and <80 kg: 40 mg PO once ≥5 years and ≥80 kg: 80 mg PO once
Adult Dosage for Renal Impairment	CrCl 30-60mL/min: 30mg once daily CrCl >10-30mL/min: 30mg every other day HD: 30mg after every other HD CAPD: 30mg once/week after exchange ESRD not on HD: not recommended	No dosage adjustments required for renal impairment	Not FDA approved for prophylaxis	No studies available for the use of baloxavir in patients with CrCl <50mL/min. Effects of severe renal impairment has not been evaluated.
Pediatric Dosage	<1 year : 3 mg/kg PO once/day x 7 days 1-12 years: 30-75mg PO once/day x 7 days	≥5 years: 2 inhalations once daily x 7 days	Not FDA approved for prophylaxis	≥5 years and <80 kg: 40 mg PO once ≥5 years and ≥80 kg: 80 mg PO once
<b>Treatment of Uncomplicated Influenza</b>				
Adult Dosage	≥13 years: 75mg PO bid x 5 days	2 inhalations bid x 5 days	600mg IV over 15-30 minutes once	≥5 years and <80 kg: 40 mg PO once ≥5 years and ≥80 kg: 80 mg PO once
Adult Dosage for Renal Impairment	CrCl 30-60mL/min: 30mg bid CrCl >10-30mL/min: 30mg once daily HD: 30mg after every HD CAPD: 30mg after exchange ESRD not on HD: not recommended	No dosage adjustments required for renal impairment	CrCl 30-49mL/min: 200mg once CrCl 10-29mL/min: 100mg once HD: administer dose (based on CrCl) after HD	No studies available for the use of baloxavir in patients with CrCl <50mL/min. Effects of severe renal impairment has not been evaluated.
Pediatric Dosage	≥2 weeks- <1 year : 3 mg/kg PO bid x 5 days 1-12 years: 30-75mg PO bid x 5 days	≥7 years: 2 inhalations bid x 5 days	6 months-12 years: 12 mg/kg (max 600 mg) IV over 15-30 minutes once ≥13 years: 600 mg IV over 15-30 minutes once	≥5 years and <80 kg: 40 mg PO once ≥5 years and ≥80 kg: 80 mg PO once
Comments	<ul style="list-style-type: none"> <li>• FDA-approved for treatment of acute uncomplicated influenza in patients ≥2 weeks old</li> <li>• FDA-approved for chemoprophylaxis of influenza in patients ≥1 year old</li> <li>• Preferred for treatment of influenza in pregnant women, hospitalized patients, and outpatients with severe, complicated, or progressive illness</li> </ul>	<ul style="list-style-type: none"> <li>• Contraindicated in patients with milk protein allergy</li> <li>• Not recommended for patients with underlying airway disease</li> <li>• Not recommended for treatment of severe influenza</li> </ul>	<ul style="list-style-type: none"> <li>• FDA-approved for treatment of acute uncomplicated influenza healthy patients ≥6 months old</li> <li>• Not recommended for treatment of severe influenza</li> <li>• Not FDA-approved for chemoprophylaxis</li> </ul>	<ul style="list-style-type: none"> <li>• No data in patients with severe influenza</li> <li>• Monotherapy is not recommended for the severely immunosuppressed due to resistance concerns.</li> <li>• Not recommended for use in severely immunocompromised patients or pregnant women</li> </ul>

## Comparative Costs - Agents for the Treatment of Influenza A and B

Brand Name	Generic Name	Strength/ Dosage Form	*Brand Course
<b>Rapivab</b>	<b>peramivir</b>	<b>200mg/20mL vials</b>	
<b>Adult Prophylaxis: Not FDA approved</b>			N/A
<b>Pediatric Prophylaxis: Not FDA approved</b>			N/A
<b>Adult Treatment: 600mg IV once</b>			<b>\$943.20</b>
<b>Pediatric Treatment: 6 months-12 years: 12 mg/kg (max 600 mg) IV once ≥13 years: 600 mg IV once</b>			
<b>Relenza</b>	<b>zanamivir</b>	<b>5mg/blister for inhalation</b>	
<b>Adult Prophylaxis: 10mg (2 inhalations) once daily x 7 days</b>			<b>\$66.18</b>
<b>Pediatric Prophylaxis: ≥5 years: 10mg (2 inhalations) once daily x 7 days</b>			
<b>Adult Treatment: 10mg (2 inhalations) twice daily x 5 days</b>			
<b>Pediatric Treatment: ≥7 years: 10mg (2 inhalations) twice daily x 5 days</b>			
Additional dosing regimens indicated for institutional and community outbreaks <sup>4</sup>			
<b>Tamiflu</b>	<b>oseltamivir</b>		
<b>Adult Prophylaxis:</b>	75mg PO once daily x 7 days	<b>75mg caps</b>	<b>\$26.86</b>
<b>≥13 years</b>	75mg (12.5mL) PO once daily x 7 days	<b>6mg/mL oral susp</b>	<b>\$61.00</b>
<b>Pediatric Prophylaxis:</b>	30mg-75mg PO once daily x 7 days	<b>30mg caps</b>	<b>\$19.85</b>
<b>1-12 years old*</b>		<b>45mg caps</b>	<b>\$22.73</b>
<b>*&lt;1 year weight based dosing – see chart above</b>		<b>75mg caps</b>	<b>\$26.86</b>
		<b>6mg/mL oral susp</b>	<b>\$30.50</b>
<b>Adult Treatment:</b>	75mg PO bid x 5 days	<b>75mg caps</b>	<b>\$26.86</b>
<b>≥13 years</b>		<b>6mg/mL oral susp</b>	<b>\$91.50</b>
<b>Pediatric Treatment:</b>	30mg-75mg PO bid x 5 days	<b>30mg caps</b>	<b>\$19.85</b>
<b>1-12 years old*</b>		<b>45mg caps</b>	<b>\$22.73</b>
<b>*≥2 weeks- &lt;1 year weight based dosing – see chart above</b>		<b>75mg caps</b>	<b>\$26.86</b>
		<b>6mg/mL oral susp</b>	<b>\$61.00</b>
<b>Xofluza</b>	<b>baloxavir marboxil</b>		
<b>Treatment and Prophylaxis for ≥5 years</b>	(Less than 80kg) 40mg as a single oral dose	<b>40mg</b> <b>40mg/20mL oral suspension**</b>	<b>\$160.06</b>
	(80kg or greater) 80mg as a single oral dose	<b>80mg</b>	

\*Source: GoodRx (GRx) – accessed 11/28/22

\*\* Pricing/availability data of Xofluza (baloxavir) oral suspension unavailable in GoodRx/Amerisource

### Prescribers are encouraged to:

- Not wait for laboratory confirmation of influenza before starting antiviral treatment.<sup>5</sup>
- Consider the benefits, risks, and cost of prescribing anti-influenza therapy.
- Reinforce the value of generics with patients!

Frequently updated information on influenza activity and antiviral resistance available at [www.cdc.gov/flu](http://www.cdc.gov/flu).

#### References:

- 1) *The Medical Letter on Drugs and Therapeutics*. 2022. Nov 28:64 (1664)
- 2) CDC. Influenza antiviral medications: summary for clinicians. Available at: [www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm](http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm). Accessed November 28, 2022.
- 3) Xofluza (baloxavir marboxil) package insert. South San Francisco, CA: Genentech, Inc.; August 2022.
- 4) Relenza. In: Micromedex. (electronic version) IBM Corporation; [Updated July 22, 2021]; Accessed November 28, 2022
- 5) CDC. Guide for considering influenza testing when influenza viruses are circulating in the community. Available at: <https://www.cdc.gov/flu/professionals/diagnosis/consider-influenza-testing.htm>. Accessed November 28, 2022.