



# Pharmacy Pearls

January 2020

## Comparison of Oral Antivirals for Influenza

Contact: AHPPharmacist@urmc.rochester.edu

**Summary:** As a result of the recently completed CAPSTONE-2 trial, Xofluza® now has an expanded indication for patients at high risk of developing influenza-related complications. *However, there was not statistically significant difference in the median time to improvement of influenza symptoms in patients who received Xofluza® versus those who received oseltamivir.* **Due to cost and coverage, consider generic oseltamivir as first-line therapy for influenza A & B and reserve Xofluza® as an alternative agent in healthy or high-risk adult or adolescent outpatients with acute uncomplicated influenza if antiviral therapy is deemed necessary and can be initiated within 48 hours of symptom onset.**

### Comparison of oral antivirals for influenza†:

		oseltamivir (Tamiflu®)	Baloxavir (Xofluza®)
Formulation		Capsule & Suspension	Tablet
Approved Age		≥14 days old (treatment) 1 years old (prophylaxis)	≥12 years old
Adult Treatment Dose		CrCl >60 mL/min: 75mg BID CrCl 30-60 mL/min: 30mg BID CrCl <30 mL/min: 30mg daily	40 kg to <80 kg: (2) 20mg tablets at once ≥80 kg: (2) 40mg tablets at once
Treatment Duration		5 days*	Single dose
Prophylaxis Dose		CrCl >60 mL/min: 75mg daily CrCl 30-60 mL/min: 30mg daily CrCl <30 mL/min: 30mg every other day	Not studied
Prophylaxis Duration		7 days	Not studied
Time to symptom improvement vs. placebo	2 wks-12 yrs	1.5 days faster	Not studied
	12 – 65 yrs	1.3 days faster (NNT = 77)	1.1 days faster (NNT = 91)
	> 65 yrs	1 day faster	1.2 days faster (NNT = 83)
Median time to cessation of viral shedding		96 hours	48 hours
Incidence of GI Side Effects		10% Nausea, NNH=28 9% Vomiting, NNH =22	3% Diarrhea
Estimated cash price of treatment		\$100	\$180
Additional Information		<ul style="list-style-type: none"> <li>Generic available and is the <u>preferred agent on most insurance plans</u></li> <li>Preferred treatment agent in pregnant women</li> <li>GI adverse effects can be mitigated if taken with food and tend to improve after the two days of therapy</li> <li><b>Preferred agent</b> for severe influenza, pregnant/breastfeeding women, select high risk patients and children</li> </ul>	<ul style="list-style-type: none"> <li>Brand only</li> <li>Avoid co-administration with polyvalent-containing products (e.g., calcium)</li> <li>Emergence of resistance with single dose was noted in clinical trials.</li> <li><b>CDC does not recommend use in unstudied populations:</b> <ul style="list-style-type: none"> <li>Pregnant/breastfeeding women</li> <li>Severe, complicated or progressive illness who are or are not hospitalized</li> <li>Immunocompromised</li> <li>Children &lt;12 years old or &lt;40 kg</li> </ul> </li> </ul>

\*Longer duration may be considered for patients who remain severely ill after five days of treatment