

Treatment of Seasonal Influenza

According to the Centers for Disease Control and Prevention (CDC), the influenza virus affects approximately 8% of the United States each year. If the influenza infection is suspected or confirmed, antiviral drugs should be administered promptly if appropriate.¹

Who should be treated?^{2,3}

The CDC recommends treatment within 48 hours if influenza is suspected or confirmed and the patient:

- Requires hospitalization;
 - Has severe, complicated, or progressive illness;
 - Has risk factors for flu-related complications (e.g. < 2 or ≥ 65 years, pregnant women, immunocompromised).
- Individuals not at high risk may also be treated if clinically appropriate and within 48 hours of onset of illness.

Which antivirals are preferred?^{2,3,4}

- All the antiviral agents listed in Table 1 are active against both Influenza A and B viruses; baloxavir marboxil also has activity against certain strains resistant to neuraminidase inhibitors (NAIs).
- Oseltamivir is preferred for those who are pregnant, hospitalized, or with severe and/or complicated illness. It is also the most cost-effective agent.
- Peramivir may be considered in individuals who have malabsorption or are unable to tolerate oral formulations.
- Baloxavir is not recommended in pregnant or breastfeeding women due to lack of safety and efficacy data.
- Zanamivir is not recommended in individuals with respiratory disease due to risk of serious bronchospasm.
- Adamantanes (amantadine and rimantadine) are not recommended due to high resistance rates since 2006.

Antiviral timing and efficacy.^{2,3}

- The greatest clinical benefit is seen if treatment is initiated within 48 hours of illness onset.
- Treatment greater than 48 hours after illness onset may show benefit in severe, complicated, or hospitalized patients.
- Among patients with mild illness, early treatment with NAIs zanamivir and oseltamivir has been shown to shorten the duration of symptoms by up to three days.
- A single dose of baloxavir decreased duration of symptoms by one to two days after administration.
- Some studies have shown that early antiviral therapy reduces the severity and incidence of flu-related complications, such as otitis media, asthma exacerbations, and pneumonia.

Table 1. Recommended Antiviral Agents for the 2018-2019 Flu Season.⁵

Drug	Preparation	Treatment Age	Treatment Duration	MCAL	OC/OCC
Neuraminidase Inhibitors (NAIs)					
Tamiflu (oseltamivir)	Capsule: 30 mg, 45 mg, 75 mg Suspension: 6 mg/mL	≥ 2 weeks old	5 days (2 doses/day)	F* generic only	F* generic only
Relenza Diskhaler (zanamivir)	Diskhaler: 5 mg/actuation	≥ 7 years old	5 days (2 doses/day)	F*	F*
Rapivab (peramivir)	Intravenous: 200 mg/20 mL	≥ 2 years old	1 day (single dose)	PA	NF
Endonuclease Inhibitors					
Xofluza (baloxavir marboxil)	Tablet Pack: 20mg, 40mg	≥ 12 years old [§]	1 day (single dose)	F*	F*

MCAL: Medi-Cal; OC: OneCare; OCC: OneCare Connect; F: Formulary; PA: Prior Authorization; NF: Nonformulary; ¹Routine dosing for outpatients with acute uncomplicated influenza; duration may be longer for hospitalized, severely ill individuals. [§]Recommended in ≥12 yrs or ≥40 kg; *Subject to quantity limit

References

1. Key Facts About Influenza (Flu), Available at: <https://www.cdc.gov/flu/about/keyfacts.htm>. Accessed on October 23, 2019.
2. Influenza Antiviral Medications. Available at: <https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>. Accessed on October 2, 2019.
3. Morbidity and Mortality Weekly Report. Antiviral Agents for the Treatment and Chemoprophylaxis of Influenza: Recommendations of the ACIP. 2011; 60(1).
4. Kimberly E. Ng. "Xofluza (baloxavir marboxil) for the Treatment of Acute Uncomplicated Influenza." PT. 2019;44(1):9-11.
5. Lexicomp Online, Lexi-drugs online, Hudson, Ohio: Wolters Kluwer Clinical Drug Information, Inc.; October 3, 2019.

The CalOptima Approved Drug List is available on our website: www.caloptima.org
and for PDA download at www.epocrates.com