zanamivir (za-na-mi-veer)

**Indications**
Treatment of uncomplicated acute illness caused by influenza virus in patients <7 yr who have been symptomatic <2 days. Prevention of influenza in patients <5 yr.

**Action**
Inhibits the neuraminidase, which may alter virus particle aggregation and release. Therapeutic Effects: Reduced duration or prevention of the related symptoms.

**Pharmacokinetics**

- Absorption: 4–17% of inhaled dose is systemically absorbed.
- Distribution: Unknown.
- Protein Binding: 10%.
- Metabolism and Excretion: Mainly excreted by kidneys as unchanged drug; unabsorbed drug is excreted in feces.
- Half-life: 2.5–5.1 hr.

**TIME/ACTION PROFILE (blood levels)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>1–2 hr</td>
<td>12 hr</td>
<td>12 hr</td>
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</table>

**Contraindications/Precautions**

- Contraindicated in: Hypersensitivity to zanamivir or lactose.
- Use Cautiously in: Chronic obstructive pulmonary disease or asthma (risk of decreased lung function and/or bronchospasm); OB, Lactation: Safety not established; Pedi: Children <7 yr (for treatment) or <5 yr (for prophylaxis) (safety not established; may be at risk for neuropsychiatric events).

**Adverse Reactions/Side Effects**

- **CNS:** Seizures, abnormal behavior, agitation, delirium, hallucinations, mydriasis.
- **Resp:** Bronchospasm.
- **Misc:** Allergic reactions.

**Interactions**

- **Drug-Drug:** None noted.

**Route/Dosage**

**Treatment**

- Inhalation (Adults and children ≥7 yr): 10 mg (given as 2 inhalations of 5 mg each) twice daily for 5 days.

**Prophylaxis**

- Inhalation (Adults and children ≥5 yr): 10 mg (given as 2 inhalations of 5 mg each) daily for 10 days (for household setting) (28 days for community outbreaks).

**NURSING IMPLICATIONS**

**Assessment**

- Assess patient for signs and symptoms of influenza (fever, headache, myalgia, cough, sore throat) before administration. Determine duration of symptoms. Indicated for patients who have been symptomatic for up to 2 days.
- Determine if patient is lactose intolerant; may cause allergic reaction.

**Potential Nursing Diagnoses**

- Risk for infection (Indications)

**Implementation**

- Consider available information on influenza drug susceptibility patterns and treatment effects before using zanamivir for prophylaxis.
- Inhalation: Administer 2 doses on the first day of treatment whenever possible; must have at least 2 hours between doses. Doses should be administered 12 hr apart on subsequent days. Zanamivir is only for oral inhalation via DISKHALER; do not attempt via nebulization or mechanical ventilation.

**Patient/Family Teaching**

- Instruct patient to use zanamivir exactly as directed and to finish entire course, even if feeling better.
Instruct patient in the use of the DISKHALER. Patient should read the accompanying Patient Instructions for Use.

Advise patients that zanamivir is not a substitute for a flu shot. Patients should receive annual flu shot according to immunization guidelines.

Patients with a history of asthma should be advised to have a fast-acting inhaled bronchodilator available in case of bronchospasm following zanamivir administration. If using bronchodilator and zanamivir concurrently, administer bronchodilator first.

Advise patients to report behavioral changes (hallucinations, delirium, and abnormal behavior) to health care professional immediately.

Advise patient that zanamivir does not replace the flu shot. Flu shot should be taken according to instructions of health care professional.

Advise female patients to avoid zanamivir if pregnant or breastfeeding.

**Evaluation/Desired Outcomes**

- Reduced duration or prevention of flu-related symptoms.

Why was this drug prescribed for your patient?