

OSELTAMIVIR

Indications/Uses

Listed in Dosage.

Dosage/Direction for Use

Adult : PO Influenza A and B 75 mg bid for 5 days. Initiate w/in 2 days of onset of symptoms. Prophylaxis of influenza A and B 75 mg once daily for at least 10 days. Initiate w/in 2 days of exposure. For community outbreak: May continue dosing for up to 6 wk.

Dosage Details

Oral

Influenza A and B

Adult: 75 mg bid for 5 days. Initiate w/in 2 days of onset of symptoms.

Child: 0-1 mth 2 mg/kg; >1-3 mth 2.5 mg/kg; >3-12 mth 3 mg/kg. >1 yr ≤15 kg: 30 mg; >15-23 kg: 45 mg; >23-40 kg: 60 mg; >40 kg: 75 mg. All doses to be given bid for 5 days. Initiate w/in 2 days of onset of symptoms.

Oral

Prophylaxis of influenza A and B

Adult: 75 mg once daily for at least 10 days. Initiate w/in 2 days of exposure. For community outbreak: May continue dosing for up to 6 wk.

Child: 0-1 mth 2 mg/kg; >1-3 mth 2.5 mg/kg; >3-12 mth 3 mg/kg. >1 yr ≤15 kg: 30 mg; >15-23 kg: 45 mg; >23-40 kg: 60 mg; >40 kg: 75 mg. All doses to be given once daily for 10 days. Initiate w/in 2 days of exposure. For community outbreak: May continue dosing for up to 6 wk.

Renal Impairment

Prophylaxis of influenza A and B: Haemodialysis patient: 30 mg after every 2nd dialysis session. Peritoneal dialysis patient: 30 mg once wkly.

CrCl (mL/min) Dosage

≤10 Not recommended.

>10-30 30 mg every 2nd day.

>30-60 30 mg once daily. Influenza A and B: Haemodialysis patient: 30 mg after each dialysis session. Peritoneal dialysis patient: 30 mg as a single dose.

CrCl (mL/min) Dosage

≤10 Not recommended.

>10-30 30 mg once daily.

>30-60 30 mg bid.

Administration

May be taken with or without food. May be taken w/ meals to reduce GI discomfort. Cap may be opened & mixed w/ sweetened food products eg chocolate syr, sweetened condensed milk, apple sauce or yogurt. Swallow mixt immediately after preparation.

Reconstitution

Reconstitute w/ 55 mL of water to a final concentration of 6 mg/mL susp.

Contraindications

Hypersensitivity to oseltamivir.

Special Precautions

Patient w/ resp disease, chronic cardiac disease. Renal and severe hepatic impairment. Immunocompromised patient. Childn. Pregnancy and lactation.

Adverse Reactions

Nausea, vomiting, abdominal pain, insomnia, bronchitis, vertigo, diarrhoea, cough, dizziness, headache, fatigue, unstable angina, anaemia, arrhythmias, GI bleeding, haemorrhagic or pseudomembranous colitis, pneumonia, pyrexia, peritonsillar abscess, aches and pains, upper resp infections, dyspepsia, rhinorrhoea. In childn: Vomiting and other GI disturbances, bronchitis, asthma, conjunctivitis, dermatitis, ear disorders, otitis media, epistaxis, lymphadenopathy, sinusitis, pneumonia.

Potentially Fatal: Anaphylaxis and skin rashes (e.g. Stevens-Johnson syndrome, erythema multiforme, epidermal necrolysis; neuropsychiatric events (e.g. delirium, hallucinations, abnormal behaviour). Rarely, fulminant hepatitis or hepatic failure.

Pregnancy Category (US FDA)

PO: C

MonitoringParameters

Monitor closely for signs and symptoms of behavioural changes.

Drug Interactions

May potentially inhibit replication of influenza virus in live/attenuated influenza virus vaccine.

Action

Description: Oseltamivir is a prodrug of oseltamivir carboxylate. Oseltamivir carboxylate inhibits neuraminidase (sialidase), a viral surface enzyme which is responsible for the replication and infectivity of influenza virus A and B, thereby preventing the release of viruses from infected cells.

Pharmacokinetics:

Absorption: Readily absorbed from the GI tract. Bioavailability: 75% (as carboxylate). Time to peak plasma concentration: W/in 3-4 hr (as carboxylate).

Distribution: Distributed throughout the body, including the upper and lower resp tract. Volume of distribution: 23-26 L (as carboxylate). Plasma protein binding: Approx 3% (as carboxylate); 42% (as parent drug).

Metabolism: Extensively metabolised to oseltamivir carboxylate by hepatic esterases.

Excretion: Via urine (>90% as carboxylate); faeces. Elimination half-life: 1-3 hr (as parent drug); 6-10 hr (as carboxylate).

Chemical Structure

Click on icon to see table/diagram/image

Storage

Store at 25°C. Reconstituted susp: Store between 2-8°C for up to 17 days or at 25°C for up to 10 days. Do not freeze.

MIMS Class

Antivirals

ATC Classification

J05AH02 - oseltamivir ; Belongs to the class of neuraminidase inhibitors. Used in the systemic treatment of viral infections.