NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Oseltamivir and IV Zanamivir for Influenza in Adults with Renal Impairment, use of

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Guidance on the use of Oseltamivir and Zanamivir for Influenza in Adults with Renal Impairment

The Public Health England (PHE 2021) Guidance on use of antiviral agents for the treatment and prophylaxis of seasonal influenza (publishing.service.gov.uk) provides information regarding oseltamivir and zanamivir dosing for

- treatment and post exposure prophylaxis for influenza infection
- patients with body weight < 40kg,
- hepatic impairment,
- renal impairment,
- pregnancy and breast feeding
- length of treatment in immunosuppressed patients

At the Antimicrobial Utilisation Committee on 15 Nov 2023, it was agreed to adopt the Renal Drug Database dose recommendations for patients with decreased renal function requiring **oseltamivir**. These doses are different from the PHE oseltamivir dose guidelines for patients with renal impairment.

Recommended Oseltamivir dosing based on the Renal Drug Database Advice

Creatinine clearance (CrCL) (mL/min)	**Oseltamivir treatment** **Duration 5 Days***	**Oseltamivir Post Exposure Prophylaxis Dosing** **Duration 10 days**
>60	75 mg twice a day	75 mg once daily
30-60	75 mg twice a day	75 mg once daily
10-30	75 mg once daily or 30 mg twice daily	75 mg every 48 hours Or 30 mg once daily
<10	75 mg as a single (one off) dose	30 mg once per week, then repeat after 7 days
Haemodialysis including High Flux Dialysis	75 mg 3x week dose post dialysis	30 mg 3x per week post dialysis session

The Renal Unit in GGC have clinical experience using these higher doses and report good tolerability.

***Length of Oseltamivir Treatment in immunosuppressed Patients**

Oseltamivir 10 days treatment is recommended for the treatment immunosuppressed patients, though may be associated with the development of antiviral resistance, See PHE guidelines.

Recommended IV Zanamivir dosing in Relation to Renal Function for Adults ≥ 50 kg

(PHE & SPC advice)

Inhaled zanamivir (Relenza) Diskhaler® should be used in preference to IV zanamivir. No dose reduction for inhaled zanamivir (Relenza) Diskhaler® is required in patients with renal impairment.

If zanamivir is indicated but patients cannot use a zanamivir (Relenza) Diskhaler® or have severe complicated illness such as multi-organ failure, IV zanamivir should be considered.

Zanamivir is eliminated by renal clearance, therefore the dose of IV zanamivir must be reduced in patients with renal impairment. All patients should have their renal function assessed before and regularly during treatment with IV zanamivir.

Creatinine clearance (CrCL) (mL/min)	**IV Zanamivir treatment for 5-10 days**
≥ 80	Initial dose: 600 mg and 12 hours later, maintenance dose: 600 mg 12 hourly
50-79	Initial dose: 600 mg and 12 hours later, maintenance dose: 400 mg 12 hourly
30-49	Initial dose: 600 mg and 12 hours later, maintenance dose: 250 mg 12 hourly
15-29	Initial dose: 600 mg and 24 hours later, maintenance dose: 150 mg 12 hourly
< 15	Initial dose: 600 mg and 48 hours later, maintenance dose: 60 mg 12 hourly
Intermittent Haemodialysis or intermittent peritoneal dialysis	Initial dose: 600 mg and 48 hours later, maintenance dose: 60 mg 12 hourly Removed by dialysis, give post dialysis on dialysis days.

For preparation and administration advice see IV zanamivir Summary of Product Characteristics (SPC) or Medusa GIG06SRVFRMWB04 - Medusa Logon page - GIG-6-04/True (wales.nhs.uk)