# Zanamivir, Oseltamivir and Amantadine: Guidance for the Treatment and Prophylaxis of Influenza

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Zanamivir, oseltamivir and amantadine: Guidance for the Treatment and Prophylaxis of Influenza.

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Implementation of NICE guidance on the use of zanamivir, oseltamivir and amantadine for the treatment and prophylaxis of influenza

1. Introduction & Purpose

1.1 This guidance applies only when it is known that influenza is circulating with the exception of "at risk" people in long term and residential nursing homes during localised outbreaks (when influenza is not circulating) if there is a high level of certainty that the causative agent is influenza. This guidance does not cover the circumstances of a pandemic, impending pandemic, or a widespread epidemic of a new strain of influenza to which there is little or no community resistance.

1.2 This policy would apply to long-term residential units. For all other units/wards, particularly where the risk of spread of influenza to an at-risk individual or individuals (from another patient or member of staff) was considered a potentially serious issue for certain categories of patients, this should be dealt with at the discretion of the clinical staff in charge of these units/wards.

2. Prophylaxis

2.1 Oseltamivir and zanamivir are recommended, within their marketing authorisations, for the post-exposure prophylaxis of influenza if all of the following circumstances apply:

- National surveillance schemes have indicated that influenza virus is circulating.
- The person is in an at-risk group as defined in section 2.3.
- The person has been exposed (as defined in section 2.4) to an influenza-like illness and is able to begin prophylaxis within the timescale specified in the marketing authorisations of the individual drugs (within 36 hours of contact with an index case for zanamivir and within 48 hours of contact with an index case for oseltamivir).
- The person has not been effectively protected by vaccination (as defined in section 2.5).

2.2 The choice of either oseltamivir or zanamivir in the circumstances described in section 2.1 should be determined by the healthcare professional in consultation with patients and carers. The decision should take into account preferences regarding the delivery of the drug and potential adverse effects and contraindications. If all other considerations are equal, the drug with the lower acquisition cost should be used.

2.3 For the purpose of this guidance, people at risk are defined as those who fall into one or more of the clinical risk groups defined, and updated, each year by the Chief Medical Officer. The list included by NICE includes people with:

- Chronic respiratory disease (including asthma that requires continuous or repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission)
• Chronic heart disease
• Chronic renal disease
• Chronic liver disease
• Chronic neurological disease
• Immunosuppression
• Diabetes mellitus.

People who are aged 65 years or older are also defined as at-risk for the purpose of this guidance.

The Department of Health in England has advised (November 2010 and April 2011) that ‘at risk patients’ also includes patients under 65 years of age who are at risk of developing medical complications from influenza (treatment only) or women who are pregnant.

2.4 Exposure to an influenza-like illness is defined as close contact with a person in the same household or residential setting who has had recent symptoms of influenza.

2.5 People who are not effectively protected by vaccination include:
• Those who have not been vaccinated since the previous influenza season
• Those for whom vaccination is contraindicated, or in whom it has yet to take effect
• Those who have been vaccinated with a vaccine that is not well matched (according to information from the Health Protection Agency) to the circulating strain of influenza virus.

[Note that at the time of preparing this guideline, NICE refers to the Health Protection Agency. This has since been merged into Public Health England though NICE terminology has not yet been updated].

2.6 During localised outbreaks of influenza-like illness (outside the periods when national surveillance indicates that influenza virus is circulating generally in the community), oseltamivir and zanamivir may be used for post-exposure prophylaxis in at-risk people living in long-term residential or nursing homes, whether or not they are vaccinated. However, this should be done only if there is a high level of certainty that the causative agent in a localised outbreak is influenza, usually based on virological evidence of infection with influenza in the index case or cases.

2.7 Oseltamivir and zanamivir are not recommended for seasonal prophylaxis of influenza.

2.8 Amantadine is not recommended for the prophylaxis of influenza.

2.9 Prescribing should follow recommendations in the BNF and the Summary of Product Characteristics (S.P.C).

Post exposure prophylaxis:

Oseltamivir: Adult and adolescent over 13 years, 75mg once daily for 10 days for post exposure prophylaxis.
Zanamivir\textsuperscript{2,4}.
Adult and child over 5 years – 10mg once daily for 10 days by inhalation.

Amantadine is not recommended for either post-exposure or seasonal prophylaxis of influenza\textsuperscript{1,2}.

3. Treatment

3.1 Zanamivir and oseltamivir are recommended, within their marketing authorisations, for the treatment of influenza in children or adults if all the following circumstances apply\textsuperscript{5}:

- National surveillance schemes indicate that influenza virus A or B is circulating.
- The person is in an ‘at risk’ group as defined in 3.2.
- The person presents with an influenza-like illness and can start treatment within 48 hours (or within 36 hours for zanamivir treatment in children) of the onset of symptoms as per licensed indications.

3.2 For the purpose of this guidance, people ‘at risk’ are defined as those who have one of more of the following\textsuperscript{5}:

- Chronic respiratory disease (including asthma and chronic obstructive pulmonary disease
- Chronic heart disease
- Chronic renal disease
- Chronic liver disease
- Chronic neurological conditions
- Diabetes mellitus

People who are aged 65 years or older and people who might be immunosuppressed are also defined as ‘at risk’ for the purpose of this guidance\textsuperscript{5}.

The Department of Health in England has advised (November 2010 and April 2011) that ‘at risk patients’ also includes patients under 65 years of age who are at risk of developing medical complications from influenza (treatment only) or women who are pregnant\textsuperscript{2}.

3.3 The choice of either oseltamivir or zanamivir in the circumstances described in 3.1 should be made after consultation between the healthcare professional, the patient and carers. The decision should take into account the patient’s preferences regarding drug delivery and potential adverse effects and contraindications. If all other considerations are equal, the drug with the lowest acquisition cost should be offered\textsuperscript{5}.

3.4 During localised outbreaks of influenza-like illness (outside the periods when national surveillance indicates that influenza virus is circulating in the community), oseltamivir and zanamivir may be offered for the treatment of influenza in ‘at risk’ people who live in long-term residential or nursing homes. However, these treatments should be offered only if there is a high level of
certainly that the causative agent in a localised outbreak is influenza (usually based on virological evidence of influenza injection in the initial case)

3.5 Amantadine is not recommended for the treatment of influenza

3.6 Prescribing should follow recommendations in the BNF and the Summary of Product Characteristics (S.P.C).

Treatment of influenza –

Oseltamivir:
Adults and adolescents over 13 years, 75mg every 12 hours for 5 days
Children over 1 year - body weight 10-15 kg 30mg every 12 hours
- body weight 15-23 kg 45mg every 12 hours
- body weight 23-40 kg 60mg every 12 hours
- body weight over 40 kg adult dose

All given for 5 days.

Zanamivir:
Adult and child over 5 years dose by inhalation of powder 10 mg twice daily for 5 days (for up to 10 days if resistance to oseltamivir suspected).

4. Training

4.1 Staff awareness only.

5. References