Oseltamivir (Tamiflu™) for Institutional Outbreak Control

Manitoba
Building for the Future

Communicable Disease Control Unit

NOTE: This protocol pertains to the control of institutional (personal care home and acute care hospital) outbreaks of influenza B or influenza A amantadine-resistant strains.

Preamble

Although the neuraminidase inhibitor Oseltamivir is not currently licensed in Canada for prophylactic use in control of influenza A or B outbreaks, there is substantial data available to indicate its efficacy in this situation. It has been licensed for prophylaxis in the U.S. and is licensed for *treatment* of influenza A and B in Canada.

Use of Oseltamivir to Control Institutional Outbreaks of Influenza in Manitoba

The use of Oseltamivir is ***restricted to prophylaxis*** *of personal care home residents or acute care hospital patients*. However, should influenza-like illness develop in a resident/patient receiving Oseltamivir prophylaxis, dosage can be increased to provide treatment if desired.

Oseltamivir prophylaxis should be reserved for influenza B or influenza A amantadine-resistant outbreaks, for which there is no prophylactic alternative. However, in an amanatadine-sensitive influenza A outbreak where a patient/resident has a relative contraindication to amantadine prophylaxis, such as a seizure disorder or concomitant anticholinergic therapy, Oseltamivir should be substituted.

Definitions

Influenza like illness (ILI): Acute onset of respiratory illness with fever and cough and one or more of the following—sore throat, arthralgia, myalgia or prostration. In children under 5, gastrointestinal symptoms may also be present. In patients five years and younger or 65 and older, fever may not be prominent.

Influenza B outbreak:

a) At least one laboratory-confirmed case of influenza B infection and at least one additional case of influenza-like illness (ILI) occurring within seven days of each other

OR

b) at least two cases of influenza-like illness (ILI) occurring within seven days of each other

AND

evidence that influenza B is circulating during the current or previous week according to weekly electronic reports from the CDC Unit.

The Medical Officer of Health may also use judgment in accepting equivalent definitions; e.g., outbreak with identical features to a laboratory confirmed influenza B outbreak with similar geographic and temporal setting.

Influenza A amantadine-resistant strain outbreak:

- Amantadine prophylaxis has begun;
- more than 48 hours after beginning amantadine prophylaxis, new cases of influenza-like illness (ILI) continue to occur, at a rate of two or more per day for a total of at least six cases; and
- at least two new cases described above are laboratory confirmed as influenza A.

Amantadine-resistance testing can be performed at the Canadian Science Centre for Human and Animal Health. To arrange testing contact Barbara Wells, Cadham Provincial Laboratory at 945-6858.

Oseltamivir prophylaxis failure: Development of laboratory-confirmed influenza four or more days following initiation of prophylaxis. Failure is not anticipated; however if it did occur, it would be important to document (see last section on outbreak reporting).

Decision to Initiate Oseltamivir Prophylaxis

Having established that there is an influenza B or influenza A amantadine-resistant outbreak occurring, the Medical Officer of Health, in consultation with personal care home staff, will recommend whether or not to initiate Oseltamivir prophylaxis.

Release Procedure:

Product can only be released by:

- the local Medical Officer of Health;
- the Medical Officer of Health on-call; or
- a person specifically designated by a Medical Officer of Health (e.g., public health nurse, infection control nurse).

Product is stored at UPS Supply Chain Solutions. Call (204) 633-2621 or 1-800-665-7315. After hours: (204) 781-5342 with back-up phone numbers (204) 654-3630 and (204) 668-3665 and (204) 228-2819.

Persons calling to release product should self-identify as the Medical Officer of Health or his/her designate wishing to utilize Manitoba Health's stock.

Specify the number of 75mg capsules and the destination. UPS Supply Chain Solutions will ship full bottles or blister packs containing 10 capsules each; 2,000 capsules will be kept on hand at UPS Supply Chain Solutions at any time and replenished as necessary by the manufacturer.

Administration Procedure:

All patients or residents or their legal decision-maker should provide informed consent and this should be documented in the chart. A question-and-answer fact sheet has been developed for this purpose. Fact sheets may be ordered from Material Distribution Agency (MDA) at (204) 942-6212 or e-mail to InformationResources@gov.mb.ca.

- Prescriptions should be written by the medical director or attending physicians.
- For persons who have difficulty swallowing capsules, the capsule contents can be mixed with warm water in a 10cc syringe.

Dosage and Duration of Oseltamivir Prophylaxis

- Asymptomatic residents should receive prophylaxis at 75mg OD for 10 days or until the outbreak is determined to be over, whichever occurs first. If the outbreak is not over after 10 days, the local Medical Officer of Health should be consulted to determine if prophylaxis should continue.
- Patients/residents who are <13 years of age or have estimated creatinine clearances <10ml/min **should not receive Oseltamivir for prophylaxis**.
- Patients/residents with estimated creatinine clearances ≥10ml/min but <30ml/min **should receive prophylaxis at the reduced dosage of 75mg EOD**.
- Recovered patients/residents with prior, laboratory-confirmed influenza A or B during the outbreak in question, do not require treatment or prophylaxis.
- If a resident receiving prophylaxis appears to develop influenza, dosage should be increased to 75mg p.o. b.i.d for five days (except if creatinine clearance is ≥10ml/min but <30ml/min, in which case dosage should not be increased), after which no more Oseltamivir should be prescribed. In order to document the failure of prophylaxis, a nasopharyngeal aspirate or swab or throat swab should be collected when feasible.
- In the event that Oseltamivir prophylaxis has been initiated and subsequent information reveals that the outbreak is caused by an influenza A strain presumed or found sensitive to amantadine, Oseltamivir prophylaxis should be continued. This will eliminate confusion involved in switching to amantadine.

Outbreak Reporting

In conjunction with the submission of the outbreak investigation report to the Communicable Disease Control (CDC) Unit, Manitoba Health, please report any unanticipated adverse reactions and Oseltamivir failures to the CDC Unit.