

**SUBJECT: Update on current antiviral drug use recommendations for influenza for adults with renal impairment: The 2012/2013 AMMI guidelines and the June 2012 Tamiflu® (oseltamivir phosphate) product monograph**

**DATE: January 10, 2013**

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## **Background**

This memorandum follows a previous release by Public Health Ontario (PHO)<sup>1</sup> in November 2012 concerning the use of Tamiflu® (oseltamivir phosphate) for the treatment and prophylaxis of influenza.

The November 2012 memorandum highlighted recent changes to the Roche Canada Tamiflu® product monograph,<sup>2</sup> including dose adjustments for patients with renal impairment (June 2011), as well as the availability of a new lower concentration of the oral suspension (June 2012). In December 2012, the Association of Medical Microbiology and Infectious Disease Canada (AMMI) released their updated recommendations on *Use of Antiviral Drugs for Influenza: Guidelines for Practitioners 2012/2013* (2012/2013 AMMI Guidelines).<sup>3</sup> These two documents currently contain the most up-to-date Canadian recommendations for the use of oseltamivir for treatment and prophylaxis of influenza.

Since the 2010 MOHLTC recommendations on antiviral use in long-term care facility influenza outbreaks were released,<sup>4</sup> the oseltamivir treatment and prophylaxis dosing recommendations for individuals with renal impairment have changed in both the current Tamiflu® product monograph and the 2012/2013 AMMI guidelines.

## **Comparison of the Tamiflu® product monograph and the 2012/2013 AMMI clinical guidelines for the treatment and prophylaxis of influenza in adults with renal impairment**

In terms of dosing for persons with different degrees of renal impairment, the 2012 product monograph and the 2012/2013 AMMI guidelines contain many of the same recommendations for treatment and prophylaxis of influenza with oseltamivir. For adults with renal impairment, the 2012/2013 AMMI guidelines also recommend several alternative and additional subgroup-specific dosing regimens, with respect to dose and frequency of administration. These complement the recommendations common to both AMMI guidelines and the product monograph. Both documents acknowledge that data concerning the use of Tamiflu® in patients with renal impairment are limited, and that consultation with infectious disease specialists may be indicated.

Differences between the oseltamivir dose recommendations for individuals with renal impairment in the 2012 product monograph and the 2012/2013 AMMI guidelines include:

- For adults with a creatinine clearance of >30-60 mL/min, in addition to the twice daily doses recommended for treatment and prophylaxis in the product monograph, the AMMI guidelines provide alternative higher dose once daily regimens.

- The AMMI guidelines provide specific treatment dose recommendations for some additional sub-groups of adults with renal impairment (e.g., adults with a creatinine clearance of < 10mL/min; adults on low-flux vs. high-flux dialysis; adults receiving continuous renal replacement therapy (CRRT)).
- The product monograph makes recommendations about when to administer oseltamivir in relation to the timing of dialysis sessions (e.g., prior to dialysis).
- The recommended duration of oseltamivir prophylaxis for individuals with renal impairment differs between the two documents.

## Key Messages

**Health care providers, including those in long-term care facilities, should at minimum consult the 2012/2013 AMMI guidelines to inform influenza treatment and prophylaxis, particularly for adults with renal impairment.** The 2012/2013 AMMI guidelines contain many of the same recommendations for oseltamivir use in the population as the Roche Canada Tamiflu® product monograph (Revised: June 12, 2012). The AMMI guidelines also provide several alternative and additional subgroup-specific dosing regimens. Both the 2012/2013 AMMI guidelines and the 2012 Tamiflu® product monograph include oseltamivir dosing recommendations for adults with renal impairment that have been updated since the release of the 2010 MOHLTC antiviral medication use recommendations for influenza.

The current AMMI guidelines and Tamiflu® product monograph acknowledge that limited evidence exists to guide oseltamivir treatment and prophylaxis antiviral use recommendations in individuals with renal impairment. Practitioners may wish to consult with infectious disease specialists when considering the use of oseltamivir for the treatment or prophylaxis of influenza in this patient population.

## References

- (1) Public Health Ontario. Subject: Recent changes to the Tamiflu® (oseltamivir phosphate) product monograph for treatment and prophylaxis of seasonal influenza. Memorandum; 2012, Nov 7.
- (2) Hoffman-La Roche Canada. (June 12, 2012). Product Monograph Tamiflu®. Available online at: <http://www.rochecanada.com/fmfiles/re7234008/Research/ClinicalTrialsForms/Products/ConsumerInformation/MonographsandPublicAdvisories/Tamiflu/tamifluJune12HPE.pdf>
- (3) Aoki FY, Allen UD, Stiver HG, Evans GA. AMMI Canada Guidelines: The use of antiviral drugs for influenza: Guidance for practitioners 2012/2013. *Can J Infect Dis Med Microbiol.* Winter 2012;23(4):e79-e92.
- (4) Ministry of Health and Long-term Care (Dec 2010). Antiviral Medication for the Prevention and Treatment of Influenza. Public Health Protection and Prevention Branch, Public Health Division.

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