Tamiflu

Description

Tamiflu (oseltamivir)

Background

Tamiflu (oseltamivir phosphate), an antiviral drug, is an ethyl ester prodrug requiring ester hydrolysis for conversion to the active form, oseltamivir carboxylate. Oseltamivir carboxylate is an inhibitor of influenza virus neuraminidase affecting release of viral particles.

Efficacy of oseltamivir in patients who begin treatment after 48 hours of symptoms has not been established.

Oseltamivir is not a substitute for early influenza vaccination on an annual basis as recommended by the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP).

Regulatory Status

FDA-approved indication: Tamiflu is an influenza neuraminidase inhibitor indicated for:

- Treatment of influenza in patients 2 weeks of age and older who have been symptomatic for no more than 2 days (1,2).
- Prophylaxis of influenza in patients 1 year and older (1).

Important Limitations of Use:

- Efficacy not established in patients who begin therapy after 48 hours of symptoms.
- Not a substitute for annual influenza vaccination.
- No evidence of efficacy for illness from agents other than influenza viruses types A and B.
- Consider available information on influenza drug susceptibility patterns and treatment effects when deciding whether to use (1).

Persons at high risk of complications from influenza should be considered for antiviral therapy. There is data to suggest that the highest risk of both mortality and serious morbidity (e.g. hospitalization) occurs for severely immunocompromised patients (e.g. hematopoietic stem cell transplant patients) and very elderly (age >85 years). Residents of nursing homes and infants aged <24 months also have high hospitalization rates but lower case-fatality rates than do the other 2 groups (3).

Examples of persons at high risk of complications would be (3):
- Unvaccinated infants aged 12-24 months
- Persons with asthma or other chronic pulmonary diseases, such as cystic fibrosis in children or chronic obstructive pulmonary disease in adults.
- Persons with hemodynamically significant cardiac disease
- Persons who have immunosuppressive disorders or who are receiving immunosuppressive therapy
- HIV-infected persons
- Persons with sickle cell anemia and other hemoglobinopathies
- Persons with diseases that require long-term aspirin therapy, such as rheumatoid arthritis or Kawasaki disease
- Persons with chronic renal dysfunction
- Persons with cancer
- Persons with chronic metabolic disease, such as diabetes mellitus
- Persons with neuromuscular disorders, seizure disorders, or cognitive dysfunction that may compromise the handling of respiratory secretions
- Adults aged >65 years
- Residents of any age of nursing homes or other long-term care institutions

**Related policies**
Releza
Policy

This policy statement applies to clinical review performed for pre-service (Prior Approval, Precertification, Advanced Benefit Determination, etc.) and/or post-service claims.

Tamiflu may be considered medically necessary for the treatment or prophylaxis of influenza. Tamiflu may be considered investigational for all other indications.

Prior-Approval Requirements

Diagnosis

Patient must have ONE of the following:

1. Treatment of Influenza
   - Onset of symptoms within the previous 48 hours
   - Age of 2 weeks old or older

2. Prophylaxis of Influenza
   - Age of 1 year or older

Prior – Approval Renewal Requirements

None

Policy Guidelines

Pre - PA Allowance

Quantity A total of TWO 5-day courses: of the Tamiflu capsules, or up to 360ml standard allowance for Tamiflu 6mg/ml suspension

Duration 12 months

Prior - Approval Limits

For treatment of influenza

Quantity
1 capsule (75mg or 45mg), twice a day, for 5 days (except for the 30mg strength, which may require 2 capsules twice a day, for 5 days). Approve one 45mg, one 75mg, or two 30mg blister pack(s) of 10 capsules, or quantity of 180ml for 6mg/ml suspension.

Duration
1 month duration

For prophylaxis of influenza
Quantity
1 capsule, once a day, for 6 weeks. Approve for a total of five blister packs of 10 (quantity of 50), or quantity of 660ml for 6mg/ml suspension (adapted to accommodate package size.)

For immunocompromised patients: 1 capsule, once a day, for 6 months if patient is immunocompromised. Approve for a total of seventeen blister packs of 10 (quantity of 170), or quantity of 2,640ml for 6mg/ml suspension (adapted to accommodate package size.)

Duration: 2 months duration unless patient is immunocompromised then 6 months duration.

Prior – Approval Renewal Limits
None

Rationale
Summary
Tamiflu (oseltamivir phosphate), an antiviral drug, is an ethyl ester prodrug requiring ester hydrolysis for conversion to the active form, oseltamivir carboxylate. Oseltamivir carboxylate is an inhibitor of influenza virus neuraminidase affecting release of viral particles.

Oseltamivir is not a substitute for early influenza vaccination on an annual basis as recommended by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP). Persons at high risk of complications from influenza should be considered for antiviral therapy. There is data to suggest that the highest risk of both mortality and serious morbidity (e.g. hospitalization) occurs for severely immunocompromised
patients (e.g. hematopoietic stem cell transplant patients) and very elderly (age >85 years). Residents of nursing homes and infants aged <24 months also have high hospitalization rates but lower case-fatality rates than do the other 2 groups.

Prior authorization is required to ensure the safe, clinically appropriate and cost effective use of Tamiflu while maintaining optimal therapeutic outcomes.

**References**

2. FDA.Gov
   http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm333205.htm

**Policy History**

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>December 2005</td>
<td>The FDA approved the use of Tamiflu for the prevention of seasonal influenza in children 1 to 12 years of age who had close contact with an infected individual. The criteria have been updated to reflect this change.</td>
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<tr>
<td>November 2007</td>
<td>The criteria were updated to reflect the availability of Tamiflu 30mg and 45mg capsules.</td>
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<tr>
<td>March 2008</td>
<td>Addition of criteria requiring treatment to be started within 48 hours of symptoms to reflect FDA indications. Change in the quantity of suspension allowed both Pre and Post PA to reflect how suspension is supplied.</td>
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<tr>
<td>April 2009</td>
<td>Standard allowance increased due to the introduction of H1N1 flu and the possibility of contracting several different strains of flu during a 12 month period.</td>
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<tr>
<td>December 2012</td>
<td>FDA approved the age requirement to be lowered from 1 year of age to 2 weeks of age in the treatment of influenza.</td>
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<tr>
<td>March 2013</td>
<td>Annual editorial review Preventative quantity limits revised.</td>
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<tr>
<td>March 2014</td>
<td>Annual review and reference update Revised length of therapy for immunocompromised patients</td>
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Section: Prescription Drugs  Effective Date: April 1, 2014
Subsection: Anti-infective Agents  Original Policy Date: September 8, 2011
Subject: Tamiflu  Page: 6 of 6

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 13, 2014 and is effective April 1, 2014.

Signature on File

Deborah Smith, M.D., MPH