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 (1).

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) (1).

**Regulatory Status**

FDA-approved indication: Tamiflu is an influenza neuraminidase inhibitor (NAI) indicated for: (1)

1. Treatment of acute, uncomplicated influenza A and B in patients 2 weeks of age and older who have been symptomatic for no more than 48 hours
2. Prophylaxis of influenza A and B in patients 1 year and older

**Limitations of Use:** (1)

- Not a substitute for annual influenza vaccination.
- Consider available information on influenza drug susceptibility patterns and treatment effects when deciding whether to use
- Not recommended for patients with end-stage renal disease not undergoing dialysis.
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 (2).

Examples of persons at high risk of complications would be (2):

- 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 with 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

Per the CDC, chemoprophylaxis is recommended for control of outbreaks in institutional settings (e.g. long-term care facilities for elderly persons and children) and hospitals. CDC recommends antiviral chemoprophylaxis for a minimum of 2 weeks, and continuing up to 1 week after the last known case was identified. Antiviral chemoprophylaxis is recommended for all residents, including those who have received the influenza vaccination (3).

Related policies
Relenza, Xofluza
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 of influenza in patients 2 weeks of age and older or for the prophylaxis of influenza and if the conditions below are met.

Tamiflu may be considered **investigational** for all other indications.

**Prior-Approval Requirements**

**Diagnoses**

Patient must have **ONE** of the following:

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

2. **Prophylaxis of Influenza**
   a. Age of 1 year or older

   **AND ONE** of the following:
   a. High risk for complications
   b. Immunocompromised
   c. Resides in an institutional setting (e.g. long term care facilities)

**Prior – Approval Renewal Requirements**

**Diagnosis**

Patient must have the following:

1. **Prophylaxis of Influenza**
   a. Age of 1 year or older

   **AND ONE** of the following:
   a. Immunocompromised
   b. Resides in an institutional setting (e.g. long term care facilities)
Policy Guidelines

Pre - PA Allowance

<table>
<thead>
<tr>
<th>Strength</th>
<th>Quantity</th>
</tr>
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<tbody>
<tr>
<td>30 mg</td>
<td>40 capsules OR</td>
</tr>
<tr>
<td>45 mg</td>
<td>20 capsules OR</td>
</tr>
<tr>
<td>75 mg</td>
<td>20 capsules OR</td>
</tr>
<tr>
<td>6 mg/mL suspension</td>
<td>360 mL</td>
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</table>

Duration: 12 months

Prior - Approval Limits

Treatment of influenza

<table>
<thead>
<tr>
<th>Strength</th>
<th>Quantity per 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mg</td>
<td>20 capsules per 30 days OR</td>
</tr>
<tr>
<td>45 mg</td>
<td>10 capsules per 30 days OR</td>
</tr>
<tr>
<td>75 mg</td>
<td>10 capsules per 30 days OR</td>
</tr>
<tr>
<td>6 mg/mL suspension</td>
<td>180 mL per 30 days</td>
</tr>
</tbody>
</table>

Duration: 1 month

Prophylaxis of influenza
For high risk patients

<table>
<thead>
<tr>
<th>Strength</th>
<th>Quantity per 60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 mg</td>
<td>50 capsules per 60 days OR</td>
</tr>
<tr>
<td>45 mg</td>
<td>50 capsules per 60 days OR</td>
</tr>
<tr>
<td>75 mg</td>
<td>50 capsules per 60 days OR</td>
</tr>
<tr>
<td>6 mg/mL suspension</td>
<td>660 mL per 60 days</td>
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</tbody>
</table>

Duration: 2 months
For immunocompromised or institutionalized patients

<table>
<thead>
<tr>
<th>Quantity per 180 days</th>
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<tbody>
<tr>
<td>170 capsules per 180 days OR 2640 mL per 180 days</td>
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</tbody>
</table>

Duration: 6 months

Prior – Approval Renewal Limits

For prophylaxis of influenza
For immunocompromised or institutionalized patients

<table>
<thead>
<tr>
<th>Quantity per 180 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>170 capsules per 180 days OR 2640 mL per 180 days</td>
</tr>
</tbody>
</table>

Duration: 6 months

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) (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 (2).

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

References


Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<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>
</tr>
<tr>
<td>November 2007</td>
<td>The criteria were updated to reflect the availability of Tamiflu 30mg and 45mg capsules.</td>
</tr>
<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>
</tr>
<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>
</tr>
<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>
</tr>
<tr>
<td>March 2013</td>
<td>Annual editorial review.</td>
</tr>
<tr>
<td>March 2014</td>
<td>Preventative quantity limits revised.</td>
</tr>
<tr>
<td>March 2015</td>
<td>Annual review and reference update. Revised length of therapy for immunocompromised patients.</td>
</tr>
<tr>
<td>March 2016</td>
<td>Annual review and reference update.</td>
</tr>
<tr>
<td>March 2016</td>
<td>Annual editorial review. Policy number change from 5.04.04 to 5.01.19.</td>
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</table>
Section: Prescription Drugs  Effective Date: April 1, 2019
Subsection: Anti-infective Agents  Original Policy Date: September 8, 2011
Subject: Tamiflu  Page: 7 of 7

December 2017  Annual editorial review and reference update.
February 2018  Addition of renewal for prophylaxis of influenza in immunocompromised patients and patients in an institutional setting and the clarification of prophylaxis types to initiation
June 2018  Annual review and reference update
March 2019  Annual review and reference update

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 15, 2019 and is effective on April 1, 2019.