Synribo

Description

Synribo (omacetaxine mepesuccinate)

Background
Synribo is a protein synthesis inhibitor used in the treatment of adults with chronic or accelerated chronic myelogenous leukemia. Chronic myelogenous leukemia (CML) is a myeloproliferative disorder that accounts for 15-20% of leukemias in adults. Synribo is a semi-synthetic formulation of the cytotoxic plant alkaloid homoharringtonine, isolated from the evergreen tree Cephalotaxus harringtonia (1-2).

Regulatory Status
FDA-approved indication: Synribo for injection is indicated for the treatment of adult patients with chronic or accelerated phase chronic myeloid leukemia (CML) with resistance and/or intolerance to two or more tyrosine kinase inhibitors (TKI) (2).

Synribo does not carry a boxed warning; however, serious adverse effects include: (2)

- Myelosuppression: severe and fatal thrombocytopenia, neutropenia and anemia.
- Bleeding: severe thrombocytopenia and increased risk of hemorrhage. Fatal cerebral hemorrhage and severe, non-fatal gastrointestinal hemorrhage.
- Hyperglycemia: glucose intolerance and hyperglycemia including hyperosmolar non-ketotic hyperglycemia.
- Embryo-fetal toxicity: Can cause fetal harm. Advise females of reproductive potential to avoid pregnancy while being treated with Synribo.
- IV administration may be associated with acute cardiac toxicity. Synribo is FDA approved for subcutaneous administration.
The safety and efficacy of Synribo in pediatric patients have not been established (2).

Related policies

**Policy**

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

Synribo may be considered **medically necessary** for patients 18 years of age or older with a confirmed diagnosis of chronic or accelerated phase chronic myeloid leukemia and if the conditions indicated below are met.

Synribo is considered **investigational** in patients under the age of 18 and for all other indications.

**Prior-Approval Requirements**

**Age** 18 years of age or older

**Diagnoses**

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

1. Chronic phase myeloid leukemia (CML) that is resistant and/or intolerant to two or more tyrosine kinase inhibitors (TKI)

2. Accelerated phase chronic myeloid leukemia (CML) that is resistant and/or intolerant to two or more tyrosine kinase inhibitors (TKI)

**AND** the following:

a. Subcutaneous administration

**Prior – Approval Renewal Requirements**

**Age** 18 years of age or older

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

1. Chronic phase myeloid leukemia (CML) that is resistant and/or intolerant to two or more tyrosine kinase inhibitors (TKI)

2. Accelerated phase chronic myeloid leukemia (CML) that is resistant and/or intolerant to two or more tyrosine kinase inhibitors (TKI)

AND ALL of the following:
   a. Show clinical benefit from therapy
   b. Subcutaneous administration

Policy Guidelines

Pre - PA Allowance
None

Prior - Approval Limits
Duration 12 months

Prior – Approval Renewal Limits
Duration 12 months

Rationale

Summary
Synribo is medically necessary for the treatment of adult patients with chronic or accelerated phase chronic myeloid leukemia (CML) with resistance and/or intolerance to two or more tyrosine kinase inhibitors (TKI). This indication is based upon response rate. There are no trials verifying an improvement in disease-related symptoms or increased survival with Synribo. Synribo warnings include myelosuppression, bleeding, hyperglycemia, and for female patients, the potential to cause fetal toxicity. Synribo may be associated with acute cardiac toxicity when administered intravenously. Synribo is FDA-approved for subcutaneous administration (1, 2).

Prior approval is required to ensure the safe, clinically appropriate and cost effective use of Synribo (omacetaxine mepesuccinate) while maintaining optimal therapeutic outcomes.
References

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>November 2012</td>
<td>New addition to PA</td>
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<tr>
<td>March 2013</td>
<td>Addition of the subcutaneous administration due to acute cardiac toxicity with IV administration</td>
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<tr>
<td>March 2014</td>
<td>Annual review</td>
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<td>March 2015</td>
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<tr>
<td>December 2015</td>
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<tr>
<td>June 2016</td>
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<td></td>
<td>Policy code changed from 5.04.31 to 5.21.31</td>
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<tr>
<td>June 2017</td>
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Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on June 20, 2019 and is effective on July 1, 2019.