Yondelis (trabectedin)

**Background**
Yondelis is an alkylating drug used for two types of unresectable or metastatic soft tissue sarcomas - liposarcoma or leiomyosarcoma. In soft tissue sarcomas, cancer cells form in the soft tissues of the body, including the muscles, tendons, fat, blood vessels, lymph vessels, nerves and tissues around joints. Liposarcoma and leiomyosarcoma are specific types of soft tissue sarcoma that occur in fat cells (liposarcoma) or smooth muscle cells (leiomyosarcoma). Soft tissue sarcomas can form almost anywhere in the body, but are most common in the head, neck, arms, legs, trunk and abdomen. Yondelis impairs DNA function resulting in a change of the cell cycle and eventual cell death (1).

**Regulatory Status**
FDA-approved indication: Yondelis is an alkylating drug indicated for the treatment of patients with unresectable or metastatic liposarcoma or leiomyosarcoma who received a prior anthracycline-containing regimen (1).

Dexamethasone should be administered intravenously 30 minutes prior to each dose of Yondelis to prevent hepatotoxicity and bone marrow toxicity (1).

Yondelis is associated with risk of neutropenic sepsis that can be fatal. Assess neutrophil count prior to administration of each dose of Yondelis and periodically throughout the treatment cycle (1).
Yondelis can cause rhabdomyolysis and musculoskeletal toxicity that can be fatal. Assess CPK levels prior to each administration of Yondelis (1).

Hepatotoxicity, including hepatic failure, can occur with Yondelis. Use of Yondelis in patients with serum bilirubin levels above the upper limit of normal or with AST or ALT greater than 2.5 times the upper limit of normal has not been studied. Assess hepatic function prior to each administration of Yondelis (1).

Cardiomyopathy including cardiac failure, congestive heart failure, ejection fraction decreased, diastolic dysfunction, or right ventricular dysfunction can occur with Yondelis. In Trial 1, patients with a history of New York Heart Association Class II to IV heart failure or abnormal left ventricular ejection fraction (LVEF) at baseline were ineligible (1). LVEF was quantified as grade 1 (normal; ejection fraction [EF] 50% or greater), grade 2 (mild dysfunction; EF 40% to 49%), grade 3 (moderate dysfunction; EF 30% to 39%), grade 4 (severe dysfunction; EF 20% to 29%) or grade 5 (very severe dysfunction; EF 20% or less) (2). Assess left ventricular ejection fraction by echocardiogram or multigated acquisition scan before initiation of Yondelis and at 2- to 3-month intervals thereafter until Yondelis is discontinued (1).

Safety and effectiveness of Yondelis in patients less than 18 years of age have not been established (1).

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.

Yondelis may be considered medically necessary for use in patients 18 years of age or older with unresectable or metastatic liposarcoma or leiomyosarcoma and if the conditions indicated below are met.

Yondelis may be considered investigational 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. Unresectable or metastatic liposarcoma
2. Unresectable or metastatic leiomyosarcoma

AND ALL of the following:
1. Prior therapy with anthracycline-containing chemotherapy regimen
2. Neutrophil count greater than 1500 cells/mL and monitor neutrophil count before each dose
3. Left ventricular ejection fraction (LVEF) is above 50%
4. AST or ALT levels < 2.5 x ULN prior to the start of therapy
5. Physician agrees to monitor hepatic function (LFTs) prior to each dose

Prior – Approval Renewal Requirements

Age 18 years of age or older

Diagnoses

Patient must have ONE of the following:

1. Unresectable or metastatic liposarcoma
2. Unresectable or metastatic leiomyosarcoma

AND ALL of the following:
1. NO disease progression or unacceptable toxicity
2. Neutrophil count greater than 1500 cells/mL and monitor neutrophil count before each dose
3. Physician agrees to monitor hepatic function (LFTs) prior to each dose
4. Left ventricular ejection fraction (LVEF) is above 50%

Policy Guidelines

Pre - PA Allowance
None

Prior - Approval Limits
Duration 12 months
Prior – Approval *Renewal* Limits
Duration 12 months

**Rationale**

**Summary**
Yondelis is an alkylating drug indicated for the treatment of patients with unresectable or metastatic liposarcoma or leiomyosarcoma who received a prior anthracycline-containing regimen. Yondelis impairs DNA function resulting in a change of the cell cycle and eventual cell death. Patients prescribed Yondelis must have monitored platelets, neutrophil count, left ventricular ejection fraction, and hepatic function prior to each administration of Yondelis. Safety and effectiveness of Yondelis in patients less than 18 years of age have not been established (1).

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

**References**

**Policy History**

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<tr>
<td>December 2016</td>
<td>Addition to PA</td>
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<tr>
<td>March 2016</td>
<td>Annual editorial review</td>
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<td>Policy number change from 5.04.65 to 5.21.65</td>
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<tr>
<td>June 2016</td>
<td>Annual editorial review</td>
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<td>Change of the assessment of left ventricular ejection fraction (LVEF) by echocardiogram or multigated acquisition (MUGA) scan before initiation and every 3 months to left ventricular ejection fraction (LVEF) is above 50% per SME</td>
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<tr>
<td>September 2016</td>
<td>Annual review</td>
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<td>June 2017</td>
<td>Annual editorial review and reference update</td>
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<td>Added age limit to renewal section</td>
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- June 2018  Annual review and reference update
- June 2019  Annual review and reference update

**Keywords**

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