Alprostadil

Description

Alprostadil (prostaglandin E1)

Background
Alprostadil is naturally-occurring prostaglandin-E1 in pharmaceutical form that causes smooth-muscle relaxation, vasodilation, inhibition of platelet aggregation and other biological effects related to prostaglandins. Alprostadil is indicated for temporary, palliative maintenance of the ductal opening in patent ductus arteriosus in neonates (injectable / IV) (1).

Alprostadil for treatment of erectile dysfunction (ED) in any dosage form (topical, suppository, injection – cavernosal or otherwise) is excluded from coverage.

Regulatory Status
FDA-approved indication: Alprostadil injection is indicated for palliative, not definitive, therapy to temporarily maintain the patency of the ductus arteriosus until corrective or palliative surgery can be performed in neonates who have congenital heart defects and who depend upon the patent ductus for survival. Such congenital heart defects include pulmonary atresia, pulmonary stenosis, tricuspid atresia, tetralogy of Fallot, interruption of the aortic arch, coarctation of the aorta, or transposition of the great vessels with or without other defects (1).

Apnea is experienced by about 10 to 12% of neonates with congenital heart defects treated with Prostin VR Pediatric Sterile Solution. Apnea is most often seen in neonates weighing less than 2 kg at birth and usually appears during the first hour of drug infusion. Therefore, respiratory status should be monitored throughout treatment. Prostin VR Pediatric
should be administered only by trained personnel and used where ventilatory assistance and pediatric intensive care is immediately available (1).

Off-label (non-FDA approved) compounded topical preparations of alprostadil have not been proven to be safe or effective.

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.

Alprostadil may be considered medically necessary in patients 1 year of age or older who have a congenital heart defect and if the conditions indicated below are met.

Alprostadil is considered investigational in patients with all other indications.

Prior-Approval is not required for members less than 1 year of age.

**Prior-Approval Requirements**

**Age**

1 year or older

**Diagnosis**

Patient must have the following:

- Congenital heart defect with dependence on the patent ductus for survival

  AND ALL of the following:

  1. Need to maintain the patency of the ductus arteriosus
  2. Pending corrective or palliative surgery

**Prior – Approval Renewal Requirements**

None

**Policy Guidelines**
Pre - PA Allowance
None
This is a covered benefit for members less than 1 year of age – PA not required.

Prior - Approval Limits
Duration 1 month

Prior – Approval Renewal Requirements
None

Rationale

Summary
Alprostadil is indicated for palliative therapy to temporarily maintain the patency of the ductus arteriosus in neonates with congenital heart defects until corrective or palliative surgery can be performed. Alprostadil used for this purpose should be administered only by trained personnel in facilities that provide pediatric intensive care (1).

Alprostadil for treatment of erectile dysfunction (ED) in any form (topical, suppository, injection – cavernosal or otherwise) is excluded from coverage.

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

References

Policy History
<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>December 2013</td>
<td>New addition to PA</td>
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<tr>
<td>March 2014</td>
<td>Annual review</td>
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<tr>
<td>June 2015</td>
<td>Annual editorial review</td>
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<tr>
<td>December 2016</td>
<td>Annual editorial review and reference update</td>
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<tr>
<td></td>
<td>Policy number change from 5.16.03 to 5.40.03</td>
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<tr>
<td>September 2017</td>
<td>Annual editorial review and reference update</td>
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<td>September 2018</td>
<td>Annual review</td>
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<td>September 2019</td>
<td>Annual review</td>
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<td>September 2020</td>
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5.40.03

Section: Prescription Drugs  Effective Date: April 1, 2021
Subsection: Cardiovascular Agents  Original Policy Date: January 1, 2014
Subject: Alprostadil  Page: 4 of 4

March 2021  Annual review

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 12, 2021 and is effective on April 1, 2021.