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# 5.40.003

Section: Prescription Drugs Effective Date: April 1, 2024

Subsection: Cardiovascular Agents Original Policy Date: January 1, 2014

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Last Review Date: March 8, 2024

# Alprostadil

### Description

## Alprostadil (prostaglandin E1)

### **Background**

Alprostadil is a 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

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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** if the conditions indicated below are met.

Alprostadil may be 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**

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### **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

1. Prostin VR [package insert]. New York, NY: Pfizer Inc.; April 2013.

Policy History	
Date	Action
December 2013 March 2014 June 2015 December 2016	New addition to PA Annual review Annual editorial review Annual editorial review and reference update Policy number change from 5.16.03 to 5.40.03
September 2017 September 2018 September 2019 September 2020 March 2021	Annual editorial review and reference update Annual review Annual review Annual review Annual review Annual review

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March 2022 Annual review

March 2023 Annual review. Changed policy number to 5.40.003

March 2024 Annual review

Keywords

This policy was approved by the FEP® Pharmacy and Medical Policy Committee on March 8, 2024 and is effective on April 1, 2024.