



## Clinical Policy: Epoprostenol Sodium (Flolan, Veletri)

Reference Number: PA.CP.PHAR.192

Effective Date: 01/18

Last Review Date: 01/2021

[Coding Implications](#)

[Revision Log](#)

### Description

Epoprostenol (Flolan<sup>®</sup>, Veletri<sup>®</sup>) is a prostacyclin.

### FDA Approved Indication(s)

Flolan and Veletri are indicated for the treatment of pulmonary arterial hypertension (PAH) (World Health Organization [WHO] Group 1) to improve exercise capacity.

Studies establishing effectiveness included predominantly patients with New York Heart Association (NYHA) Functional Class III-IV symptoms and etiologies of idiopathic or heritable PAH or PAH associated with connective tissue diseases.

### Policy/Criteria

*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.*

It is the policy of health plans affiliated with Pennsylvania Health and Wellness that Flolan and Veletri are **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. Pulmonary Arterial Hypertension (must meet all):

1. Diagnosis of PAH;
2. Prescribed by or in consultation with a cardiologist or pulmonologist;
3. Failure of a calcium channel blocker (*see Appendix B*), unless member meets one of the following (a, b, or c):
  - a. Inadequate response or contraindication to acute vasodilator testing;
  - b. Contraindication or clinically significant adverse effects to a calcium channel blocker are experienced;
  - c. Members already taking and stabilized on epoprostenol sodium will not be required to change therapy;
4. If request is for brand Flolan or brand Veletri, medical justification supports inability to use generic epoprostenol sodium (e.g., contraindication to excipients);

**Approval duration: 6 months**

##### B. Other diagnoses/indications: Refer to PA.CP.PMN.53

#### II. Continued Approval

##### A. Pulmonary Hypertension (must meet all):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.LTSS.PHAR.01) applies;
2. Member is responding positively to therapy.

**Approval duration: 12 months**

**B. Other diagnoses/indications (must meet 1 or 2):**

1. Currently receiving medication via Pennsylvania Health and Wellness benefit and documentation supports positive response to therapy; or the Continuity of Care policy (PA.LTSS.PHAR.01) applies;  
**Approval duration: Duration of request or 6 months (whichever is less);** or
2. Refer to PA.CP.PMN.53

**III. Diagnoses/Indications for which coverage is NOT authorized:**

- A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – PA.CP.PMN.53

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| FC: functional class              | PAH: pulmonary arterial hypertension |
| FDA: Food and Drug Administration | PH: pulmonary hypertension           |
| NYHA: New York Heart Association  | WHO: World Health Organization       |

*Appendix B: Therapeutic Alternatives*

*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.*

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
nifedipine (Adalat <sup>®</sup> CC, Afeditab <sup>®</sup> CR, Procardia <sup>®</sup> , Procardia XL <sup>®</sup> )	60 mg PO QD; may increase to 120 to 240 mg/day	240 mg/day
diltiazem (Dilacor XR <sup>®</sup> , Dilt-XR <sup>®</sup> , Cardizem <sup>®</sup> CD, Cartia XT <sup>®</sup> , Tiazac <sup>®</sup> , Taztia XT <sup>®</sup> , Cardizem <sup>®</sup> LA, Matzim <sup>®</sup> LA)	720 to 960 mg PO QD	960 mg/day
amlodipine (Norvasc <sup>®</sup> )	20 to 30 mg PO QD	30 mg/day

*Therapeutic alternatives are listed as Brand name<sup>®</sup> (generic) when the drug is available by brand name only and generic (Brand name<sup>®</sup>) when the drug is available by both brand and generic.*

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s):
  - Congestive heart failure due to severe left ventricular systolic dysfunction
  - Pulmonary edema
  - Hypersensitivity to the drug or to structurally related compounds
- Boxed Warning(s): none reported

*Appendix D: Pulmonary Hypertension: WHO Classification*

- Group 1: PAH (pulmonary arterial hypertension)
- Group 2: PH due to left heart disease
- Group 3: PH due to lung disease and/or hypoxemia

- Group 4: CTEPH (chronic thromboembolic pulmonary hypertension)
- Group 5: PH due to unclear multifactorial mechanisms

*Appendix E: Pulmonary Hypertension: WHO/NYHA Functional Classes (FC)*

Treatment Approach*	FC	Status at Rest	Tolerance of Physical Activity (PA)	PA Limitations	Heart Failure
Monitoring for progression of PH and treatment of co-existing conditions	I	Comfortable at rest	No limitation	Ordinary PA does not cause undue dyspnea or fatigue, chest pain, or near syncope.	
Advanced treatment of PH with PH-targeted therapy - see Appendix F**	II	Comfortable at rest	Slight limitation	Ordinary PA causes undue dyspnea or fatigue, chest pain, or near syncope.	
	III	Comfortable at rest	Marked limitation	Less than ordinary PA causes undue dyspnea or fatigue, chest pain, or near syncope.	
	IV	Dyspnea or fatigue may be present at rest	Inability to carry out any PA without symptoms	Discomfort is increased by any PA.	Signs of right heart failure

\*PH supportive measures may include diuretics, oxygen therapy, anticoagulation, digoxin, exercise, pneumococcal vaccination. \*\*Advanced treatment options also include calcium channel blockers.

*Appendix F: Pulmonary Hypertension: Targeted Therapies*

Mechanism of Action	Drug Class	Drug Subclass	Drug	Brand/Generic Formulations
Reduction of pulmonary arterial pressure through vasodilation	Prostacyclin* pathway agonist  *Member of the prostanoid class of fatty acid derivatives.	Prostacyclin	Epoprostenol	Velettri (IV) Flolan (IV) Flolan generic (IV)
		Synthetic prostacyclin analog	Treprostinil	Orenitram (oral tablet) Remodulin (IV) Tyvaso (inhalation)
			Iloprost	Ventavis (inhalation)
		Non-prostanoid prostacyclin receptor (IP receptor) agonist	Selexipag	Uptravi (oral tablet)

Mechanism of Action	Drug Class	Drug Subclass	Drug	Brand/Generic Formulations
	Endothelin receptor antagonist (ETRA)	Selective receptor antagonist	Ambrisentan	Letairis (oral tablet)
		Nonselective dual action receptor antagonist	Bosentan	Tracleer (oral tablet)
			Macitentan	Opsumit (oral tablet)
	Nitric oxide-cyclic guanosine monophosphate enhancer	Phosphodiesterase type 5 (PDE5) inhibitor	Sildenafil	Revatio (IV, oral tablet, oral suspension)
			Tadalafil	Adcirca (oral tablet)
		Guanylate cyclase stimulant (sGC)	Riociguat	Adempas (oral tablet)

**V. Dosage and Administration**

Drug Name	Dosing Regimen	Maximum Dose
Epoprostenol (Flolan)	2 ng/kg/min IV, increased by 1-2 ng/kg/min at intervals of at least 15 minutes	Based on clinical response
Epoprostenol (Veletri)	2 ng/kg/min IV, increased by 2 ng/kg/min every 15 minutes or longer	Based on clinical response

**VI. Product Availability**

Drug Name	Availability
Epoprostenol (Flolan)	Vial with powder for reconstitution: 0.5 mg, 1.5 mg
Epoprostenol (Veletri)	Vial: 0.5 mg/10 mL, 1.5 mg/10 mL

**VII. References**

1. Epoprostenol Sodium Prescribing Information. Sellersville, PA: Teva Pharmaceuticals USA; March 2019. Available at: <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=56733651-d331-4e69-a6a3-303756ccc53c>. Accessed October 8, 2020.
2. Flolan Prescribing Information. Research Triangle Park, NC: GlaxoSmithKline; November 2019. Available at: [https://www.gsksource.com/pharma/content/dam/GlaxoSmithKline/US/en/Prescribing\\_Information/Flolan/pdf/FLOLAN-PI-PIL.PDF](https://www.gsksource.com/pharma/content/dam/GlaxoSmithKline/US/en/Prescribing_Information/Flolan/pdf/FLOLAN-PI-PIL.PDF). Accessed October 8, 2020.
3. Veletri Prescribing Information. South San Francisco, CA: Actelion Pharmaceuticals US, Inc.; December 2018. Available at: <https://www.veletri.com>. Accessed October 8, 2020.
4. McLaughlin VV, Archer SL, Badesch DB, et al. ACCF/AHA 2009 expert consensus document on pulmonary hypertension: A report of the American College of Cardiology Foundation Task Force on Expert Consensus Documents and the American Heart Association - developed in collaboration with the American College of Chest Physicians, American Thoracic Society, Inc., and the Pulmonary Hypertension Association. *J Am Coll Cardiol.* 2009; 53(17): 1573-1619.

5. Klinger JR, Elliott CG, Levine DJ, et al. Therapy for pulmonary arterial hypertension in adults: update of the CHEST guideline and expert panel report. *CHEST*. 2019;155(3):565-586.
6. Abman SH, Hansmann G, Archer SL, et al. Pediatric pulmonary hypertension: Guidelines from the American Heart Association and American Thoracic Society. *Circulation*. 2015; 132(21): 2037-99.
7. Kim NH, Delcroix M, Jenkins DP, et al. Chronic thromboembolic pulmonary hypertension. *J Am Coll Cardiol*. 2013; 62(25): Suppl D92-99.
8. Galiè N, Humbert M, Vachiery JL, et al. 2015 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. *Kardiol Pol*. 2015;73(12):1127-206. doi: 10.5603/KP.2015.0242.
9. Simmonneau G, Montani D, Celermajer D, et al. Haemodynamic definitions and updated clinical classification of pulmonary hypertension. *Eur Respir J*. 2019; 53:1801913.
10. Sitbon O, Humbert M, Jais X, et al. Long-term response to calcium channel blockers in idiopathic pulmonary arterial hypertension. *Circulation*. 2005;111(23);3105;11.
11. Yaghi S, Novikov A, Trandafirescu T. Clinical update on pulmonary hypertension. *J Investig Med*. 2020; 0:1-7. doi:10.1136/jim-2020-001291.

**Coding Implications**

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J1325	Injection, poprostenol, 0.5 mg

Reviews, Revisions, and Approvals	Date	Approval Date
Removed WHO/NYHA classifications from initial criteria since specialist is involved in care. References reviewed and updated.	02/18	
1Q 2019 annual review: references reviewed and updated.	01/19	
Q1 2020: policy retired	01/2020	
1Q 2021 annual review: reintroduced policy; no significant changes; references reviewed and updated.	01/2021	