

Clinical Policy: Treprostinil (Orenitram, Remodulin, Tyvaso)

Reference Number: CP.PHAR.199

Effective Date: 03.16

Last Review Date: 02.22

Line of Business: Commercial, HIM, Medicaid

[Coding Implications](#)

[Revision Log](#)

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

Description

Treprostinil (Orenitram[®], Remodulin[®], Tyvaso[®]) is a prostacyclin analog.

FDA Approved Indication(s)

Orenitram, Remodulin, and Tyvaso are indicated for the treatment of pulmonary arterial hypertension (PAH) (World Health Organization [WHO] Group 1) to improve exercise ability.

- Orenitram is also indicated to delay disease progression.
- Remodulin is also indicated to reduce the rate of clinical deterioration in patients with PAH requiring transition from Flolan[®] (epoprostenol sodium). The risks and benefits of each drug should be carefully considered prior to transition.
- Tyvaso is also indicated for the treatment of pulmonary hypertension associated with interstitial lung disease (PH-ILD; WHO Group 3) to improve exercise ability.

For PAH, studies establishing effectiveness included predominately patients with New York Heart Association (NYHA) Functional Class II-IV symptoms and etiologies of idiopathic or heritable PAH, PAH associated with congenital systemic-to-pulmonary shunts, or PAH associated with connective tissue diseases. Nearly all controlled clinical experience with inhaled treprostinil has been on a background of bosentan (an endothelin receptor antagonist) or sildenafil (a phosphodiesterase type 5 inhibitor) with study duration of 12 weeks.

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 Centene Corporation[®] that treprostinil is **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 or b):
 - a. Inadequate response or contraindication to acute vasodilator testing;
 - b. Contraindication or clinically significant adverse effects to calcium channel blockers are experienced;

4. If request is for brand Remodulin, member must use generic treprostinil, unless contraindicated or clinically significant adverse effects are experienced;
5. Request meets one of the following (a, b, or c):
 - a. Orenitram: If member requires titration, provider must submit a titration plan;
 - b. Remodulin: Provider must submit treatment plan detailing pump rate, dose, quantity (in mL), and frequency of cassette change;
 - c. Tyvaso: Dose does not exceed 12 breaths per treatment session (72 mcg of treprostinil) four times daily to be used with the Tyvaso Inhalation System (a second back-up system device is recommended).

Approval duration:

Medicaid/HIM – 6 months

Commercial – Length of Benefit

B. Pulmonary Hypertension Associated with Interstitial Lung Disease (must meet all):

1. Diagnosis of PH-ILD;
2. Member has WHO Group 3 pulmonary hypertension;
3. Request is for Tyvaso;
4. Prescribed by or in consultation with a cardiologist or pulmonologist;
5. Age \geq 18 years;
6. Member has had right heart catheterization which confirmed all of the following (a, b, and c):
 - a. Pulmonary vascular resistance (PVR) $>$ 3 Wood Units (WU);
 - b. Pulmonary capillary wedge pressure (PCWP) of $<$ 15 mmHg;
 - c. Mean pulmonary arterial pressure (mPAP) of \geq 25 mmHg;
7. If member's pulmonary hypertension is due to connective tissue disease, member's baseline forced vital capacity (FVC) is $<$ 70%;
8. Dose does not exceed 12 breaths per treatment session (72 mcg of treprostinil) four times daily to be used with the Tyvaso Inhalation System (a second back-up system device is recommended).

Approval duration:

Medicaid/HIM – 6 months

Commercial – Length of Benefit

C. Other diagnoses/indications

1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. Pulmonary Arterial Hypertension (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met all initial approval criteria;
2. Member is responding positively to therapy;
3. If request is for brand Remodulin, member must use generic treprostinil, unless contraindicated or clinically significant adverse effects are experienced;

4. Request meets one of the following (a, b, or c):
 - a. Orenitram: If member requires titration, provider must submit a titration plan;
 - b. Remodulin: Provider must submit treatment plan detailing pump rate, dose, quantity (in mL) and frequency of cassette change;
 - c. Tyvaso: Dose does not exceed 12 breaths per treatment session (72 mcg of treprostini) four times daily to be used with the Tyvaso Inhalation System (a second back-up system device is recommended).

Approval duration:

Medicaid/HIM – 12 months

Commercial – Length of Benefit

B. Pulmonary Hypertension Associated with Interstitial Lung Disease (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met all initial approval criteria;
2. Request is for Tyvaso;
3. Member is responding positively to therapy;
4. If request is for a dose increase, new dose does not exceed 12 breaths per treatment session (72 mcg of treprostini) four times daily to be used with the Tyvaso Inhalation System (a second back-up system device is recommended).

Approval duration:

Medicaid/HIM – 12 months

Commercial – Length of Benefit

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

1. Currently receiving medication via Centene benefit and documentation supports positive response to therapy.

Approval duration: Duration of request or 6 months (whichever is less); or

2. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid.

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 – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace, and CP.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

FC: functional class

FDA: Food and Drug Administration

FVC: forced vital capacity

mPAP: mean pulmonary arterial pressure

NYHA: New York Heart Association

PAH: pulmonary arterial hypertension

PCWP: pulmonary capillary wedge pressure

PH: pulmonary hypertension

PVR: pulmonary vascular resistance

WHO: World Health Organization

WU: Wood Units

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 [®] CC, Afeditab [®] CR, Procardia [®] , Procardia XL [®]) | 60 mg PO QD; may increase to 120 to 240 mg/day | 240 mg/day |
| diltiazem (Dilacor XR [®] , Dilt-XR [®] , Cardizem [®] CD, Cartia XT [®] , Tiazac [®] , Taztia XT [®] , Cardizem [®] LA, Matzim [®] LA) | 720 to 960 mg PO QD | 960 mg/day |
| amlodipine (Norvasc [®]) | 20 to 30 mg PO QD | 30 mg/day |

Therapeutic alternatives are listed as Brand name[®] (generic) when the drug is available by brand name only and generic (Brand name[®]) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
 - Orenitram: Severe hepatic impairment (Child Pugh Class C)
- Boxed warnings(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 | II | Comfortable at rest | Slight limitation | Ordinary PA causes undue dyspnea or fatigue, chest pain, or near syncope. | |

| Treatment Approach* | FC | Status at Rest | Tolerance of Physical Activity (PA) | PA Limitations | Heart Failure |
|---------------------|-----|---|--|---|------------------------------|
| - see Appendix F** | 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 <i>*Member of the prostanoid class of fatty acid derivatives.</i> | Prostacyclin | Epoprostenol | Velettri (IV) Flolan (IV) Flolan generic (IV) |
| | | Synthetic prostacyclin analog | Treprostinil | Orenitram (oral tablet) Remodulin (IV) Tyvaso (inhalation) |
| | | | Iloprost | Ventavis (inhalation) |
| | Endothelin receptor antagonist (ETRA) | Non-prostanoid prostacyclin receptor (IP receptor) agonist | Selexipag | Upravi (oral tablet) |
| | | 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 |
|--------------------------|--|----------------------------------|
| Treprostinil (Orenitram) | 0.25 mg PO BID or 0.125 mg PO TID; can be increased every 3-4 days as tolerated | Based on tolerability |
| Treprostinil (Remodulin) | 1.25 ng/kg/min SC or IV; can be increased weekly based on clinical response | Based on weight and tolerability |
| Treprostinil (Tyvaso) | 4 treatment sessions per day with 3 breaths (18 mcg) per treatment session, titrated up to 12 breaths (72 mcg) per treatment session | 288 mcg/day |

VI. Product Availability

| Drug | Availability |
|--------------------------|---|
| Treprostinil (Orenitram) | Extended-release tablets: 0.125 mg, 0.25 mg, 1 mg, 2.5 mg, 5 mg |
| Treprostinil (Remodulin) | 20 mL vials: 20 mg, 50 mg, 100 mg, 200 mg |
| Treprostinil (Tyvaso) | Solution for inhalation (ampule): 1.74 mg/2.9 mL |

VII. References

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12. Yaghi S, Novikov A, Trandafirescu T. Clinical update on pulmonary hypertension. *J Investig Med*. 2020; 0:1-7. doi:10.1136/jim-2020-001291.
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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 |
|-------------|--|
| J3285 | Injection, treprostinil, 1mg |
| J7686 | Treprostinil, inhalation solution, FDA-approved final product, non-compounded, administered through DME, unit dose form, 1.74 mg |
| J8499 | Prescription drug, oral, non-chemotherapeutic, Not Otherwise Specified (including Orenitram) |

| Reviews, Revisions, and Approvals | Date | P&T Approval Date |
|---|----------|-------------------|
| 1Q18 annual review: Policies combined for commercial, HIM and Medicaid; No significant changes from previous corporate approved policy; Medicaid/HIM: removed WHO/NYHA classifications from initial criteria since specialist is involved in care; References reviewed and updated. | 11.20.17 | 02.18 |
| 1Q 2019 annual review: disclaimer added that Orenitram 5 mg and Tyvaso are NF for HIM; no significant changes; references reviewed and updated. | 11.20.18 | 02.19 |
| 1Q 2020 annual review: no significant changes; added statement that titration plan be submitted for Orenitram and treatment plan detailing dose, quantity, and frequency be submitted for Remodulin; removed HIM NF disclaimer statements; references reviewed and updated. | 11.26.19 | 02.20 |
| Added preferencing for generic Remodulin prior to allowing Remodulin brand for all indications. | 02.27.20 | |

| Reviews, Revisions, and Approvals | Date | P&T Approval Date |
|---|----------|-------------------|
| Added lack of pump access for subcutaneous infusion as an example of medical justification supporting inability to use generic Remodulin. | 05.20.20 | |
| Revised the example of medical justification supporting inability to use generic Remodulin from “lack of subcutaneous infusion pump access” to “IV administration not suitable and subcutaneous generic Remodulin is not available”; added generic redirection to Section II; added Appendix G; references updated. | 08.06.20 | |
| 1Q 2021 annual review: no significant changes; references to HIM.PHAR.21 revised to HIM.PA.154; Added coding implications for J7686; references reviewed and updated. | 10.12.20 | 02.21 |
| RT4: added criteria for new indication for PH-ILD; updated max recommended dose for PAH per PI. | 05.13.21 | 08.21 |
| Removed “or IV administration is not suitable and subcutaneous generic Remodulin is not available” as a potential exception for generic redirection requirement, as generic SC treprostinil is now available. | 09.10.21 | |
| 1Q 2022 annual review: no significant changes; references reviewed and updated. | 11.09.21 | 02.22 |

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to

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This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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Note:

For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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