

PHARMACY POLICY STATEMENT North Carolina Marketplace Inhaled Prostacyclins for Pulmonary Arterial Hypertension: Tyvaso (treprostinil), Ventavis (iloprost) BENEFIT TYPE Pharmacy STATUS Prior Authorization Required

Pulmonary Arterial Hypertension (PAH) is a rare but serious condition characterized by elevated pulmonary arterial resistance. Ventavis and Tyvaso are approved for the treatment of PAH World Health Organization (WHO) Group 1. Ventavis is approved to increase exercise tolerance, improve symptoms (NYHA Class), and delay deterioration for PAH. Tyvaso is indicated to improve exercise ability for adults with PAH. It is also indicated for the treatment of pulmonary hypertension associated with interstitial lung disease (PH-ILD; WHO Group 3) to improve exercise ability.

Inhaled Prostacyclins will be considered for coverage when the following criteria are met:

Pulmonary Arterial Hypertension [WHO Group 1]

For **initial** authorization:

- 1. Member is at least 18 years of age or older; AND
- 2. Medication must be prescribed by or in consultation with a cardiologist or pulmonologist; AND
- 3. Member must have a diagnosis of WHO Group 1 PAH confirmed by right heart catheterization; AND
- 4. Member must have documentation of **one** of the following:
 - a) Patient had an acute response to vasodilator testing AND has tried a calcium channel blocker (CCB) for at least 3 months;
 - b) Patient did not have a response to vasodilator testing;
 - c) Patient cannot undergo vasodilator testing;
 - d) Patient cannot take CCB therapy; AND
- Member has tried and failed **one** of the following oral medications: phosphodiesterase type 5 inhibitor (ie. Sildenafil, Tadalafil), endothelin receptor antagonist (ie. Ambrisentan, Bosentan, Macitentan), or Soluble Guanylate Cyclase Stimulator (ie. Adempas); OR
- 6. Member has WHO functional class III symptoms with rapid progression of disease (see appendix); OR
- 7. Member has WHO functional class IV symptoms (see appendix); AND
- 8. For Tyvaso DPI: Member has tried and failed a 90-day trial of Tyvaso nebulizer solution.
- 9. Dosage allowed/Quantity limit:

<u>Tyvaso:</u> Initiate 3 breaths (18 mcg) per treatment session; Titrate to target maintenance dosage of 9 to 12 breaths per treatment session, 4 times daily. Quantity Limit: 288 mcg/day. <u>Tyvaso DPI:</u> Initiate one cartridge (16 mcg) per treatment session; Titrate to target maintenance dosage of 48 mcg to 64 mcg per treatment session, 4 times daily. Quantity Limit: 256 mcg/day. <u>Ventavis</u>: Initiate 2.5 mcg per treatment session; Titrate to target maintenance dose of 6 to 9 doses (inhalations) per day (minimum of 2 hours between doses during waking hours). Quantity Limit: 45 mcg/day.

If all the above requirements are met, the medication will be approved for 6 months.



For reauthorization:

- 1. Member has documentation of improvement in signs and symptoms of disease as evidenced by at least one of the following:
 - a) Stabilization or improvement in functional class symptoms or quality of life;
 - b) Stabilization or improvement in 6MWD (6-minute walk distance).

If all the above requirements are met, the medication will be approved for an additional 12 months.

Pulmonary hypertension associated with interstitial lung disease [WHO Group 3] – TYVASO ONLY

For **initial** authorization:

- 1. Member is at least 18 years of age or older; AND
- 2. Medication must be prescribed by or in consultation with a cardiologist or pulmonologist; AND
- 3. Member must have a diagnosis of W HO Group 3 PH-ILD confirmed by right heart catheterization; AND
- 4. Member has evidence of diffuse parenchymal lung disease on computed tomography (CT) imaging of the chest; AND
- 5. For Tyvaso DPI: Member has tried and failed a 90-day trial of Tyvaso nebulizer solution.
- 6. Dosage allowed/Quantity limit:

<u>Tyvaso</u>: Initiate 3 breaths (18 mcg) per treatment session; Titrate to target maintenance dosage of 9 to 12 breaths per treatment session, 4 times daily. Quantity Limit: 288 mcg/day. Tyvaso DPI: Initiate one cartridge (16 mcg) per treatment session; Titrate to target maintenance

<u>Tyvaso DPI:</u> Initiate one cartridge (16 mcg) per treatment session; Titrate to target maintenance dosage of 48 mcg to 64 mcg per treatment session, 4 times daily. Quantity Limit: 45 mcg/day.

If all the above requirements are met, the medication will be approved for 6 months. For reauthorization:

- 1. Member has documentation of improvement in signs and symptoms of disease as evidenced by at least one of the following:
 - a) Stabilization or improvement in functional class symptoms or quality of life;
 - b) Stabilization or improvement in 6MWD (6-minute walk distance).

If all the above requirements are met, the medication will be approved for an additional 12 months.

CareSource considers Inhaled Prostacyclins not medically necessary for the treatment of conditions that are not listed in this document. For any other indication, please refer to the Off-Label policy.

DATE	ACTION/DESCRIPTION
06/15/2011	Pulmonary Arterial Hypertension policy creation.
05/13/2014	Combined all PAH agents into one policy
07/09/2015	Revised guidelines for therapy aligning with CMS
08/18/2015	Revised guidelines to include diagnosis criteria
10/13/2021	Separated PAH agents by drug class; Updated guidelines; Added provider specialty; Added PH-ILD; WHO Group 3 indication for Tyvaso
07/08/2022	Added new Tyvaso DPI formulation to dosing instructions; Added a 90 day trial of Tyvaso nebulizer solution prior to Tyvaso DPI; Updated references
05/04/2023	Added references; added quantity limits; updated trials to exclude WHO FC III with rapid progression and IV.

References:

1. Tyvaso [package insert]. Research Triangle Park, NC: United Therapeutics Corp; May 2022

Qualified Health Plans offered in North Carolina by CareSource North Carolina Co., d/b/a CareSource.



- 2. Tyvaso DPI [package insert]. Research Triangle Park, NC: United Therapeutics Corp; May 2022
- 3. Ventavis [package insert]. South San Francisco, CA: Actelion Pharmaceuticals US, Inc.; March 2022.
- 4. Coons, J.C., Pogue, K., Kolodziej, A.R. et al. Pulmonary Arterial Hypertension: a Pharmacotherapeutic Update. Curr Cardiol Rep. 2019; 21(141)
- 5. Klinger JR, Elliott CG et al. Therapy for Pulmonary Arterial Hypertension in Adults; Chest Journal. March 2019; 155(3): 565-586
- 6. Humbert M, Kovacs G, Hoeper MM, et al. 2022 ESC/ERS Guidelines for the diagnosis and treatment of pulmonary hypertension. Eur Respir J. 2023;61(1):2200879. Published 2023 Jan 6. doi:10.1183/13993003.00879-2022
- 7. Waxman A, Restrepo-Jaramillo R, Thenappan T, et al. Inhaled Treprostinil in Pulmonary Hypertension Due to Interstitial Lung Disease. N Engl J Med. 2021;384(4):325-334. doi:10.1056/NEJMoa2008470
- 8. Dhont S, Zwaenepoel B, Vandecasteele E, Brusselle G, De Pauw M. Pulmonary hypertension in interstitial lung disease: an area of unmet clinical need. ERJ Open Res. 2022;8(4):00272-2022. Published 2022 Nov 14. doi:10.1183/23120541.00272-2022

Effective date: 10/01/2023 Revised date: 05/04/2023

Appendix:

New York Heart Association Functional Classification		
Class 1	Cardiac Disease, but no symptoms and no limitation in ordinary physical activity, e.g. shortness of breath when walking, climbing stairs, etc.	
Class 2	Mild symptoms (mild shortness of breath and/or angina) and slight limitation during ordinary activity.	
Class 3	Marked limitation in activity due to symptoms, even during less-than- ordinary activity, e.g. walking short distances (20-100 m). Comfortable only at rest.	
Class 4	Severe limitations. Experiences symptoms even while at rest. Mostly bedbound patients	

World Health Organization Functional Assessment Classification		
Class I	Patients with PAH but without resulting limitation of physical activity.	
	Ordinary physical activity does not cause undue dyspnea or fatigue,	
	chest pain or near syncope.	
Class II	Patients with PAH resulting in slight limitation of physical activity. They	
	are comfortable at rest. Ordinary physical activity causes undue	
	dyspnea or fatigue, chest pain, or near syncope.	
Class III	Patients with PAH resulting in marked limitation of physical activity. They	
	are comfortable at rest. Less than ordinary activity causes undue	
	dyspnea or fatigue, chest pain, or near syncope.	
Class IV	Patients with PAH with inability to carry out any physical activity without	
	symptoms. These patients manifest signs of right-heart failure. Dyspnea	
	and/or fatigue may even by present at rest. Discomfort is increased by	
	any physical activity.	