

SPECIALTY GUIDELINE MANAGEMENT

sildenafil tablets (generic) Revatio (sildenafil tablets and oral suspension)

POLICY

I. INDICATIONS

The indications below including FDA-approved indications and compendial uses are considered a covered benefit provided that all the approval criteria are met and the member has no exclusions to the prescribed therapy.

A. FDA-Approved Indication

Pulmonary Arterial Hypertension

Sildenafil/Revatio is indicated for the treatment of pulmonary arterial hypertension (WHO Group I) in adults to improve exercise ability and delay clinical worsening. The delay in clinical worsening was demonstrated when Revatio was added to background epoprostenol therapy. Studies establishing effectiveness were short-term (12 to 16 weeks), and included predominately patients with New York Heart Association (NYHA) Functional Class II–III symptoms and idiopathic etiology (71%) or associated with connective tissue disease (CTD) (25%).

All other indications are considered experimental/investigational and are not a covered benefit.

II. REQUIRED DOCUMENTATION

The following information is necessary to initiate the prior authorization review (initial requests): Report with pretreatment results from right heart catheterization.

III. EXCLUSIONS

Coverage will not be provided for members with any of the following exclusions:

- A. Treatment with a nitrate/nitric oxide donor medication on a regular or intermittent basis (refer to Appendix A for examples)
- B. Concomitant treatment with a guanylate cyclase stimulator (e.g., Adempas)

IV. CRITERIA FOR INITIAL APPROVAL

Authorization of 12 months may be granted for treatment of PAH when ALL of the following criteria are met:

A. Member has PAH defined as WHO Group 1 class of pulmonary hypertension (refer to Appendix B).

B. PAH was confirmed by either criterion (1) or criterion (2) below:

1. Pretreatment right heart catheterization with all of the following results:
 - mPAP \geq 25 mmHg
 - PCWP \leq 15 mmHg
 - PVR $>$ 3 Wood units
2. For infants less than one year of age with any of the following conditions, PAH was confirmed by Doppler echocardiogram if right heart catheterization cannot be performed:
 - Post cardiac surgery
 - Chronic heart disease

- Chronic lung disease associated with prematurity
 - Congenital diaphragmatic hernia
- C. Member has NYHA functional Class II or III symptoms (refer to Appendix C) prior to initiation of sildenafil therapy

V. CONTINUATION OF THERAPY

For members with PAH who are currently receiving sildenafil/Revatio therapy through a paid pharmacy or medical benefit, authorization of 12 months may be granted if the member is continuing to benefit from sildenafil/Revatio therapy. All other members (including new members) must meet initial authorization criteria.

VI. DOSAGE AND ADMINISTRATION

Approvals may be subject to dosing limits in accordance with FDA-approved labeling, accepted compendia, and/or evidence-based practice guidelines.

A. Dosing Limits

1. For members who are < 18 years of age: maximum 30 mg per day
2. For members who are ≥ 18 years of age:
 - i. For initial therapy: maximum 60 mg per day
 - ii. For continuation of therapy: maximum 240 mg per day for members who have been titrated without adverse effects and experience clinical benefit with higher dose

B. Dosage Forms

1. For members who are < 18 years of age: authorization may be granted for tablets or suspension
2. For members who are ≥ 18 years of age: authorization may be granted for tablets only

VII. APPENDICES

Appendix A: Examples of Nitrate/Nitric Oxide Donor Therapy

- Isosorbide dinitrate (eg, Isordil)
- Isosorbide mononitrate (eg, Imdur, Ismo)
- Nitroglycerin tablets/capsules, patch (eg, Nitro-Dur)
- Isosorbide dinitrate/hydralazine (BiDil)
- Amyl nitrite

Appendix B: WHO Classification of Pulmonary Hypertension

WHO Group 1. Pulmonary Arterial Hypertension (PAH)

1.1 Idiopathic (IPAH)

1.2 Heritable PAH

- 1.2.1 Germline mutations in the bone morphogenetic protein receptor type 2 (BMPR2)
- 1.2.2 Activin receptor-like kinase type 1 (ALK1), endoglin (with or without hereditary hemorrhagic telangiectasia), Smad 9, caveolin-1 (CAV1), potassium channel super family K member-3 (KCNK3)
- 1.2.3 Unknown

1.3 Drug- and toxin-induced

1.4. Associated with:

- 1.4.1 Connective tissue diseases
- 1.4.2 HIV infection
- 1.4.3 Portal hypertension
- 1.4.4 Congenital heart diseases
- 1.4.5 Schistosomiasis

1'. Pulmonary veno-occlusive disease (PVOD) and/or pulmonary capillary hemangiomatosis (PCH)

1". Persistent pulmonary hypertension of the newborn (PPHN)

WHO Group 2. Pulmonary Hypertension Owing to Left Heart Disease

- 2.1 Systolic dysfunction
- 2.2 Diastolic dysfunction
- 2.3 Valvular disease
- 2.4 Congenital/acquired left heart inflow/outflow tract obstruction and congenital cardiomyopathies

WHO Group 3. Pulmonary Hypertension Owing to Lung Disease and/or Hypoxia

- 3.1 Chronic obstructive pulmonary disease
- 3.2 Interstitial lung disease
- 3.3 Other pulmonary diseases with mixed restrictive and obstructive pattern
- 3.4 Sleep-disordered breathing
- 3.5 Alveolar hypoventilation disorders
- 3.6 Chronic exposure to high altitude
- 3.7 Developmental abnormalities

WHO Group 4. Chronic Thromboembolic Pulmonary Hypertension (CTEPH)WHO Group 5. Pulmonary Hypertension with Unclear Multifactorial Mechanisms

- 5.1 Hematologic disorders: chronic hemolytic anemia, myeloproliferative disorders, splenectomy
- 5.2 Systemic disorders: sarcoidosis, pulmonary Langerhans cell histiocytosis, lymphangioleiomyomatosis, neurofibromatosis, vasculitis
- 5.3 Metabolic disorders: glycogen storage disease, Gaucher disease, thyroid disorders
- 5.4 Others: tumoral obstruction, fibrosing mediastinitis, chronic renal failure on dialysis, segmental PH

Appendix C: New York Heart Association Functional Classification

- Class I: Patients with pulmonary hypertension 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 pulmonary hypertension 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 pulmonary hypertension 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 pulmonary hypertension with inability to carry out any physical activity without symptoms. These patients manifest signs of right heart failure. Dyspnea and/or fatigue may be present even at rest. Discomfort is increased by any physical activity.

VIII. REFERENCES

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