**Adcirca®/Revatio®
Prior Authorization Criteria**

**FDA APPROVED INDICATIONS AND DOSAGE**

<table>
<thead>
<tr>
<th>Available Products¹,²</th>
<th>Indication</th>
<th>Route of administration</th>
<th>Dosage and Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revatio</strong> (sildenafil citrate)</td>
<td>Treatment of pulmonary arterial hypertension (WHO Group I) to improve exercise ability and delay clinical worsening.</td>
<td>Oral tablets; IV bolus</td>
<td>Oral tablets: 20 mg three times daily; no greater efficacy seen with higher doses in clinical trial. <strong>IV bolus injection:</strong> 10 mg three times daily; IV injection is for patients temporarily unable to take oral tablets.</td>
</tr>
<tr>
<td><strong>Adcirca</strong> (tadalafil)</td>
<td>Treatment of pulmonary arterial hypertension (WHO Group I) to improve exercise ability.</td>
<td>Oral tablets</td>
<td>Oral tablets: 40 mg once daily; dividing the dose over the course of the day is not recommended.</td>
</tr>
</tbody>
</table>

**CLINICAL RATIONALE**

The American College of Cardiology (ACC) guidelines (2009)⁴ include an algorithm for the treatment of pulmonary arterial hypertension (PAH). Notably, the guidelines state that the agent of choice for monotherapy in PAH (tadalafil and sildenafil) is unclear. Guidelines state that data from combination therapy studies indicate that combination therapy is appropriate in patients remaining symptomatic on monotherapy. However, the optimal combination to maximize the risk-benefit ratio is unclear.

Guidelines from the American College of Chest Physicians (ACCP) recommend the following in the treatment of PAH:³

**Functional Class II:** due to the ease of administration and relative efficacy, sildenafil may be the first choice for these patients. (This recommendation was made prior to the introduction of tadalafil for PAH).

**Functional Class III:** Most experts now consider one of the two approved oral therapies (bosentan or sildenafil, listed in no order of preference) for patients with early functional class III PAH.

- Patients with more advanced class III disease may require treatment with a prostanoid, such as IV epoprostenol or treprostinil, inhaled iloprost, or subcutaneous treprostinil. Until evidence becomes available, add on or combination therapy might be considered in the context of enrollment into clinical trials.

**Functional Class IV:** IV epoprostenol is the treatment of choice.

- Oral, subcutaneous, and inhaled agents should generally not be used as first line therapy in this situation unless the patient refuses IV therapy or is believed not to be capable of managing the complex delivery system.
Sildenafil and tadalafil are marketed as Viagra and Cialis, respectively, for the treatment of erectile dysfunction. Revatio and Adcirca are not approved for erectile dysfunction and should not be used for this indication. Sildenafil has been studied for use for prophylactic treatment in men undergoing nerve-sparing radical retropubic prostatectomy (RRP) and Raynaud’s phenomenon. Studies for these indications are for strengths of sildenafil 50 mg and do not evaluate the efficacy of sildenafil 20 mg. Tadalafil is being evaluated in clinical trials for Raynaud’s phenomenon, benign prostate hyperplasia, hypertension, and high altitude pulmonary edema. Evidence on comparative efficacy between oral therapies and doses above those approved in the FDA label are lacking.

For additional clinical information see Prime Therapeutics Formulary Chapter 5.10B: Vasodilators for Pulmonary Hypertension.

REFERENCES

Document History
Original Prime Standard approved by UMC 02/2006
Annual Review Prime Standard criteria with changes approved by External UM Committee 11/2007
Annual Review Prime Standard criteria with changes approved by External UM Committee 08/2009
Annual Review Prime Standard criteria (Adcirca added) approved by External UM Committee 08/2009
Mid-Year Revision (through preferred agent) approved by P & T UM Committee 11/2009
Annual Review Prime Standard criteria with changes approved by P&T UM Committee 05/2010
Initial Client Review Client Specific criteria, approved by HCSC Corporate Clinical Committee 07/2010
Adcirca®/Revatio® Prior Authorization

OBJECTIVE
The intent of the Adcirca/Revatio Prior Authorization (PA) Criteria is to appropriately select patients for therapy according to product labeling and/or clinical guidelines and/or clinical studies and according to the dosing recommended in product labeling. The use of these agents may be considered for indications and dosing not included in the Food and Drug Administration (FDA) approved labeling if the prescriber submits documentation supporting the intended therapeutic use for the patient. This program will target the oral tablet dosage forms of these products.

TARGET DRUGS
Adcirca (tadalafil)
Revatio (sildenafil)

PROGRAM QUANTITY LIMIT

<table>
<thead>
<tr>
<th>Brand (generic)</th>
<th>GPI</th>
<th>Multisource Code</th>
<th>Quantity Per Day Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adcirca® (tadalafil)</td>
<td>40143080000320</td>
<td>M, N, O, or Y</td>
<td>2 tablets</td>
</tr>
<tr>
<td>Revatio® (sildenafil)</td>
<td>40143060100320</td>
<td>M, N, O, or Y</td>
<td>3 tablets</td>
</tr>
</tbody>
</table>

PRIOR AUTHORIZATION CRITERIA FOR APPROVAL
Adcirca or Revatio will be approved when ONE of the following is met:
1. The patient has a diagnosis of Pulmonary Arterial Hypertension (WHO Group I) AND ONE of the following:
   a. The requested quantity is within the set quantity limit OR
   b. The prescriber has submitted documentation in support of the quantity requested for this patient which has been reviewed and approved by the Clinical Review pharmacist.

OR
2. The prescriber has submitted documentation in support of the use of the prescribed agent for the intended diagnosis and the requested quantity which has been reviewed and approved by the Clinical Review pharmacist.

Length of Approval: 12 months
Adcirca®/Revatio® Prior Authorization

ELECTRONIC EDIT
The overall process for a prior authorization will not allow the targeted drugs to adjudicate through the claims system. When a patient requests a targeted drug the system will reject the claim with the message indicating that prior authorization is necessary.

PRIOR AUTHORIZATION CRITERIA QUESTION SET
Initial and Renewal Evaluation

1. Has Revatio or Adcirca been prescribed to treat Pulmonary Arterial Hypertension (WHO Group I)?
   If yes, continue to 2. If no, continue to 3.

2. Is the requested dose within the set limit?
   If yes, approve for a quantity equal to the set limit for 12 months.
   If no, continue to 3.

3. Has the prescriber submitted and the pharmacist reviewed documentation in support of the use of the prescribed agent for the intended diagnosis and the requested quantity?
   If yes, pharmacist must review and may approve for the requested quantity for up to 12 months based on review of information provided.
   If no, deny.