

RIOCIGUAT (Adempas®) for CTEPH

What is riociguat (Adempas®) used for?

Riociguat (Adempas®) is a prescription medication used to treat inoperable or residual chronic thromboembolic pulmonary hypertension (CTEPH). CTEPH is defined by high blood pressure in the lungs resulting from chronic blood clots in the pulmonary arteries, the blood vessels that carry blood from the heart to the lungs.

How does it work?

Riociguat (Adempas®) is a soluble guanylate cyclase (sGC) stimulator that lowers blood pressure in the lungs, making it easier for the heart to pump more effectively. Riociguat (Adempas®) helps increase sensitivity to nitric oxide in the pulmonary arteries to stimulate vasodilation (relaxation of the blood vessels). Taking this medication may lead to an increase in the ability to exercise and walk farther.

What do I need to know?

Contraindications:

Do not use riociguat (Adempas®) if you:

- Have increased pressure in your pulmonary circulation associated with scarring of the lungs, of unknown cause (idiopathic pulmonary pneumonia)
- Have ever had an allergic reaction to riociguat (Adempas®)
- Have low blood pressure or develop severe low blood pressure when you start taking the medication
- Have severe liver or kidney disease
- Are breastfeeding
- Are taking medications for pulmonary arterial hypertension and/or erectile dysfunction, e.g. sildenafil (Revatio®, Viagra®), tadalafil (Adcirca®, Cialis®), vardenafil (Levitra®, Staxyn®)
- Are taking nitrates for angina or heart disease, e.g. nitroglycerin spray, tablets, patch, or ointments, isosorbide dinitrate or mononitrate

Important information:

If you are pregnant or may become pregnant, contact your medical team right away.

Drug interactions

The following drugs and supplements may interact with riociguat (Adempas®). Please note that this is not a comprehensive list of drug interactions.

Please speak to your medical team before starting any new medication.

Using riociguat (Adempas®) with blood pressure medications can lead to low blood pressure in some patients.

Medications used to treat angina (heart/chest pain) — nitrates, e.g. nitroglycerin spray, tablets, patch, or ointments, isosorbide dinitrate or mononitrate

Medications used to treat pulmonary arterial hypertension (PAH) and erectile dysfunction — e.g. sildenafil (Viagra®, Revatio®), tadalafil (Adcirca®, Cialis®), and vardenafil (Levitra®, Staxyn®).

Medications used to treat fungal infections — e.g. ketoconazole (Apo-Ketoconazole®), itraconazole (Sporanox®), and voriconazole (Vfend®)

Medications for the treatment of HIV infection — e.g. darunavir (Prezista®), ritonavir (Norvir®), and nelfinavir (Viracept®)

Medications for seizure disorders — e.g. phenytoin (Dilantin®) and carbamazepine (Tegretol®)

Antacids (separate the administration of antacids by at least one hour) — e.g. aluminum hydroxide (Gaviscon®, Maalox®), calcium carbonate (Tums®), and magnesium hydroxide (Milk of Magnesia)

Herbal supplement for depression — e.g. St. John's Wort

Please Note:

Tell your medical team about ALL the medicines you are taking including over-the-counter drugs, vitamins, minerals, natural supplements, and alternative medications.

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How is riociguat (Adempas®) taken?

Riociguat (Adempas®) is usually started at a 1 mg dose three times a day and slowly increased in 0.5 mg increments every 2 weeks until the desired dose is reached. The maximum dose is 2.5 mg three times daily (6–8 hours apart). The medication can be taken with or without food.

In case treatment is interrupted for 3 days or more, please contact your medical team before starting treatment. You will likely need to restart at a lower dose and increase as directed by your medical team.

Missed dose:

If you miss a dose of riociguat (Adempas®), take your tablet as soon as you remember, then continue with your next scheduled dose. Do not take two doses at the same time.

What are common side effects?

Some patients may experience side effects when taking this medication. If the side effects are severe or bothersome, please contact your medical team. Side effects may include:

- Headaches
- Indigestion, nausea, vomiting, or diarrhea
- Low blood pressure or dizziness
- Swelling of the limbs
- Palpitations
- Nasal congestion or nosebleeds
- Anemia

When should I notify my PH clinic or seek medical attention?

Contact your medical team or seek medical attention immediately if you develop:

- Dizziness, light-headedness, or passing out
- Nosebleeds or coughing up blood
- Symptoms of worsening PH, including: difficulty breathing, fluid retention or weight gain, and/or dizziness or passing out
- An allergic reaction, including: swelling of the mouth, tongue, face, and throat; itching; rash; and/or difficulty breathing

If you take more than your prescribed dose, contact your medical team immediately, even if you feel well.

Do not stop taking riociguat (Adempas®) unless advised by your medical team

Additional information:

Store out of reach of children at 15°–30° C.

Do not use expired medication.

Do not throw away any medication via wastewater or household waste. Ask your pharmacist how to dispose of medications you no longer require.

For more information please see full product monograph.



To learn more about chronic thromboembolic pulmonary hypertension (CTEPH) and available treatments, please visit www.phacanada.ca/cteph.

This educational resource was developed by the Canadian Pulmonary Hypertension Professionals Network (CPHPN), a PHA Canada network that brings together PH nurses from across the country to enhance nursing care in the field through leadership, education, and professional development.

The information provided in this resource is for educational purposes only. Please speak with your medical team to establish a personalized treatment plan and discuss any changes to your lifestyle or course of treatment.