



EUROPEAN MEDICINES AGENCY  
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## Yuvanci (*macitentan / tadalafil*)

An overview of Yuvanci and why it is authorised in the EU

### What is Yuvanci and what is it used for?

Yuvanci is a medicine used for the long-term treatment of adults with pulmonary arterial hypertension (PAH).

It contains the active substances macitentan and tadalafil and is used as a replacement for people who are already taking macitentan and tadalafil as separate medicines for PAH.

People with PAH have narrowed blood vessels in the lungs, causing an abnormally high blood pressure in the arteries of the lungs and symptoms such as breathlessness and fatigue.

Yuvanci is used in people with moderate or marked limitations of physical activity (corresponding to WHO functional class II or III, respectively).

### How is Yuvanci used?

Treatment with Yuvanci should be started and supervised by a doctor experienced in the diagnosis and treatment of PAH. The medicine can only be obtained with a prescription.

Yuvanci is available as tablets. The patient takes one tablet every day at about the same time.

For more information about using Yuvanci, see the package leaflet or contact your doctor or pharmacist.

### How does Yuvanci work?

Endothelin receptors are part of a natural mechanism in the body that causes blood vessels to narrow. In people with PAH, this mechanism is overactive and causes severe narrowing of small blood vessels in the lungs, leading to high blood pressure in the lungs and making it difficult for the heart to pump blood.

One of the active substances in Yuvanci, macitentan, works by blocking endothelin receptors. This helps to widen the blood vessels in the lungs, thereby reducing blood pressure in the arteries of the lungs.

The other active substance in Yuvanci, tadalafil, works by blocking an enzyme called PDE-5 found in the blood vessels of the lungs and which normally breaks down a substance known as cGMP. By

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blocking this enzyme, tadalafil allows cGMP to accumulate and, because cGMP causes the relaxation and widening of blood vessels, it helps reduce blood pressure in the arteries of the lungs.

## **What benefits of Yuvanci have been shown in studies?**

A main study has shown that the combination of macitentan and tadalafil in Yuvanci is more effective than macitentan or tadalafil alone at lowering blood pressure and improving the ability to exercise in adults with PAH.

In this study involving 187 people with PAH, the first main measure of effectiveness was the difference in the distance people could walk in 6 minutes before and after treatment. The second was the change in pulmonary vascular resistance before and after treatment. Pulmonary vascular resistance is a measure of the resistance the blood must overcome to pass through the blood vessels and gives an indication of the blood pressure in the lungs.

After 16 weeks of treatment, people given Yuvanci could walk an average of 16 metres further than those given macitentan alone and an average of 25 metres further than those taking tadalafil alone. Yuvanci also reduced pulmonary vascular resistance by 29% when compared with macitentan and 28% when compared with tadalafil.

## **What are the risks associated with Yuvanci?**

For the full list of side effects and restrictions with Yuvanci, see the package leaflet.

The most common side effects with Yuvanci (which may affect more than 1 in 10 people) include anaemia (low levels of red blood cells) and reduced haemoglobin (the protein in red blood cells that carries oxygen around the body), oedema (swelling or fluid retention) and headache.

The most frequently reported serious side effects with Yuvanci (which may affect up to 1 in 10 people) include anaemia, palpitations (a forceful heartbeat that may be rapid or irregular), low blood pressure, vaginal bleeding between periods, oedema (swelling), and flu.

Yuvanci must not be used in people who had an acute (sudden) heart attack in the last 90 days, have severe liver problems, have very low blood pressure, or have ever had non-arteritic anterior ischaemic optic neuropathy (NAION). It must also not be used during pregnancy or in women able to have children or who are breastfeeding. People who take nitrates or guanylate cyclase stimulators medicines such as riociguat (other medicines used to treat PAH) must not use Yuvanci.

## **Why is Yuvanci authorised in the EU?**

The combination of macitentan and tadalafil in Yuvanci was shown to improve the ability to exercise and reduce blood pressure in the lungs of people with PAH compared with macitentan or tadalafil given on their own. Yuvanci was therefore considered a possible replacement for people who were already taking macitentan and tadalafil separately. Yuvanci would allow these people to take only one tablet daily instead of two. This could improve compliance with treatment and reduce the risk of errors in people taking several medicines.

Side effects with Yuvanci are similar to those seen with macitentan and tadalafil separately. Although there were uncertainties regarding the long-term safety of the medicine, the side effects were mild to moderate and considered manageable.

The European Medicines Agency therefore decided that Yuvanci's benefits are greater than its risks and it can be authorised for use in the EU.

## **What measures are being taken to ensure the safe and effective use of Yuvanci?**

The company that markets Yuvanci will provide people taking the medicine with a patient card instructing them to contact their doctor if they experience side effects, especially symptoms of liver problems. It will also remind them that Yuvanci must not be taken during pregnancy and that women who can have children should use contraception and have a pregnancy test before starting Yuvanci and every month during treatment.

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Yuvanci have also been included in the summary of product characteristics and the package leaflet.

As for all medicines, data on the use of Yuvanci are continuously monitored. Suspected side effects reported with Yuvanci are carefully evaluated and any necessary action taken to protect patients.

## **Other information about Yuvanci**

Yuvanci received a marketing authorisation valid throughout the EU on 27 September 2024.

Further information on Yuvanci can be found on the Agency's website:  
[ema.europa.eu/medicines/human/EPAR/yuvanci](https://ema.europa.eu/medicines/human/EPAR/yuvanci).

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