

EUROPEAN PUBLIC ASSESSMENT REPORT (EPAR)
CIRCADIN
EPAR summary for the public

This document is a summary of the European Public Assessment Report (EPAR). It explains how the Committee for Medicinal products for Human Use (CHMP) assessed the studies performed, to reach their recommendations on how to use the medicine.

If you need more information about your medical condition or your treatment, read the Package Leaflet (also part of the EPAR) or contact your doctor or pharmacist. If you want more information on the basis of the CHMP recommendations, read the Scientific Discussion (also part of the EPAR).

What is Circadin?

Circadin is a medicine containing the active substance melatonin. It is available as white prolonged-release tablets (2 mg). Prolonged-release means that melatonin is released slowly from the tablet over a few hours.

What is Circadin used for?

Circadin is used on its own for the short-term treatment of primary insomnia (poor quality of sleep) in patients aged 55 years or over. 'Primary' means that the insomnia does not have any identified cause, including other medical, mental or environmental causes.

The medicine can only be obtained with a prescription.

How is Circadin used?

The recommended dose of Circadin is one tablet a day, taken 1 to 2 hours before bedtime and after food. This dose should be continued for three weeks. Circadin is not recommended for use in patients who have problems with their liver, and it should be used with caution in patients who have problems with their kidneys.

How does Circadin work?

The active substance in Circadin, melatonin, is a naturally occurring hormone, which is normally produced by a gland in the brain called the pineal gland. Melatonin is involved in co-ordinating the body's sleep cycle by acting on cells in specific areas of the brain. Its levels in the blood normally increase after the onset of darkness and peak in the middle of the night to promote sleep. Older people may produce less melatonin, leading to the development of insomnia. By replacing the hormone, Circadin increases blood levels of melatonin, helping them to sleep. Circadin tablets release melatonin slowly over a few hours, to mimic the natural production of melatonin in the body.

How has Circadin been studied?

The effects of Circadin were first tested in experimental models before being studied in humans. The company also presented data from the scientific literature.

The effects of Circadin have also been studied in three main studies involving a total of 681 patients aged over 55 years with primary insomnia. The studies compared the effects of Circadin with those of placebo (a dummy treatment). The main measure of effectiveness was the proportion of patients who reported a significant improvement in their quality of sleep and ability to function normally on the following day, after three weeks of treatment. The patients assessed the severity of their symptoms using a standard questionnaire.

What benefit has Circadin shown during the studies?

Circadin was more effective than placebo at improving quality of sleep and the patients' ability to function normally on the following day. When the results of all three studies were looked at together, 86 (32.4%) of the 265 patients taking Circadin reported a significant improvement in symptoms, compared with 51 (18.7%) of the 272 taking placebo.

What is the risk associated with Circadin?

Side effects are uncommon in patients treated with Circadin, but the most common side effects (seen in between 1 and 10 patients in 1,000) are irritability, nervousness, restlessness, insomnia, abnormal dreams, migraine, psychomotor hyperactivity (restlessness with increased activity), dizziness, somnolence (drowsiness), abdominal (tummy) pain, constipation, dry mouth, hyperbilirubinaemia (raised blood levels of bilirubin, a breakdown product of red blood cells, which can cause yellowing of the skin and eyes), hyperhidrosis (excessive sweating), asthenia (weakness) and increased weight. For the full list of all side effects reported with Circadin, see the Package Leaflet.

Circadin can cause drowsiness, so it should be used with caution in people in whom this could pose a risk to safety, including those who need to drive or use machines. Patients should avoid alcohol before, during and after taking Circadin.

Circadin should not be used in people who may be hypersensitive (allergic) to melatonin or any of the other ingredients.

Why has Circadin been approved?

The Committee for Medicinal Products for Human Use (CHMP) decided that, although Circadin has been shown to have a small effect size in a relatively small fraction of patients, its benefits are greater than its risks for the short-term treatment of primary insomnia characterised by poor quality of sleep in patients who are aged 55 or over. The Committee recommended that Circadin be given marketing authorisation.

Other information about Circadin:

The European Commission granted a marketing authorisation valid throughout the European Union for Circadin to Neurim Pharmaceuticals EEC Limited on 29 June 2007.

The full EPAR for Circadin can be found [here](#).

This summary was last updated in 05-2007