EMA/346437/2016
EMEA/H/C/001038

EPAR summary for the public

Afinitor

everolimus

This is a summary of the European public assessment report (EPAR) for Afinitor. It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the medicine to reach its opinion in favour of granting a marketing authorisation and its recommendations on the conditions of use for Afinitor.

What is Afinitor?

Afinitor is a medicine that contains the active substance everolimus. It is available as tablets (2.5, 5 and 10 mg).

What is Afinitor used for?

Afinitor is used to treat the following cancers:

- breast cancer that is advanced (has started to spread) in women who have been through their menopause. Afinitor is used in breast cancer that is 'hormone receptor-positive' (when the cancer cells have oestrogen receptors on their surface) and 'HER2/neu negative' (when the cancer cells do not contain high levels of the HER2/neu [human epidermal growth factor receptor-2] protein). It is used together with a medicine called exemestane after other treatments called 'non-steroidal aromatase inhibitors' have failed;
- pancreatic neuroendocrine tumours (tumours of the hormone-producing cells in the pancreas) when the cancer cells are well- or moderately differentiated (which means that they have a similar appearance to normal pancreas cells) and the cancer is getting worse. It is used when the cancer is metastatic (has spread to other parts of the body) or when it cannot be surgically removed;
- neuroendocrine tumours originating in the lungs or gut, when the cancer cells are well-differentiated and the cancer is metastatic or cannot be removed by surgery.

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- advanced renal cell carcinoma (a type of kidney cancer), when the cancer has worsened despite treatment with a 'VEGF-targeted' medicine (a type of medicine that blocks the effects of vascular endothelial growth factor proteins).

The medicine can only be obtained with a prescription.

How is Afinitor used?

Treatment with Afinitor should be started and supervised by a doctor who has experience in the use of cancer treatments.

The recommended dose of Afinitor is 10 mg once a day. Treatment should continue for as long as the patient benefits from it or until the patient develops unacceptable side effects. The doctor may reduce the dose or stop treatment for a short period if the patient has severe or intolerable side effects. Doses need to be reduced for patients with liver problems.

The tablets should be swallowed whole at the same time every day and should not be chewed or crushed. They should be taken consistently with or without food.

How does Afinitor work?

The active substance in Afinitor, everolimus, is a cancer medicine, which acts by blocking a protein called 'mammalian target of rapamycin' (mTOR). In the body, everolimus first attaches to a protein called FKBP-12 that is found inside cells to make a 'complex'. This complex then blocks mTOR. Since mTOR is involved in the control of cell division and the growth of blood vessels, Afinitor prevents the division of tumour cells and reduces their blood supply. This slows down the growth and spread of the tumours.

How has Afinitor been studied?

The effects of Afinitor were studied in four main studies. The first study involved 724 patients with hormone receptor-positive and HER2/neu-negative advanced breast cancer which had got worse after treatment with letrozole and anastrazole ('non-steroidal aromatase inhibitors' cancer medicines). In addition, all patients in this study received exemestane.

The second study involved 410 patients with advanced well- or moderately differentiated neuroendocrine tumours of pancreatic origin.

The third study involved 416 patients with advanced renal cell carcinoma that had got worse despite treatment with certain VEGF-targeted medicines (sunitinib, sorafenib or both).

The fourth study was done in 302 patients with advanced neuroendocrine tumours of lung or gutorigin. Patients who received Afinitor and best supportive treatments were compared with patients who received placebo (a dummy treatment) and best supportive treatments to relieve disease symptoms.

The main measure of effectiveness in the four studies was how long the patients lived without the disease getting worse.

What benefit has Afinitor shown during the studies?

Afinitor was more effective than placebo at treating patients in all studies.

In the breast cancer study, patients who took Afinitor lived for an average of 7.8 months without their disease getting worse, compared with 3.2 months for the patients who took placebo.

In the pancreatic neuroendocrine study, patients who took Afinitor lived for an average of 11 months without the disease getting worse, compared with 4.6 months for the patients who took placebo.

In the renal cell carcinoma study, patients who took Afinitor lived for an average of 4.9 months without the disease getting worse, compared with 1.9 months for the patients who took placebo.

In the lung/gut neuroendocrine tumour study, patients who took Afinitor lived for an average of 11 months without the disease getting worse, compared with around 4 months for patients given placebo.

What is the risk associated with Afinitor?

The most common side effects with Afinitor (which may affect more than 1 in 10 people) are rash, pruritus (itching), nausea, decreased appetite, dysgeusia (taste disturbances), headache, decreased weight, peripheral oedema (swelling, especially of the ankles and feet), cough, anaemia (low red blood cell counts), fatigue (tiredness), diarrhoea, asthenia (weakness), infections, stomatitis (inflammation of the lining of the mouth), hyperglycaemia (high blood glucose levels), hypercholesterolaemia (high blood cholesterol levels), pneumonitis (inflammation of the lungs) and epistaxis (nosebleeds). For the full list of all side effects reported with Afinitor, see the package leaflet.

Afinitor must not be used in people who are hypersensitive (allergic) to other rapamycin derivatives (substances with a similar structure to everolimus) or to any of the other ingredients. For the full list of restrictions, see the package leaflet.

Why has Afinitor been approved?

The CHMP decided that Afinitor was shown to slow down disease progression in patients with advanced neuroendocrine tumours of pancreatic origin, advanced renal cell carcinoma and hormone-receptor-positive advanced breast cancer. The CHMP also concluded that the 7 month delay in disease progression for patients with neuroendocrine tumours originating in the lungs or gut was clinically relevant, despite the known side effects of Afinitor. The CHMP concluded that the benefits of Afinitor are greater than its risks and recommended that it be granted marketing authorisation.

What measures are being taken to ensure the safe and effective use of Afinitor?

The company that makes Afinitor will provide the results of a main study comparing treatment with Afinitor alone, treatment with Afinitor and exemestane in combination, and treatment with capecitabine (another cancer medicine). This study is being done in patients with oestrogen-receptor positive breast cancer that has spread or progressed after previous treatment with letrozole or anastrozole.

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

Other information about Afinitor

The European Commission granted a marketing authorisation valid throughout the European Union for Afinitor on 03 August 2009.

The full EPAR for Afinitor can be found on the Agency's website: ema.europa.eu/Find medicine/Human medicines/European Public Assessment Reports. For more information about treatment with Afinitor, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

This summary was last updated in 05-2016.