

EMA/189718/2022 EMEA/H/C/004163

Cabometyx (cabozantinib)

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

What is Cabometyx and what is it used for?

Cabometyx is a cancer medicine used to treat adults with:

- advanced renal cell carcinoma (a type of kidney cancer). It is used on its own in patients who have previously been treated with a type of cancer medicine called vascular endothelial growth factor (VEGF) inhibitor. It is also used in patients who have not had previous treatment and whose cancer is at moderate or high risk of rapidly getting worse. It is also used in combination with nivolumab (a cancer medicine) in patients who have not had previous treatment.
- hepatocellular carcinoma (a liver cancer). It is used on its own in patients who have already been treated with the cancer medicine sorafenib.
- differentiated thyroid carcinoma (a type of cancer of the thyroid gland). Cabometyx is used after systemic therapy (affecting the whole body) when the cancer has progressed or spread locally or to other parts of the body. It is used in patients whose cancer does not respond to treatment with radioactive iodine or who cannot have radioactive iodine.
- pancreatic (pNET) neuroendocrine tumours (tumours of the hormone-producing cells in the
 pancreas) and extra-pancreatic (epNET) neuroendocrine tumours (tumours originating in the
 hormone-producing cells of the lungs, gut or other organs) that cannot be removed by surgery or
 are metastatic (have spread to other parts of the body). It is used when the cancer does not
 respond to at least one treatment other than medicines known as somatostatin analogues.

Cabometyx contains the active substance cabozantinib.

How is Cabometyx used?

Cabometyx can only be obtained with a prescription and treatment should be started by a doctor who has experience in using cancer medicines.

Cabometyx is available as tablets to be taken by mouth once a day. Patients should not eat for at least two hours before and one hour after taking Cabometyx. The dose may need to be reduced or treatment stopped temporarily if serious or unacceptable side effects occur. Treatment is continued for as long as the patient benefits from it or until side effects become unacceptable.



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

How does Cabometyx work?

The active substance in Cabometyx, cabozantinib, is a tyrosine kinase inhibitor. This means that it blocks the activity of enzymes known as tyrosine kinases. These enzymes can be found in certain receptors in cancer cells, where they are involved in activating processes that include cell division and the growth of new blood vessels to supply the cancer. By blocking the activity of these enzymes in cancer cells, the medicine reduces the growth and spread of the cancer.

What benefits of Cabometyx have been shown in studies?

Renal cell carcinoma

A first main study involving 658 adults with advanced renal cell carcinoma that had got worse despite treatment with a VEGF inhibitor showed that Cabometyx is effective at prolonging the time patients live without their disease getting worse (progression-free survival). In this study, Cabometyx was compared with the cancer medicine everolimus. Patients treated with Cabometyx lived for an average of 7.4 months without their disease getting worse, compared with 3.8 months in patients treated with everolimus. In addition, results indicated that patients treated with Cabometyx lived longer overall (overall survival) than patients treated with everolimus (an average of 21.4 months compared with 16.5 months).

A second main study showed that Cabometyx is effective in adults with previously untreated renal cell carcinoma that is locally advanced or has spread elsewhere in the body. The study involved 157 patients, and compared Cabometyx with another cancer medicine, sunitinib. Patients treated with Cabometyx lived for an average of 8.6 months without their disease getting worse, compared with 5.3 months in those treated with sunitinib.

Hepatocellular carcinoma

A main study involving 707 adults with hepatocellular carcinoma who had already been treated with sorafenib showed that Cabometyx is effective at prolonging how long patients live. In the study, Cabometyx was compared with placebo (a dummy treatment). Patients treated with Cabometyx lived on average for 10.2 months, compared with 8.0 months in patients who received placebo.

Differentiated thyroid carcinoma

A main study involved 187 adults with differentiated thyroid carcinoma that had got worse despite previous treatment. Patients treated with Cabometyx lived for an average of 11 months without the disease getting worse, compared with 2 months for patients who received placebo. In addition, results indicated that patients treated with Cabometyx lived longer overall than patients on placebo (an average of 17 months compared with 14 months).

Extra-pancreatic (epNET) and pancreatic (pNET) neuroendocrine tumours

A main study involved 298 patients with epNET or pNET that could not be removed by surgery or were metastatic. Patients received either Cabometyx or placebo.

Among those with epNET, patients treated with Cabometyx lived on average for 8.5 months without their disease getting worse, compared with around 4 months for those given placebo.

For patients with pNET, those treated with Cabometyx lived on average for 13.8 months without their disease getting worse, compared with around 4.5 months for those given placebo.

What are the risks associated with Cabometyx?

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

The most common side effects with Cabometyx (which may affect 25 in 100 people) in patients with renal cell carcinoma, hepatocellular carcinoma, differentiated thyroid carcinoma and neuroendocrine tumours include diarrhoea, fatigue, nausea (feeling sick), decreased appetite, palmar-plantar erythrodysaesthesia syndrome (hand-foot syndrome, which involves rash and numbness on the palms and soles) and high blood pressure.

The most common serious side effects (which may affect more than 1 in 100 people) with Cabometyx in patients with renal cell carcinoma are pneumonia (infections of the lungs), abdominal pain (belly ache), high blood pressure, diarrhoea, nausea, vomiting, loss of appetite, dizziness, tiredness, dehydration, deep vein thrombosis (blood clot in a deep vein, usually in the leg), hyponatraemia and hypomagnesaemia (low blood levels of sodium and magnesium), palmar-plantar erythrodysaesthesia syndrome, weakness, embolism (clot in a blood vessel) and pulmonary embolism (clot in a blood vessel in the lungs).

The most common serious side effects (which may affect more than 1 in 100 people) with Cabometyx in patients with hepatocellular carcinoma include hepatic encephalopathy (harmful effects on the brain caused by liver damage), tiredness, vomiting, abdominal pain, hyponatraemia, palmar-plantar erythrodysaesthesia syndrome, weakness, diarrhoea and low levels of platelets in the blood.

The most common serious side effects (which may affect more than 1 in 100 people) with Cabometyx in patients with differentiated thyroid carcinoma include diarrhoea, pleural effusion (fluid around the lungs), pneumonia, anaemia (low levels of red blood cells), osteonecrosis (death of bone tissue) of the jaw, pulmonary embolism, deep vein thrombosis, palmar-plantar erythrodysaesthesia syndrome, pain, high blood pressure and hypocalcaemia (low blood levels of calcium).

The most common serious side effects (which may affect more than 1 in 100 people) with Cabometyx in patients with neuroendocrine tumours include high blood pressure, tiredness, vomiting, diarrhoea, nausea and embolism including pulmonary embolism.

Why is Cabometyx authorised in the EU?

In advanced renal cell carcinoma, Cabometyx was shown to prolong the time patients who had previously been treated lived without their disease getting worse. These patients have poor outcomes and a high unmet medical need. Results also indicated that Cabometyx helped patients live longer. In previously untreated patients with moderate or high-risk disease, Cabometyx provided clinically relevant benefits, delaying the progression of the cancer and the need for other treatments.

In hepatocellular carcinoma, Cabometyx was shown to prolong survival in patients who had been treated with sorafenib. The improvement in survival is considered significant considering that these patients have poor outcomes and few treatment options.

A clinically significant benefit was also seen in patients with differentiated thyroid carcinoma.

In epNET and pNET, Cabometyx was shown to delay the progression of the cancer. Delaying cancer progression is considered beneficial in epNET and pNET, as progressive disease may often be associated with new or worsening cancer-related symptoms.

The side effects of Cabometyx are similar to those of other tyrosine kinase inhibitors, and although they can sometimes be severe, they are considered manageable.

The European Medicines Agency therefore decided that Cabometyx'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 Cabometyx?

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

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

Other information about Cabometyx

Cabometyx received a marketing authorisation valid throughout the EU on 9 September 2016.

Further information on Cabometyx can be found on the Agency's website: ema.europa.eu/en/medicines/human/EPAR/cabometyx.

This overview was last updated in 07-2025.