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Mekinist (*trametinib*)

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

What is Mekinist and what is it used for?

Mekinist is a cancer medicine used to treat adults whose cancer cells have a specific genetic mutation (change) in their genes called 'BRAF V600'. It is used for the treatment of:

- melanoma (a skin cancer) that has spread or cannot be removed surgically. Mekinist is used on its own or in combination with another cancer medicine, dabrafenib;
- advanced (stage III) melanoma after surgery for it. Mekinist is used in combination with dabrafenib;
- advanced non-small cell lung cancer. It is used in combination with dabrafenib.

Mekinist contains the active substance trametinib.

How is Mekinist used?

Treatment with Mekinist must be started and supervised by a doctor experienced in the use of cancer medicines. The medicine can only be obtained with a prescription.

Mekinist is available as tablets (0.5 and 2 mg). The dose of Mekinist is 2 mg once a day taken on an empty stomach (at least 1 hour before or 2 hours after a meal) and at around the same time every day.

Mekinist can be continued for as long as the patient benefits from it. After surgery for advanced melanoma, treatment is normally continued for 12 months unless the disease comes back. Treatment may need to be interrupted or stopped, or the dose reduced, if certain side effects occur.

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

How does Mekinist work?

In melanoma and non-small cell lung cancer with the BRAF V600 mutation, an abnormal form of the protein BRAF is present, which switches on another protein called MEK involved in stimulating cell

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division. This leads cancers to develop by allowing uncontrolled division of cells. The active substance in Mekinist, trametinib, works by blocking MEK and by preventing its activation by BRAF, thereby slowing down the growth and spread of the cancer.

What benefits of Mekinist have been shown in studies?

Mekinist has been studied in patients whose cancer had the BRAF V600 mutation.

Melanoma

Mekinist was more effective than the cancer medicines dacarbazine or paclitaxel at controlling melanoma that had spread to other parts of the body or could not be removed surgically. This was based on a main study involving 322 patients who received either Mekinist or the comparator medicine and which measured how long patients lived until their disease got worse. Patients taking Mekinist lived on average for 4.8 months before their disease getting worse, compared with 1.5 months for patients given dacarbazine or paclitaxel.

In an additional study Mekinist did not show any benefit when given to patients who did not respond to previous treatment with another cancer medicine that blocked BRAF.

Two additional studies on melanoma that had spread to other parts of the body or could not be removed surgically looked at using the combination of Mekinist and dabrafenib. In one study, 423 patients were given either the combination or dabrafenib alone. Patients given the combination lived for 11 months without their disease worsening compared with 8.8 months for those given dabrafenib alone. In a second study involving 704 patients, Mekinist with dabrafenib was compared with another medicine for melanoma, vemurafenib. Patients given the combination lived on average 25.6 months versus 18 months with vemurafenib.

In a study involving 870 patients with stage III melanoma that had been removed surgically, the combination of Mekinist and dabrafenib given for 1 year was compared with placebo (a dummy treatment). Some 40% of patients treated with the combination either died or had their disease come back after an average of about 3.5 years compared with 59% of patients receiving placebo.

Non-small cell lung cancer

In one main study, 171 patients with non-small cell lung cancer received either dabrafenib combined with Mekinist or dabrafenib alone. The main measure of effectiveness was the percentage of patients who responded completely or partially to treatment. Response to treatment was assessed using body scans and patients' clinical data. The use of Mekinist and dabrafenib led to a response in over 60% of the patients, compared with 23% of patients using dabrafenib alone.

What are the risks associated with Mekinist?

The most common side effects with Mekinist (which may affect more than 1 in 5 people) are rash, diarrhoea, tiredness, peripheral oedema (swelling, especially of ankles and feet), nausea and acneiform dermatitis (acne-like inflammation of the skin).

When Mekinist is taken in combination with dabrafenib the most common side effects (which may affect more than 1 in 5 people) are fever, tiredness, nausea, chills, headache, diarrhoea, vomiting, joint pain and rash.

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

Why is Mekinist authorised in the EU?

The European Medicines Agency decided that Mekinist's benefits in cancers that carry the BRAF V600 mutation are greater than its risks and it can be authorised for use in the EU. The Agency considered that Mekinist when used alone or in combination with dabrafenib had shown a clinically relevant benefit in patients with non-small cell lung cancer or with melanoma that had spread or could not be removed surgically. The Agency also found it to be of benefit in patients with advanced melanoma that had been removed surgically. Mekinist's side effects were considered acceptable and manageable with appropriate measures.

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

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

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

Other information about Mekinist

Mekinist received a marketing authorisation valid throughout the EU on 30 June 2014.

Further information on Mekinist can be found on the Agency's website: ema.europa.eu/Find medicine/Human medicines/European public assessment reports.

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