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Questions and answers

Positive opinion on a change to the marketing authorisation for Avastin (bevacizumab)

Outcome of a re-examination of an extension of the indication

On 14 April 2011, the Committee for Medicinal Products for Human Use (CHMP) recommended that a change to the marketing authorisation for the medicine Avastin be granted. The change concerns an extension of indication to add the use of Avastin in combination with capecitabine for the first-line treatment of patients with metastatic breast cancer. The company that applied for the change to the authorisation is Roche.

On 16 December 2010, the CHMP had originally adopted a negative opinion on the use of Avastin in combination with standard cytotoxic chemotherapy, including capecitabine, for the first-line treatment of patients with metastatic breast cancer. At the request of the applicant, the CHMP started a re-examination of its opinion. Following the re-examination, the CHMP adopted a final positive opinion on 14 April 2011 recommending that the change to the marketing authorisation be granted for Avastin, but restricting its use in combination with capecitabine to patients in whom treatment with other chemotherapy options including taxanes or anthracyclines is not considered appropriate.

What is Avastin?

Avastin is an anticancer medicine that contains the active substance bevacizumab. It is used in combination with other anticancer medicines to treat cancers of the colon, rectum, lung, kidney or breast that are either advanced or metastatic (spread to other parts of the body). For breast cancer, it is used in combination with paclitaxel (an anticancer medicine belonging to the class called 'taxanes', which inhibit cell division) when the cancer has become metastatic.

Avastin has been authorised in the EU since 12 January 2005 and is marketed in all EU Member States as well as Norway and Iceland.



What is Avastin to be used for?

In addition to the existing authorised uses of Avastin, the CHMP has recommended that Avastin also be used in combination with capecitabine in the first-line treatment of patients with metastatic breast cancer in whom treatment with other chemotherapy options including taxanes or anthracyclines are not considered appropriate. Patients who have received a chemotherapy regimen containing taxanes and anthracyclines within the last year are not suitable for treatment with this combination.

How does Avastin work?

In metastatic breast cancer, Avastin is expected to work in combination with capecitabine in the same way as it does in its existing indications. The active substance in Avastin, bevacizumab, is a monoclonal antibody, a type of protein that has been designed to recognise and attach to a specific structure (called an antigen) found on certain cells in the body or circulating in the body. Bevacizumab attaches to a protein that circulates in the blood and makes blood vessels grow, called vascular endothelial growth factor (VEGF), and stops it having an effect. As a result, the cancer cells cannot develop their own blood supply and are starved of oxygen and nutrients, helping to slow down the growth of tumours.

What did the company present to support its application?

The CHMP examined the results of a main study to investigate the effects of adding either Avastin or placebo to other standard chemotherapy treatments (taxanes, anthracycline-based treatment or capecitabine) in 1,237 patients with metastatic breast cancer. The main measure of effectiveness was progression-free survival time (how long the patients lived without their disease getting worse).

What were the CHMP's main concerns that led to the initial negative opinion?

In December 2010, the CHMP noted that although the main study showed that adding Avastin to capecitabine produced a modest improvement in progression-free survival (how long patients lived without their disease getting worse), no meaningful effects were observed for other measurements such as overall survival or health-related quality of life. As capecitabine is aimed at patients for whom a relatively mild treatment is appropriate, the increased toxicity of adding Avastin was also considered important. Therefore, the Committee concluded that the benefits of this combination treatment did not outweigh the risks and the new indication could not be approved. Hence, the CHMP recommended that the change to the marketing authorisation be refused.

What happened during the re-examination?

During the re-examination, the CHMP looked at the data it had previously assessed and heard the company during an oral explanation. In its deliberations, the Committee also considered the company's proposed restricted indication for the combination of Avastin with capecitabine.

What were the conclusions of the CHMP following the re-examination?

The Committee noted that patients for whom other chemotherapy regimens including taxanes or anthracyclines are not appropriate, have limited treatment options. The Committee concluded that the improvement in progression-free survival brought by the combination of Avastin and capecitabine was relevant in these patients, and the toxicity profile of the combination acceptable.

Therefore, the CHMP concluded that the benefits of Avastin in combination with capecitabine outweigh its risks in the first-line treatment of metastatic breast cancer in this restricted group of patients. The Committee recommended that the change to the marketing authorisation for Avastin be granted.

The full European Public Assessment Report for Avastin can be found on the Agency's website:
[ema.europa.eu/Find medicine/Human medicines/European Public Assessment Reports](http://ema.europa.eu/Find%20medicine/Human%20medicines/European%20Public%20Assessment%20Reports).

The summary of the positive opinion of the CHMP is published on the Agency's website:
[ema.europa.eu/Find medicine/Human medicines/Pending EC decisions](http://ema.europa.eu/Find%20medicine/Human%20medicines/Pending%20EC%20decisions).