Approval of the marketing authorisation for Evenity (romosozumab)

Re-examination leads to recommendation to approve

After re-examining its initial opinion, the European Medicines Agency has recommended approving the marketing authorisation for the medicine Evenity for the treatment of severe osteoporosis.

The Agency had initially refused the application on 27 June 2019 for Evenity to treat osteoporosis. After re-examination, on 17 October 2019 the Agency recommended that marketing authorisation could be granted but for a restricted indication in postmenopausal women with severe osteoporosis at high risk of fracture.

The company that applied for authorisation was UCB Pharma S.A.

What is Evenity and what is it to be used for?

Evenity is a medicine for the treatment of osteoporosis, a disease that makes bones fragile. It is intended for use in women who have been through the menopause and who have severe osteoporosis (low bone density and a previous fracture), leading to a high risk of further fractures. However, Evenity should not be used in such women if they have previously had a heart attack (myocardial infarction) or stroke.

Evenity contains the active substance romosozumab and is to be available as an injection to be given under the skin once a month for a year.

How does Evenity work?

The active substance in Evenity, romosozumab, is a monoclonal antibody (a type of protein) that attaches to a specific target in the body called sclerostin. Sclerostin is a natural substance that plays an important role in regulating the formation and breakdown of bone. By attaching to sclerostin and blocking its action, romosozumab increases the formation of new bone tissue, and reduces the breakdown of existing bone. This helps strengthen bones and reduce the risk of fractures.

What did the company present to support its application?

The company presented data on the quality, safety and effectiveness of Evenity, including two main studies involving over 11,000 postmenopausal women with osteoporosis. In one of these studies,
involving women considered at high risk of fracture, the medicine was compared with another osteoporosis medicine, alendronate, and in the other study it was compared with placebo (a dummy treatment). The main measure of effectiveness in all the studies was the number of new fractures that developed in the bones of the spine (vertebrae).

**What were the main reasons for initially refusing the marketing authorisation?**

The Agency was originally concerned because the results suggested that patients given Evenity had an increased risk of serious problems affecting the heart or circulatory system, such as heart attacks or strokes. In addition, when all the data were looked at together, there were more deaths in patients aged over 75 years given the medicine. As it was unclear why the medicine appeared to increase the risk of heart and circulatory problems, and there was no obvious group of patients in whom the risk of these was lower, the Agency was concerned that measures to reduce the risk could not readily be put in place.

With respect to its beneficial effects, Evenity was effective in reducing the risk of fracture in patients with severe osteoporosis, although the clinical benefit was less convincing in patients with less severe disease.

Therefore, the Agency’s opinion was that the benefits of Evenity did not outweigh its risks and it recommended refusal of a marketing authorisation.

**What happened during the re-examination?**

During the re-examination the Agency looked at further analyses of the data provided and took additional advice from patient representatives and experts specialising in osteoporosis and cardiovascular diseases.

**What were the conclusions of the re-examination?**

The Agency noted that the medicine appeared to show convincing evidence of benefit in women with severe osteoporosis, with long-lasting effects that appeared better than alendronate. It also took into account the views of experts that restricting the use of the medicine to women who had no history of heart attack and stroke would reduce the risks of the latter problems occurring. Therefore, the Agency finally concluded that if restricted in this way the benefits of Evenity would outweigh its risks in postmenopausal women with severe osteoporosis who are at a high risk of fracture. Additional measures and studies are foreseen to follow its use in practice and to ensure that the medicine is used correctly.

The Agency recommended granting a marketing authorisation for Evenity.