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## EPAR summary for the public

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# Adrovanse

alendronic acid / colecalciferol

This is a summary of the European public assessment report (EPAR) for Adrovanse. 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 Adrovanse.

## What is Adrovanse?

Adrovanse is a medicine that contains two active substances: alendronic acid and colecalciferol (vitamin D<sub>3</sub>). It is available as white tablets (capsule-shaped: 70 mg alendronic acid and 2,800 international units [IU] colecalciferol; rectangular: 70 mg alendronic acid and 5,600 IU colecalciferol).

## What is Adrovanse used for?

Adrovanse (containing either 2,800 or 5,600 IU colecalciferol) is used to treat osteoporosis (a disease that makes bones fragile) in women who have been through the menopause and are at risk of low vitamin D levels. Adrovanse 70 mg/5,600 IU is for use in patients who are not taking vitamin D supplements. Adrovanse reduces the risk of broken bones in the spine and the hip.

The medicine can only be obtained with a prescription.

## How is Adrovanse used?

The recommended dose of Adrovanse is one tablet once a week. It is intended for long-term use.

The patient must take the tablet with a full glass of water (but not mineral water), at least 30 minutes before any food, drink or other medicines (including antacids, calcium supplements and vitamins). To avoid irritation of the oesophagus (gullet), the patient should not lie down until after their first food of the day, which should be at least 30 minutes after taking the tablet. The tablet should be swallowed whole and not crushed, chewed or allowed to dissolve in the mouth.



Patients should also take calcium supplements if they are not getting enough calcium from their diet. For more information, see the package leaflet.

## **How does Adroavance work?**

Osteoporosis happens when not enough new bone grows to replace the bone that is naturally broken down. Gradually, the bones become thin and fragile, and more likely to break. Osteoporosis is more common in women after the menopause, when the levels of the female hormone oestrogen fall, since oestrogen helps to keep bones healthy.

Adroavance contains two active substances: alendronic acid and colecalciferol (vitamin D<sub>3</sub>).

Alendronic acid is a bisphosphonate that has been used in osteoporosis since the mid-1990s. It slows the action of the osteoclasts, the cells that are involved in breaking down the bone tissue. Blocking the action of these cells leads to less bone loss. Vitamin D<sub>3</sub> is a nutrient that is found in some foods, but also made in the skin through exposure to natural sunlight. Vitamin D<sub>3</sub>, along with other forms of vitamin D, is required for calcium absorption and normal bone formation. Since patients with osteoporosis may not get enough vitamin D<sub>3</sub> through exposure to sunlight, it is included in Adroavance.

## **How has Adroavance been studied?**

Because alendronic acid and vitamin D<sub>3</sub> are already used separately in authorised medicines in the European Union (EU), the company presented data obtained in earlier studies and from the published literature from women who had been through the menopause and who were taking alendronic acid and vitamin D as separate tablets.

To support the combination of alendronic acid and vitamin D<sub>3</sub> in the same tablet, the company also carried out a study in 717 patients with osteoporosis, including 682 women who had been through the menopause, to show Adroavance's ability to increase vitamin D levels. Patients received either Adroavance 70 mg/2,800 IU or alendronic acid only once a week. The main measure of effectiveness was the reduction in the number of patients with low vitamin D levels after 15 weeks. This study was extended in 652 patients for a further 24 weeks to compare the effects on continuing with Adroavance 70 mg/2,800 IU on its own or adding another 2,800 IU vitamin D<sub>3</sub> (equivalent to using Adroavance 70 mg/5,600 IU).

## **What benefit has Adroavance shown during the studies?**

The information presented by the company from earlier studies and the published literature showed that the dose of alendronic acid included in Adroavance was the same as the dose needed to prevent bone loss.

The additional studies showed that including vitamin D<sub>3</sub> in the same tablet with alendronic acid could increase vitamin D levels. After 15 weeks, fewer patients had low vitamin D levels when they took Adroavance 70 mg/2,800 IU (11%) than when they took alendronic acid only (32%). In the extension study, similar numbers of patients taking Adroavance 70 mg/2,800 IU and Adroavance 70 mg/5,600 IU had low vitamin D levels (below 6%), but the patients taking Adroavance 70 mg/5,600 IU had greater increases in vitamin D levels over the 24 weeks of the study.

## **What is the risk associated with Adroavance?**

The most common side effects with Adroavance are headache, abdominal pain (stomach ache), dyspepsia (heartburn), constipation, diarrhoea, flatulence (gas), oesophageal (gullet) ulcers, dysphagia (difficulty swallowing), abdominal distension (swollen tummy), acid regurgitation and musculoskeletal

pain (pain in the muscles, bones and joints). For the full list of all side effects reported with Adrovanse, see the package leaflet.

Adrovanse should not be used in people who may be hypersensitive (allergic) to alendronic acid, vitamin D<sub>3</sub> or any of the other ingredients. It must not be used in patients who have abnormalities of the oesophagus, who have hypocalcaemia (low calcium levels), or who cannot stand or sit upright for at least 30 minutes.

### **Why has Adrovanse been approved?**

The CHMP decided that Adrovanse's benefits are greater than its risks and recommended that it be given marketing authorisation.

### **Other information about Adrovanse**

The European Commission granted a marketing authorisation valid throughout the European Union for Adrovanse to Merck Sharp & Dohme Ltd. on 4 January 2007. This authorisation was based on the authorisation granted to Fosavance in 2005 ('informed consent'). The marketing authorisation is valid for five years, after which it can be renewed.

The full EPAR for Adrovanse can be found on the Agency's website: [ema.europa.eu/Find\\_medicine/Human\\_medicines/European\\_Public\\_Assessment\\_Reports](http://ema.europa.eu/Find_medicine/Human_medicines/European_Public_Assessment_Reports). For more information about treatment with Adrovanse, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

This summary was last updated in 04-2011.