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Withdrawal of application for the marketing authorisation of Imbarkyd (bardoxolone)

Reata Ireland Limited withdrew its application for a marketing authorisation of Imbarkyd for the treatment of chronic kidney disease caused by Alport syndrome in adults and children 12 years and above.

The company withdrew the application on 9 November 2022.

What is Imbarkyd and what was it intended to be used for?

Imbarkyd was developed as a medicine for chronic kidney disease caused by Alport syndrome. It was intended for adults and children aged 12 years and above.

Imbarkyd contains the active substance bardoxolone methyl and was to be available as capsules to be taken by mouth.

Imbarkyd was designated an 'orphan medicine' (a medicine used in rare diseases) on 25 May 2018 for chronic kidney disease caused by Alport syndrome. Further information on the orphan designation can be found on the Agency's website: ema.europa.eu/medicines/human/orphan-designations/eu3182019.

How does Imbarkyd work?

Bardoxolone methyl, the active substance in Imbarkyd, activates the transcription factor Nrf2, a protein that regulates certain genes involved in inflammation. Nrf2 activity is often altered in patients with chronic kidney disease caused by Alport syndrome. Therefore, Imbarkyd was expected to restore kidney function and alleviate patients' symptoms.

What did the company present to support its application?

The company presented results from a main study involving 157 patients with mild-to-moderate chronic kidney disease caused by Alport syndrome. The study looked at the estimated glomerular filtration rate, a measure of how well the kidneys are working. Treatment with Imbarkyd was compared with placebo (a dummy treatment).

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How far into the evaluation was the application when it was withdrawn?

The application was withdrawn after the European Medicines Agency had evaluated the information from the company and prepared questions for the company. After the Agency had assessed the company's responses to the last round of questions, there were still some unresolved issues.

What did the Agency recommend at that time?

Based on the review of the data and the company's responses to the Agency's questions, at the time of the withdrawal, the Agency had some concerns and its provisional opinion was that Imbarkyd could not have been authorised for the treatment of chronic kidney disease caused by Alport syndrome.

It was unclear from the data provided by the applicant how bardoxolone is broken down in the body, and if the end products of the medicine could impact patients' health. The study did not convincingly show a sustained beneficial effect of bardoxolone on kidney function in patients with Alport syndrome and there were concerns about potential negative effects on kidney and heart function.

Therefore, at the time of the withdrawal, the Agency's opinion was that the benefits of Imbarkyd did not outweigh its risks.

What were the reasons given by the company for withdrawing the application?

In its letter notifying the Agency of the withdrawal of the application, the company stated that it withdrew its application because the Agency considers that the data provided do not allow to conclude on a positive benefit-risk balance at the present time.

Does this withdrawal affect patients in clinical trials?

The company informed the Agency that there are no consequences for patients in clinical trials using Imbarkyd.

If you are in a clinical trial and need more information about your treatment, speak with your clinical trial doctor.