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Withdrawal of application for the marketing authorisation of Roctavian (valoctocogene roxaparvovec)

BioMarin International Limited withdrew its application for a marketing authorisation of Roctavian for the treatment of severe haemophilia A.

The company withdrew the application on 4 November 2020.

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

Roctavian is a medicine intended for treating severe haemophilia A, an inherited bleeding disorder caused by the lack of factor VIII, one of the proteins involved in the blood coagulation (clotting) process, causing bleeding disorder. It was to be used in adults who had not developed factor VIII inhibitors. These are antibodies that the body produces which can stop factor VIII medicines from working.

The medicine contains the active substance valoctocogene roxaparvovec and was to be given once as an infusion (drip) into a vein.

Roctavian was designated an 'orphan medicine' (a medicine used in rare diseases) on 21 March 2016 for haemophilia A. Further information on the orphan designation can be found on the Agency's website: ema.europa.eu/medicines/human/orphan-designations/eu3161622.

Roctavian was granted eligibility to PRIME[1] on 27 January 2017 for the treatment of haemophilia A.

How does Roctavian work?

Roctavian is a type of advanced therapy medicine called a 'gene therapy', which delivers genes into the body. The active substance in Roctavian, valoctocogene roxaparvovec, is made of a virus that has been modified to contain the gene for factor VIII. After infusion of Roctavian into a vein, the virus was

[1] PRIME is an EMA scheme to enhance support during the development of medicines that target an unmet medical need. More information is available here: https://www.ema.europa.eu/en/human-regulatory/research-development/prime-priority-medicines

Official address Domenico Scarlattilaan 6 ● 1083 HS Amsterdam ● The Netherlands
Address for visits and deliveries Refer to www.ema.europa.eu/how-to-find-us
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expected to carry the factor-VIII gene into the liver cells, enabling them to produce the missing factor VIII for a long period. This was expected to control the bleeding disorder. The type of virus used in this medicine ('adeno-associated virus') does not cause disease in humans.

What did the company present to support its application?

The company presented interim results from a main study in 32 adults with severe haemophilia A. The main measure of effectiveness was a change in factor VIII activity. The study also looked at other effects such as the reduction in the use of factor replacement therapy and the number of bleeding episodes.

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. The company had not responded to the last round of questions at the time of the withdrawal.

What did the Agency recommend at that time?

Based on the review of the data and the company's response to the Agency's questions, at the time of the withdrawal, the Agency had some concerns and its provisional opinion was that Roctavian could not have been authorised for the treatment of severe haemophilia A.

The Agency considered that the duration of the benefits could not be established and had concerns about the variability of the responses amongst patients, which could not be explained based on the data available. In addition, the safety profile of Roctavian could also not be established, due to the limited data available and the short duration of follow-up in treated patients.

Therefore, at the time of the withdrawal, the Agency's opinion was that the company had not provided enough data to support the application for Roctavian.

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 it was not able to provide the requested data during the current procedure. The company also said that it will continue developing Roctavian for the treatment of severe haemophilia A and reserves the right to send another application in the future.

Does this withdrawal affect patients in clinical trials?

The company informed the Agency that the withdrawal has no consequences for patients in clinical trials using Roctavian.

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