16 September 2016
EMA/541043/2016
EMEA/H/C/0004235

Questions and answers

Withdrawal of the marketing authorisation application for Cokiera (dasabuvir / ombitasvir / paritaprevir / ritonavir)

On 3 August 2016, AbbVie Ltd officially notified the Committee for Medicinal Products for Human Use (CHMP) that it wishes to withdraw its application for a marketing authorisation for Cokiera, for the treatment of chronic hepatitis C.

What is Cokiera?

Cokiera is an antiviral medicine containing the active substances dasabuvir, ombitasvir, paritaprevir and ritonavir. It was to be available as tablets.

What was Cokiera expected to be used for?

Cokiera was expected to be used for treating adults with chronic (long-term) hepatitis C. Hepatitis C is an infection of the liver caused by the hepatitis C virus.

How is Cokiera expected to work?

All four active substances in Cokiera are already available in authorised medicines for treating chronic hepatitis C. It was expected that combining the substances in a single tablet would make it simpler for patients to take their medicine.

The active substances in Cokiera work in different ways. Dasabuvir blocks the action of an enzyme in the hepatitis C virus, called 'NS5B RNA-dependent polymerase', which the virus needs to multiply. Ombitasvir blocks the action of a protein in the hepatitis C virus called 'NS5A' and paritaprevir blocks the action of another protein called 'NS3/4A', both of which the virus needs to multiply. Ritonavir, the fourth active substance, slows down the removal of paritaprevir from the body by blocking an enzyme called CYP3A that breaks down paritaprevir. Ritonavir itself does not have an antiviral effect on hepatitis C virus.

30 Churchill Place ● Canary Wharf ● London E14 5EU ● United Kingdom
Telephone +44 (0)20 3660 6000 **Facsimile** +44 (0)20 3660 5555
Send a question via our website www.ema.europa.eu/contact

The active substances in Cokiera are effective against hepatitis C virus genotypes 1a and 1b.

What did the company present to support its application?

Because all the active substances in Cokiera were already included in authorised medicines, the company presented the results of studies to see whether the active substances from Cokiera were 'bioequivalent' to the authorised medicines. Medicines are bioequivalent when they produce the same levels of the active substance in the body. The company also provided results of a mathematical (modelling and simulation) exercise to predict the levels of the active substances and the medicine's effectiveness in clearing the virus from the blood in different circumstances.

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

The application was withdrawn after the CHMP had evaluated the documentation provided by the company and formulated lists of questions. The company had not yet responded to the last round of questions at the time of the withdrawal.

What was the recommendation of the CHMP at that time?

Based on the review of the data at the time of the withdrawal, the CHMP had some concerns and was of the provisional opinion that Cokiera could not have been approved for the treatment of chronic hepatitis C in adults.

The CHMP considered that the data provided did not properly show how the size of meals affect absorption of the active substances from Cokiera and therefore how well Cokiera works.

Therefore, at the time of the withdrawal, the CHMP was of the opinion that the company had not provided enough data to support the application for Cokiera.

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

In its letter notifying the Agency of the withdrawal of application, the company stated that the withdrawal is based on strategic business reasons for this specific product.

The withdrawal letter is available here.

What consequences does this withdrawal have for patients in clinical trials or compassionate use programmes?

The company informed the CHMP that there are no ongoing clinical trials or compassionate-use programmes for this specific product.