Hepcludex (*bulevirtide*)
An overview of Hepcludex and why it is authorised in the EU

**What is Hepcludex and what is it used for?**

Hepcludex is an antiviral medicine used to treat chronic (long-term) hepatitis delta virus (HDV) infection in adults with compensated liver disease (when the liver is damaged but is still able to work), when the presence of viral RNA (genetic material) has been confirmed by blood tests.

HDV is an 'incomplete' virus, because it cannot replicate in cells without the help of another virus, the hepatitis B virus. Because of this, patients infected with the virus always also have hepatitis B.

HDV infection is rare, and Hepcludex was designated an 'orphan medicine’ (a medicine used in rare diseases) on 19 June 2015. Further information on the orphan designation can be found here: [ema.europa.eu/medicines/human/orphan-designations/eu3151500](http://ema.europa.eu/medicines/human/orphan-designations/eu3151500).

Hepcludex contains the active substance bulevirtide.

**How is Hepcludex used?**

The recommended dose of Hepcludex is one 2 mg injection under the skin per day. Hepcludex can be given on its own, or in combination with a 'nucleoside/nucleotide analogue' medicine for the treatment of the underlying hepatitis B infection. Treatment should continue for as long as the patient benefits from it.

The medicine can only be obtained with a prescription and treatment should be started only by a doctor experienced in the management of patients with HDV infection.

For more information about using Hepcludex, see the package leaflet or contact your doctor or pharmacist.

**How does Hepcludex work?**

The active substance in Hepcludex, bulevirtide, works by attaching to and blocking a receptor (target) through which the hepatitis delta and hepatitis B viruses enter liver cells. By blocking the entry of the virus into the cells, Hepcludex limits the ability of HDV to replicate and its effects in the body, reducing symptoms of the disease.
What benefits of Hepcludex have been shown in studies?

Two main studies showed that Hepcludex was effective at clearing all or 99% of the HDV genetic material (RNA) from the blood.

In the first study, 55 out of 90 patients treated with Hepcludex plus tenofovir (a medicine for hepatitis B) had almost all their HDV RNA cleared after 6 months, compared with 1 out of 28 patients given tenofovir alone. Patients treated with Hepcludex also showed a reduction in the blood levels of the liver enzyme ALT, indicating an improvement of liver disease.

Similar results were seen in the second study where 8 out of 15 patients given Hepcludex plus peginterferon alfa (another medicine for hepatitis B) for 48 weeks had no detectable levels of HDV RNA 6 months after their treatment. Of the 15 patients treated with Hepcludex alone, one tested negative for HDV while none of the 15 patients treated with peginterferon alfa alone tested negative.

What are the risks associated with Hepcludex?

The most common side effects with Hepcludex are raised levels of bile salts in the blood (which may affect more than 1 in 10 people) and reactions at the site of injection (which may affect up to 1 in 10 people).

The most common serious side effect is worsening of liver disease after stopping Hepcludex (which may affect up to 1 in 10 people).

For the full list of side effects and restrictions of Hepcludex, see the package leaflet.

Why is Hepcludex authorised in the EU?

Although the two studies with Hepcludex had important limitations (such as the small number of patients), the available data showed a beneficial effect of Hepcludex in patients with HDV infection. The benefits are considered particularly important in light of the limited options for patients and the serious liver complications of HDV infection. As for its safety, the side effects seen with Hepcludex were considered acceptable. The European Medicines Agency therefore decided that Hepcludex’s benefits are greater than its risks and it can be authorised for use in the EU.

Hepcludex has been given ‘conditional authorisation’. This means that there is more evidence to come about the medicine, which the company is required to provide. Every year, the Agency will review any new information that becomes available and this overview will be updated as necessary.

What information is still awaited for Hepcludex?

Since Hepcludex has been given conditional authorisation, the company that markets Hepcludex will collect data on the use of the medicine in a patient registry and will provide the final results from two ongoing studies.

What measures are being taken to ensure the safe and effective use of Hepcludex?

Recommendations and precautions to be followed by healthcare professionals and patients for the safe and effective use of Hepcludex have been included in the summary of product characteristics and the package leaflet.

As for all medicines, data on the use of Hepcludex are continuously monitored. Side effects reported with Hepcludex are carefully evaluated and any necessary action taken to protect patients.
Other information about Hepcludex

Hepcludex received a conditional marketing authorisation valid throughout the EU on 31 July 2020. Further information on Hepcludex can be found on the Agency’s website: ema.europa.eu/medicines/human/EPAR/hepcludex.

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