



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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Committee for Orphan Medicinal Products

## Public summary of opinion on orphan designation

### 6alpha-ethyl-chenodeoxycholic acid for treatment of primary biliary cirrhosis

On 27 July 2010, orphan designation (EU/3/10/753) was granted by the European Commission to Intercept Pharma, Italy, for 6alpha-ethyl-chenodeoxycholic acid (also known as obeticholic acid) for treatment of primary biliary cirrhosis.

#### **What is primary biliary cirrhosis?**

Primary biliary cirrhosis is a disease in which there is gradual destruction of the small bile ducts in the liver. These ducts transport a fluid called bile towards the intestines, where it is used to help digest fats. As a result of the damage to the ducts, bile builds up in the liver and damages the liver tissue. Early symptoms of the disease include tiredness and pruritus (itching).

Primary biliary cirrhosis is ten times more common in women than in men. It is a long-term debilitating and life-threatening disease because, when the disease progresses, it may lead to liver cirrhosis (scarring of the liver) and liver failure (an inability of the liver to work properly).

#### **What is the estimated number of patients affected by the condition?**

At the time of designation, primary biliary cirrhosis affected not more than 3.9 in 10,000 people in the European Union (EU)\*. This is equivalent to a total of not more than 182,000 people, and is below the threshold for orphan designation, which is 5 people in 10,000. This is based on the information provided by the sponsor and the knowledge of the Committee for Orphan Medicinal Products (COMP).

#### **What treatments are available?**

At the time of designation, ursodeoxycholic acid was authorised in most EU countries for the treatment of primary biliary cirrhosis. Although this medicine can help to improve the flow of bile, about a third of patients with primary biliary cirrhosis do not respond to it. In advanced cases, the patient may need a liver transplant.

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\*Disclaimer: For the purpose of the designation, the number of patients affected by the condition is estimated and assessed on the basis of data from the European Union (EU 27), Norway, Iceland and Liechtenstein. This represents a population of 506,500,000 (Eurostat 2010).



The sponsor has provided sufficient information to show that 6alpha-ethyl-chenodeoxycholic acid might be of significant benefit for patients with primary biliary cirrhosis because it might improve the treatment of patients with this condition, particularly patients who do not respond to the existing treatment. This assumption will need to be confirmed at the time of marketing authorisation, in order to maintain the orphan status.

### **How is this medicine expected to work?**

6alpha-ethyl-chenodeoxycholic acid is a natural bile acid that has been chemically modified to make it more active. It is expected to work mainly by activating the farnesoid X receptor (FXR), which controls the production of bile. By activating this receptor, this medicine is expected to reduce the production of bile in the liver, preventing it building up and damaging the liver tissue.

### **What is the stage of development of this medicine?**

The effects of 6alpha-ethyl-chenodeoxycholic acid have been evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials with 6alpha-ethyl-chenodeoxycholic acid in patients with primary biliary cirrhosis were ongoing.

At the time of submission, 6alpha-ethyl-chenodeoxycholic acid was not authorised anywhere in the EU for primary biliary cirrhosis. Orphan designation of 6alpha-ethyl-chenodeoxycholic acid had been granted in the United States of America for primary biliary cirrhosis.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 8 April 2010 recommending the granting of this designation.

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Opinions on orphan medicinal product designations are based on the following three criteria:

- the seriousness of the condition;
- the existence of alternative methods of diagnosis, prevention or treatment;
- either the rarity of the condition (affecting not more than 5 in 10,000 people in the EU) or insufficient returns on investment.

Designated orphan medicinal products are products that are still under investigation and are considered for orphan designation on the basis of potential activity. An orphan designation is not a marketing authorisation. As a consequence, demonstration of quality, safety and efficacy is necessary before a product can be granted a marketing authorisation.

## For more information

Sponsor's contact details:

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## Patient associations' contact points

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## Translations of the active ingredient and indication in all official EU languages<sup>1</sup>, Norwegian and Icelandic

Language	Active ingredient	Indication
English	6alpha-ethyl-chenodeoxycholic acid	Treatment of primary biliary cirrhosis
Bulgarian	6-α-ετιλ-χενοδεοξισχολεβα киселина	Лечение на първична билиарна цирроза
Czech	6α-etyl-chenodezoxylcholová kyselina	Léčbě primární biliární cirhózy
Danish	6α-ethylchenodeoxycholsyre	Behandling af primær biliær cirrose
Dutch	6α-ethylchenodeoxycholiczuur	Behandeling van primaire biliare cirrose
Estonian	6α-etüülkenodeoksükoolhape	Primaarse biliaartsirroosi ravi.
Finnish	6α-etyylikenodeoksikoolihappo	Primaarisen biliaarisen kirroosin hoito
French	Acide 6α-éthyl-chénodésoxycholique	Traitement de la cirrhose biliare primitive
German	6α-Ethylchenodesoxycholsäure	Behandlung der primären biliären Zirrhose
Greek	6α-αιθυλ-χηνοδεοξυχολικό οξύ	Θεραπεία της πρωτοπαθούς χολικής κίρρωσης
Hungarian	6-alfa-etil-kenodezoxikólsav	Primer biliaris cirrhosis kezelése
Italian	acido 6α-etilchenodesossicolico	Trattamento della cirrosi biliare primitiva
Latvian	6alfa-etilhenodeoksiholijskābe	Primāras biliāras cirozes ārstēšana
Lithuanian	6 α-etilchenodeoksicholio rūgštis	Pirminės biliarinės cirozės gydymas
Maltese	aċidu 6α-ethylchenodeoxycholic	Kura ta' ċirrozi biljari primarja
Polish	Kwas 6-alfa-etylochenodeoksychowy	Leczenie pierwotnej żółciowej marskości wątroby
Portuguese	Ácido 6α-etil-quenodesoxicólico	Tratamento da cirrose biliar primária
Romanian	Acid 6alfa-etil-chenodeoxicolic	Tratamentul cirozei biliare primitive
Slovak	6-alfa--etyl-chenodeoxycholová kyselina	Liečba primárnej biliárnej cirhózy
Slovenian	6α-etilhenodeoksiholna kislina	Zdravljenje primarn2 biliarne ciroze
Spanish	ácido 6α-etilquenodesoxicólico	Tratamiento de la cirrosis biliar primaria
Swedish	6α-etyl-kenodeoxicholsyra	Behandling av primär biliär cirrhos
Norwegian	6-α-etyl-kenodeoksykolsyre	Behandling av primær biliær cirrhose
Icelandic	6α-etylkenódeoxýkólínsýra	Meðferð frumkominni gallskorpulifur

<sup>1</sup> At the time of designation