

15 June 2010 EMA/COMP/1185/2003 Rev.1 Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Liarozole for the treatment of congenital ichthyoses

On 10 June 2003, orphan designation (EU/3/03/144) was granted by the European Commission to Barrier Therapeutics NV, Belgium, for liarozole for the treatment of congenital ichthyoses.

The sponsorship was transferred to Stiefel Laboratories (U.K.) Limited, United Kingdom, in June 2010.

What are congenital ichthyoses?

The term ichthyosis describes a group of diseases that affect skin. The skin becomes dry and forms tiny or large scales all over the body. Congenital ichthyoses are present at birth, and are due to certain genes which carry the disease. This is different from other ichthyoses, which start later in life and are due to other causes. Normal skin acts as a barrier against external agents. It contains cells that are full of a protein called keratin. This protein is very important for the skin. It is due to keratin, for instance, that the skin is resistant, and does not allow the free passage of fluids. However, scales form if there are too many cells in the skin that contain keratin. The scales give persons with the disease a special look, and this can hamper normal life as sometimes other people react negatively to this abnormal skin appearance. Also, the skin is no longer working properly as a barrier against external agents. In newborns this can lead to more infections, loss in body fluids and occasionally death.

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

At the time of designation, congenital ichthyoses affected approximately 1 in 10,000 people in the European Union (EU)*. This is equivalent to a total of around 38,000 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?

Treatment of ichthyoses depends on several factors, including how severe the disease is, how much of the skin has the disease, and the way the skin looks. Most treatments use products to keep the skin wet and to avoid that scales form. Sometimes, there can be complications, such as infection, and then

^{*}Disclaimer: The number of patients affected by the condition is estimated and assessed for the purpose of the designation, for a European Community population of 377,000,000 (Eurostat 2001) and may differ from the true number of patients affected by the condition. This estimate is based on available information and calculations presented by the sponsor at the time of the application.



additional treatment is necessary as well. Another type of treatment uses medicines that contain retinoids. Retinoids are substances that are found in the body, and that stimulate the full growth of cells in the skin, and this can be used to decrease scales. Liarozole might be of potential significant benefit for the treatment of patients with congenital ichthyoses because it could increase the level of natural retinoids. This will have to be confirmed. This will be necessary to maintain the orphan status.

How is this medicine expected to work?

Retinoids are produced by human cells and are naturally eliminated after being transformed into inactive products by a group of substances (enzymes) called cytochrome P450. Liarozole is able to block the activity of one of those cytochrome P450 and therefore to increase the level of the retinoids in the body. It is expected that this would increase the effect that retinoids have on the skin cells, and this could reduce the forming of scales.

What is the stage of development of this medicine?

At the time of submission of the application for orphan designation, clinical trials in patients with congenital ichthyoses were completed.

Liarozole was not marketed anywhere worldwide for congenital ichthyoses or designated as orphan medicinal product elsewhere for this condition, at the time of submission.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 15 April 2003 recommending the granting of this designation.

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 European Union) 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:

Stiefel Laboratories (U.K.) Limited Eurasia Headquarters Concorde Road Maidenhead SL6 4BY United Kingdom Telephone: +44 1628 612 260

Telefax: +44 1628 612 200 E-mail: <u>Helen.barker@stiefel.com</u>

Patient associations' contact points

Selbsthilfe Ichthyose e.V.

D-36341 Lauterbach

Germany

Telephone: +49 6641 91 08 12 Telefax: +49 6641 91 08 13

E-mail: selbsthilfe-ichthyose@t-online.de

UN.IT.I: Unione Italiana Ittiosi

Viale Vasco de Gama 72 - scala H I-00121 Roma

Italy

Telephone: +39 06 561 15 63

E-mail: info@ittiosi.it

ANIPS : Association Nationale des Ichtyoses et Peaux Sèches Pathologiques

63 Allée de la Cremaillère F-59650 Villeneuve d'Ascq

France

Telephone: +33 03 20 05 21 83 Telefax: +33 03 20 05 21 83

Translations of the active ingredient and indication in all official EU languages¹, Norwegian and Icelandic

Language	Active ingredient	Indication
English	Liarozole	Treatment of congenital ichthyoses
Bulgarian	Лиарозол	Лечение на вродена ихтиоза
Czech	Liarozol	Léčba vrozené ichtyósy
Danish	Liarozol	Behandling af medfødt iktyose
Dutch	Liarozole	Behandeling van congenitale ichthyoses
Estonian	Liarozool	Kaasasündinud ihtüoosi ravi
Finnish	Liarotsoli	Synnynnäisten suomutautien (iktyoosien) hoito
French	Liarozole	Traitement des ichtyoses congénitales
German	Liarozole	Behandlung der kongenitalen Ichtyose
Greek	Λιαροζόλη	Θεραπεία των συγγενών ιχθυώσεων
Hungarian	Liarozol	Veleszületett ichthyosis kezelése
Italian	Liarozolo	Trattamento delle ittiosi congenite
Latvian	Liarozols	Iedzimtas ihtiozes ārstēšana
Lithuanian	Liarozolas	Įgimtų ichtiozių gydymas
Maltese	Liarozole	Kura tal-ittjosi konģenitali
Polish	Liarozol	Leczenie rybiej łuski wrodzonej
Portuguese	Liarozole	Tratamento das ictioses congénitas
Romanian	Liarozol	Tratamentul ihtiozelor congenitale
Slovak	Liarozol	Liečba vrodených ichtyóz
Slovenian	Liarozol	Zdravljenje vrojene ihtioze
Spanish	Liarozole	Tratamiento de las ictiosis congénitas
Swedish	Liarozol	Behandling av medfödd iktyos

¹ At the time of transfer of sponsorship