Please note that this product was withdrawn from the Community Register of designated Orphan Medicinal Products in September 2008 on request of the sponsor.

Committee for Orphan Medicinal Products

Public summary of positive opinion for orphan designation of thalidomide for the treatment of erythema nodosum leprosum (ENL) or type II lepra reactions

On 29 December 2000, orphan designation (EU/3/00/009) was granted by the European Commission to Laboratoires LAPHAL, France, for thalidomide for the treatment of erythema nodosum leprosum (ENL) or type II lepra reactions.

The sponsorship was transferred to Laphal Developpement, France, in November 2002. Laphal Developpement changed name to Pharmion Developpement in July 2004 and subsequently to Pharmion France in November 2007.

What is erythema nodosum leprosum (ENL) or type II lepra reactions?

Leprosy is a chronic infectious disease caused by a bacterium, *Mycobacterium leprae*. It is a disease which attacks the skin, nerves (e.g. of the limbs) and mucous membranes (eyes, respiratory tract). Leprosy is most common in warm, wet areas in the tropics and subtropics. Multiple lesions accompanied by sensory loss in the affected areas characterize leprosy. Usually, sensory loss begins in the extremities (toes, fingertips). Erythema nodosum lepra (ENL) may involve many parts of the body but almost always affects the skin. The reaction develops rapidly and over the course of a few hours painful erythematous papules (small reddish knobs) develop on the skin. The origin and development of erythema nodosum lepra is not fully understood but the reaction is probably caused by the immune system. Erythema nodosum lepra is chronically debilitating.

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

At the time of designation erythema nodosum leprosum affected not more than 0.001 to 0.054 in 10,000 people in the European Union (EU)*. This is based on the information provided by the sponsor and knowledge of the Committee for Orphan Medicinal Products (COMP). This is below the threshold for orphan designation which is 5 in 10,000. This is equivalent to a total of around 50 - 2,000 people.

What treatments are available?

At the time of submission of application for orphan drug designation, there were antibacterial medicinal products authorised in the community for the treatment of the condition. Several anti-inflammatory drugs were also used to limit the immune reaction causing most of the symptoms in erythema nodosum leprosum.

Satisfactory argumentation has been submitted by the sponsor to justify the assumption that thalidomide might be of potential significant benefit for the treatment of erythema nodosum leprosum

---

*Disclaimer: For the purpose of the designation, the number of patients affected by the condition is estimated and assessed based on data from the European Union. This represents a population of 377,000,000 (Eurostat 2001).*
(ENL) or type II lepra reactions. This assumption will have to be confirmed at the time of marketing authorisation. This will be necessary to maintain the orphan status.

**How is this medicine expected to work?**
The exact mechanism of action of thalidomide in leprosy is not fully known but it is thought to involve a substance called tumour necrosis factor-alpha (TNF-alpha). TNF-alpha is produced in excess in these patients and thalidomide reduces its levels.

**What is the stage of development of this medicine?**
The effects of thalidomide were evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials in patients with erythema nodosum leprosum were ongoing.

Thalidomide was authorised in several countries worldwide for various conditions, at the time of submission. Orphan designation of thalidomide was granted in the United States for an erythema nodosum leprosum related disorder.

According to Regulation (EC) No 141/2000 of 16 December 1999, the Committee for Orphan Medicinal Products (COMP) adopted on 27 October 2000 a positive opinion recommending the grant of the above-mentioned 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;
- and either the rarity of the condition (affecting not more than five in 10,000 people in the Community) or the 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 the quality, safety and efficacy is necessary before a product can be granted a marketing authorisation.

**For more information:**
Sponsor’s contact details:
Pharmion France
6-8 Boulevard Haussmann
75009 Paris
France
Telephone: +33 1 42 99 97 02
Telefax: +33 1 42 99 97 01

Patients’ associations contact points: Not available
### Translations of the active ingredient and indication in all EU languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Active Ingredient</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>Thalidomide</td>
<td>Treatment of erythema nodosum leprosum (ENL) or type II lepra reactions</td>
</tr>
<tr>
<td>Danish</td>
<td>Thalidomid</td>
<td>Behandling af erythema nodosum leprosum (ENL) eller type II leprareaktioner</td>
</tr>
<tr>
<td>Dutch</td>
<td>Thalidomide</td>
<td>Behandeling van erythema nodosum leprosum (ENL) of type-II-leprareacties</td>
</tr>
<tr>
<td>Finnish</td>
<td>Talidomidi</td>
<td>Punoittavan leprakyyhymyn (ENL) hoito tai tyyppin II leprareaktiot</td>
</tr>
<tr>
<td>French</td>
<td>Thalidomide</td>
<td>Traitement de l’érythème noueux lépreux (ENL) ou des réactions lépreuses de type II</td>
</tr>
<tr>
<td>German</td>
<td>Thalidomid</td>
<td>Therapie des erythema nodosum leprosum (ENL) oder Leprareaktion Typ II</td>
</tr>
<tr>
<td>Greek</td>
<td>Θαλιδομιδη</td>
<td>Θεραπεία του λεπρικού οξώδους ερυθήματος (ENL) ή των αντιδράσεων λέπρας τύπου II</td>
</tr>
<tr>
<td>Italian</td>
<td>Talidomide</td>
<td>Trattamento dell’eritema nodosum leprosum (ENL) o delle reazioni lepore di tipo II</td>
</tr>
<tr>
<td>Portuguese</td>
<td>Talidomida</td>
<td>Tratamento de reações de eritema nodoso (erythema nodosum leprosum - ENL) ou lepra tipo II</td>
</tr>
<tr>
<td>Spanish</td>
<td>Talidomida</td>
<td>Tratamiento del eritema nodoso de la lepra (ENL) o reacciones lepromatosas de tipo II</td>
</tr>
<tr>
<td>Swedish</td>
<td>Thalidomid</td>
<td>Behandling av erythema nodosum leprosum (ENL) eller typ II leprareaktioner</td>
</tr>
</tbody>
</table>