European Medicines Agency
Pre-authorisation Evaluation of Medicines for Human Use

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Please note that this product was withdrawn from the Community Register of designated Orphan Medicinal Products in December 2008 on request of the Sponsor.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 graft versus host disease

On 9 July 2001, orphan designation EU/3/01/046 was granted by the European Commission to Laboratoires LAPHAL, France, for thalidomide for the treatment of graft versus host disease. The sponsorship was transferred to Laphal Developpement in September 2002. Laphal Developpement changed name to Pharmion Developpement in 2004 and Pharmion Developpement changed name to Pharmion France in 2007.

What is graft versus host disease?
The bone marrow is the spongy tissue inside the large bones in the body. The bone marrow makes red blood cells (which carry oxygen and other materials to all tissues of the body), white blood cells (which make the blood clot). Blood marrow transplantation (replacing with healthy marrow) is a treatment used against certain diseases of the bone marrow. A frequent complication of bone marrow transplantation is the development of a disease called graft versus host disease (GvHD). This disease involves a reaction between the donor cells and the recipient's native tissues leading to injury of the recipient’s tissues. GvHD occurs in acute and chronic form. The organs most commonly affected in acute GvHD are the stomach and the intestines, the skin, and the liver. Chronic GvHD involves a much wider range of tissues than the acute form. The condition is chronically debilitating and life-threatening.

What is the estimated number of patients affected by the condition?
At the time of designation, graft versus host disease affected approximately 0.3 in 10,000 people in the European Union (EU)\(^1\). This is equivalent to a total of around 11,000 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 knowledge of the Committee for Orphan Medicinal Products (COMP).

What treatments are available?
The methods of treatment authorised for GvHD in the Community, at the time of submission of the application for orphan designation, consisted of certain steroid hormones (corticosteroids, a group of chemical substances, which modulate the activity of certain organs and of the immune system) administered at high doses. Other therapies include drugs that inhibit the immune response (immunosuppressants). Thalidomide might be of potential significant benefit for the treatment of GvHD. This assumption remains to be proven. This will be necessary to maintain the orphan status.

\(^1\)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.
How is this medicine expected to work?
It is not completely understood how thalidomide works. It is suggested by the sponsor that it might act as an immunosuppressor, in other words it might act by blocking the cells from the defence system involved in the GvHD reaction.

What is the stage of development of this medicine?
The sponsor had not evaluated the effects of thalidomide in experimental models or clinical studies for graft versus host disease at the time of submission.

Thalidomide was not marketed anywhere worldwide for the treatment of graft versus host disease, at the time of submission. Orphan designation of thalidomide was granted in the European Union for treatment of erythema nodosum leprosum (ENL) or type II lepra reactions and in the United States for the treatment of multiple myeloma.

According to Regulation (EC) No 141/2000 of 16 December 1999, the Committee for Orphan Medicinal Products (COMP) adopted on 23 May 2001 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;
• either the rarity of the condition (affecting not more than 5 in 10,000 people in the Community) 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:
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Patients’ association contact point: Not available
Translations of the active ingredient and indication in all EU languages

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