



6 November 2013  
EMA/COMP/313/2004 Rev.1  
Committee for Orphan Medicinal Products

## Public summary of opinion on orphan designation

### Defibrotide for the treatment of hepatic veno-occlusive disease (VOD)

First publication	12 December 2005
Rev.1: information about Marketing Authorisation	6 November 2013
Disclaimer Please note that revisions to the Public Summary of Opinion are purely administrative updates. Therefore, the scientific content of the document reflects the outcome of the Committee for Orphan Medicinal Products (COMP) at the time of designation and is not updated after first publication.	

On 29 July 2004, orphan designation (EU/3/04/212) was granted by the European Commission to, Gentium S.p.A, Italy, for defibrotide for the treatment of hepatic veno-occlusive disease (VOD).

#### What is hepatic veno-occlusive disease?

Hepatic veno-occlusive disease (VOD) is a disease of the liver in which the small vessels are destroyed. This can occur following liver transplantation but also as an adverse reaction to certain medicines. Examples of the latter one are chemotherapeutic agents (drugs used to kill cancer cells or used in certain circumstances to eliminate cells of the body's defence system) or medicines containing specific proteins called antibodies used to target abnormal cells in certain diseases such as acute myeloid leukaemia. Hepatic veno-occlusive disease (VOD) is characterised by painful enlargement of the liver (hepatomegaly), yellowing of the skin and eyes caused by excess bile products in the blood (jaundice), excess fluid in the abdomen (ascites) and weight gain due to fluid retention by the body.

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

At the time of designation, hepatic veno-occlusive disease (VOD) affected not more than 0.4 in 10,000 people in the European Union (EU). This was equivalent to a total of 19,000 people\*, and is below the ceiling 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).

\*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 25), Norway, Iceland and Liechtenstein. At the time of designation, this represented a population of 464,200,000 (Eurostat 2004).



## What treatments are available?

No satisfactory methods exist that were authorised at the time of application. Supportive measures are aimed at maintaining an adequate functioning of the liver and include dietary restriction of salt and liquids, administration of medicines called diuretics that help removing fluids from the body.

## How is this medicine expected to work?

Defibrotide is expected to act by preventing the clotting (thrombosis) in the blood vessels (antithrombotic activity) or by stimulating the dissolution of the clot (thrombolysis).

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

The effects of defibrotide were evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials in patients with hepatic veno-occlusive disease (VOD) were ongoing.

The medicinal product was not marketed anywhere worldwide for hepatic veno-occlusive disease at the time of submission.

Orphan designation of defibrotide was granted in the United States for the treatment of hepatic veno-occlusive disease.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 16 June 2004 recommending the granting of this designation.

Update: Defibrotide (Defitelio) has been authorised in the EU since 18 October 2013 for the treatment of severe hepatic veno-occlusive disease (VOD) also known as sinusoidal obstructive syndrome (SOS) in haematopoietic stem-cell transplantation (HSCT) therapy.

It is indicated in adults and in adolescents, children and infants over 1 month of age.

More information on Defitelio can be found in the European public assessment report (EPAR) on the Agency's website: [ema.europa.eu/Find\\_medicine/Human\\_medicines/European\\_Public\\_Assessment\\_Reports](http://ema.europa.eu/Find_medicine/Human_medicines/European_Public_Assessment_Reports)

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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:

Gentium S.p.A  
Piazza XX Settembre, 2  
I-22079 Villa Guardia (CO)  
Italy  
Tel.: +39 031 38 52 17  
Fax: +39 031 38 52 41  
E-mail: [miacobelli@gentium.it](mailto:miacobelli@gentium.it)

For contact details of patients' organisations whose activities are targeted at rare diseases see:

- [Orphanet](#), a database containing information on rare diseases, which includes a directory of patients' organisations registered in Europe;
- [European Organisation for Rare Diseases \(EURORDIS\)](#), a non-governmental alliance of patient organisations and individuals active in the field of rare diseases.

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

Language	Active Ingredient	Indication
English	Defibrotide	Treatment of hepatic veno-occlusive disease
Czech	Defibrotid	Léčba jaterní veno-okluzivní choroby
Danish	Defibrotid	Behandling af hepatisk veno-okklusiv sygdom
Dutch	Defibrotide	Behandeling van veno-occlusieve leverziekte
Estonian	Defibrotide	Maksa venoos-oklusiivse haiguse ravi
Finnish	Defibrotidi	Maksan laskimotukkeumasairauden hoito
French	Défibrotide	Traitement de la maladie veino-occlusive hépatique
German	Defibrotid	Behandlung des hepatischen Venenverschlusssyndroms
Greek	Δεφιβροτίδη	Θεραπεία φλεβοαποφρακτικής ηπατοπάθειας
Hungarian	Defibrotide	Veno-ocklusiv májbetegség kezelése
Italian	Defibrotide	Trattamento della malattia epatica veno-occlusiva
Latvian	Defibrotīds	Aknu vēnu okluzīvas saslimšanas ārstēšanai
Lithuanian	Defibrotidas	Kepenų veninės - okliuzinės ligos gydymas
Maltese	Defibrotide	Treatment of hepatic veno-occlusive disease
Polish	Defibrotyd	Leczenie choroby okluzyjnej żył wątroby
Portuguese	Defibrotide	Tratamento da doença veno-occlusiva hepática
Slovak	Defibrotid	Liečba venookluzívnej choroby pečene
Slovenian	Defibrotide	Zdravljenje okluzivne bolezni hepatičnih ven
Spanish	Defibrotida	Tratamiento de la enfermedad venoocclusiva hepática
Swedish	Defibrotid	Behandling av hepatisk veno-ockluderande sjukdom
Norwegian	Difibrotid	Behandling av hepatisk veno-okklusiv sykdom
Icelandic	Defibrótíð	Meðferð við bláæðastíflun í lifur

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