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

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COMMITTEE FOR ORPHAN MEDICINAL PRODUCTS

PUBLIC SUMMARY OF POSITIVE OPINION FOR ORPHAN DESIGNATION OF 5-aminolevulinic acid hydrochloride for the intra-operative photodynamic diagnosis of residual glioma

On 13 November 2002, orphan designation (EU/3/02/121) was granted by the European Commission to medac Gesellschaft für klinische Spezialpräparate mbH, Germany, for 5-aminolevulinic acid hydrochloride for the intra-operative photodynamic diagnosis of residual glioma.

What are gliomas?

Tumours that begin in brain tissue are known as primary brain tumours. Primary brain tumours are classified by the type of tissue from which they originate. The most common brain tumours are gliomas, which begin in the glial (supportive) tissue.
Due to their location, gliomas represent a potentially debilitating and life-threatening condition. Patients affected by gliomas can suffer from medical problems to the nervous system, depending on where in the brain the tumour develops.

What are the methods of diagnosis available?

Surgery is the most common treatment of gliomas. The goal of surgery is to take out all the tumour from the brain. 5-aminolevulinic acid hydrochloride may be of interest for helping the surgeon to identify and remove all tumour tissue.

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

According to the information provided by the sponsor, gliomas were considered to affect about 37,700 patients in the European Union.

How is this medicinal product expected to act?

5-aminolevulinic acid hydrochloride is a compound that can be transformed into a substance called protoporphyrin. Under blue light, protoporphyrin becomes fluorescent, and emits a red light. The intensity of the emitted fluorescence depends on the protoporphyrin concentration. The chemical activity involving protoporphyrin is different between glioma cells, compared to normal cells. After administration of 5-aminolevulinic acid to the patient this product is transformed into protoporphyrin inside the glioma cells while in normal tissue there is no build up of protoporphyrin. Thus, under blue light, glioma will appear as red, whereas normal tissue will appear as blue. This selective colouring of glioma might be useful as a guide during the surgery.

* 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.

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What is the stage of development of this medicinal product?
At the time of submission of the application for orphan designation, clinical development in patients with gliomas was ongoing.

5-aminolevulinic acid hydrochloride was not marketed anywhere worldwide for intra-operative photodynamic diagnosis of residual glioma or designated as orphan medicinal product elsewhere for this condition, at the time of submission.

According to Regulation (EC) No 141/2000 of 16 December 1999, the Committee for Orphan Medicinal Products (COMP) adopted on 9 October 2002 a positive opinion recommending the grant of the above-mentioned designation.

Update: 5-aminolevulinic acid hydrochloride (Gliolan) is authorised in the European Union as of 7 September 2007. Gliolan is indicated in adult patients for visualisation of malignant tissue during surgery for malignant glioma (WHO grade III and IV).
For more information please see www.emea.europa.eu

Opinions on orphan medicinal products designations are based on the following cumulative criteria: (i) the seriousness of the condition, (ii) the existence or not of alternative methods of diagnosis, prevention or treatment and (iii) either the rarity of the condition (considered to affect not more than five in ten thousand persons in the Community) or the insufficient return of development investments.

Designated orphan medicinal products are still investigational products, which were considered for 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 will be necessary before this product can be granted a marketing authorisation.

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Translations of the active ingredient and indication in all EU languages

Language	Active Ingredient	Indication
English	5-aminolevulinic acid hydrochloride	Intra-operative photodynamic diagnosis of residual glioma
Bulgarian	Хидрохлорид на 5-аминолевулинова киселина	Интраоперативна фотодинамична диагностика на резидуална глиома
Czech	Hydrochloride 5-aminolevulonové kyseliny	Peroperační fotodynamická diagnostika reziduálního glioblastomu
Danish	5-aminolevulinsyre-hydrochlorid	Intraoperativ fotodynamisk diagnose af residual gliom
Dutch	5-aminolevulinezuur hydrochloride	Intra-operatieve fotodynamische diagnose van residueel glioma
Estonian	5-aminolevuliinhappehüdrokloriid	Residuaalse glioomi intraoperatiivne fotodünaamiline diagnoosimine
Finnish	5-aminolevuliinihappohydrokloridi	Intraoperatiivinen residuaalisen gliooman fotodynaaminen diagnosointi
French	acide chlorhydrique 5-aminolévulinique	Diagnostic photodynamique intra-operatoire des gliomes residuels
German	5-aminolävulinsäurehydrochlorid	Intra-operative photodynamische Diagnose von residualen Gliomen
Greek	υδροχλωρικό άλας 5-αμινολεβουλινικού οξέος-	Ενδο-εγχειριτική Φωτοδυναμική διάγνωση υπολειπόμενου γλοιώματος
Hungarian	5-aminolevulinsav hidroklorid	Reziduális glioma intraoperatív fotodinámiás diagnózisa
Italian	Acido 5-amminolevulinico cloridrato	Diagnostica fotodinamica intra-operativa del glioma
Latvian	5-aminolevulīnskābes hidrohlorīds	Reziduālas gliomas intra-operatīva fotodinamiska diagnostika
Lithuanian	5-aminolevulininės rūgšties hidrochloridas	Intraoperatyviai fotodinaminei reziduojančios gliomos diagnostikai
Maltese	5-aminolevulinic acid hydrochloride	Dijanjosi fotodinamika intra-operattiva tal-fdal tal-glioma
Polish	5-aminolewulinowego kwasu chlorowodorek	Śródoperacyjna fotodynamiczna diagnostyka zmian resztkowych glajaka
Portuguese	Cloridrato de ácido 5-aminolevulínico.	Diagnóstico intra-operativo foto-dinâmico de glioma residual
Romanian	Clorhidrat de acid 5-aminilevulinic	Diagnostic fotodinamic intra-operator al gliomului rezidual
Slovak	Chlorid kyseliny 5-aminolevulovej	Intraoperatívna fotodynamická diagnóza reziduálneho gliómu
Slovenian	Hidroklorid 5-aminolevulinske kisline	Intraoperativna fotodinamična diagnostika rezidualnega glioma
Spanish	Clorhidrato de ácido 5-aminolevulínico	Diagnóstico fotodinámico intraoperatorio del glioma residual
Swedish	5-aminolevulinsyrahydroklorid	Intraoperativ fotodynamisk diagnostik av residual gliom