10 December 2013
EMA/COMP/612/2002 Rev.5
Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Pseudomonas exotoxin (domains II/III)-Interleukin 13 chimeric protein for the treatment of glioma

First publication	8 January 2003
Rev.1: administrative update	10 January 2003
Rev.2: administrative update	30 November 2007
Rev.3: transfer of sponsorship	21 March 2012
Rev.4: administrative update	30 April 2012
Rev.5: administrative update	10 December 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 30 April 2002, orphan designation (EU/3/02/101) was granted by the European Commission to PPD Global Ltd, United Kingdom, for pseudomonas exotoxin (domains II/III)-Interleukin 13 chimeric protein [hIL13-PE-38QQR (plasmid phuIL13-Tx)] for the treatment of glioma.

The sponsorship was transferred to EUDRAC Limited, United Kingdom, in February 2012.

What is glioma?

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.

Gliomas develop in the brain and patients with gliomas can suffer neurological complications. Gliomas can be debilitating and life-threatening, despite available treatments.

7 Westferry Circus ● Canary Wharf ● London E14 4HB ● United Kingdom
Telephone +44 (0)20 7418 8400 **Facsimile** +44 (0)20 7523 7040
E-mail info@ema.europa.eu **Website** www.ema.europa.eu

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

At the time of designation, glioma affected approximately 0.8 in 10,000 people in the European Union (EU). This was equivalent to a total of around 30,000 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).

What treatments are available?

Treatment for glioma depends on a number of factors and may include surgery and radiation therapy. Chemotherapy is also used in some cases. Corticosteroids are used to control symptoms such as a raised pressure in the skull. Other drugs help to control epilepsy, if present. At the time of designation some drugs had already been approved in the European Union for the treatment of some types of gliomas. PE-IL13 may have a new mechanism of action against gliomas. For this reason, it might be of potential significant benefit for the treatment of gliomas.

How is this medicine expected to work?

hIL13-PE-38QQR (plasmid phuIL13-Tx) is the combination of a bacterial toxin with a human protein called interleukin 13. The toxin is derived from a bacterium (*Pseudomonas aeruginosa*). Interleukin 13 interacts with a specific protein receptor found on the surface of cells. Glioma cells have a high number of such protein receptors on their surface compared to normal cells. Thus it is expected that through this mechanism the toxin will target and kill tumour cells.

What is the stage of development of this medicine?

The product had not been marketed in any country at the time of designation.

In the United States orphan drug status was granted for the treatment of malignant glioma.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 26 March 2002 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 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.

*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.
At the time of designation, this represented a population of 380,600,000 (Eurostat 2002).

For more information

Sponsor's contact details:

EUDRAC Limited
Hampden House
Monument Business Park
Chalgrove OX44 7RW
United Kingdom
Telephone: +44 (0) 186 589 3274
Telefax: +44 (0) 186 589 3333
E-mail: carole.pugh@eudrac.com

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[1], Norwegian and Icelandic

Language	Active ingredient	Indication
English	Pseudomonas exotoxin (domains II/III)-Interleukin 13 chimeric protein	Treatment of glioma
Bulgarian	Псевдомонасен екзотоксин (домейни II/III) – интерлевкин 13 химерен протеин	Лечение на глиома
Czech	Pseudomonádový exotoxin (domény II/III)-interleukin 13 chimerický protein	Léčba gliomu
Danish	Pseudomonas exotoxin (dominans II/III) – Interleukin 13 chimerisk protein	Behandling af gliom
Dutch	Pseudomonas exotoxine (domein II/III) – Interleukine 13 chimerisch eiwit	Behandeling van glioma
Estonian	Pseudomonas eksotoksiin (domeenid II/III) ja interleukiin-13 kimäärne proteiin	Glioomi ravi
Finnish	Pseudomonas eksotoksiini (osat II/III)– interleukiini 13 kimeerinen proteiini	Glioman hoito
French	Protéine chimérique exotoxine (domaines II/III) de Pseudomonas - interleukine 13	Traitement des gliomes
German	Pseudomonas Exotoxin(Domäne II-III)-Interleukin 13 chimäres Protein	Behandlung des Glioms
Greek	Χειμερική πρωτεΐνη εξωτοξίνης (περιοχής II- III) ψευδομονάδας και ιντερλευκίνης 13	Θεραπεία γλοιώματος
Hungarian	Psudomonas exotoxin (II/III domén)-interleukin 13 kimérás protein	Glioma kezelése
Italian	Proteina chimerica esotossina Pseudomonas (dominio II/III)-Interleuchina 13	Trattamento dei gliomi
Latvian	Pseidomonas eksotoksīns (II/III domēns) – Interleikīna 13 himēriskais proteīns	Gliomas ārstēšana
Lithuanian	Pseudomonas egzotoksinas (II/III domenai)-Interleukino 13 chimerinis baltymas	Gliomos gydymas
Maltese	Proteina kimerika esotossina ta' Pseudomonas (oqsma II/III)-Interleukin 13	Kura tal-glioma
Polish	Egzotoksyna pałeczki ropy błękitnej (domeny II/III) – białko chimeryczne interleukiny 13	Leczenie glejaka
Portuguese	Proteína quimérica Pseudomonas exotoxina (domínio II/III)- Interleuquina 13	Tratamento de gliomas

[1] At the time of designation

Language	Active ingredient	Indication
Romanian	Proteină chimerică exotoxina Pseudomonas (domeniile II/III)-interleukina 13	Tratamentul gliomului
Slovak	Chimérická bielkovina zložená z pseudomonádového exotoxínu (domény II/III) a interleukínu 13	Liečba gliómu
Slovenian	Pseudomonas eksotoksin (domene II/III)-interlevkin 13 himerni protein	Zdravljenje glioma
Spanish	Proteína quimérica Pseudomonas exotoxina (dominio II/III)- Interleuquina 13	Tratamiento de glioma
Swedish	Pseudomonas exotoxin (domän II/III)-interleukin 13 chimärt protein	Behandling av gliom