



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

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Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Streptococcus pyogenes Su strain cells treated with benzylpenicillin for the treatment of congenital lymphatic malformations

Please note that this product was withdrawn from the Community Register of designated orphan medicinal products in June 2011 on request of the sponsor.

On 29 January 2010, orphan designation (EU/3/09/714) was granted by the European Commission to Theradex (Europe) Ltd., United Kingdom, for *Streptococcus pyogenes* Su strain cells treated with benzylpenicillin for the treatment of congenital lymphatic malformations.

What are congenital lymphatic malformations?

Patients with congenital lymphatic malformations are born with 'lymphangiomas', which show up as birthmarks, swellings or soft-tissue tumours (tumour of the tissues just below the skin). These generally form around the head and neck, but can also be found in the tissues around the lungs.

Abnormalities in the development of the lymphatic system before birth result in congenital lymphatic malformations. The lymphatic system is a network of vessels that transport lymph from tissues through the lymph nodes and into the bloodstream. These abnormalities cause lymph to accumulate just under the skin.

Congenital lymphatic malformations are long-term debilitating diseases because they can cause pain, discomfort, swelling and can be associated with blood clots. They can also cause mental distress because of the deformities they cause. The condition can be life-threatening if the swellings develop near the lungs or the oesophagus (the tube that connects the mouth to the stomach), and start affecting vital functions.

What is the estimated number of patients affected by these conditions?

At the time of designation, congenital lymphatic malformations affected less than 1.5 in 10,000 people in the European Union (EU)*. This is equivalent to a total of fewer than 75,000 people, and is below

*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 27), Norway, Iceland and Liechtenstein. This represents a population of 504,800,000 (Eurostat 2009).



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?

At the time of designation, no medicines were authorised in the EU for the treatment of congenital lymphatic malformations. Sclerosing agents, which are injected into lymph vessels to make them shrink, were used to reduce swelling. Surgery was also used to remove the malformations.

How is this medicine expected to work?

Streptococcus pyogenes Su strain cells treated with benzylpenicillin is a sclerosing agent made up of remnants of a bacterium (*Streptococcus pyogenes*) that has been disrupted through exposure to an antibiotic (benzylpenicillin). When it is injected directly into a lymphatic malformation, the product is expected to trigger an inflammation process that makes the malformation shrink.

What is the stage of development of this medicine?

The effects of *Streptococcus pyogenes* Su strain cells treated with benzylpenicillin have been evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials with the designated product in patients with congenital lymphatic malformations were ongoing.

At the time of submission, *Streptococcus pyogenes* Su strain cells treated with benzylpenicillin was authorised in Japan and South Korea for the treatment of congenital lymphatic malformations.

At the time of submission, *Streptococcus pyogenes* Su strain cells treated with benzylpenicillin was not authorised anywhere in the EU for congenital lymphatic malformations. Orphan designation of *Streptococcus pyogenes* Su strain cells treated with benzylpenicillin had been granted in the United States of America for lymphatic malformations.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 5 November 2009 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 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

Sponsor's contact details:

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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, Norwegian and Icelandic

Language	Active ingredient	Indication
English	Streptococcus pyogenes Su strain cells treated with benzylpenicillin	Treatment of congenital lymphatic malformations
Bulgarian	<i>Streptococcus pyogenes</i> щам SU клетки обработени с бензилпеницилин	Лечение на вродени лимфатични малформации
Czech	Buňky <i>Streptococcus pyogenes</i> kmene SU léčený benzylpenicilinem	Léčba kongenitálních lymfatických malformací
Danish	Celler fra <i>Streptococcus pyogenes</i> SU-stamme behandlet med benzylpenicillin	Behandling af kongenital misdannelse i lymfesystemet
Dutch	<i>Streptococcus pyogenes</i> Su stam cellen behandeld met benzylpenicilline	Behandeling van congenitale lymfatische misvormingen
Estonian	<i>Streptococcus pyogenes</i> tüve SU rakud ravitud bensüülpenitsilliiniga	Kaasasündinud lümfaatiliste väärmoodustiste ravi
Finnish	Bentsyylipenisilliinillä käsitellyt <i>Streptococcus pyogenes</i> SU-kannan solut	Synnyynnäisten imusuonten epämuodostumien hoito
French	Cellules de souche SU de <i>Streptococcus pyogenes</i> traitées par la benzylpénicilline	Traitement des malformations lymphatiques congénitales
German	<i>Streptococcus pyogenes</i> Stamm SU Zellen behandelt mit Benzylpenicillin	Behandlung kongenitaler lymphatischer Malformationen
Greek	Κύτταρα Πυογόνου στρεπτόκοκκου στέλεχους SU επεξεργασμένα με βενζύλ-Πενικιλίνη	Θεραπεία συγγενών δυσπλασιών λεμφικού συστήματος
Hungarian	Benzylpenicillinnel kezelt streptococcus pyogenes SU törzs sejtek	Kongenitális limfatikus malformációk kezelése
Italian	Cellule di <i>Streptococcus pyogenes</i> ceppo Su, trattate con benzilpenicillina	Trattamento delle malformazioni linfatiche congenite
Latvian	Ar benzilpenicilīnu ārstēts <i>Streptococcus pyogenes</i> SU celmsa šūnas	Iedzimtas limfātiskas malformācijas ārstēšana
Lithuanian	<i>Streptococcus pyogenes</i> SU ląstelių štamų gydytas benzilpenicilinu	Įgimtų limfagyslių anomalijų gydymas
Maltese	Ċelloli tar-razza Su ta' <i>Streptococcus pyogenes</i> ittrattati bil-benzylpenicillin	Kura ta' malformazzjonijiet limfatiċi konġenitali
Polish	Komórki paciorkowca ropnego (<i>Streptococcus pyogenes</i>) szczepu SU poddanego działaniu benzylopenicyliny	Leczenie wrodzonych malformacji naczyń limfatycznych

Language	Active ingredient	Indication
Portuguese	Células de Streptococcus pyogenes estirpe SU tratado com benzilpenicilina	Tratamento das malformações linfáticas congénitas
Romanian	Celule de Streptococcus pyogenes tulpină SU tratat cu benzilpenicilnă	Tratamentul malformațiilor congenitale limfatice
Slovak	<i>Streptococcus pyogenes</i> – bunky kmeňa Su ošetrené benzylpenicilínom	Liečba vrodených malformácií lymfatického systému
Slovenian	Su sev celic Streptococcus pyogenesa tretiran z benzilpenicilinom	Zdravljenje kongenitalne malformacije limfatičnega sistema
Spanish	Células de <i>Streptococcus pyogenes</i> cepa SU tratadas con benzilpenicilina	Tratamiento de las malformaciones linfáticas congénitas
Swedish	Streptococcus pyogenes SU stamceller behandlade med benzylopenicillin	Behandling av kongenitala lymfatiska missbildningar
Norwegian	<i>Streptococcus pyogenes</i> celler stamme Subehandlet med benzylopenicillin	Behandling av medfødte lymfatiske misdannelser
Icelandic	<i>Streptococcus pyogenes</i> SU-stofn meðhöndlaður með benzálopenicillíni	Meðferð sjúklinga með vanskapanir á vessakerfi