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Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Humanised monoclonal modified IgG4 antibody with bispecific structure targeting factors IX, IXa, X and Xa for the treatment of haemophilia A

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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 16 January 2014, orphan designation (EU/3/13/1221) was granted by the European Commission to Chugai Pharma Europe Ltd, United Kingdom, for humanised monoclonal modified IgG4 antibody with bispecific structure targeting factors IX, IXa, X and Xa for the treatment of haemophilia A.

The sponsorship was transferred to Roche Registration Limited, United Kingdom, in December 2014.

What is haemophilia A?

Haemophilia A is an inherited bleeding disorder that is caused by the lack of factor VIII, which is one of the proteins involved in the blood coagulation (clotting) process. Patients with haemophilia A are more prone to bleeding than normal and have prolonged bleeding after injury or surgery. Bleeding can also happen within muscles or the spaces in the joints, such as the elbows, knees and ankles. This can lead to permanent injury if it happens repeatedly.

Haemophilia A is a debilitating disease that is life-long and may be life threatening because bleeding can happen in the brain, the spinal cord or the gut.

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

At the time of designation, haemophilia A affected approximately 0.7 in 10,000 people in the European Union (EU). This was equivalent to a total of around 36,000 people*, and is below the ceiling for

*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 28), Norway, Iceland and Liechtenstein.
At the time of designation, this represented a population of 512,900,000 (Eurostat 2014).

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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?

At the time of submission of the application for orphan drug designation, medicines containing factor VIII were authorised in the EU for the treatment of haemophilia A, to replace the missing protein. Some patients needed other treatments, such as medicines containing other substances involved in blood clotting.

The sponsor has provided sufficient information to show that this medicine might be of significant benefit for patients with haemophilia A because it might be given less often than existing treatments. In addition, the medicine is expected to be given under the skin (instead of into a vein), which is expected to improve compliance with treatment. These assumptions will need to be confirmed at the time of marketing authorisation, in order to maintain the orphan status.

How is this medicine expected to work?

This medicine is expected to work on blood clotting by replacing the activity of factor VIII and promoting the activation of another factor called factor X by factor IXa, which starts the clotting process. By activating factor X, this medicine is expected to control the bleeding disorder in patients with haemophilia A because it acts directly on factor X, independently of factor VIII.

What is the stage of development of this medicine?

The effects of the medicine have been evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials with the medicine in patients with haemophilia A were ongoing.

At the time of submission, this medicine was not authorised anywhere in the EU for haemophilia A or designated as an orphan medicinal product elsewhere for this condition.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 6 November 2013 recommending the granting of this designation.

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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:

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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[1], Norwegian and Icelandic

Language	Active ingredient	Indication
English	Humanised monoclonal modified IgG4 antibody with bispecific structure targeting factors IX, IXa, X and Xa	Treatment of haemophilia A
Bulgarian	Хуманизирано моноклонално модифицирано IgG4 антитяло с биспецифична структура, насочено към фактори IX, IXa, X и Xa	Лечение на хемофилия A
Croatian	Humanizirano monoklonsko modificirano IgG4 protutijelo s dvospecifičnom strukturom usmjereno protiv faktora IX, IXa, X i Xa	Liječenje hemofilije A
Czech	Humanizirano monoklonsko protutijelo s modificiranim IgG4 i dvospecifičnom strukturom, usmjereno na faktore IX, IXa, X i Xa	Léčba hemofilie A
Danish	Humaniseret monoklonalt modificeret IgG4-antistof med bispecifik struktur rettet mod faktor IX, IXa, X og Xa	Behandling af hæmofili A
Dutch	Gehumaniseerd monoklonaal gemodificeerd IgG4-antilichaam met bispecifieke structuur gericht op factor IX, IXa, X en Xa	Behandeling van hemofilie A
Estonian	Humaniseeritud monoklonaalne muudetud kahespetsiifilise struktuuriga IgG4 antikeha, mis on suunatud faktorite IX, IXa, X ja Xa vastu	Hemofiilia A ravi
Finnish	Monoklonaalinen ihmisen muunneltu IgG4-vasta-aine, jossa on bispesifiset rakenteeseen kohdentuvat tekijät IX, IXa, X ja Xa	Hemofilia A:n hoito
French	Anticorps monoclonal IgG4 humanisé modifié ayant une structure bispécifique ciblant les facteurs IX, IXa, X et Xa	Traitement de l'hémophilie A
German	Humanisierter modifizierter monoklonaler IgG4-Antikörper mit bispezifischer Struktur, der auf die Faktoren IX, IXa, X und Xa abzielt	Behandlung der Hämophilie A
Greek	Εξανθρωποποιημένο, μονοκλωνικό τροποποιημένο αντίσωμα IgG4 με διπλής ειδικότητας δομή που στοχεύει τους παράγοντες IX, IXa, X και Xa	Θεραπεία της αιμορροφιλίας A
Hungarian	Humanizált, monoklonális, IX, IXa, X és Xa faktorokat célzó, bispecifikus struktúrájú, módosított IgG4 antitest	A típusú hemofília kezelése
Italian	Anticorpo monoclonale umanizzato IgG4 con struttura bispecifica contro i fattori IX, IXa, X e Xa	Trattamento dell'emofilia A
Latvian	Cilvēciskotas monoklonālas modificētas IgG4 antivielas ar bispecifisku struktūru iedarbībai pret IX, IXa, X un Xa faktoriem	A tipa hemofilijas ārstēšana

[1] At the time of designation

Language	Active ingredient	Indication
Lithuanian	Humanizuotas monokloninis modifikuotas IgG4 antikūnas su bispecifine struktūra, nukreiptas į IX, IXa, X ir Xa faktorius	Hemofilijos A gydymas
Maltese	Antikorp monoklonali IgG4 umanizzat modifikat bi struttura bispeċifika immirat għall-fatturi IX, IXa, X u Xa	Kura ta' l-emofilja A
Polish	Humanizowane modyfikowane przeciwciało monoklonalne klasy IgG4 o dwuswoistej strukturze przeciw czynnikom IX, IXa, X i Xa	Leczenie hemofilii A
Portuguese	Anticorpo monoclonal IgG4 modificado humanizado com estrutura biespecífica dirigido contra os fatores IX, IXa, X e Xa	Tratamento da hemofilia A
Romanian	Anticorp monoclonal IgG4 umanizat modificat cu structură bispecifică având drept ţintă factorii IX, IXa, X şi Xa	Tratamentul hemofiliei A
Slovak	Humanizovaná monoklonálna modifikovaná IgG4 protilátka s bišpecifickou štruktúrou zacielená proti faktorom IX, IXa, X a Xa	Liečba hemofílie A
Slovenian	Humanizirano monoklonsko modificirano protitelo IgG4 z bispecifično strukturo, ciljno usmerjeno proti faktorjem IX, IXa, X in Xa	Zdravljenje hemofilije A
Spanish	Anticuerpo monoclonal humanizado IgG4 modificado con estructura biespecífica contra los factores IX, IXa, X y Xa	Tratamiento de la hemofilia A
Swedish	Humaniserad monoklonal modifierad IgG4-antikropp med bispecifik struktur riktad mot faktor IX, IXa, X och Xa	Behandling av hemofili A
Norwegian	Humanisert monoklonalt modifisert IgG4-antistoff med bispesifikk struktur rettet mot faktor IX, IXa, X og Xa	Behandling av hemofili A
Icelandic	Mannaaðlagað, einstofna, breytt IgG4 mótefni með tvísértækri uppbyggingu sem beinist að storkuþáttum IX, IXa, X og Xa	Meðferð við dreyrasýki A