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Public summary of opinion on orphan designation

Monoclonal antibody against human CD30 covalently linked to the cytotoxin monomethylauristatin E (brentuximab vedotin) for the treatment of peripheral T-cell lymphoma

On 21 August 2019, orphan designation EU/3/08/595 was granted by the European Commission to Takeda Pharma A/S, Denmark, for monoclonal antibody against human CD30 covalently linked to the cytotoxin monomethylauristatin E (brentuximab vedotin) for the treatment of peripheral T-cell lymphoma.

What is peripheral T-cell lymphoma?

Peripheral T-cell lymphoma is a cancer of the lymphatic system, a network of vessels that transport fluid from tissues through the lymph nodes and into the bloodstream. In peripheral T-cell lymphoma there is uncontrolled growth of T lymphocytes (T cells), a type of white blood cell found in the lymphatic system. Peripheral T-cell lymphomas include types that mainly occur in the lymph nodes (primary nodal) and types that occur mainly outside the lymph nodes (primary extranodal).

The symptoms of the disease vary according to the type of lymphoma, but the first sign may be a lump in the neck, under the arm or in the groin area, which is caused by an enlarged lymph node. The lymphoma may also affect other organs in the body such as the bone marrow, liver and the skin.

Peripheral T-cell lymphoma is a long-term debilitating and life-threatening condition because in most cases the disease does not respond well to therapy, usually comes back within one year and is associated with early death.

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

At the time of designation, peripheral T-cell lymphoma affected less than 1 in 10,000 people in the European Union (EU). This was equivalent to a total of fewer than 52,000 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 28), Norway, Iceland and Liechtenstein. This represents a population of 518,400,000 (Eurostat 2019).

Official address Domenico Scarlattilaan 6 ● 1083 HS Amsterdam ● The Netherlands
Address for visits and deliveries Refer to www.ema.europa.eu/how-to-find-us
Send us a question Go to www.ema.europa.eu/contact **Telephone** +31 (0)88 781 6000 An agency of the European Union

What treatments are available?

At the time of designation, there were no specific treatments for peripheral T-cell lymphoma, but the disease was treated in the same way as the broader class of lymphomas known as non-Hodgkin's lymphomas, for which several medicines were authorised in the EU. The main treatment was chemotherapy (medicines to treat cancer), sometimes in combination with radiotherapy (treatment with radiation).

The sponsor has provided sufficient information to show that this medicine might be of benefit for patients with peripheral T-cell lymphoma because early studies showed that the medicine, used on its own, can be of benefit in patients whose disease had not improved with previous treatments or had come back after treatment. Studies also showed that patients lived longer when the medicine was used in combination with existing treatments. This assumption 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?

Peripheral T-cell lymphoma cells have a molecule on their surface called CD30. This medicine is made up of a CD30 monoclonal antibody (a type of protein that attaches to CD30), attached to monomethyl auristatin E, a cytotoxic (cell-killing) molecule. The monoclonal antibody delivers the cytotoxic molecule inside the CD30-positive cancer cells, which stops them from dividing and eventually causes their death.

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 peripheral T-cell lymphoma were ongoing.

At the time of submission, the medicine was authorised in the EU as Adcetris for the treatment of Hodgkin’s lymphoma, systemic anaplastic large cell lymphoma and CD30-positive cutaneous T-cell lymphoma. The medicine was not authorised anywhere in the EU for the treatment of peripheral T-cell lymphoma. Orphan designation of the medicine had been granted in the United States for this condition.

This medicine had been given orphan designation on 15 January 2009 for the treatment of anaplastic large cell lymphoma (EU/3/08/595). At the request of the sponsor and having assessed the additional data submitted, the COMP adopted a positive opinion on 18 July 2019 recommending the designation be amended to treatment of peripheral T-cell lymphoma.

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:

Contact details of the current sponsor for this orphan designation can be found on EMA website.

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	Monoclonal antibody against human CD30 covalently linked to the cytotoxin monomethylauristatin E	Treatment of peripheral T-cell lymphoma
Bulgarian	Моноклонално антитяло срещу човешки CD30 антиген, ковалентно свързано с цитотоксина монометилауристатин Е	Лечение на периферен Т-клетъчен лимфом
Croatian	Monoklonsko protutijelo protiv ljudskog CD30 kovalentno vezanog na citotoksin monometilauristatin E	Liječenje perifernog limfoma T-stanica
Czech	Monoklonální antiCD30 protilátka kovalentně vázaná na cytotoxin monomethylauristatin E	Léčba periferních T-lymfomů
Danish	Monoklonalt antistof mod humant CD30, kovalent bundet til cytotoksinet monomethylauristatin E	Behandling af perifer T-celle lymfom
Dutch	Monoklonaal antilichaam gericht tegen humaan CD30, covalent gebonden aan cytotoxine monomethylauristatine E	Behandeling van perifere T-cel lymfomen
Estonian	Tsütotoksiin monometüülauristatiin E-ga kovalentselt seotud inimese CD30 vastane monoklonaalne antikeha	Perifeerse T-rakulise lümfoomi ravi
Finnish	Sytotoksiini monometyyliauristatiini E:hen kovalenttisesti kytketty ihmisen monoklonaalinen CD30-vasta-aine	Perifeerisen T-solulymfooman hoito
French	Anticorps monoclonal anti-CD30 humain lié de façon covalente à la cytotoxine monométhylauristatine E	Traitement du lymphome périphérique à cellules T
German	Gegen humanes CD30-Antigen gerichteter, kovalent an die zytotoxische Substanz Monomethylauristatin E gebundener monoklonaler Antikörper	Behandlung des peripheren T-Zell-Lymphoms
Greek	Μονοκλωνικό αντίσωμα κατά του ανθρώπινου CD30 ομοιοπολικά συνδετού με την κυτταροτοξίνη μονομεθυλαυριστατίνη Ε	Θεραπεία του λεμφώματος περιφερικών κυττάρων Τ
Hungarian	A monometil-aurisztatin E citotoxinhoz kovalensen kötött, humán CD30 elleni monoklonális antitest	Perifériás T-sejtes lymphoma kezelése

[1] At the time of designation

Language	Active Ingredient	Indication
Italian	Anticorpo monoclonale anti-CD30 umano legato in modo covalente alla citotossina monometilauristatina E	Trattamento del linfoma periferico a cellule T
Latvian	Monoklonālās antivielas pret cilvēka CD30, kovalenti saistītas ar citotoksīnu monometilauristatīnu E	Perifēriskās T-šūnu limfomas ārstēšana
Lithuanian	Monokloninis antikūnas prieš žmogaus CD30, kovalentiniu ryšiu sujungtas su monometilauristatino E citotoksinu	Periferinės T-ląstelių limfomos gydymas
Maltese	Antikorp monoklonali kontra CD30 uman marbut b'mod kovalenti maċ-ċitotossina monomethylauristatin E	Kura tal-limfoma taċ-ċelloli T periferali
Polish	Przeciwciało monoklonalne przeciwko ludzkiemu CD30, związane kowalencyjnie z cytotoksyczną monometyloauristatyną E	Leczenie obwodowego chłoniaka T-komórkowego
Portuguese	Anticorpo monoclonal anti-CD30 humano ligado de forma covalente à citotoxina monometilauristatina E	Tratamento do linfoma periférico das células T
Romanian	Anticorp monoclonal împotriva CD30 uman, legat covalent la citotoxina monometil-auristatină E	Tratamentul limfomului periferic cu celule T
Slovak	Monoklonálna protilátka proti ľudskému CD30, kovalentne naviazaná na cytotoxín monometylauristatín E	Liečba periférneho T-bunkového lymfómu
Slovenian	Monoklonsko protitelo proti humanemu CD30, kovalentno vezano na citotoksin monometilavristatin E	Zdravljenje perifernega limfoma celic T
Spanish	Anticuerpo monoclonal anti-CD30 humano, unido covalentemente a la citotoxina monometilauristatina E	Tratamiento del linfoma periférico de células T
Swedish	Monoklonal antikropp mot humant CD30 kovalent bunden till cytotoxinet monometylauristatin E	Behandling av perifert T-cellslymfom
Norwegian	Monoklonalt antistoff mot humant CD30 kovalent bundet til cytotoksinet monometylauristatin E	Behandling av perifert T-celle-lymfom
Icelandic	Einstofna mótefni gegn manna-CD30 tengda frumueitrinu mónómetýlauristatíni E með jafngildum (covalent) tengjum	Meðferð við útlægu T-eitilfrumukrabbameini