



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

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Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Acalabrutinib for the treatment of mantle cell lymphoma

On 21 March 2016, orphan designation (EU/3/16/1625) was granted by the European Commission to Acerta Pharma, BV, the Netherlands, for acalabrutinib for the treatment of mantle cell lymphoma.

What is mantle cell lymphoma?

Mantle cell lymphoma is an aggressive cancer of a type of white blood cell called B lymphocytes, or B cells. In mantle cell lymphoma, the B cells multiply too quickly and live for too long, so there are too many of them in the lymph nodes. The first sign of the disease is usually a lump in the neck, under the arm or in the groin, caused by an enlarged lymph node. Patients may also have fever, weight loss, tiredness and night sweats.

Mantle cell lymphoma is usually diagnosed in people aged over 50 years. It is more common in men than in women. Mantle cell lymphoma is a long-term debilitating and life-threatening disease associated with poor survival.

What is the estimated number of patients affected by mantle cell lymphoma?

At the time of designation, mantle cell lymphoma affected less than 0.6 in 10,000 people in the European Union (EU). This was equivalent to a total of fewer than 31,000 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?

At the time of designation, the main treatments for mantle cell lymphoma included chemotherapy (medicines to treat cancer), immunotherapy (medicines that act on the body's immune system) and radiotherapy (treatment with radiation). Bortezomib, ibrutinib and temsirolimus were specifically authorised in the EU for the treatment of mantle cell lymphoma that has come back after previous treatment or has not responded to other treatments. Haematopoietic (blood) stem-cell transplantation

*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 513,700,000 (Eurostat 2016).



was also used. This is a complex procedure where patients receive stem cells to help restore the bone marrow.

The sponsor has provided sufficient information to show that acalabrutinib might be of significant benefit for patients with mantle cell lymphoma because early studies show that it might improve the outcome of patients whose disease has come back after previous treatment. 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?

Acalabrutinib is expected to work by blocking an enzyme called Bruton's tyrosine kinase (Btk), which is found in B cells. Btk promotes growth and survival of B cells. By blocking Btk, acalabrutinib is expected to slow down the build-up of cancerous B cells in mantle-cell lymphoma, thereby delaying or stopping the progression of the disease.

The medicine is expected to be taken by mouth.

What is the stage of development of this medicine?

The effects of acalabrutinib have been evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials with acalabrutinib in patients with mantle cell lymphoma were ongoing.

At the time of submission, acalabrutinib was not authorised anywhere in the EU for mantle cell lymphoma. Orphan designation of acalabrutinib had been granted in the United States for mantle cell lymphoma.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 18 February 2016 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.

For more information

Sponsor's contact details:

Contact details of the current sponsor for this orphan designation can be found on EMA website, on the medicine's [rare disease designations page](#).

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 languages¹, Norwegian and Icelandic

Language	Active ingredient	Indication
English	Acalabrutinib	Treatment of mantle cell lymphoma
Bulgarian	Акалабрутиниб	Лечение на мантелно-клетъчна лимфом
Croatian	Akalabrutinib	Liječenje limfoma plaštenih stanica
Czech	Acalabrutinib	Léčba lymfomu z pláštové zóny
Danish	Acalabrutinib	Behandling af mantelcellelymfom
Dutch	Acalabrutinib	Behandeling van mantelcellymfoom
Estonian	Akalabrutiniib	Mantelrakulise lümfoomi ravi
Finnish	Akalabrutinibi	Manttelisolu-lymfooman hoito
French	Acalabrutinib	Traitement des lymphomes du manteau
German	Acalabrutinib	Behandlung von Mantelzelllymphom
Greek	Ακαλαβρουτινίμπη	Θεραπεία του λεμφώματος μανδύκων κυττάρων
Hungarian	Akalabrutinib	Köpenysejtes lymphoma kezelése
Italian	Acalabrutinib	Tattamento del linfoma con cellule a mantello
Latvian	Akalabrutinibs	Mantijšūnu limfomas ārstēšana
Lithuanian	Akalabrutinibas	Mantijos ląstelių limfomos gydymas
Maltese	Acalabrutinib	Kura tal-linfoma taċ-ċelloli tal-mantell
Polish	Akalabrutynib	Leczenie chłoniaków z komórek płaszczowych
Portuguese	Acalabrutinib	Tratamento de linfoma de células do manto
Romanian	Acalabrutinib	Tratamentul limfomului cu celule în manta
Slovak	Akalabrutinib	Liečba lymfómu pláštovej zóny
Slovenian	Akalabrutinib	Zdravljenje limfoma plaščnih celic
Spanish	Acalabrutinib	Tratamiento del linfoma de células del manto
Swedish	Acalabrutinib	Behandling av mantelcellslymfom
Norwegian	Acalabrutinib	Behandling av mantelcelle-lymfom
Icelandic	Acalabrutíníþ	Meðferð möttulfrumu eitlakrabbameins

¹ At the time of designation