30 September 2015
EMA/COMP/508544/2015
Committee for Orphan Medicinal Products

# Public summary of opinion on orphan designation

Ibrutinib for the treatment of marginal zone lymphoma

On 10 August 2015, orphan designation (EU/3/15/1541) was granted by the European Commission to Janssen-Cilag International N.V., Belgium, for ibrutinib for the treatment of marginal zone lymphoma.

## What is marginal zone lymphoma?

Marginal zone lymphoma is a cancer of a type of white blood cell called B lymphocytes or B cells. In marginal zone lymphoma, abnormal B cells multiply too quickly and live for too long. The abnormal B cells affect various organs. Patients usually have fever, weight loss, tiredness and night sweats.

Marginal zone lymphoma is a life-threatening and long-term debilitating disease due to its effects on the spleen, lymph nodes and bone marrow, as well as the increased risk of infection.

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

At the time of designation, marginal zone lymphoma 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 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 marginal zone lymphoma available in the EU included immunotherapy (using the body's own immune system to kill cancer cells) with the medicine rituximab, chemotherapy (cancer medicines), radiotherapy (treatment with radiation) and surgery to remove affected lymph nodes. In some patients, marginal zone lymphoma affecting the stomach is associated with infection by the bacterium *Helicobacter pylori*, and treatment with antibiotics was used to resolve the infection.

The sponsor has provided sufficient information to show that ibrutinib might be of significant benefit for patients with marginal zone lymphoma because early studies in patients indicated a beneficial effect in

*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 512,900,000 (Eurostat 2015).

30 Churchill Place ● Canary Wharf ● London E14 5EU ● United Kingdom
**Telephone** +44 (0)20 3660 6000 **Facsimile** +44 (0)20 3660 5555
**Send a question via our website** www.ema.europa.eu/contact

patients whose disease had come back after or did not respond to 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?

Ibrutinib is expected to work in patients with marginal zone lymphoma by blocking the action of an enzyme known as Bruton's tyrosine kinase (BTK). BTK is important for the growth and survival of B cells, including the abnormal B cells of the cancer, and their migration to the organs where these cells normally divide. By blocking the action of BTK, it is expected that the medicine will slow the migration of abnormal B cells and induce cell death, thereby slowing the progression of the disease.

Ibrutinib is already authorised in the EU for treating three other types of B cell cancers: chronic lymphocytic leukaemia, mantle cell lymphoma and Waldenström's macroglobulinaemia.

## What is the stage of development of this medicine?

The effects of ibrutinib have been evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials with ibrutinib including patients with marginal zone lymphoma were ongoing.

At the time of submission, ibrutinib was not authorised anywhere in the EU for marginal zone lymphoma. Orphan designation of ibrutinib had been granted in the United States for splenic and nodal marginal zone lymphoma.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 16 July 2015 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:

Janssen-Cilag International N.V.
Turnhoutseweg, 30
2340 Beerse
Belgium
Tel. +32 1 46 03 189
Fax +32 1 46 05 533
E-mail: http://www.janssen-emea.com/contactus

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 | Ibrutinib | Treatment of marginal zone lymphoma |
| Bulgarian | Ибрутиниб | Лечение на маргинално зонален лимфом |
| Croatian | Ibrutinib | Liječenje limfoma marginalne zone |
| Czech | Ibrutinib | Léčba lymfomu z marginální zóny |
| Danish | Ibrutinib | Behandling af marginalzonelymfom |
| Dutch | Ibrutinib | Behandeling van marginale zone lymfoom |
| Estonian | Ibrutiniib | Marginaaltsooni lümfoomi ravi |
| Finnish | Ibrutinibi | Marginaalivyöhykkeen lymfooman hoito |
| French | Ibrutinib | Traitement du lymphome de la zone marginale |
| German | Ibrutinib | Behandlung des Marginalzonenlymphoms |
| Greek | Ιβρουτινίμπη | Θεραπεία του λεμφώματος μεθοριακής ζώνης |
| Hungarian | Ibrutinib | Marginális zóna lymphoma kezelése |
| Italian | Ibrutinib | Trattamento del linfoma della zona marginale |
| Latvian | Ibrutinibs | Marginālo zonu limfomas ārstēšana |
| Lithuanian | Ibrutinibas | Marginalinės zonos limfomos gydymas |
| Maltese | Ibrutinib | Kura ta' limfoma taż-żona marġinali |
| Polish | Ibrutynib | Leczenie chłoniaka strefy brzeżnej |
| Portuguese | Ibrutinib | Tratamento do linfoma da zona marginal |
| Romanian | Ibrutinib | Tratamentul limfomului de zonă marginală |
| Slovak | Ibrutinib | Liečba lymfómu z marginálnej zóny |
| Slovenian | Ibrutinib | Zdravljenje limfoma marginalne cone |
| Spanish | Ibrutinib | Tratamiento del linfoma de la zona marginal |
| Swedish | Ibrutinib | Behandling av marginalzonslymfom |
| Norwegian | Ibrutinib | Behandling av marginalsonelymfom |
| Icelandic | Íbrútíníb | Meðferð við jaðarsvæðiseitilkrabbameini |

[1] At the time of designation