



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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EMA/COMP/639353/2014  
Committee for Orphan Medicinal Products

## Public summary of opinion on orphan designation

### Bazedoxifene acetate for the treatment of hereditary haemorrhagic telangiectasia

On 19 November 2014, orphan designation (EU/3/14/1367) was granted by the European Commission to Consejo Superior de Investigaciones Cientificas (CSIC), Spain, for bazedoxifene acetate for the treatment of hereditary haemorrhagic telangiectasia.

#### What is hereditary haemorrhagic telangiectasia?

Hereditary haemorrhagic telangiectasia (HHT, also known as Rendu-Osler-Weber syndrome) is a genetic disease that causes abnormalities in the capillaries (small blood vessels that connect arteries with veins). This results in direct connections between arteries and veins, which are fragile, increasing the risk of bleeding. The most common symptoms of the disease are spontaneous and frequent nosebleeds, and red spots on the skin, particularly on the face and hands and in the mouth. Bleeding can also occur in the stomach, gut, brain, liver and lungs, and often leads to anaemia (low red blood cell counts).

HHT is a long-term debilitating disease that may be life threatening because of its complications, such as internal bleeding and effects on organs such as the brain, liver and lungs.

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

At the time of designation, HHT affected approximately 2 in 10,000 people in the European Union (EU). This was equivalent to a total of around 102,000 people<sup>\*</sup>, 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, no satisfactory methods were authorised in the EU for the treatment of HHT. Different methods were used to control bleeding, which depend mainly on where in the body it

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<sup>\*</sup>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 511,100,000 (Eurostat 2014).



occurred. For nosebleeds, patients used nasal humidifiers and lubricants. Laser treatment and surgery were used to stop internal bleeding. In patients with severe liver problems, liver transplantation was performed. When bleeding caused anaemia, patients were given iron supplements and blood transfusions.

### **How is this medicine expected to work?**

Patients with HHT normally have a mutation (defect) in one of two genes responsible for the production of two proteins known as ALK1 (activin receptor-like kinase type I) and ENG (endoglin). These proteins are involved in angiogenesis (formation of new blood vessels) and wound healing. Bazedoxifene mimics the effects of the hormone oestrogen, which stimulates the genes for ALK1 and ENG to increase the production of these proteins. By increasing production of ALK1 and ENG, the medicine is expected to relieve the symptoms of bleeding in HHT.

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

At the time of submission of the application for orphan designation, the evaluation of the effects of bazedoxifene acetate in experimental models was ongoing.

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

At the time of submission the medicine was not authorised anywhere in the EU for HHT or designated as an orphan medicinal product elsewhere for this condition. Bazedoxifene is authorised in the EU for the treatment of osteoporosis in women who have been through the menopause.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 9 October 2014 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:

Consejo Superior de Investigaciones Cientificas (CSIC)  
C/ Serrano 142  
28006 Madrid  
Spain  
Tel. +34 91 5681531  
Fax +34 91 5681551  
E-mail: [vatc@csic.es](mailto:vatc@csic.es)

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<sup>1</sup>, Norwegian and Icelandic

Language	Active ingredient	Indication
English	Bazedoxifene acetate	Treatment of hereditary haemorrhagic telangiectasia
Bulgarian	Базедоксифен ацетат	Лечение на наследствена хеморагична телангиектазия
Croatian	Bazedoksifenacetat	Liječenje hereditarne hemoragijske teleangiektazije
Czech	Bazedoxifenum acetát	Léčba hereditární hemoragické telangiektázie
Danish	Bazedoxifen acetat	Behandling af hereditær hæmragisk telangiektasi
Dutch	Bazedoxifeenacetaat	Behandeling van hereditaire hemorrhagische telangiëctasie
Estonian	Basedoksifeen atsetaat	Päriliku hemorraagilise teleangiektasias ravi
Finnish	Batsedoksifeeni asetaatti	Perinnöllisen hemorragisen telangiektasian hoito
French	Acétate de bazedoxifène	Traitement de la téléangiectasie hémorragique héréditaire (Rendu-Osler)
German	Bazedoxifen Acetat	Behandlung der hereditären hämorrhagischen Teleangiektasie
Greek	Οξική Βαζεδοξιφένη	Θεραπεία της κληρονομικής αιμορραγικής τηλαγγειεκτασίας
Hungarian	Bazedoxifen acetát	Örökletes vérzéses hajszálértágulat kezelése
Italian	Acetato di bazedoxifene	Trattamento della telangiectasia emorragica ereditaria
Latvian	Bazedoksifēna acetāts	Iedzimtas hemorāģiskas teleangiektāzijas ārstēšana
Lithuanian	Bazedoksifeno acetatas	Paveldimos hemoraginės telangiektazijos gydymas
Maltese	Bazedoxifene acetate	Kura tat-telangektasija ereditarja emorragika
Polish	Octan bazedoksyfenu	Leczenie wrodzonej naczyniakowatości krwotocznej
Portuguese	Acetato de bazedoxifeno	Tratamento das telangiectasias hemorrágicas hereditárias
Romanian	Acetat de bazedoxifen	Tratamentul teleangiectaziei hemoragice ereditare
Slovak	Bazedoxifén acetát	Liečba hereditárnej hemoragickej teleangiektázie
Slovenian	Bazedoksifen acetat	Zdravljenje dedne hemoragične teleangiektazije
Spanish	Acetato de bazedoxifeno	Tratamiento de la telangiectasia hemorrágica hereditaria
Swedish	Bazedoxifen acetat	Behandling av ärftlig hemoragisk telangiektasia
Norwegian	Bazedoksifenacetat	Behandling av Hereditær <i>hemoragisk</i> telangiektasi
Icelandic	Bazedoxifen acetat	Meðhöndlun á arfgengri blæðinga-háræðavíkkun

<sup>1</sup> At the time of designation