9 February 2015
EMA/COMP/396281/2010 Rev.2
Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-*d*]pyrimidin-7-yl]-3-*tert*-butyl-urea for the treatment of acute myeloid leukaemia

First publication	15 October 2010
Rev.1: sponsor's name and address change	4 April 2013
Rev.2: withdrawal from the Community Register	9 February 2015

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.

Please note that this product was withdrawn from the Community Register of designated Orphan Medicinal Products in October 2014 on request of the Sponsor.

On 20 September 2010, orphan designation (EU/3/10/770) was granted by the European Commission to Sanofi Aventis, France, for 1-[2-(benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-*d*]pyrimidin-7-yl]-3-*tert*-butyl-urea for the treatment of acute myeloid leukaemia.

In October 2012, Sanofi Aventis changed name to Sanofi-Aventis Groupe.

What is acute myeloid leukaemia?

Acute myeloid leukaemia (AML) is a cancer of the white blood cells (cells that fight against infections). In patients with AML, the bone marrow (the spongy tissue inside the large bones) produces large numbers of abnormal, immature white blood cells called 'blasts'. These abnormal cells quickly build up in large numbers in the bone marrow and are found in the blood.

AML is a life-threatening disease because these immature cells take the place of the normal white blood cells, reducing the patient's ability to fight infections.

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

At the time of designation, AML affected less than 2 in 10,000 people in the European Union (EU)[*]. This was equivalent to a total of fewer than 101,000 people, and is below the threshold 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?

Treatment for AML is complex and depends on a number of factors including the extent of the disease, whether it has been treated before, and the patient's age, symptoms and general state of health. At the time of designation, the main treatments for AML were chemotherapy (medicines to treat cancer) and haematopoietic (blood) stem-cell transplantation (a complex procedure where the patient receives stem cells from a matched donor to help restore the bone marrow).

The sponsor has provided sufficient information to show that this medicine might be of significant benefit for patients with AML because it works in a different way to existing treatments and because early studies in experimental models indicate that it might improve the treatment of patients with this condition. 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?

This medicine is expected to work mainly by blocking enzymes called Src kinases. These enzymes can be found in some receptors on the surface of AML cells, including the receptors that are involved in stimulating the cells to divide uncontrollably. By blocking these enzymes, this medicine is expected to control the spread of AML cells.

What is the stage of development of this medicine?

The effects of 1-[2-(benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-*d*]pyrimidin-7-yl]-3-*tert*-butyl-urea 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 AML were ongoing.

At the time of submission, this medicine was not authorised anywhere in the EU for AML 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 2 June 2010 recommending the granting of this designation.

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[*]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 27), Norway, Iceland and Liechtenstein.
At the time of designation, this represented a population of 506,300,000 (Eurostat 2010).

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	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-*d*]pyrimidin-7-yl]-3-*tert*-butyl-urea	Treatment of acute myeloid leukaemia
Bulgarian	1-[2-(бензо[1,2,5]тиадиазил-5-ил-амино)-6-(2,6-дихлоро-фенил)-пиридо[2,3-d]пиримидин-7-ил]-3-трет-бутил-уреа	Лечение на остра миелоидна левкемия
Czech	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-urea	Léčba akutní myeloidní leukémie
Danish	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-urea	Behandling af akut myeloid leukæmi
Dutch	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloor-fenyl)-pyrido[2,3-d]pyrimidine-7-yl]-3-tert-butyl-urea	Behandeling van acute myeloïde leukemie
Estonian	1-[2-(Benso[1,2,5]tiadiasool-5-üülamino)-6-(2,6-diklorofenüül)-pürido[2,3-d]pürimidiin-7-üül]-3-tert-butüüluurea	Akuutse müeloidse leukeemia ravi
Finnish	1-[2-(bentso[1,2,5]tiadiatsoli-5-yyliamino)-6-(2,6-dikloorifenyyli)-pyrido[2,3-d]pyrimidiini-7-yyli]-3-tertbutyyliurea	Akuutin myelooisen leukemian hoito
French	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phényl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-urée	Traitement de la leucémie aiguë myéloïde
German	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-harnstoff	Behandlung der akuten myeloischen Leukämie
Greek	1-[2-(βενζο [1,2,5] θειαδιαζολ-5-υλάμινο)-6-(2,6-διχλωρο-φαινυλ)-πυριδο[2,3-d]πυριμιδιν-7-υλ]-3-τερτ-βουτυλ-ουρία	Θεραπεία της οξείας μυελοειδούς λευχαιμίας
Hungarian	1-[2-(Benzo[1,2,5]tiadiazol-5-il-amino)-6-(2,6-diklór-fenil)-pirido[2,3-d]pirimidin-7-il]-3-terc-butil-karbamid	Akut myeloid leukaemia kezelése
Italian	1-[2-(Benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dicloro-fenil)-pirido[2,3-d]pirimidin-7-il]-3-tert-butil-urea	Trattamento della leucemia mieloide acuta
Latvian	1-[2-(benzo[1,2,5]tiadiazol-5-ilamīn)-6-(2,6-dihlor-fenil)-pirido[2,3-d]pirimidīn-7-il]-3-terc-butilurīnviela	Akūtas mieloleikozes ārstēšana
Lithuanian	1-[2-(benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dichloro-fenil)-pirido[2,3-d]pirimidin-7-il]-3-tert-butil-urėja	Ūmios mieloleukozės gydymas

[1] At the time of designation

Maltese	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamino)-6-(2,6-dichloro-phenyl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-urea	Kura tal-lewkimja mjelojda akuta
Polish	1-[2-(benzo[1,2,5]tiadiazol-5-yl-amino)-6-(2,6-dichloro-fenyl)-pirydo[2,3-d]pirymidyn-7-yl]-3-tert-butylomocznik	Leczenie ostrej białaczki szpikowej
Portuguese	1-[2-(Benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dicloro-fenil)-pirido[2,3-d]pirimidin-7-il]-3-terc-butil-ureia	Tratamento da leucémia mielóide aguda
Romanian	1-[2-(Benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dicloro-fenil)-pirido[2,3-d]pirimidín-7-yl]-3-tert-butil-uree	Tratamentul leucemiei mieloide acute
Slovak	1-[2-(benzo[1,2,5]tiodiazol-5-ilamino)-6-(2,6-dichloro-fenyl)-pyrido[2,3-d]pyrimidín-7-il]-3-terc-butyl-urea	Liečba akútnej myeloickej leukémie
Slovenian	1-[2-(Benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dicloro-fenl)-pirido[2,3-d]pirimidin-7-il]-3-tert-butil-urea	Zdravljenje akutne mieloične levkemije
Spanish	1-[2-(Benzo[1,2,5]thiadiazol-5-ylamin)-6-(2,6-dicloro-fenil)-pirido[2,3-d]pirimidin-7-il]-3-tert-butil-urea	Tratamiento de la leucemia mieloide aguda
Swedish	1-[2-(benzo[1,2,5]tiadiazol-5-ilamino)-6-(2,6-dicloro-fenil)-pyrido[2,3-d]pyrimidin-7-il]-3-tert-butyl-urea	Behandling av akut myeloisk leukemi
Norwegian	1-[2-(Benzo[1,2,5]tiadiazol-5-ylamino)-6-(2,6-dikloro-fenyl)-pyrido[2,3-d]pyrimidin-7-yl]-3-tert-butyl-urea	Behandling av akutt myelogen leukemi
Icelandic	1-[2-(Bensó[1,2,5]tíadíasól-5-ýlamínó)-6-(2,6-tvíklóró-fenýl)-pýrídó[2,3-d]pýrimídín -7-ýl]-3-tert-bútýl-úrea	Meðferð við bráðu kyrningahvítblæði