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Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

(2-aminoethyl) carbamic acid (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaexo-17-phenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminosuccinic acid] salt (pasireotide) for the treatment of functional gastro-entero-pancreatic endocrine tumours

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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.	

On 8 June 2004, orphan designation (EU/3/04/200) was granted by the European Commission to Novartis Europharm Limited, United Kingdom, for pasireotide for the treatment of functional gastro-entero-pancreatic endocrine tumours.

What are functional gastro-entero-pancreatic endocrine tumours?

Functional gastro-entero-pancreatic endocrine tumours are tumours originating in the digestive tract structures. These tumours produce and release excessive amounts of substances called hormones and of other substances that are normally present in the body in very small amounts. Different symptoms can be associated to different functional gastro-entero-pancreatic endocrine tumours depending on the type of substance(s)/hormone(s) produced by the tumour. The most common type among these tumours, is the so-called carcinoid tumour. It contains cells that synthesise a substance called serotonin that, in excess, mainly produces facial flushing (transient redness of the face and neck) and brief periods of watery stools.

Functional gastro-entero-pancreatic endocrine tumours are chronically debilitating and life-threatening to the patient.



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

At the time of designation, functional gastro-entero-pancreatic endocrine tumours affected approximately 0.6 in 10,000 people in the European Union (EU). This was equivalent to a total of around 28,000 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?

The choice of treatment of functional gastro-entero-pancreatic endocrine tumours depends on several factors, including the type of tumour and the stage of the disease. Treatments may include surgery, immunotherapy (treatment of disease by stimulating the body's own defence system), hormonal therapy or chemotherapy (using drugs to kill cancer cells). Several products were authorised for the condition in the Community at the time of submission of the application for orphan drug designation.

Pasireotide could be of potential significant benefit for the treatment of functional gastro-entero-pancreatic endocrine tumours as it might improve the long-term outcome of the patients. This assumption will have to be confirmed at the time of marketing authorisation. This will be necessary to maintain the orphan status.

How is this medicine expected to work?

Hormones are substances secreted by specialised cells in the body. They are recognised by certain proteins, called hormone receptors, which are present on the surface of some cells. The hormones will lock on to these receptors, causing a biological effect on the activity of the cell. Gastro-entero-pancreatic endocrine tumours also have this kind of receptors on their cell surface, which might link pasireotide. In this way pasireotide will help to regulate the production and release of the substances produced by the tumour cells.

What is the stage of development of this medicine?

The effects of pasireotide were evaluated in experimental models. At the time of submission of the application for orphan designation, clinical trials in patients with functional gastro-entero-pancreatic endocrine tumours were ongoing.

The medicinal product was not marketed anywhere worldwide for functional gastro-entero-pancreatic endocrine tumours or designated as orphan medicinal product elsewhere for this condition, at the time of submission.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 14 April 2004 recommending the granting of this designation.

*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 25), Norway, Iceland and Liechtenstein. At the time of designation, this represented a population of 464,200,000 (Eurostat 2004).

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 languages¹, Norwegian and Icelandic

Language	Active ingredient	Indication
English	(2-aminoethyl) carbamic acid (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaoxo-17-phenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminosuccinic acid] salt	Treatment of functional gastro-entero-pancreatic endocrine tumours
Czech	(2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-[4-(benzyloxy)benzyl]-17-fenyl-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaaxooktadekahydro-3a,6,9,12,15,18-hexaazacyklopentacyklooktadecen-2-yl-(2-aminoethyl)karbamát-bis[(S)-2-aminobutandioát]	Léčba gastro-entero-pankreatických endokrinních tumorů
Danish	(2-aminoethyl) carbaminsyre (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaoxo-17-phenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminosuccinsyre] salt	Behandling af funktionelle gastroenteropankreatiske endokrine tumorer
Dutch	(2-aminoethyl) carbamidezuur (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaoxo-17-fenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminobarnsteen-zuur] zout	Behandeling van functionele gastro-entero-pancreatische endocriene tumoren
Estonian	(2-aminoetüül) karbaamhappe (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutüül)-5-bensüül-8-(4-bensüüloksübensüül)-14-(1H-indool-3-üülmetüül)-4,7,10,13,16,19-heksaokso-17-fenüüloktadekahüdro-3a,6,9,12,15,18-heksaasatsüklopentatsüklooktadetseen-2-üül ester, di[(S)-2-aminosuktsiin-happe] sool	Mao-sooletrakti endokriinsete kasvajate ravi

¹ At the time of designation

Language	Active ingredient	Indication
Finnish	(2-aminoetyyli) karbamiinihappo (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyli)-5-bentsyyli-8-(4-bentsyylioksibentsyyli)-14-(1H-indoli-3-yylimetyyli)-4,7,10,13,16,19-heksaokso-17-fenylioktadekahydro-3a,6,9,12,15,18-heksaatsasyklopentasyklo-oktadekeeni-2-yyli esteri, di[(S)-2-aminosukkiinihappo] suola	Toiminnallisten gastroenteropankreaalisten endokriinikasvaimien hoito
French	Sel d'acide (2-aminoéthyl) carbamique (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylméthyl)-4,7,10,13,16,19-hexaoxo-17-phényloctadécahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadécen-2-yl ester, di[acide (S)-2-aminosuccinique]	Traitement des tumeurs endocrines fonctionnelles gastro-intestinales et pancréatiques
German	(2-aminoethyl) carbaminsäure (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaoxo-17-phenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminobernsteinsäure]-Salz	Behandlung von funktionellen gastro-entero-pankreatischen endokrinen Tumoren
Greek	(2-αμινοαιθυλ) καρβαμικό οξύ (2R,5S,8S,11S,14R,17S,19As)-11-(4-αμινοβουτυλο)-5-βενζυλο-8-(4-βενζυλοξυ βενζυλο)-14-(1H-ινδολ-3-ιλμεθυλ)-4,7,10,13,16,19- εξασξο-17-φαινυλοκταδεκαϋδρο3α, 6,9,12,15,18-εξααζακυκλοπεντακυκλοοκταδεσεν-2-υλ εστερο, δι[(S)-2-αμινοηλεκτρικό οξύ] ως άλας	Θεραπεία των γαστρεντερο-παγκρεατικών ενδοκρινών όγκων
Hungarian	[(2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutil)-5-benzil-8-(4-benziloxibenzil)-14-(1H-indol-3-ilmetil)-4,7,10,13,16,19-hexaoxo-17-feniloktadekahidro-3a,6,9,12,15,18-hexaazaciklopentaciklooktadecén-2-il]-[N-(2-aminoetil)karbamát]-di[(2S)-2-aminobutándisav]-só	Funkcionáló gasztro-entero-pankreász endokrin daganatok kezelése
Italian	Estere (2-aminoetilico) dell'acido carbammico (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutil)-5-benzil-8-(4-benzilossibenzil)-14-(1H-indol-3-il-metil)-4,7,10,13,16,19-esaoxo-17-feniloktadecaidro-3a,6,9,12,15,18-esaazaciclopentaciclooctadecen-2-ile , sale bi[(S)-2-aminosuccinico]	Trattamento dei tumori endocrini gastro-entero-pancreatici secernenti

Language	Active ingredient	Indication
Latvian	(2-aminoetil) karbamil (2R,5S,8S,8S,11S,17S,19aS)-11-(4-aminobutil)-5-benzil-8-(4-benziloksibenzil)-14-(1H-indol-3-il-metil)-4,7,10,13,16,19-heksaokso-17-feniloktadekahidro-3a,6,9,12,15,18-heksaazaciklopentaciklooktadecēn-2-il ēstera, di[(S)-2-aminodzintarskābes] sāls	Funkcionālo gastro-entero-pankreātisko endokrīno audzēju ārstēšana
Lithuanian	(2-aminoetil) karbamo rūgštis (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutil)-5-benzil-8-(4-benziloksi benzil)-14-(1H-indol-3-ilmetil)-4,7,10,13,16,19-heksaokso-17-feniloktadekahidro-3a,6,9,12,15,18-heksaazaciklopentaciklooktadecen-2-il esterio, di[(S)-2-aminogintaro rūgšies] druska	Skrandžio, žarnyno, kasos funkcinių endokrininių auglių gydymas
Maltese	(2-aminoethyl) carbamic acid (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloxy benzyl)-14-(1H-indol-3-ylmethyl)-4,7,10,13,16,19-hexaokso-17-phenyloctadecahydro-3a,6,9,12,15,18-hexaazacyclopentacyclooctadecen-2-yl ester, di[(S)-2-aminosuccinic acid] salt	Treatment of functional gastro-entero-pancreatic endocrine tumours
Polish	Sól kwasu di [(S)-2-aminobursztynowego] z estrem (2R, 5S, 8S, 11S, 14R, 17S, 19aS)-11-(4-aminobutylo)-5-benzylo-8-(4-benzyloksybenzylo)-14-(1H-indol-3-ilometylo)-4,7,10,13, 16, 19-heksaokso-17-fenyloktadekahydro-3a,6,9,12,15,18-heksaazacyklopentacyklooktadeceno-2-yłowym kwasu (2-aminoetylo)-karbaminowego	Leczenie hormonalnie czynnych nowotworów wywodzących się z żołądka, jelit lub trzustki
Portuguese	Éster (2R, 5S, 8S, 11S, 14R, 17S, 19aS)-11-(4-aminobutil)-5-benzil-8-(4-benziloxibenzil)-14-(1H-indol-3-ilmetil)-4,7,10,13,16,19-hexaokso-17-feniloktadecahidro-3a,6,9,12,15,18-hexa-azaciclopentaciclo-octadeceno-2-il do ácido (2-aminoetil) carbâmico, sal do di [ácido (S)-2-aminosuccínico]	Tratamento dos tumores endócrinos gastro-entero-pancreáticos funcionais
Slovak	Soľ (2R,5S,8S,11S,14R,17S,19aS)-11-(aminobutyl)-N-(2-aminoetyl)-5-benzyl-8-(4-benzyloxybenzyl)-17-fenyl-14-(1H-indol-3-ylmetyl)-4,7,10,13,16,19-hexaooktadekahydro-3a-6,9,12,15,18-hexaazacyklopentacyklooktadecen-2-yl karbamátu s kyselinou (S)-2-aminojantárovou	Liečba funkčných gastroenteropankreatických endokrinných nádorov

Language	Active ingredient	Indication
Slovenian	(2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutil)-5-benzil-8-(4-benziloksi benzil)-14-(1H-indol-3-il-metil)-4,7,10,13,16,19-heksaokso-17-feniloktadekahidro-3a,6,9,12,15,18-heksaazaciklopentaciklooktadecen-2-il ester (2-aminoetil) karbaminske kisline, di[(S)-2-aminosukcinat]	Zdravljenje endokrinih gastro-entero-pankreatičnih tumorjev
Spanish	Éster del ácido (2-aminoetil)carbámico (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutil)-5-bencil-8-(4-benciloxibencil)-14-(1H-indol-3-ilmetil)-4,7,10,13,16,19-hexaokso-17-feniloktadecahidro-3a,6,9,12,15,18-hexaazaciclopentaciclooctadecen-2-il, sal de di-[ácido (S)-2-aminosuccínico]	Tratamiento de los tumores endocrinos funcionales gastroenteropancreáticos
Swedish	(2-aminoetyl)karbaminsyra (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-bensyl-8-(4-bensyloxibensyl)-14-(1H-indol-3-ylmetyl)-4,7,10,13,16,19-hexaokso-17-fenyloktadekahydro-3a,6,9,12,15,18-hexaazacyklopentacyklooktadeken-2-ylester, di[(S)-2-aminobärnstensyra]salt	Behandling av funktionella tumörer i det endokrina cellsystemet i mage, tarm och bukspottkörtel
Norwegian	(2-aminoetyl)-karbaminsyre (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutyl)-5-benzyl-8-(4-benzyloksi-benzyl)-14-(1H-indol-3-ylmetyl)-4,7,10,13,16,19-heksaokso-17-fenyloktadekahydro-3a,6,9,12,15,18-heksa-azasyklopentasyklooktadeken-2-ylester, di[(S)-2-aminosuksinat]	Behandling av funksjonelle gastro-entero-pankreatiske endokrine tumores
Icelandic	(2-aminoethýl) carbaminsýra (2R,5S,8S,11S,14R,17S,19aS)-11-(4-aminobutýl)-5-benzýl-8-(4-benzýloxý benzýl)-14-(1H-indol-3-ýlmethýl)-4,7,10,13,16,19-hexaokso-17-phenýloctadecahýdró-3a,6,9,12,15,18-hexaazacyclopentacyclóoctadecen-2-ýl ester, di[(S)-2-aminosuccinin sýra] salt	Til meðferðar á virkum innkirtlaæxlum í maga-þörmum-brisi