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Committee for Orphan Medicinal Products

Public summary of opinion on orphan designation

Pancreatic enzymes (cross linked enzyme crystal lipase, protease, amylase) for the treatment of malabsorption due to exocrine pancreatic enzyme insufficiency

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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 2 September 2004, orphan designation (EU/3/04/222) was granted by the European Commission to Dr Falk Pharma GmbH, Germany, for pancreatic enzymes (cross linked enzyme crystal lipse, protease, amylase) for the treatment of malabsorption due to exocrine pancreatic enzyme insufficiency.

The sponsorship was transferred to Gregory Fryer Associates Ltd, United Kingdom, in June 2008 and subsequently to Eli Lilly Nederland B.V., The Netherlands, in May 2011 and finally to TRX Services Limited, United Kingdom, in February 2015.

What is malabsorption due to exocrine pancreatic enzyme insufficiency?

The pancreas is a small organ that lies behind the stomach and in front of the spine. The pancreas has two main functions in the body. It makes hormones, such as insulin, that help to control blood sugar levels (this is called endocrine activity). It also makes a juice that helps to digest (break down) food (this is called exocrine activity). The juice contains enzymes, which are proteins that speed up the transformation of certain substances (such as particles of food) into other substances.

Certain conditions affecting the pancreas, including cystic fibrosis, inflammation of the pancreas (pancreatitis), cancer of the pancreas and an inherited disease called Shwachman-Diamond syndrome, may interfere with its exocrine activity by reducing the synthesis and the release of pancreatic

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enzymes. This may result in a defective absorption (malabsorption) of food nutrients. Typically, the patient experiences bloating and pain in the abdominal area and loose, frequent stools. Malabsorption due to exocrine pancreatic enzyme insufficiency is a severe chronically debilitating condition.

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

At the time of designation, malabsorption due to exocrine pancreatic enzyme insufficiency affected approximately 3.6 in 10,000 people in the European Union (EU). This was equivalent to a total of around 167,000 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?

Several pancreatic enzyme extracts were authorised for treatment of the condition at the time of application. Satisfactory argumentation has been submitted by the sponsor to justify the assumption that the medicinal product might be of potential significant benefit for the treatment of malabsorption due to exocrine pancreatic insufficiency because it may have better efficacy than other available enzymes. The 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?

The proposed medicinal product contains the following 3 enzymes: crystal lipase, protease and amylase. By administration of this product it is expected that it will substitute the lacking pancreatic enzymes and ultimately restore normal digestion.

What is the stage of development of this medicine?

The effects of pancreatic enzymes (cross linked enzyme crystal lipase, protease, amylase) were evaluated in experimental models.

At the time of submission of the application for orphan designation, clinical trials in patients with malabsorption due to exocrine pancreatic insufficiency were ongoing.

Pancreatic enzymes (cross linked enzyme crystal lipase, protease, amylase) were not marketed anywhere worldwide for malabsorption due to exocrine pancreatic insufficiency, at the time of submission.

In accordance with Regulation (EC) No 141/2000 of 16 December 1999, the COMP adopted a positive opinion on 22 July 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

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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	Pancreatic enzymes (cross linked enzyme crystal lipase, protease, amylase)	Treatment of malabsorption due to exocrine pancreatic enzyme insufficiency
Bulgarian	Панкреатични ензими (свързани ензимни кристали липаза, протеаза, амилаза)	Лечение на малабсорбция в следствие на екзокринна панкреатична ензимна недостатъчност
Croatian	Enzimi pankreasa (križno povezani enzim kristalne lipaze, proteaze, amilaze)	Liječenje malapsorpcije uzrokovane nedostatkom enzima egzokrinog pankreasa
Czech	Pankreatické enzymy (směs síťované krystalické lipázy, proteázy a amylázy)	Léčba malabsorpce při exokrinní insuficienci pankreatu
Danish	Pankreasenzymer (krydsbundet enzym krystal lipase, protease, amylase)	Behandling af malabsorption på grund af eksokrin pankreasenzyminsufficiens
Dutch	Pancreasenzymen (“cross-linked” lipase enzymkristal, protease, amylase)	Behandeling van malabsorptie ten gevolge van exocriene pancreasenzyminsufficiëntie
Estonian	Pankrease ensüümid (siduv ensüüm-kristall lipaas, proteaas, amülaas)	Pankrease eksokriinsete ensüümide puudulikkusest tingitud malabsorptsiooni ravi
Finnish	Haimaentsyymejä (silloitettu entsyymi kristalli lipaasi, proteaasi, amylaasi)	Imeytymishäiriön hoito, kun aiheuttajana on eksokriinisten haimaentsyymien vajaatoiminta
French	Enzymes pancréatiques (lipase sous forme cristalline, protéase, amylase)	Traitement des malabsorptions dues à une insuffisance pancréatique exocrine
German	Pankreasenzyme (gekoppeltes Lipasekristall, Protease, Amylase)	Behandlung der durch eine exokrin-pankreatische Enzyminsuffizienz verursachten Malabsorption
Greek	Παγκρεατικά ένζυμα (διασυνδεδεμένη ενζυμική κρυσταλλική λιπάση, πρωτεάση, αμυλάση)	Θεραπεία της δυσαπορρόφησης λόγω εξωκρινούς παγκρεατικής ενζυμικής ανεπάρκειας
Hungarian	Hasnyálmirigy enzimek (keresztkötésben lévő lipáz, proteáz, amiláz kristály)	Hasnyálmirigy exocrin enzimhiány okozta felszívódási zavar kezelése
Italian	Enzimi pancreatici (lipasi sotto forma di enzima cristallizzato con legami crociati, proteasi, amilasi)	Trattamento del malassorbimento dovuto a carenza degli enzimi pancreatici esocrini
Latvian	Aizkuņģa dziedzera enzīmi (šķērssūtā enzīma kristāla lipāze, proteāze, amilāze)	Ierobežotas absorbcijas ārstēšanai sakarā ar eksokrīnā aizkuņģa dziedzera enzīmu nepietiekamību
Lithuanian	Kasos fermentai (fermento kristalinės lipazės, proteazės, amilazės mišinys)	Malabsorbcijos dėl egzokrininės kasos funkcijos nepakankamumo gydymas
Maltese	Enzimi pankreatiċi (lipase f’forma ta’ enzima kristallizzata b’rabta inkroċjata, protease, amylase)	Kura ta’ assorbiment ħazin mill-musrana dovut għal nuqqas ta’ enzimi pankreatiċi esokrinali

[1] At the time of transfer of sponsorship

Language	Active ingredient	Indication
Polish	Enzymy trzustkowe (lipaza krystaliczna poprzecznie sieciowana, proteaza, amylaza)	Leczenie zaburzeń wchłaniania powodowanych zewnątrzwydzielniczą niewydolnością trzustki
Portuguese	Enzimas pancreáticas (lipase cristalina de ligação cruzadas, protease, amilase)	Tratamento da mal-absorção devido a insuficiência enzimática pancreática exócrina
Romanian	Enzime pancreatice (amestec cristalizat de enzime lipază, protează, amilază)	Tratamentul malabsorbţiei datorate insuficienţei pancreatice exocrine
Slovak	Pankreatické enzýmy (vzájomne prepojený enzýmový kryštál lipázy, proteázy, amylázy)	Liečba porúch vstrebávania pre exokrinnú pankreatickú insuficienciu
Slovenian	Pankreasni encimi (prečno povezan encimski kristal lipaze, proteaze, amilaze)	Zdravljenje malabsorpcije zaradi pomanjkanja eksokrinih pankreasnih encimov
Spanish	Enzimas pancreáticas (lipasa cristalina con puentes de unión, proteasa, amilasa)	Tratamiento de la malabsorción debida a insuficiencia enzimática pancreática exocrina.
Swedish	Pankreasenzymer (korsbundna enzym kristall lipas, proteas, amylas)	Behandling av malabsorption beroende på bristande funktion av enzymer från exokrina pankreas
Norwegian	Pankreasenzymer (kryssbundet krystallinsk lipase, protease, amylase)	Behandling av malabsorpsjon pga eksokrin sekretorisk pankreasinsuffisiens
Icelandic	Ensím briskirtils (lípasi, próteasi, amýlasi)	Til meðhöndlunar á vanupptöku vegna skorts á útkirtilsensímum brisins