



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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EMA/COMP/57720/2007 Rev.4<sup>1</sup>  
Committee for Orphan Medicinal Products

## Public summary of opinion on orphan designation

### Hydrocortisone (modified release tablet) for the treatment of adrenal insufficiency

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| First publication                                                                                                                                                                                                                                                                                                       | 30 November 2007 |
| Rev.1: transfer of sponsorship                                                                                                                                                                                                                                                                                          | 27 August 2009   |
| Rev.2: sponsor's change of address                                                                                                                                                                                                                                                                                      | 12 November 2009 |
| Rev.3: sponsor's change of address                                                                                                                                                                                                                                                                                      | 6 March 2015     |
| <b>Disclaimer</b><br>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 20 March 2007, orphan designation (EU/3/07/441) was granted by the European Commission to Phocus Pharmaceuticals Ltd, United Kingdom, for hydrocortisone (modified release tablet) for the treatment of adrenal insufficiency.

The sponsorship was transferred to Diurnal Limited, United Kingdom, in February 2009.

### What is adrenal insufficiency?

There are two adrenal glands in the abdomen, located above the kidneys. The adrenal glands secrete important hormones, called "steroid hormones"; these include cortisol (a glucocorticoid hormone), aldosterone (a mineralocorticoid hormone) and dehydroepiandrosterone (a weak androgen, or male hormone). Adrenal insufficiency occurs when adrenal glands do not produce enough of these hormones. Patients affected by this disease suffer of weight loss, muscle weakness, fatigue, low blood pressure, and sometimes darkening of the skin. Adrenal insufficiency can also cause irritability and depression. Some patients experience a reduced general health and impaired sexuality. Because the symptoms often worsen slowly, they are sometimes ignored until a stressful event such as an illness or an accident causes them to become clinically obvious and severe. This can develop into acute adrenal insufficiency ("Addisonian crisis"), which is a life-threatening condition. Some patients still have symptoms even if they are treated with currently available medications.

<sup>1</sup> Following a corrigendum procedure, the active ingredient was renamed from Hydrocortisone (modified release tablet) to Hydrocortisone in July 2020.



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

At the time of designation, adrenal insufficiency affected less than 4.5 in 10,000 people in the European Union (EU). This was equivalent to a total of 225,000 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 products to treat adrenal insufficiency have been authorised, including hydrocortisone, as oral tablets administered in two or three daily doses. Various other steroid hormones can also be used to replace those that are insufficiently produced by the adrenal gland.

Hydrocortisone (modified release tablet) might be of potential significant benefit for the treatment of adrenal insufficiency because of its special way of releasing hydrocortisone into the body once it is administered. This assumption will have to be confirmed at the time of marketing authorisation, as this will be necessary to maintain the orphan status.

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

Hydrocortisone (also known as cortisol) is the main steroid hormone secreted by the adrenal gland. Hydrocortisone (modified release tablet) is expected to replace the natural cortisol that is missing in adrenal insufficiency, which helps to treat the symptoms of the disease. The product is designed to mimic more closely the level of cortisol in the body, which has a variable profile over the day. In particular, it may improve the early morning fatigues and the patient's compliance with the treatment, since the increase of plasma cortisol would start to occur before the patient awakens in the morning, as occurs in healthy individuals.

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

At the time of submission of the application for orphan designation, no clinical trials in patients with adrenal insufficiency were initiated.

This specific formulation of hydrocortisone (modified release tablet) was not authorised anywhere worldwide for adrenal insufficiency, 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 7 February 2007 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 500,300,000 (Eurostat 2007).

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:

Diurnal Limited  
Cardiff Medicentre  
Heath Park  
Cardiff CF14 4UJ  
United Kingdom  
Tel. +44 (0)871 716 8848  
<http://www.diurnal.co.uk/contact>

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>2</sup>, Norwegian and Icelandic

| Language   | Active Ingredient                                               | Indication                                   |
|------------|-----------------------------------------------------------------|----------------------------------------------|
| English    | Hydrocortisone (modified release tablet)                        | Treatment of adrenal insufficiency           |
| Bulgarian  | Хидрокортизон (таблетка с изменено освобождаване)               | Лечение на надбъбречна недостатъчност        |
| Czech      | Hydrocortizon ( upravené uvolňovací tablety)                    | Léčba nedostatečné funkce kůry nadledvin     |
| Danish     | Hydrocortison (tablet med modificeret udløsning)                | Behandling af binyreinsufficiens             |
| Dutch      | Hydrocortisone (tablet met gereguleerde afgifte)                | Behandeling van bijnierschorsinsufficiëntie  |
| Estonian   | Hüdrokortisoon (modifitseeritud vabanemisega tablett)           | Neerupealiste puudulikkuse ravi              |
| Finnish    | Hydrokortisoni (depottabletti)                                  | Lisämunuaisen vajaatoiminnan hoito           |
| French     | Hydrocortisone (comprimé à libération modifiée)                 | Traitement de l'insuffisance surrénalienne   |
| German     | Hydrocortison (Tabletten mit veraenderter Wirkstofffreisetzung) | Behandlung der Nebennierenrindeninsuffizienz |
| Greek      | Υδροκορτιζόνη (δισκίο τροποποιημένης απελευθέρωσης)             | Θεραπεία ανεπάρκειας επινεφριδίων            |
| Hungarian  | Hidrokortizon (módosított hatóanyagleadású tablett)             | Mellékveseelégtelenség kezelése              |
| Italian    | Idrocortisone (compressa a rilascio modificato)                 | Trattamento dell'insufficienza surrenalica   |
| Latvian    | Hidrokortizons (mainīgas darbības tabletes)                     | Virsnieru mazspējas ārstēšana                |
| Lithuanian | Hidrokortizonas (modifikuota atpalaiduota tabletė)              | Antinksčių nepakankamumo gydymas             |
| Maltese    | Hydrocortisone (pillola li terfi l-medicina b'mod modifikat)    | Kura ta' insufficjenza adrenali              |
| Polish     | Hydrokortyzon (tabletki o zmodyfikowanym uwalnianiu)            | Leczenie niewydolności nadnerczy             |
| Portuguese | Hydrocortisone (comprimido de libertação modificada)            | Tratamento da insuficiência supra-renal      |
| Romanian   | Hidrocortizon (comprimat cu eliberare modificată)               | Tratamentul insuficienței suprarenaliene     |
| Slovak     | hydrokortizón (tableta s riadeným uvoľňovaním)                  | Liečba adrenokortikálnej nedostatočnosti     |
| Slovenian  | Hidrokortizon (tablete s prirejenim sproščanjem)                | Zdravljenje nadledvične insufucence          |

<sup>2</sup> At the time of transfer of sponsorship

| Language  | Active Ingredient                                    | Indication                                  |
|-----------|------------------------------------------------------|---------------------------------------------|
| Spanish   | Hidrocortisona (comprimido de liberación modificada) | Tratamiento de la insuficiencia suprarrenal |
| Swedish   | Hydrocortison (tablett med modifierad frisättning)   | Behandling av binjureinsufficiens           |
| Norwegian | Hydrokortison (tablett med modifisert frisetting)    | Behandling av binyrebarksvikt               |
| Icelandic | Hýdrókortisón (tafla með aðlagaðri losun)            | Meðferð á vanstarfsemi nýrnahettna          |