

## **Public Assessment Report**

# **Scientific discussion**

# Hidroferol 0.266 mg soft capsules (calcifediol)

# NL/H/5606/001/DC

# Date: 22 June 2022

This module reflects the scientific discussion for the approval of Hidroferol 0.266 mg soft capsules. The procedure was finalised on February 2017 with Spain as RMS (ES/H/0412/001/DC). The current RMS is the Netherlands (NL/H/5606/001/DC). For information on changes after this date please refer to the 'steps taken after finalisation' at the end of this PAR.



## List of abbreviations

ASMF	Active Substance Master File
CEP	Certificate of Suitability to the monographs of the European
	Pharmacopoeia
СНМР	Committee for Medicinal Products for Human Use
CMD(h)	Coordination group for Mutual recognition and Decentralised
	procedure for human medicinal products
CMS	Concerned Member State
EDMF	European Drug Master File
EDQM	European Directorate for the Quality of Medicines
EEA	European Economic Area
ERA	Environmental Risk Assessment
ICH	International Conference of Harmonisation
MAH	Marketing Authorisation Holder
Ph.Eur.	European Pharmacopoeia
PL	Package Leaflet
RH	Relative Humidity
RMP	Risk Management Plan
SmPC	Summary of Product Characteristics
TSE	Transmissible Spongiform Encephalopathy



## I. INTRODUCTION

Based on the review of the quality, safety and efficacy data, the Member States have granted a marketing authorisation for Hidroferol 0.266 mg soft capsules, from Faes Farma, S.A.

The product is indicated in adults for:

Treatment of vitamin D deficiency, in those cases where the initial administration of high doses is required or administration spaced in time is preferred, as in the following situations:

- As adjuvant for the treatment of osteoporosis
- In patients with malabsorption syndrome
- Renal osteodystrophy
- Bone diseases induced by treatment with corticosteroid drugs.

A comprehensive description of the indications and posology is given in the SmPC.

This decentralised procedure concerns a generic application claiming essential similarity with the innovator product Hidroferol 0.266 mg oral solution, which has been registered in Spain by Faes Farma, S.A. since 1977. In the Netherlands, Hidroferol 0.266 mg oral solution has been registered since 17 November 2020 by the mutual recognition procedure NL/H/5606/001.

The reference member state (RMS) of the initial procedure was Spain and the concerned member states (CMS) involved in this procedure were Belgium, France, Germany, Italy, Poland and Portugal. The role of RMS was transferred to the Netherlands on 16 June 2022.

The marketing authorisation has been granted pursuant to Article 10(1) of Directive 2001/83/EC.

## II. QUALITY ASPECTS

## II.1 Introduction

Hidroferol is an orange, oval soft gelatine capsule containing a clear, low viscous and free from particles liquid. Each capsule contains as active substance 0.266 mg of calcifediol, equivalent to 15.960 international units of vitamin D.

The soft capsules are packed in either PVC-PCDC/Al or Al/Al blisters.

The excipients are:

*Capsule content* – calcifediol, anhydrous ethanol and medium-chain triglycerides.



Capsule shell – gelatine, glycerol, sorbitol, titanium dioxide (E-171) and sunset yellow S (E-110).

#### **II.2 Drug Substance**

Calcifediol is a known active substance described in Ph.Eur. A Ph.Eur. Certificate of Suitability has been submitted to support the quality of the active ingredient.

The CEP does not include re-test period but stability data have been included in the dossier to support the proposed the re-test period.

#### 11.3 **Medicinal Product**

Pharmaceutical development

The pharmaceutical development has been adequately described.

The proportion of each solvent in cosolvent mixture has been discussed. The composition of capsule shell has been justified.

Test for disintegration and dissolution of soft capsules has been performed.

The photostability of calcifediol concern has been discussed along the production process.

### Manufacturing process

The manufacturing process is sufficiently described and the process controls are appropriate, considering the nature of the product and the manufacturing method. The commercial batch size is defined.

The dossier includes sufficient validation data to guarantee that the manufacturing process is controlled and to ensure batch to batch reproducibility and compliance with product specifications.

### <u>Control of excipients</u>

The information provided is adequate. The specifications for the different excipients are justified by their official adoption in the relevant Ph. Eur. monograph or by an in-house monograph (for the non-compendial excipient). All the gelatin sources used for capsules have CEP on TSE risk evaluation.

### <u>Quality control of drug product</u>

The specifications proposed for the soft capsule is adequate. The limits proposed for the different parameters have been adequately justified.

The analytical methods have been properly described and validated.

The components of the container closure system comply with the specifications established in the applicable Ph. Eur. Monographs and/or EU directives on foodstuff contact.

### Stability of drug product

The stability studies have been performed following the ICH guidelines. The stability data support the proposed shelf-life and storage conditions.



Specific measures concerning the prevention of the transmission of animal spongiform encephalopathies

Due to the origin and type of tissues of raw material and the manufacturing process applied, the CEP indicates than the active substance meets the criteria described in the current version of the monograph Products with risk of transmitting agents of animal spongiform encephalopathies no. 1483 of the European Pharmacopoeia, current edition including supplements.

#### **II.4** Discussion on chemical, pharmaceutical and biological aspects

Based on the submitted dossier, the member states consider that Hidroferol has a proven chemical-pharmaceutical quality. Sufficient controls have been laid down for the active substance and finished product. No post-approval commitments were made.

#### **NON-CLINICAL ASPECTS** III.

#### Ecotoxicity/environmental risk assessment (ERA) **III.1**

Since Hidroferol is intended for generic substitution, this will not lead to an increased exposure to the environment. An environmental risk assessment is therefore not deemed necessary.

#### Discussion on the non-clinical aspects **III.2**

This product is a generic formulation of Hidroferol oral solution which is available on the European market. Reference is made to the preclinical data obtained with the innovator product. A non-clinical overview on the pharmacology, pharmacokinetics and toxicology has been provided, which is based on up-to-date and adequate scientific literature. The overview justifies why there is no need to generate additional non-clinical pharmacology, pharmacokinetics and toxicology data. Therefore, the member states agreed that no further non-clinical studies are required.

#### **CLINICAL ASPECTS** IV.

#### IV.1 Introduction

Calcifediol is a well-known active substance with established efficacy and tolerability. A clinical overview has been provided, which is based on scientific literature. The overview justifies why there is no need to generate additional clinical data. Therefore, the member states agreed that no further clinical studies are required.



## **IV.2** Pharmacokinetics

Since the dossier is identical to the dossier approved for the reference product Hidroferol 0.266 mg oral solution and have an identical Module 3, the active pharmaceutical ingredient used, the manufacturing process and manufacturing site for the finished dosage form being the same. A bioavailability study is therefore not required to demonstrate bioequivalence, and none is provided in this application.

## IV.3 Risk Management Plan

A risk management plan in accordance with the requirements of Directive 2001/83/EC as amended has been submitted.

No additional risk minimization activities were required beyond those included in the product information.

## IV.4 Discussion on the clinical aspects

For this authorisation, reference is made to the clinical studies and experience with the innovator product Hidroferol 0.266 mg oral solution. No new clinical studies and no bioequivalence study were conducted. Risk management is adequately addressed. This generic medicinal product can be used instead of the reference product.

## V. OVERALL CONCLUSION, BENEFIT/RISK ASSESSMENT AND RECOMMENDATION

Hidroferol 0.266 mg soft capsules has a proven chemical-pharmaceutical quality and is a generic form of Hidroferol 0.266 mg oral solution. Hidroferol oral solution is a well-known medicinal product with an established favourable efficacy and safety profile.

The Board followed the advice of the assessors.

There was no discussion in the CMD(h). Agreement between member states was reached during a written procedure. The member states, on the basis of the data submitted, considered that essential similarity has been demonstrated for Hidroferol with the reference product, and have therefore granted a marketing authorisation. The decentralised procedure was finalised with a positive outcome on February 2017.



## STEPS TAKEN AFTER THE FINALISATION OF THE INITIAL PROCEDURE -**SUMMARY**

Procedure number*	Scope	Product Information	Date of end of	Approval/ non	Summary/ Justification for refuse
	Change in the (invented)	affected	procedure	approval	for refuse
ES/H/0412/001/IB/00	Change in the (invented)	Y	20-9-2017	Approved	
1	name of the medicinal				
	product in Portugal		20.0.2017	Arenenessed	
ES/H/0412/001/IA/00	Replacement or addition of a	-	20-9-2017	Approved	
2	secondary packaging site		20-11-2017	Arenenessed	
ES/H/0412/001/IB/00	Change in the manufacturing	-	20-11-2017	Approved	
3	process of the finished				
	product, including an intermediate used in the				
	manufacture of the finished				
	product; other variation		9 6 2019	Approved	
ES/H/0412/001/IB/00	Implementation of change(s) for which no new additional	-	8-6-2018	Approved	
4					
	data is required to be				
	submitted by the MAH Deletion of an immediate		6 7 2019	Approved	
ES/H/0412/001/IA/00 5		-	6-7-2018	Approved	
5	packaging container that does				
	not lead to the complete				
	deletion of a strength or pharmaceutical form				
			11 10 2010	Arenenessed	
ES/H/0412/IB/006/G	Introduction of a summary of pharmacovigilance system,	-	11-10-2018	Approved	
	changes in QPPV (including				
	contact details) and/or				
	changes in the				
	Pharmacovigilance System				
	Master File (PSMF) location				
ES/H/0412/001/IA/00	Minor changes to an	_	22-8-2019	Approved	
7	approved test procedure	_	22-0-2015	Approved	
, ES/H/0412/001/IB/00	Change of the (invented)	Y	17-9-2019	Approved	
8	name of the medicinal		17-9-2019	Approved	
0	product in Belgium				
ES/H/0412/001/IA/00	Updated certificate from an	_	5-11-2019	Approved	
9	already approved		5 11 2015	Approved	
5	manufacturer				
ES/H/0412/IB/010/G	- Addition of a new	-	23-4-2020	Approved	
23/11/0412/10/010/0	specification parameter to the		25 4 2020	Approved	
	specification with its				
	corresponding test method				
	- Deletion of a non-significant				
	specification parameter (e.g.				
	deletion of an obsolete				
	parameter such as odour and				
	taste or identification test for				
	a colouring or flavouring				
	material)				



	[]		1		
	- Minor changes to an				
	approved test procedure				
ES/H/0412/001/E/001	Adding of new CMS Belgium,	Y	22-8-2020	Approved	
	Bulgaria, Estonia, Latvia,				
	Lithuania, Luxembourg, the				
	Netherlands and Romania				
ES/H/0412/001/WS/0	Other variation Type II C.I.z	-	30-8-2021	Approved	
11					
ES/H/0412/001/IB/01	Change in the manufacturing	-	5-2-2021	Approved	
2	process of the finished				
	product, including an				
	intermediate used in the				
	manufacture of the finished				
	product; other variation				
ES/H/0412/001/R/001	Renewal	Y	24-6-21	Approved	-
ES/H/0412/IB/013/G	- Introduction of a summary		22-10-2021	Partially	The change
	of pharmacovigilance system,			approved	of the
	changes in QPPV (including				invented
	contact details) and/or				name has
	changes in the				been
	Pharmacovigilance System				refused. The
	Master File (PSMF) location				MAH
	- Introduction of new				requested
	summary Pharmacovigilance				the same
	System Master File (sPSMF)				name for
	from the new Marketing				CMS
	Authorisation Holder in CMS.				Lithuania,
					Latvia, and
					Estonia.
ES/H/0412/IB/014/G	Change of (invented) name in	Y	11-3-2022	Approved	
	CMS Lithuania, Latvia, and				
	Estonia				