IPAR

Public Assessment Report for a
Medicinal Product for Human Use

Scientific Discussion

Finasteride 1mg film-coated tablets
Finasteride
PA22753/002/001

The Public Assessment Report reflects the scientific conclusion reached by the Health Products Regulatory Authority (HPRA) at the end of the evaluation process and provides a summary of the grounds for approval of a marketing authorisation for a specific medicinal product for human use. It is made available by the HPRA for information to the public, after deletion of commercially sensitive information. The legal basis for its creation and availability is contained in Article 21 of Directive 2001/83/EC, as amended. It is a concise document which highlights the main parts of the documentation submitted by the applicant and the scientific evaluation carried out by the HPRA leading to the approval of the medicinal product for marketing in Ireland.

CONTENTS

I. INTRODUCTION

Finasteride is a well-known active substance with a known safety profile.

Based on the review of the data on quality, safety and efficacy, the HPRA granted a marketing authorisation for Finasteride 1mg film-coated tablets, from Careforsons Ireland Limited, New Cork Road, Cork, Ireland on 16th October 2020 for the treatment the early stages of androgenetic alopecia in men 18-41 years of age.

The originator product is Propecia 1 mg film-coated tablets by Merck Sharp & Dohme limited (MSD), registered nationally since 17th April 1998 in Sweden (SE). Finasteride, as Proscar 5mg FCT by MSD for the treatment of benign prostatic hyperplasia, was first registered in Europe in Finland on 24th June 1992.

In the bioequivalence study provided, finasteride, as European Reference product Proscar 5 mg FCT by MSD, was compared to the Test product, Finasteride 5 mg FCT by Genepharm SA. A biowaiver was requested for the lower strength, Finasteride 1 mg FCT, which was considered acceptable.

The summary of product characteristics (SmPC) of Finasteride 1mg film-coated tablets is in line with that of the European Reference product for the 1 mg strength indication, and is available on the HPRA's website.

With IE as the RMS in a Mutual Recognition Procedure (IE/H/1214/001/MR) Careforsons Ireland ltd applied for a Marketing Authorisation for Finasteride 1 mg FCT in Germany (DE). This application was submitted in accordance with Article 10 (1) of Directive 2001/83/EC, as amended. This procedure ended positively on 24th May 2022.

Name of the product	Finasteride 1mg film-coated tablets
Name(s) of the active substance(s) (INN)	Finasteride
Pharmacotherapeutic classification (ATC code)	D11AX10
Pharmaceutical form and strength(s)	1mg film-coated tablets
Marketing Authorisation Number(s) in Ireland (PA)	PA 22753/002/001
Marketing Authorisation Holder	Careforsons Ireland Limited
MRP/DCP No.	IE/H/1214/001/MR
Reference Member State	IE
Concerned Member State	DE

II. QUALITY ASPECTS

II.1. Introduction

This application is for Finasteride 1mg film-coated tablets.

II.2 Drug substance

The active substance is Finasteride, an established active substance described in the European Pharmacopoeia, and is manufactured in accordance with the principles of Good Manufacturing Practice (GMP).

The active substance specification is considered adequate to control the quality and meets current pharmacopoeial requirements. Batch analytical data demonstrating compliance with this specification has been provided.

II.3 Medicinal product

P.1 Composition

Composition of the medicinal product

Finasteride 1 mg.

The excipients in the medicinal product are listed in section 6.1 of the SmPC.
A visual description of the product is included in section 3 of the SmPC.

P.2 Pharmaceutical Development

The product is an established pharmaceutical form and its development is adequately described in accordance with the relevant European guidelines.

P.3 Manufacture of the Product

The product is manufactured in accordance with the principles of good manufacturing practice (GMP) at suitably qualified manufacturing sites.

The manufacturing process has been validated according to relevant ICH guidelines and the process is considered to be sufficiently validated.

P.4 Control of Other Substances (Excipients)

All ingredients comply with Ph. Eur. or are adequately controlled by the manufacturer's specifications.

P.5 Control of Finished Product

The Finished Product Specification is based on the pharmacopoeial monograph for tablets, and the tests and control limits are considered appropriate for this type of product.

The analytical methods used are described in sufficient detail and are supported by validation data.

Batch analytical data for a number of batches from the proposed production site(s) have been provided, and demonstrate the ability of the manufacturer to produce batches of finished product of consistent quality.

P.6 Packaging material

The approved packaging for this product is described in section 6.5 of the SmPC.

Evidence has been provided that the packaging complies with Ph. Eur./EU legislation for use with foodstuffs requirements.

P.7 Stability of the Finished Product

Stability data on the finished product in the proposed packaging have been provided in accordance with EU guidelines and support the shelf-life and storage conditions listed in sections 6.3 and 6.4 of the SmPC.

II.4 Discussion on Chemical, Pharmaceutical and Biological Aspects

The important quality characteristics of the product are well-defined and controlled. Satisfactory chemical and pharmaceutical documentation has been provided, assuring consistent quality of Finasteride 1mg film-coated tablets.

III. NON-CLINICAL ASPECTS

III.1 Introduction

This active substance is a generic formulation of Propecia 1 mg film coated tablets on the European market.

Pharmacodynamic, pharmacokinetic and toxicological properties of finasteride are well known. As finasteride is a widely used, well-known active substance, the applicant has not provided additional studies and further studies are not required. Overview based on literature review is, thus, appropriate.

III.2 Ecotoxicity/environmental risk assessment

An Environmental Risk Assessment has not been performed as this product is intended for generic substitution and therefore will not result in an increase of risk to the environment during use, storage and disposal.

III.6 Discussion on the non-clinical aspects

As finasteride is a widely used, well-known active substance, the applicant has not provided additional studies. A nonclinical overview based on literature review was provided in support of this marketing authorisation application, which is acceptable.

IV. CLINICAL ASPECTS

IV.1 Introduction

Finasteride is a well-known active substance with established efficacy and tolerability.

The content of the SmPC approved during the MR procedure is in accordance with the accepted originator product (Propecia 1 mg film-coated tablets by Merck Sharp & Dohme LtD)

For this generic application, the applicant has submitted one bioequivalence study in which the pharmacokinetic profile of the test product Finasteride 5 mg FCT was compared with the pharmacokinetic profile of the reference product, Proscar (finasteride) 5mg FCT (Merck Sharp & Dohme Ltd) in a single-dose, randomised, two-period, two-treatment, two-sequence, crossover study in healthy males under fasting conditions.

A biowaiver was granted for the lower strength, Finasteride 1 mg FCT.

Based on the pharmacokinetic parameters of finasteride, Proscar 5mg FCT (Merck Sharp & Dohme Ltd) and Finasteride 5 mg FCT, the test product are bioequivalent with extent to the rate and extent of absorption and fulfil the bioequivalence requirements outlined in the relevant CHMP Note for Guidance.

Compliance with GCP

A statement on the application of appropriate GCP standards in the submitted study has been provided and the HPRA has been assured that GCP standards were followed in an appropriate manner in the studies conducted.

IV.2 Pharmacokinetics

The pharmacokinetic profile of finasteride is well characterised.

Absorption
The oral bioavailability of finasteride is approximately 80% and is not affected by food. Maximum finasteride plasma concentrations are reached approximately two hours after dosing and the absorption is complete after six to eight hours.

Distribution
Protein binding is approximately 93%. The volume of distribution is approximately 76 litres (44 – 96 litres). At steady state following dosing with 1 mg/day, maximum finasteride plasma concentration averaged 9.2 ng/ml and was reached 1 to 2 hours post-dose; AUC (0-24 hr) was 53 ng•hr/ml.

Biotransformation
Finasteride is metabolised primarily via, but does not affect, the cytochrome P450 3A4 system.

Elimination
Approximately 39% of the dose of finasteride is excreted, unchanged in the urine in the form of metabolites. Plasma clearance is approximately 165 ml/min (70 – 279 ml/min).

Linearity/Non-linearity:
Finasteride exhibits linear kinetics over the range of 1 to 10 mg.

Additional information on the PK characteristics of finasteride is provided in the product information.

IV.3 Pharmacodynamics

Finasteride is a 4-azasteroid, which inhibits human type II 5α-reductase (present within the hair follicles) with greater than 100-fold selectivity over human type I 5α-reductase, and blocks the peripheral conversion of testosterone to the androgen dihydrotestosterone (DHT). In men with male pattern hair loss, the balding scalp contains miniaturised hair follicles and increased amounts of DHT. Finasteride inhibits a process responsible for miniaturisation of the scalp hair follicles, which can lead to reversal of the balding process.

No new clinical studies were submitted which is acceptable for this type of application.

IV.4 Clinical Efficacy

No new clinical studies were submitted which is acceptable for this type of application.

IV.5 Clinical Safety

Finasteride is a well-known active substance with a known safety profile and further studies are not required for this type of application.

Risk Management Plan
The applicant has submitted a risk management plan, in accordance with the requirements of Directive 2001/83/EC as amended, describing the pharmacovigilance activities and interventions designed to identify, characterise, prevent or minimise risks relating to Finasteride 1mg film-coated tablets
The revised RMP (version 1.0, dated 20/12/2019) is acceptable. Routine pharmacovigilance and routine risk minimisation activities are considered sufficient.
The applicant is requested to ensure it maintains the RMP in line with the latest SmPC updates and maintains regular reviews.

Summary of Safety Concerns	
Important identified risks	• Exposure during pregnancy • Off-label use in women and adolescents
Important potential risks	• Persistence of Sexual Dysfunction (decreased libido, erectile dysfunction and ejaculation disorders) following discontinuation of finasteride. • Male infertility • Depressive disorders • Male breast cancer
Missing Information	• None

Periodic Safety Update Report (PSUR)
With regard to PSUR submission, the MAH should take the following into account:

- PSURs shall be submitted in accordance with the requirements set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and published on the European medicines web-portal. Marketing authorisation holders shall continuously check the European medicines web-portal for the DLP and frequency of submission of the next PSUR.
- For medicinal products authorized under the legal basis of Article 10(1) or Article 10a of Directive 2001/83/EC, no routine PSURs need to be submitted, unless otherwise specified in the EURD list.
- In case the active substance will be removed in the future from the EURD list because the MAs have been withdrawn in all but one MS, the MAH shall contact that MS and propose DLP and frequency for further PSUR submissions together with a justification.

IV.6 Discussion on the clinical aspects

The application contains an adequate review of published clinical data for the active substance finasteride in the proposed indication in men 18 – 41 years of age in the treatment of the early stages of androgenetic alopecia.

Bioequivalence has been shown between the Test product, Finasteride 5 mg FCT, and the European Reference product, Proscar 5 mg tablet. The biowaiver is accepted for the lower strength, Finasteride 1 mg FCT.

V. OVERALL CONCLUSIONS

Finasteride 1mg film-coated tablets is a generic form of Propecia 1 mg film-coated tablets by Merck Sharp & Dohme limited (MSD). Propecia 1 mg film-coated tablets is a well-known medicinal product with a proven chemical-pharmaceutical quality and an established favourable efficacy and safety profile.

Bioequivalence has been shown to be in compliance with the CHMP guidance documents. The SmPC is consistent with that of the reference product.

The MAH has provided written confirmation that systems and services are in place to ensure compliance with their pharmacovigilance obligations.

The HPRA, on the basis of the data submitted considered that Finasteride 1mg film-coated tablets demonstrated bioequivalence with the reference product as well as a satisfactory risk/benefit profile and therefore granted a marketing authorisation.

VI. REVISION DATE

15.10.2025

VII. UPDATES