1. Name of the Medicinal Product:

Prosfin – 5 Tablets (Finasteride Tablets BP 5 mg)

2. Qualitative and Quantitative Composition

Each Film Coated Tablet Contains:

Finasteride BP 5 mg

S. No	Name of the Ingredient
1	Finasteride
2	Lactose Monohydrate (super tab 30 GR)
3	Microcrystalline Cellulose (PH 102)
4	Pregelatinized starch (Starch 1500)
5	Sodium starch Glycolate (Type A)
7	Lauryl Macrogol glyceride
8	Purified Water
9	Microcrystalline cellulose (pH 102)
10	Sodium starch Glycolate (Type A)
11	Magnesium Stearate
	Coating
12	Opadry Blue (03F505003)
13	Purified water

3. Pharmaceutical form

Film coated Tablet

Blue color circular biconvex, film – coated tablets, marked “F5” on one side and plain on other side.

4. Clinical Particular

4.1 Therapeutic Indications:

Finasteride 5 mg Tablets are indicated for the treatment and control of benign prostatic hyperplasia (BPH) to: - cause regression of the enlarged prostate, improve urinary flow and improve the symptoms associated with BPH, - reduce the incidence of acute urinary retention and reduce need for surgery including transurethral resection of the prostate (TURP) and prostatectomy. Finasteride 5 mg tablets should be administered in patients with an enlarged prostate (prostate volume above ca. 40 ml).

4.2 Posology and Method of Administration

For oral use only. The recommended dosage is one 5 mg tablet daily with or without food. The tablet should be swallowed whole and must not be divided or crushed Even though improvement can be seen within a short time, treatment for at least 6 months may be necessary in order to determine objectively whether a satisfactory response to treatment has been achieved. Dosage in the elderly Dosage adjustments are not necessary although pharmacokinetic studies have shown that the elimination rate of finasteride is slightly decreased in patients over the age of 70. Dosage in hepatic insufficiency. The effect of hepatic insufficiency on the pharmacokinetics of finasteride has not been studied. Dosage in renal insufficiency Dosage adjustments are not necessary in patients with varying degrees of renal insufficiency (starting from creatinine clearance as low as 9 ml/min) as in pharmacokinetic studies renal insufficiency was not found to affect the elimination of finasteride. Finasteride has not been studied in patients on hemodialysis.

4.3 Contraindications

Hypersensitivity to finasteride or to any of the excipients.Contra-indicated in women and children. Pregnancy - Use in women when they are or may potentially be pregnant.

4.4 Special warnings and precautions for use

Paediatric population: Finasteride must not be used in children / adolescents (< 18 years). There are no data demonstrating efficacy or safety of finasteride in children under the age of 18. Effects

on Prostate Specific Antigen (PSA): In clinical studies with Finasteride 1 mg Tablets in men 18-41 years of age, the mean value of serum prostate-specific antigen (PSA) decreased from 0.7 ng/ml at baseline to 0.5 ng/ml at month 12. This decrease in serum PSA concentrations needs to be considered, if during treatment with Finasteride Tablets 1mg, a patient requires a PSA assay. In this case it should be considered to double PSA value before making a comparison with the results from untreated men. Effects on fertility: Breast cancer has been reported in men taking finasteride during clinical trials and in the post-marketing period. Physicians should instruct their patients to promptly report any changes in their breast tissue such as lumps, pain, gynaecomastia or nipple discharge. The effect of hepatic insufficiency on the pharmacokinetics of finasteride has not been studied. Excipients: This medicinal product contains lactose-monohydrate. Patients with rare hereditary problems of galactose intolerance, Lapp lactase deficiency or glucosegalactose malabsorption should not take this medicine. Mood alterations and depression Mood alterations including depressed mood, depression and, less frequently, suicidal ideation have been reported in patients treated with finasteride 1 mg. Patients should be monitored for psychiatric symptoms and if these occur, treatment with finasteride should be discontinued and the patient advised to seek medical advice.

4.5 Interaction with other medicinal products and other forms of interaction

No clinically significant drug interactions have been identified. Finasteride does not appear to significantly affect the cytochrome P450-Iinked drug metabolizing enzyme system. Although the risk for finasteride to affect the pharmacokinetics of other drugs is estimated to be small, it is probable that inhibitors and inducers of cytochrome P450 3A4 will affect the plasma concentration of finasteride. However, based on established safety margins, any increase due to concomitant use of such inhibitors is unlikely to be of clinical significance. The following medicinal products have been investigated in man, and no clinically significant interactions have been found: propanolol, digoxin, glibenclamide, warfarin, theophylline, phenazone and antipyrine and no clinically meaningful interactions were found.

4.6 Fertility, Pregnancy and Lactation

Pregnancy: Finasteride is contra indicated in women when they are or may potentially be pregnant. Because of the ability of type II 5α-reductase-inhibitors to inhibit conversion of testosterone to dihydrotestosterone, these drugs, including finasteride, may cause abnormalities of the external genitalia of a male foetus when administered to a pregnant woman. Exposure to finasteride - risk to male foetus.Women should not handle crushed or broken tablets of finasteride when they are or may potentially be pregnant because of the possibility of absorption of finasteride and the subsequent potential risk to a male foetus.Finasteride tablets are coated and will prevent contact with the active ingredient during normal handling, provided that the tablets have not been broken or crushed. Small amounts of finasteride have been recovered from the semen in subjects receiving finasteride 5 mg/day. It is not known whether a male foetus may be adversely affected if his mother is exposed to the semen of a patient being treated with finasteride. When the patient's sexual partner is or may potentially be pregnant, the patient is recommended to minimise exposure of his partner to semen.

Lactation: Finasteride 5 mg tablets are not indicated for use in women. It is not known whether finasteride is excreted in human milk.

4.7 Effects on ability to drive and use machines

There is no available information indicating that finasteride would have an influence on the ability to drive or use machines.

4.8 Undesirable effects

The adverse reactions during clinical trials and / or post-marketing use are listed in the table below. The frequencies of undesirable effects are following: very common (≥1/10), common (≥1/100 to <1/10), uncommon (≥1/1,000 to <1/100), rare (≥1/10,000 to ≤1/1,000), very rare (<1/10,000), not known (cannot be estimated from the available data) The frequency of adverse

reactions reported during post- marketing use cannot be determined as they are derived from spontaneous reports.

Immune system disorders: Not known: Hypersensitivity reactions, including rash, pruritus, urticaria and angioedema (swelling of the lips, tongue, throat, and face). Cardiac disorders: Not known: Palpitation.

Psychiatric disorder: Uncommon: Decreased libido, depression Not known: Anxiety.

Hepatobiliary disorders: Not known: Increased hepatic enzymes.

Reproductive system and breast disorders: Uncommon$: Erectile dysfunction, ejaculation disorder (including decreased volume of ejaculate) Not known: Breast tenderness and enlargement (gynecomastia), Testicular pain, infertility*.In addition, the following have been reported in post-marketing use: Persistent sexual dysfunction (decreased libido, erectile dysfunction and ejaculation disorder) after discontinued treatment with finasteride; Male breast cancer. Drug-related sexual undesirable effects were more common in the finasteride treated men than the placebo-treated men, with frequencies during the first 12 months of 3.8% vs 2.1%, respectively. The incidence of these effects decreased to 0.6% in finasteride-treated men over the following four years. Approximately 1% of men in each treatment group discontinued due to drug related sexual adverse experiences in the first 12 months, and the incidence declined thereafter.

4.9 Over Dosage:

Patients have received Single doses of finasteride up to 400 mg and multiple doses up to 80 mg/day without adverse effects. There is no specific recommended treatment of overdose of finasteride.

5. Pharmacological Properties

5.1 Pharmacodynamic Properties

Pharmacotherapeutic group: Testosteron-5α-reductase-inhibitors. **ATC-Code:** G04CB01

Finasteride is a synthetic 4-azasteroid, a specific competitive inhibitor of the intracellular enzyme Type-II-5a-reductase. The enzyme converts testosterone into the more potent androgen

dihydrotestosterone (DHT). The prostate gland and, consequently, also the hyperplasic prostate tissue are dependent on the conversion, of testosterone to DHT for their normal function and growth. In benign prostatic hyperplasia (BPH), enlargement of the prostate gland is dependent upon the conversion of testosterone to DHT within the prostate. Finasteride is highly effective in reducing circulating and intraprostatic DHT. Finasteride has no affinity for the androgen receptor. Clinical studies show a rapid reduction of the Serum DHT levels of 70%, which leads to a reduction on prostate volume. After 3 months, a reduction of approx. 20% in the volume of the gland occurs, and the shrinking continues and reaches approx. 27% after 3 years. Marked reduction takes place in the periurethral Zone immediately surrounding the Urethra. Urodynamic measurements have also confirmed a significant reduction of detrusor pressure as a result of the reduced obstruction. Significant improvements in maximum urinary flow rate and symptoms have been obtained after a few weeks, compared with the stand of treatment. Differences from Placebo have been documented at 4 and 7 months, respectively. All efficacy parameters have been maintained over a 3-year follow-up period. Effects of four years treatment with finasteride on incidence of acute urine retention, need for surgery, symptom-Score and prostate volume: In clinical studies of patients with moderate to severe symptoms of BPH, an enlarged prostate on digital rectal examination and low residual urinary volumes, finasteride reduced the incidence of acute retention of urine from 7/1 00 to 3/100 over four years and the need for surgery (TURP or prostatectomy) from 10/100 to 5/100. These reductions were associated with a 2-point improvement in QUASJ-AUA Symptom Score (range 0-34), a sustained regression in prostate volume of approximately 20% and a sustained increase in urinary flow rate.

5.2 Pharmacokinetic Properties

Absorption: The oral bioavailability of finasteride is approx. 80%. Peak plasma concentrations are reached approx. 2 hours after drug intake, and absorption is complete after 6-8 hours. **Distribution:** Binding to plasma proteins is approx. 93%. Plasma clearance and volume of distribution are approx. 165 ml/min (70-279 ml/min) and 76 l (44-96 l), respectively. Accumulation of small amounts of finasteride is seen on repeated administration. After a daily

dose of 5 mg the lowest steady-state concentration of finasteride has been calculated to be 8-10 ng/ml, which remains stable over time.

Biotransformation: Finasteride is metabolised in the liver. Finasteride does not significantly affect the cytochrome P 450 enzyme system. Two metabolites with low 5αreductase-inhibiting effects have been identified. Elimination: The plasma half-life averages 6 hours (4-12 hours) (in men >70 years of age, 8 hours, range 6-15 hours). After administration of radioactively labelled finasteride, approx. 39% (32-46%) of the given dose is excreted in the urine in the form of metabolites. Virtually no unchanged finasteride is recovered in the urine. Approximately 57% (51-64%) of the total dose is excreted in the faeces. Finasteride has been found to cross the blood-brain barrier. Small amounts of finasteride have been recovered in the seminal fluid of treated. In 2 studies of healthy subjects (n=69) receiving finasteride 5 mg/day for 6-24 weeks, finasteride concentrations in semen ranged from undetectable. In patients with chronic renal impairment, whose creatinine clearance ranged from 9-55 ml/min, the disposition of a single dose of 14C-finasteride was not different from that in healthy volunteers. Protein binding also did not differ in patients with renal impairment. A portion of the metabolites, which normally is excreted renally, was excreted in the faeces. It therefore appears that faecal excretion increases commensurate to the decrease in urinary excretion of metabolites. Dosage adjustment in non-dialysed patients with renal impairment is not necessary.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeated dose toxicity, genotoxicity, and carcinogenic potential.

Reproduction toxicology studies in male rats have demonstrated reduced prostate and seminal vesicular weights, reduced secretion from accessory genital glands and reduced fertility index (caused by the primary pharmacological effect of finasteride).The clinical relevance of these findings is unclear.

As with other 5-alpha-reductase inhibitors, femininisation of male rat foetuses has been seen with administration of finasteride in the gestation period. Intravenous administration of

finasteride to pregnant rhesus monkeys at doses up to 800 ng/day during the entire period of embryonic and foetal development resulted in no abnormalities in male foetuses. This dose is about 60 to120 times higher than the estimated amount in semen of a man who have taken 5 mg finasteride, and to which a woman could be exposed via semen. In confirmation of the relevance of the Rhesus model for human foetal development, oral administration of finasteride 2 mg/kg/day (the systemic exposure (AUC) of monkeys was slightly higher (3x) than that of men who have taken 5 mg finasteride, or approximately 1 to 2 million times the estimated amount of finasteride in semen) to pregnant monkeys resulted in external genital abnormalities in male foetuses. No other abnormalities were observed in male foetuses and no finasteride-related abnormalities were observed in female foetuses at any dose.

6. Pharmaceutical particulars

6.1 List of Excipients

Lactose Monohydrate BP (200#), Microcrystalline Cellulose BP (PH 102), Pregelatinized starch (Starch 1500) BP, Sodium Starch Glycolate BP (Type A), Lauryl Macrogol glyceride BP, and Magnesium Stearate BP

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 Years

6.4 Special precautions for storage

Store below 30°C in the original package in order to protect from moisture.

6.5 Nature and Contents of Container

Printed Aluminum Foil/Clear PVC Foil

2 x 14 Tablets

6.6 Special precautions for disposal and other handling

No Special Requirements

7. Marketing Authorization Holder

ESTRO IMPORT & EXPORT PLC

C/O Ozone Pharmacy,

Girum Hospital Road,

Near Medianialme School,

Gulale Sub City,

P.O.BOX 160412.

Addis Ababa, Ethiopia.

8. Marketing authorization number(s)

09405/10366/NMR/2022

9. Date of first authorization/renewal of the authorization

Jan 7, 2024

10. Date of revision of the text

23/06/2022