

Summary of Product Characteristics for Pharmaceutical Products

1. Name of the medicinal product:

Proviron 25mg Tablet

2. Qualitative and quantitative composition

Each tablet contains 25 mg mesterolone.

Excipient with known effect:

Each tablet contains 60.050 mg of lactose monohydrate.

For the full list of excipients, see section 6.1.

3. Pharmaceutical form

Tablet

4. Clinical particulars

4.1 Therapeutic indications

R Disturbances due to androgen deficiency.

R Disturbances due to androgen deficiency, such as easy fatigability, lack of concentration, gradual retreat of memory and concentration ability, disturbances of libido and potency, irritability, disturbances of sleep, depressive mental states, general vegetative disturbances that can be eliminated or improved taking Proviron tablets.

R Potency disturbances attributable to androgen deficiency are treated with Proviron. If other factors are the sole cause or if they contribute to the disturbances, Proviron may be prescribed as an additional medicine.

R Hypogonadism

R Growth, progression and function of androgen-dependent target organs are stimulated by Proviron, as well as the development of secondary male sexual characteristics in cases of prepuberal androgen-deficiency.

R Proviron eliminates deficiency symptoms in cases where a loss of gonadal function has occurred after puberty.

R Infertility

Oligozoospermia and insufficient Leydig-cell secretion may be the cause of infertility. Proviron increases the sperm count and improves its quality by increasing and normalizing the fructose concentration of the ejaculate, thus increasing the chances of procreation.

4.2 Posology and method of administration

The tablets are swallowed whole with some liquid. The following dosages are recommended: R Disturbances due to androgen deficiency
1 Proviron tablet 3 times per day.

After satisfactory clinical improvement is achieved, a dose reduction can be attempted.

Maintenance: 1 Proviron tablet twice or once per day.

Depending on the type and severity of the disturbances or symptoms, the maintenance dose should be adjusted to individual needs for the continuation of the treatment.

Continuous treatment over a period of several months is recommended.

R Hypogonadism requires continuous treatment:

Start: For the stimulation of the development of secondary male sexual characteristics, 1 - 2 tablets of Proviron must be administered 3 times per day for several months.

Maintenance: 1 tablet of Proviron 2- 3 times per day could be sufficient as a maintenance dose.

R Infertility - for the improvement of sperm quantity and quality

1 tablet of Proviron 2 - 3 times per day for a cycle of spermatogenesis completed, i.e. for approximately 90 days. If necessary, treatment is to be repeated after an interval of several weeks.

To achieve a higher fructose concentration in the ejaculate in cases of Leydig-cell insufficiency after puberty, 1 tablet of Proviron twice per day over several months

4.3 Contraindications

- R Prostate cancer
- R Previous or existing liver tumours.
- R Hypersensitivity to the active substance or any of the other excipients mentioned in section 6.1

4.4 Special warnings and precautions for use

Proviron is for use in male patients only. Drug abuse and dependency: Mesterolone has been abused, typically in combination with other anabolic-androgenic steroids. Abuse of mesterolone and other anabolic-androgenic steroids carries serious health risks (e.g. cardiovascular events with a fatal outcome in some cases, hepatic and/or psychiatric events and dependency), therefore it must be discouraged.

Proviron must be used exclusively in male patients.

If in isolated cases, frequent or very prolonged erections are observed, the dose should be reduced, or treatment suspended to avoid damage to the penis.

Regular examinations of the prostate should be carried out as precaution measures.

In rare cases, benign and, in even rarer cases, malignant liver tumours leading in isolated cases to life- threatening intraabdominal haemorrhage have been observed after the use of hormonal substances such as the one contained in Proviron. If severe abdominal pain, hepatomegaly or signs of intra-abdominal haemorrhage occur, then a liver tumour should be included in the differential-diagnostic considerations.

Proviron contains lactose

Patients with rare genetic conditions such as galactose intolerance, total lactase deficiency or glucose- galactose malabsorption must not use this medication.

4.5 Interaction with other medicinal products and other forms of interaction

No studies have been conducted on pharmacokinetic interactions with mesterolone.

4.6 Pregnancy and Lactation

Proviron is not indicated in women.

At the recommended therapeutic dose, Proviron will not damage spermatogenesis.

With Proviron, sperm count and quality, as well as the concentration of fructose in the ejaculation, can be improved or normalized, thus increasing the reproduction hypothesis (also see section 4.1).

4.7 Effects on ability to drive and use machines

No effects were observed on the ability to drive and use machines.

4.8 Undesirable effects

The table below includes adverse reactions from spontaneous reporting and scientific literature, the frequency of which cannot be estimated from the available data.

System organ class	Unknown
Gastrointestinal disorders	Abdominal pain
Skin and subcutaneous tissue disorders	Acne Alopecia
Nervous system disorders	Headache
Reproductive system and breast disorders	Increased erection* Priapism

* increased number of erections Reporting of suspected adverse reactions

It is important to report suspected adverse reactions in the post-marketing phase as it enables the risk/benefit ratio of the medicine to be continuously monitored.

Reporting of suspected adverse reactions: Healthcare professionals are asked to report any suspected adverse reactions via pharmacy and poisons board, Pharmacovigilance Electronic Reporting System (PvERS) <https://pv.pharmacyboardkenya.org>

4.9 Overdose

Acute toxicity studies using single administration showed that Proviron is to be classified as non-toxic. Equally, no risk of toxicity is to be expected even after inadvertent single administration of a multiple of the dose required for therapy.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: 8.5.2 Androgens and anabolics, ATC code:

G03BB01.

Proviron balances a deficiency of androgen formation which begins to fall gradually with increasing age. Therefore, Proviron is suitable for the treatment of all conditions caused by deficient endogenous androgen formation. In the recommended therapeutic dosage, Proviron will not impair spermatogenesis. Proviron is well tolerated by the liver.

5.2 Pharmacokinetic properties

Absorption

Following oral ingestion, mesterolone is rapidly and almost completely absorbed in a dose range of 10 - 100 mg. The intake of Proviron 25 mg generates maximum serum drug levels of

3.1 ± 1.1 ng/ml after 1.6 ± 0.2 hours. Absolute bioavailability of mesterolone was determined in approximately 3 % of oral dose.

Distribution

Mesterolone is bound to serum proteins by 98 %. Binding to albumin accounts for 40 % and binding to SHBG (sex hormone binding globulin) to 58 %.

Biotransformation

Mesterolone is rapidly inactivated by metabolism. The metabolic clearance rate from serum is

4.4 ± 1.6 ml/min-1/kg-1. There is no renal excretion of unchanged drug. The main metabolite has been identified as 1 α -methyl-androsterone, which in conjugated form accounts for 55 - 70 % of renally excreted metabolites. The ratio of main metabolite (glucuronide conjugate) to sulphate conjugate was about 12:1.

As a further metabolite 1 α -methyl-5 α -androstane-3 α ,17 β -diol, has been recognized, which accounted for about 3 % of renally eliminated metabolites.

No metabolic conversion into oestrogens or corticoids has been observed.

Elimination

The serum levels of mesterolone decrease with a terminal half- life of 12-13 hours. In form of metabolites, mesterolone is excreted by approximately 80 % of dose with the urine and by approximately 13 % of dose with the faeces. Within 7 days, 93 % of dose was excreted, half of which in urine within 24 hours.

Linearity/non-linearity

The daily intake of Proviron 25 mg leads to approximately 30 % increase of the mesterolone serum concentration.

5.3 Preclinical safety data

Repeated-dose toxicity

Based on conventional repeated-dose toxicity studies, non-clinical data do not show any specific danger to humans in necessary treatment doses.

Genotoxicity and carcinogenicity

No trials have been conducted on the mutagenic or carcinogenic effect of mesterolone. A toxicity assessment based on the structure did not show any evidence on a mutagenic potential.

The results of repeated-dose toxicity studies with systemic administration in rats and in dogs for a 6-and 12-month period did not indicate a drug-related tumorigenic effect. However, it has to be taken into account that sex steroids can stimulate the growth of certain hormone-dependent tissues and tumours.

Toxicity in reproduction

There have been no investigations for embryotoxic effects of mesterolone, since this medicinal product is intended for therapeutic use only by male patients.

Fertility studies with mesterolone have not been conducted in order to elucidate its harmful effect on the sperm. Based on long-term studies of systemic tolerability, the results obtained do not indicate a toxic effect on sperm cells, but a central moderate inhibition of spermatogenesis. Although this is known from experiments in animals, this effect has not been observed in humans, even after many years of use of the proposed therapeutic dosage.

6. Pharmaceutical Particulars

6.1 List of Excipients

Lactose mono-hydrate
Maize starch
Povidone 25 000
Methyl parahydroxybenzoate
Propyl parahydroxybenzoate
Magnesium stearate

6.2 Incompatibilities

None so far known

6.3 Shelf-Life

5 Years.

6.4 Special Precautions for storage

Store below 30°C
Protect from heat, light and moisture
Keep out of reach of children
Only on prescription.

6.5 Nature and Content of container

Blister of polyvinyl chloride and aluminium, heat-sealed. Presentations:
1x20 tablets

6.6 Special precautions for disposal and other handling

None

7. Marketing Authorization Holder

Bayer Weimar GmbH und Co. KG
Döbereinerstrasse 20
99427 Weimar
Germany.

8. Marketing Authorization Number

1949

9. Date of first authorization/renewal of the authorization

31/08/2020

10. Date of revision of the text

12/08/2026