

# NEW ZEALAND DATA SHEET

## **ANDRIOL TESTOCAPS**

testosterone undecanoate 40mg testocaps

### **Presentation**

40mg capsules: soft, oval (No. 6), glossy capsule, transparent, orange in colour, with a yellow, oily fill, coded DV/3 in white. Each capsule contains 40mg testosterone undecanoate dissolved in a mixture of castor oil and propylene glycol laurate.

### **Uses**

#### **Actions**

Testosterone is the principal endogenous hormone essential for normal growth and development of the male sex organs and male secondary sex characteristics. During adult life testosterone is essential for the functioning of the testes and accessory structures, and for the maintenance of libido, sense of well-being, erectile potency, prostate and seminal vesicle function.

Treatment of hypogonadal men with ANDRIOL TESTOCAPS results in a clinically significant rise of plasma concentrations of testosterone, dihydrotestosterone and androstenedione, as well as a decrease of SHBG (sex hormone binding globulin). In males with primary (hypergonadotropic) hypogonadism treatment with ANDRIOL TESTOCAPS results in a normalization of gonadotropin levels.

#### **Pharmacokinetics**

##### **Absorption:**

Following oral administration of ANDRIOL TESTOCAPS, an important part of the active substance testosterone undecanoate is co-absorbed with the lipophilic solvent from the intestine into the lymphatic system, thus partially circumventing the first-pass inactivation by the liver.

Andriol Testocaps must be taken with a normal meal or breakfast to ensure absorption. The bioavailability is about 7%.

##### **Distribution:**

From the lymphatic system testosterone undecanoate is released into the plasma.

Single administration of 80-160mg ANDRIOL TESTOCAPS leads to a clinically significant increase of total plasma testosterone with peak-levels of approximately 40 nmol/L ( $C_{max}$ ) reached approximately 4-5 hours after administration ( $t_{max}$ ). Plasma testosterone levels remain elevated for at least 8 hours. Testosterone and testosterone undecanoate display a high (over 97%) non specific binding to plasma protein and sex hormone binding globulin in in vitro test.

##### **Biotransformation:**

In plasma and tissues testosterone undecanoate is hydrolyzed to yield the natural male androgen testosterone. Testosterone is further metabolized to dihydrotestosterone and estradiol.

##### **Elimination:**

Testosterone, estradiol and dihydrotestosterone are metabolised via the normal pathways. Excretion mainly takes place via the urine as conjugates of etiocholanolone and androsterone.

##### **Linearity:**

Dose-linearity has been demonstrated for a dose range of 40-240 mg/day.

### **Indications**

#### **In the male**

Testosterone replacement therapy for primary or secondary hypogonadal disorders, for example:

- after castration
- eunuchoidism
- hypopituitarism
- endocrine impotence

- male climacteric symptoms such as decreased libido and decreased feeling of general well-being and fitness
  - certain types of infertility due to spermatogenesis disorders.
- Moreover, in men testosterone therapy may be indicated in osteoporosis due to androgen deficiency.

### **Dosage And Administration**

#### **Dosage**

In general, dosage should be adjusted according to the response of the individual patient. Usually, an initial dosage of 120-160mg daily for 2-3 weeks is adequate, followed by a maintenance dosage of 40-120mg daily.

#### **Administration**

ANDRIOL TESTOCAPS must be taken with a meal, with some fluid and swallowed whole without chewing. It is preferable that half of the daily dose be taken in the morning and the other half in the evening. If an uneven number of capsules is to be taken, the larger dose should be taken in the morning.

#### **Contraindications**

- Known or suspected prostatic carcinoma or breast carcinoma in the male
- Pregnancy
- Breast-feeding
- Hypersensitivity to the active substance or to any of the excipients.

#### **Warnings And Precautions**

Physicians should consider subjects receiving Andriol Testocaps for monitoring before the start of treatment, at quarterly intervals for the first 12 months and yearly thereafter for the following parameters:

- Digital rectal examination (DRE) of the prostate and PSA,
- Hematocrit and haemoglobin to exclude polycythemia.

Patients with latent or overt cardiac failure, renal dysfunction, hypertension, epilepsy or migraine (or a history of these conditions) should be kept under close medical supervision, since aggravation or recurrence may occasionally be induced.

Androgens should be used with caution in (pre)pubertal boys to avoid premature epiphyseal closure or precocious sexual development. Skeletal maturation should be monitored regularly.

The use of steroids may influence the results of certain laboratory tests.

Androgens should be used with caution in men suffering from benign prostatic hypertrophy.

If androgen-associated adverse reactions occur, treatment with ANDRIOL TESTOCAPS should be interrupted and, after disappearance of the symptoms, be resumed at a lower dosage.

Andriol Testocaps contains Sunset Yellow (E110, FD&C Yellow No. 6) which may cause allergic reactions.

#### **Pregnancy and lactation**

ANDRIOL TESTOCAPS are contraindicated in pregnancy and lactation.

#### **Effects on ability to drive and use machines**

As far as is known ANDRIOL TESTOCAPS have no adverse effect on alertness and concentration.

### **Adverse Effects**

The following adverse reactions have been associated with androgen therapy in general:

| <b>System Organ Class</b>  | <b>MedDRA term*</b>  |
|--|--|
| Neoplasms benign, malignant and unspecified (incl. cysts and polyps) | Prostatic cancer <sup>1</sup>  |
| Blood and lymphatic system disorders                                 | Polycythaemia  |
| Metabolism and nutrition disorders                                   | Fluid retention  |
| Psychiatric disorders  | Depression, nervousness, mood disturbances, libido increased, libido decreased |
| Musculoskeletal and connective tissue disorders                      | Myalgia  |
| Vascular disorders   | Hypertension   |
| Gastrointestinal disorders   | Nausea   |
| Skin and subcutaneous tissue disorders                               | Pruritus, acne   |
| Reproductive system and breast disorders                             | Gynaecomastia, oligozoospermia, priapism, prostatic disorder <sup>2</sup>      |
| Investigations   | Hepatic function test abnormal, lipids abnormal <sup>3</sup> , PSA increased   |

\* MedDRA version 7.1

<sup>1</sup> Progression of a sub-clinical prostatic cancer

<sup>2</sup> Prostatic growth (to normogonadal size)

<sup>3</sup> Decrease in serum LDL-C, HDL-C and triglycerides

In a few patients diarrhea and abdominal pain or discomfort have been reported during use of ANDRIOL TESTOCAPS.

### **Interactions**

Enzyme-inducing agents may exert increasing or decreasing effects on the testosterone levels. Therefore adjustment of dose for ANDRIOL TESTOCAPS may be required.

Androgens may improve glucose tolerance and decrease the need for insulin or other anti-diabetic medicines.

Androgens may enhance the anticoagulant action of coumarine type agents allowing a reduction of the dose of these agents.

ANDRIOL TESTOCAPS must be taken with a meal to establish appropriate plasma testosterone levels.

### **Overdosage**

The acute oral toxicity of testosterone undecanoate is low. High dosages of ANDRIOL TESTOCAPS may cause gastrointestinal complaints due to the oily solvent contained in the capsule. Treatment consists of supportive measures.

**Pharmaceutical Precautions**

Shelf-life 36 months at Store below 30°C; do not refrigerate or freeze.  
Keep blister in outer carton in order to protect from light.

**Medicine Classification**

Prescription Medicine.

**Package Quantities**

A box of ANDRIOL TESTOCAPS contains either 3, 6 or 12 sachets, each containing a blister with 10 capsules.

**Further Information****Preclinical safety data**

Preclinical data reveal no hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential and toxicity to reproduction.

**List of excipients**

Each capsule contains about 293mg of a mixture of castor oil and propylene glycol laurate (E477).  
Capsule shell ingredients are glycerin, Sunset Yellow (E110, FD&C Yellow No. 6) and gelatin.

**Instructions for use, handling and disposal**

Any unused product or waste material should be disposed of in accordance with local requirements.

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