

MAGNUS PHARMACEUTICALS

# Oxymetholone

Oxymetholone 50mg

# Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

#### About

Oxymetholone is a potent oral anabolic steroid derived from dihydrotestosterone. More specifically, it is a close cousin of methyldihydrotestosterone (mestanolone), differing only by the addition of a 2-hydroxymethylene group. This creates a steroid with considerably different activity than mestanolone, however, such that it is very difficult to draw comparisons between the two. For starters, oxymetholone is a very potent anabolic hormone. Dihydrotestosterone and mestanolone are both very weak in this regard, owing to the fact that these molecules are not very stable in the high enzyme (3-alpha hydroxysteroid dehydrogenase) environment of muscle tissue. Oxymetholone remains highly active here instead, as is reported in standard animal assay tests demonstrating a significantly higher anabolic activity than testosterone or methyltestosterone. Such assays suggest the androgenicity of oxymetholone is also very low (1/4th to 1/7th its anabolic activity), although real world results in humans suggest it is decidedly higher than that.

Oxymetholone is considered by many to be the most powerful steroid commercially available. A steroid novice experimenting with this agent is likely to gain 20 to 30 pounds of massive bulk, and it can often be accomplished within 6 weeks of use. This steroid produces a lot of water retention, so a good portion of this gain is going to be water weight. This is often of little consequence to the user, who may be feeling very big and strong while taking oxymetholone. Although the smooth look that results from water retention is often not attractive, it can aid quite a bit to the level of size and strength gained. The muscle is fuller, will contract better, and is provided a level of protection in the form of extra water held into and around connective tissues. This will allow for more elasticity, and will hopefully decrease the chance for injury when lifting heavy. It should be noted, however, that a very rapid gain in mass might also place too much stress on your connective tissues. The tearing of pectoral and biceps tissue is commonly associated with heavy lifting while massing up on steroids, and oxymetholone is a common offender. There can be such a thing as gaining too fast.

#### **Side Effects (Estrogenic)**

Oxymetholone is a highly estrogenic steroid. Gynecomastia is often a concern during treatment, and may present itself quite early into a cycle (particularly when higher doses are used). At the same time water retention can become a problem, causing a notable loss of muscle definition as both subcutaneous water retention and fat levels build. To avoid strong estrogenic side effects, it may be necessary to use an anti-estrogen such as Nolvadex and Arimidex will, likewise, not effect the relative estrogenicity of this steroid. Some have suggested that the high level of estrogenic activity in estrogenic is actually due to the drug acting as a progestin, similar to nandrolone. The side effects of both estrogens and progestins can be very similar, which might have made this explanation a plausible one. There was a medical study examining the progestational activity of oxymetholone, however, and it determined that there was no such activity present. With such



findings, it seems most plausible that oxymetholone can activate the estrogen receptor, similar to, but more profoundly than, the estrogenic androgen methandriol.

#### Side Effects (Androgenic)

Although oxymetholone is classified as an anabolic steroid, androgenic side effects are still possible with this substance. These may include bouts of oily skin, acne, and body/facial hair growth. Higher doses are more likely to cause such side effects. Anabolic/androgenic steroids may also aggravate male pattern hair loss. Women are additionally warned of the potential virilizing effects of anabolic/androgenic steroids. These may include a deepening of the voice, menstrual irregularities, changes in skin texture, facial hair growth, and clitoral enlargement. While Anadrol is classified as an anabolic steroid, it does retain a notable androgenic component.

It is interesting to note that oxymetholone does exhibit some tendency to convert to dihydrotestosterone in the body, although this does not occur via the 5-alpha reductase enzyme. Oxymetholone is already a dihydrotestosterone-based steroid, so no such alteration can take place. Aside from the added c-17 alpha alkylation (discussed below), oxymetholone differs from DHT only by the addition of a 2-hydroxymethylene group. This grouping can be removed metabolically, reducing oxymetholone to the potent androgen 17alpha-methyl dihydrotestosterone (mestanolone). There is little doubt that this biotransformation contributes at least on some level to the androgenic nature of this steroid. Note that since 5-alpha reductase is not involved, the relative androgenicity of oxymetholone is not affected by the concurrent use of finasteride.

### Side Effects (Hepatotoxicity)

Oxymetholone is a c17-alpha alkylated compound. This alteration protects the drug from deactivation by the liver, allowing a very high percentage of the drug entry into the bloodstream following oral administration. C17-alpha alkylated anabolic/androgenic steroids can be hepatotoxic. Prolonged or high exposure may result in liver damage. In rare instances life-threatening dysfunction may develop. It is advisable to visit a physician periodically during each cycle to monitor liver function and overall health. Intake of c17-alpha alkylated steroids is commonly limited to 6-8 weeks, in an effort to avoid escalating liver strain.

Oxymetholone has a saturated A-ring, which slightly reduces its relative hepatotoxicity.388 Still, this agent, particularly at the doses commonly used, can present substantial hepatotoxicity to the user. Studies administering 50 mg or 100 mg daily to 31 elderly men for 12 weeks produced significant increases in liver enzymes (transaminases AST and ALT) only in patients taking 100 mg. A second study administering 50 mg daily to 30 patients for up to and exceeding one year (in some patients) has demonstrated elevations in yglutamyltransferase (GGT) in 17% of patients, significant increases in bilirubin in 10%, andserum albumin increases in 20%.389 One patient developed a liver tumor that could have been peliosis hepatitis, a life-threatening adverse event characterized by blood filled cysts in the liver. A small number of other cases of peliosis hepatitis have been linked to oxymetholone, suggesting the potential for hepatotoxicity should still be carefully considered before use.

The use of a liver detoxification supplement such as Liver Stabil, Liv-52, or Essentiale Forte is advised while taking any hepatotoxic anabolic/androgenic steroids.

#### Side Effects (Cardiovascular)

Anabolic/androgenic steroids can have deleterious effects on serum cholesterol. This includes a tendency to reduce HDL (good) cholesterol values and increase LDL (bad) cholesterol values, which may shift the HDL to LDL balance in a direction that favors greater risk of arteriosclerosis. The relative impact of an anabolic/androgenic steroid on serum lipids is dependant on the dose, route of administration (oral vs. injectable), type of steroid (aromatizable or non-aromatizable), and level of resistance to hepatic metabolism. Anabolic/androgenic steroids may also adversely affect blood pressure and triglycerides, reduce endothelial relaxation, and support left ventricular hypertrophy, all potentially increasing the risk of cardiovascular disease and myocardial infarction.

Oxymetholone has a strong effect on the hepatic management of cholesterol due to its structural resistance to liver breakdown and route of administration. Studies administering 50 mg or 100 mg daily to a group of elderly men for 12 weeks have demonstrated insignificant increases in LDL cholesterol, accompanied by very significant (dramatic) suppressions of HDL cholesterol (reduced 19 and 23 points in the 50 mg and 100 mg groups, respectively). The use of oxymetholone should be undertaken only after careful consideration in people with high cholesterol or a familial history of heart disease.

To help reduce cardiovascular strain it is advised to maintain an active cardiovascular exercise program and minimize the intake of saturated fats, cholesterol, and simple carbohydrates at all times during active AAS administration. Supplementing with fish oils (4 grams per day) and a natural cholesterol/antioxidant formula such as Lipid Stabil or a product with comparable ingredients is also recommended.

#### Side Effects (Testosterone Suppression)

All anabolic/androgenic steroids when taken in doses sufficient to promote muscle gain are expected to suppress endogenous testosterone production. Without the intervention of testosterone stimulating substances, testosterone levels should return to normal within 1-4 months of drug secession. Note that prolonged hypogonadotrophic hypogonadism can develop secondary to steroid abuse, necessitating medical intervention.

Note that when discontinuing oxymetholone, the crash can be as equally powerful as the oncycle results. To begin with, the level of water retention will quickly diminish, dropping the user's body weight dramatically. This should be expected, and not of much concern. What is usually of most concern is restoring endogenous testosterone production with a proper PCT program (see: Post Cycle Therapy in this book). Before going off, some alternately choose to first switch over to a milder injectable like Deca-Durabolin for several weeks. This is in an effort to "harden up the new mass," and can prove to be an effective practice, at least from a mental standpoint. A drop of weight is likely when making the switch, although the end result is still often viewed as allowing the retention of more (quality) muscle mass. It is sort of stepping down, first off the water retention, and weeks later finally off the hormones. Remember ancillaries though, as testosterone production will not be rebounding during Deca therapy.

#### **Administration (General)**

Studies have shown that taking an oral anabolic steroid with food may decrease its bioavailability. This is caused by the fat-soluble nature of steroid hormones, which can allow some of the drug to dissolve with undigested dietary fat, reducing its absorption from the gastrointestinal tract. For maximum utilization, this steroid should be taken on an empty stomach.

## Administration (Men)

Early prescribing guidelines for oxymetholone recommended a dosage of 2.5 mg three times per day to reverse the wasting process and provide lean body mass gain. Doses as high as 30 mg were employed in some cases. Current prescribing guidelines recommend a dosage of 1-5 mg per kilogram of bodyweight per day for treating anemia, although indicate that a dose of 1-2 mg/kg is typically sufficient. A 175-pound person would take approximately 150 mg per day at the 2 mg/kg dosage level. In some other countries, it is recommended to limit the dosing of oxymetholone to 100 mg per day. Therapy is usually given for a minimum of three to six months.

When used for physique- or performance-enhancing purposes, an effective oral daily dosage would fall in the range of 25-150 mg, taken in cycles lasting no more than 6-8 weeks to minimize hepatotoxicity. This level is sufficient for dramatic increases in muscle mass and strength. Higher doses are rarely administered due to the strong estrogenic nature of the drug, as well as the high potential for hepatotoxicity. When used for physique- or performance-enhancing purposes, an effective oral daily dosage would fall in the range of 25-150 mg, taken in cycles lasting no more than 6-8 weeks to minimize hepatotoxicity. This 25-150 mg, taken in cycles lasting no more than 6-8 weeks to minimize hepatotoxicity. This level is sufficient for dramatic increases in muscle



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#### **Administration (Women)**

Prescribing information for oxymetholone in the U.S. makes no distinction with the dose for females. Oxymetholone is generally not recommended for women for physique- or performance enhancing purposes due to its very strong nature and tendency to produce virilizing side effects.