

MAGNUS PHARMACEUTICALS

Tamoxifen

Tamoxifen Citrate 10mg

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

Tamoxifen citrate is a non-steroidal anti-estrogenic drug, used widely in clinical medicine. It is specifically a Selective Estrogen-Receptor Modulator (SERM) of the triphenylethylene family, and possesses both estrogen agonist and antagonist properties. As such, it may act as an estrogen in some tissues while blocking the action of estrogen in others. In breast tissue tamoxifen citrate is a strong anti-estrogen, and as a result it is commonly used in the treatment of hormone-responsive breast cancer in women. In some cases it is even utilized as a preventative measure, taken by women with an extremely high familial tendency for breast cancer. In male bodybuilders and athletes, tamoxifen citrate is commonly used (off-label) to counter the side effects caused by elevated estrogens subsequent to the use of certain anabolic/androgenic steroids.

The primary worry among the athletic/bodybuilding population is gynecomastia, or the very unsightly development of female breast tissue in men. This can be first noticed by the appearance of swelling or a small lump under the nipple. If left to progress, this can develop into a large hard-tissue gynecomastia that may be an irreversible occurrence without surgery. The estrogen can also lead to an increase in the level of water retained in the body, resulting in a notable loss of definition as the muscles begin to look smooth (even bloated) due to the retention of subcutaneous fluid. Fat storage may also be increased as estrogen levels rise in men. In fact, differences in the estrogen/androgen ratio are one of the reasons women have a higher body fat percentage, and different fat distribution (hips/thighs), than men.

Tamoxifen citrate also possesses the ability to increase production of FSH (follicle stimulating hormone) and LH (luteinizing hormone). This is accomplished by blocking negative feedback inhibition caused by estrogen at the hypothalamus, which (via the actions of GnRH) fosters the release of the mentioned pituitary hormones. This is very similar to the function ofClomid and cyclofenil, tamoxifen citrate can have a positive impact on one's serum testosterone level. This "testosterone stimulating" effect is an added benefit when preparing to conclude a steroid cycle. Since anabolic/androgenic steroids tend to suppress endogenous testosterone production, tamoxifen citrate can help restore a balance in hormone levels. It is most commonly used as part of a comprehensive post cycle recovery program (see Post-Cycle Recovery).

Note that like some other triphenylethylene compounds, tamoxifen citrate can act as an estrogen in the liver . Estrogenic action in the liver is important in the regulation of serum cholesterol, and tends to support HDL (good) cholesterol synthesis and LDL (bad) cholesterol reductions. Since steroid-using bodybuilders are already dealing with the negative cardiovascular effects of these drugs, compounding the issue with aromatase inhibitors (which will lower total serum estrogen levels) may not always be the best option. Using a drug that blocks gynecomastia, for example, while at the same time supporting improved cholesterol values, might be much more ideal. It is important to note that tamoxifen citrate is not sufficient to stabilize serum cholesterol at healthy levels with the use of c-17alpha alkylated orals or high doses of steroids in general. The effect it



would have on cholesterol values would likely be one of degrees, and cannot be relied upon to eliminate cardiovascular disease risk from anabolic/androgenic steroid use. interrupted.

Side effects

Common side effects associated with the administration of tamoxifen citrate include hot flashes, vaginal bleeding, vaginal discharge, vaginal itching, upset stomach, headache, lightheadedness, edema, and hair loss. Other listed adverse reactions include skin rash, reduced platelet or white blood cell count, visual disturbances, uterine fibroids, endometriosis and other endometrial changes, deep vein thrombosis and pulmonary embolism, changes in liver enzyme levels, and increased triglyceride levels. An increased incidence of endometrial cancer and uterine sarcoma has been reported in association with tamoxifen citrate. Tamoxifen citrate may cause birth defects and should not be taken during pregnancy.

Administration

Tamoxifen citrate is indicated for:

- the treatment of metastatic breast cancer in women and men
- · adjuvant treatment of node-negative breast cancer following breast surgery and radiation
- adjuvant treatment of node-positive breast cancer in postmenopausal women following breast
- surgery and radiation
- reduction in incidence of contralateral breast cancer (in the other breast) in the adjuvant setting
- · reduction in incidence of invasive breast cancer in women with DCIS (Ductal Carcinoma in Situ)
- following breast surgery and radiation
- · reduction in incidence of breast cancer in women at high risk for breast cancer

In women and men with metastatic breast cancer, a dose of 10-20 mg is administered twice a day (morning and evening). When used by men (off-label) to mitigate the estrogenic effects of anabolic/androgenic steroid use, a daily dosage of 10-30 mg (1-3 tablets) is usually administered while any offending steroids are taken, or as part of a comprehensive post-cycle hormone recovery program.

It is important to note that anti-estrogen use may slightly reduce gains made during a steroid cycle, as many androgenic/anabolic steroids seem to exhibit their most powerful anabolic effects when accompanied by a sufficient level of estrogen (See Estrogen Aromatization). This may be one reason why gains made with a strong aromatizable androgen like testosterone are usually more pronounced than those achieved with anabolic steroids that aromatizes to a lower (or no) degree. Therefore, it is usually advised to identify a specific need for tamoxifen citrate before committing to its use during a cycle. Many people, in fact, find the use of an anti-estrogen unnecessary, even when utilizing problematic compounds such as testosterone or methandrostenolone. Others, however, find they are troubled by water retention and gynecomastia even with milder (less estrogenic) drugs like Deca-Durabolin and Equipoise. The estrogenic response to steroid use is very individual, and may be influenced by factors such as age and body fat percentage (adipose tissue is a primary site of aromatization).