

# Anti Estrogens

**Anti Estrogens** are drugs that are actively used in bodybuilding on the course of anabolic steroids and in the context of restorative post-course therapy. All antiestrogens can be divided into two groups. **Aromatase inhibitors** (lethroza, anastrozole) are used simultaneously with anabolic steroids, that is, on the course. **Estrogen receptor blockers** (clomid, phareston, tamoxifen) are included in post-course therapy regimens. Provorone is a separate category. It refers to androgen hormones, but does not affect the growth of muscle mass, but prevents the conversion of estradiol or estradiol to other AAS.

## Bodybuilding and anti-estrogens: why take?

During anabolic courses, the level of testosterone or its synthetic derivatives increases in the athlete's blood. This leads to an overload of the usual metabolic pathways of sex hormones, and their excess begins to turn into estrogens under the action of the aromatase enzyme. Men even a slight increase in the level of estrogen threatens the development of side effects, among which the most significant are gynecomastia, oppression of the genital arc and edema.

On the course in powerlifting and bodybuilding, anti-estrogens are used to prevent undesirable effects of conversion of steroids to estrogens. This transformation is characteristic of all testosterone esters (enanthate, cypionate, sustanon, etc.), methandrostenolone and methyltestosterone. The minimum conversion is also subjected to boldenone undecylenate. After the course, anti-estrogens are used to restore normal secretion of testosterone, the inhibition of which is inevitable with the constant introduction of high doses of steroid drugs into the body.

## Anti-estrogens on the course

Which antiestrogens on the course are most effective? Beginning "chemists" should remember a simple rule: on the course you can use Proviron and aromatase inhibitors. The blockers of estrogen receptors can not be used simultaneously with anabolic steroids. This is explained by the fact that receptor blockers have a mass of side effects and can inflict more damage to the body than a severe AAS course.

A good choice is proviron (Locolon), which is recommended for the course both by experienced bodybuilders and experts in sports medicine. Proviron (Locolone) is an androgen and does not inhibit the genital arc (testosterone synthesis). The use of proviron leads to an improvement in erectile function. It is advised to include in schemes based on nandrolone or trenbolone to prevent the side effect, which in slang is called "deca dick". This property in combination with a unique feature to inhibit aromatase and suppress the conversion of AAS to estrogens makes proviron very popular in the iron world.

**How to take Proviron on the course?** Take Proviron (Locolone) every day, starting with the second-third week of the course. The optimal dose depends on the severity of the circuit and the AAS selected for it. During light courses, proviron (meteorolone) is taken at a dose of 25 mg / day. In heavy courses, the figure can increase to 75-100 mg. Further increase in dosage is impractical due to an increased risk of side effects of the proviron itself (placeolone).

Of the other antiestrogens, anastrozole can be used on the course. In prophylactic purposes it is taken every other day for 0.5 mg. When there are signs of gynecomastia, the dosage is increased to a therapeutic dose of

1 mg. The disadvantage of anastrozole is a high price and side effects in the form of inhibition of muscle mass, demineralization of bones (increased risk of fractures), depression, and libido decline. Clomid on the course is undesirable - it is usually used after the course.

## Anti estrogens after the course

Estrogen receptor blockers (clomiphene citrate, tamoxifen, toremifene) are a key element of post-course therapy. The main purpose of their application is to restore the work of the sexual arc (hypothalamus - pituitary - testicles), increase the production of their own testosterone, prevent atrophy of the gonads, normalize spermatogenesis.

The drugs **clomid and tamoxifen** are the main anti-estrogens for post-course therapy. They are used in sports medicine for a long time, so that athletes of all levels have accumulated a rich experience in the use of clomid and tamoxifen. Disputes, which of these blockers are more effective, do not subside to this day, but the truth is that both drugs cope with their tasks perfectly well, you only need to follow certain rules.

Clomid buy is recommended to athletes who have built a course on nandrolone, oxymetholone or trenbolone. These steroids possess the properties of progestins, which makes it extremely undesirable to use tamoxifen immediately after the course. Therefore, the drug of choice is clomid.

**The use of clomid:** starting post-course therapy with antiestrogens should be followed by the complete elimination of steroid drugs from the body. In other words, if you are using prolonged-action steroids, PKT should begin in a couple of weeks. If the course is based on "short" drugs, the interval between the last injection and PCT is reduced to 3-4 days.

Clomid after the course should be taken daily for 3 weeks. The optimal dosage is in the range of 25 to 50 mg. After extremely severe courses, the dose of clomid is increased to 150 mg per day, but in this case the PCT regimens should be individually formulated by a sports doctor.

**The use of tamoxifen:** the time of onset of PCT and its duration with the replacement of clomid by tamoxifen does not change, only dosages differ. The optimal dose of tamoxifen is 10-20 mg. After aggressive steroid courses, the dose can be raised to 40 mg, but here, as in the case of clomid, one should consult a doctor and make a decision only after a laboratory analysis of the level of hormones in the blood.

## Conclusion: anti-estrogen therapy

Antiestrogens are an integral part of pharmacological support. If you take steroids or plan to start using them, you will have to buy anti-estrogens. Therefore, study the maximum information not only about AAS, but also about preparations of this category. Give maximum attention to the side effects of antiestrogens, never exceed the dose.

DO NOT try to find the best antiestrogen! All of them are toxic and differ only in the severity of side effects. To relatively "safe" can be attributed proviron, but this characteristic is only valid when using small doses.