



Medications

Medical therapy for hypogonadism (LowT) and male infertility. These are safe and preferred medications used to enhance a few hormones of our endocrine system. The goal is to increase bioavailable testosterone and decrease estradiol. Man Alive and many other hormone replacement clinics use the following off-label medications to achieve homeostasis or reach optimal hormone levels:

- Clomiphene Citrate or Clomid – used for the treatment of Low T, Clomiphene has proven effective to boost one's own testosterone.
- Anastrozole (Arimidex) – estrogen blocker.
- hCG – also proven effective to help boost one's testosterone and aid in weight loss.

Clomiphene and Anastrozole are pills, hCG is used as a self-administered injection. All of these drugs have potential side effects. The following is an explanation of how the medications work and possible side effects. We will go over these in further detail, at the time of consultation.

Clomiphene Citrate (Clomid)

Clomiphene Citrate (Clomid), works by blocking estrogen's effect on the hypothalamus, which in turn allows the pituitary gland to produce more LH and FSH. The result is an increase in testosterone and spermatogenesis (sperm production).

Possible side effects: Include, but are not limited to, pectoral (breast muscle) tenderness, irritability, *possible* ability to accelerate prostate cancer growth if cancer is present, mild acne, and rarely, visual field disturbances caused by pituitary swelling. All of these side effects are reversible if the clomiphene is stopped. Please stop taking clomiphene and notify us immediately if you experience any of these side effects.

Most men notice positive effects from Clomiphene Citrate such as - improved erections, increased sex drive, increased muscle mass, more energy, and weight loss.

hCG

Very few men will not respond to clomiphene citrate, those who do not are usually treated with hCG. While delivered by injection, hCG has a very similar side effect profile to Clomiphene Citrate. hCG works by directly stimulating the testes to make testosterone and improve spermatogenesis. We strive to use hCG as an alternative to Clomiphene, however, as we discuss treatment options, we will pursue the safest and most effective treatment regimen.



Anastrozole (Arimidex)

Anastrozole (Arimidex) is a drug that was originally developed for breast cancer that has become an excellent drug for a specific group of men with hypogonadism (Low T) and male factor infertility. Anastrozole blocks the conversion of testosterone to estradiol or estrogen in the peripheral tissues. Specifically, it blocks the action of an enzyme called aromatase, that converts testosterone to estradiol. If estradiol is up and testosterone down, we may use Anastrozole to decrease estradiol and increase one's own testosterone.

Possible side effects: Although Anastrozole is very well tolerated in men, possible effects include, but are not limited to chest discomfort, difficulty breathing, high blood pressure, etc.

Medication Monitoring

Man Alive advises patients on any of these medications to return after 4-6 weeks initially then every 3-6 months in the first year and annually thereafter to determine if the medications are working properly.

At each of these visits, we check the appropriate blood work to evaluate the efficacy of these medications and make adjustments if indicated.

We look forward to working with you and helping you reach your potential.

Your partner in health – The Man Alive Team DPM