

Ovulation Induction

Letrozole

Letrozole is a class of medications known as *aromatase inhibitors*. It is best known for treating breast cancer, but has been used to enhance ovulation. It works by blocking estrogen production and causing the brain (pituitary gland) to increase its stimulation of ovarian follicles (where the eggs are made). Although these medications are currently FDA approved for postmenopausal breast cancer, two drugs, letrozole (Femara®) and anastrozole (Arimidex®), have been used successfully for ovulation induction. Typically, the pills are prescribed for five days starting on cycle day 3 or 4 or taking the total dose (25 mg) on the start day (cycle day 3 or 4). Studies indicate that pregnancy rates are comparable to clomiphene citrate. **(Some studies reveal that letrozole is better tolerated with fewer side effects and maybe better ovulation rates.)**

Who should use letrozole?

Women who have had a poor response to clomiphene may respond better to letrozole since it doesn't have a thinning effect on the endometrium (uterine lining). Women have responded to Clomid but have not conceived may also benefit. Many physicians recommend using this as the best first-line treatment for ovulation induction.

What are the side effects?

It is generally well tolerated and the main side effects are hot flushes and nausea and leg cramps. Most of these side effects occur in older patients treated for breast cancer. There is no known effect on the fetus should you become pregnant. In 2001, the manufacturer of letrozole recommended against using it for fertility treatment. This was based on one study that was never published. Recent data (2006) has confirmed that letrozole is safe and poses no increase risk for birth defects or congenital abnormalities (i.e., it is as safe as any other ovulation medication.)

Though most patients respond to the medications with only one or two mature follicles, it is possible to overstimulate and conceive multiples (i.e., triplets or more). It is therefore, our practice usually monitors the ovulation closely to prevent over stimulation of the ovaries.