

Easy, cost
effective
ovulation
prediction
for your
patients



Dear Fertility Team,

Through my years of work as an obstetrician, I have learned that the proper and accurate prediction of ovulation can assist a patient in successfully achieving a pregnancy.

An Ovulation Predictor Test, such as the one available from FIRST RESPONSE®, is an easy and cost effective way for the patient to time intercourse. The materials enclosed will help to guide patients in the use of the FIRST RESPONSE® Easy-Read Ovulation Test, particularly when used in conjunction with clomiphene citrate.

I trust that you will find the enclosed materials helpful to your patients. I wish you the best and thank you for your dedication to helping your patients create families.

Best Wishes,

- tray Love Trulin, M.D.

Mary Jane Minkin, MD

## The Infertility Crisis

According to the most recent National Survey on Family Growth, 6.1 million people in the United States are infertile. While this statistic may seem daunting, 85-90% of these problems can be solved with medication or surgery and 25% of infertility can be attributed to ovulation problems alone.

The use of clomiphene citrate has been shown to restore normal ovulation in 60-80% of the women who use it. The correct use of an ovulation predictor kit can assist otherwise normal and healthy women in successfully achieving a pregnancy sooner, either when using clomiphene citrate or when trying to conceive naturally. Please be sure to discuss the use and the timing of the ovulation predictor test with the patient's doctor.

### **Ovulation Anatomy**

As you know, proper ovulation is determined by the correct and timed release of the hormones LH and FSH from the pituitary gland. The release of these hormones must be precise both in timing and amount to lead to the growth of a healthy follicle. Many women have problems with this scheduled release of hormones, often evidenced when a woman presents with an irregular menstrual cycle.

# Ovulation Physiology – A Brief Review

The hypothalamus releases GNRH, which travels to the pituitary and causes the release of FSH and LH. FSH is the hormone that stimulates the ovary to develop a mature

follicle. As the follicle reaches its maximum size, it releases a large amount of estradiol. This hormone stimulates the release of LH from the pituitary, which when it surges, causes the follicle to rupture, freeing the mature egg. Estradiol is also responsible for preparation of the uterus for the arrival of a blastocyst.

A low estradiol level correlates with a follicle of inadequate size, a lack of "sperm friendly" cervical mucus, and a uterine lining too thin to accommodate a growing blastocyst. Normal estradiol levels are in the range of 100 to 300 picograms/mL. Clomiphene citrate can help women with estradiol levels lower than 100 picograms/mL boost the signals from the hypothalamus by blocking the estrogen receptors and causing the release of more GNRH, creating a larger and stronger follicle.

## Role of Clomiphene Citrate

Clomiphene citrate, which is structurally like estrogen, binds to the estrogen receptors in the brain and causes the increased release of GNRH. Just a few days of clomiphene citrate are often enough to allow the rest of the menstrual cycle to proceed normally. However, the timing of ovulation in this new menstrual cycle may be difficult to determine for a woman whose cycle has always been irregular. An ovulation predictor test can be a cost effective and efficient means of pinpointing the LH surge.

#### **Ovulation Predictor Tests**

The FIRST RESPONSE® Easy-Read Ovulation Test is over 98% accurate in laboratory studies and is easy to use. With no messy cups to fill, each kit contains 7 test sticks. A stick is placed in the stream of urine for 5 seconds and reveals a color indicator line to be matched with a reference line. First morning urine or fasting urine is not necessary. The test sticks can be used at any time of day, but fluid intake should be restricted for two hours before testing. It is generally recommended that testing begin 3 days after the patient has stopped taking clomiphene citrate for that cycle. Please be sure to consult with the patient's doctor to ensure that the patient tests for ovulation at the appropriate time.



A toll free number (800-367-6022) has been included in the package insert for any questions that the patients may have.

# Early Result Pregnancy Test

Also available from FIRST RESPONSE® is an at home pregnancy test. This pregnancy test is highly sensitive and can be used up to 5 days sooner than the missed period. FIRST RESPONSE® has 99% accuracy at typical hormone levels. The test is as easy to use and read as the ovulation predictor tests and can be used at any time of day. With the use of the FIRST RESPONSE® Early Result Pregnancy Test, your patient can schedule an appointment with her obstetrician and take all of the proper steps needed to care for her pregnancy that much sooner.

## How to Use this Program

The enclosed patient materials are for the use of the fertility team during initial or ongoing patient consultations. The patient handout contains educational materials for use of an ovulation predictor test when taking clomiphene citrate.

This program is brought to you and your patients by FIRST RESPONSE®, makers of FIRST RESPONSE® Easy-Read Ovulation Test and FIRST RESPONSE® Early Result Pregnancy Test.

### For more materials go to www.ovulationtiming.com

Sources: Published materials from: American Society of Reproductive Medicine; Centers for Disease Control; Food and Drug Administration and The National Infertility Association
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<sup>&</sup>lt;sup>†</sup>2004 *Pharmacy Today* study.