EVERY LITTLE DETAIL MAKES UP A FORMULA YOU CAN RELY ON

Dedicated to the details that matter

MERCK

Contact Information

Fertility Clinic Details:

Fertility Nurse Co-ordinator Name:

Fertility Nurse Co-ordinator Contact Number:

With help and a hopeful heart

AN INTRODUCTION TO YOUR OWN FERTILITY JOURNEY

It may take months and many heartfelt discussions between a couple before deciding to take the next step and go to a fertility clinic. It could feel overwhelming and incredibly stressful.

If you've been trying to have a baby, you were probably surprised that it didn't happen right away; then distressed. You may look around and see nothing but pregnant women and small children, and feel that you are alone in having difficulties. In reality, you have lots of company: one couple in six can't conceive in the first 12 months of trying.*

Take heart. We hope this guide will help you find your way through what can be an emotionally uncertain and frustrating journey. We're with you all the way.

*Source: IAAC. http://www.iaac.ca/content/forty-new-thirty-right.

With healthy living choices

TIPS TO ENSURE YOUR WELL-BEING THROUGHOUT THIS JOURNEY

If you're having difficulty getting pregnant, there's no question that this is a stressful and emotional time. Many people describe the process of fertility treatment as an emotional roller coaster, with wild swings from hope and excitement, to disappointment and despair. It's normal to feel sadness, frustration, worry, a sense of loss, isolation, grief or other strong emotions.

Tips in helping you cope

- Talk it out with your partner. Share your feelings, concerns and fears with your partner. Your partner will find it easier to cope if he or she is not the only outlet for your emotions. After all, your partner has a lot to process too. If you are in a heterosexual relationship, be mindful that most men and women communicate differently. As a result, they also tend to cope differently with conception difficulties*.
  Being aware of these differences can help you avoid misunderstanding and enable you to experience your treatment journey as a team. Even if things don't always go as hoped, you'll know what to do next and find the strength to continue. After all, you both want the same thing!

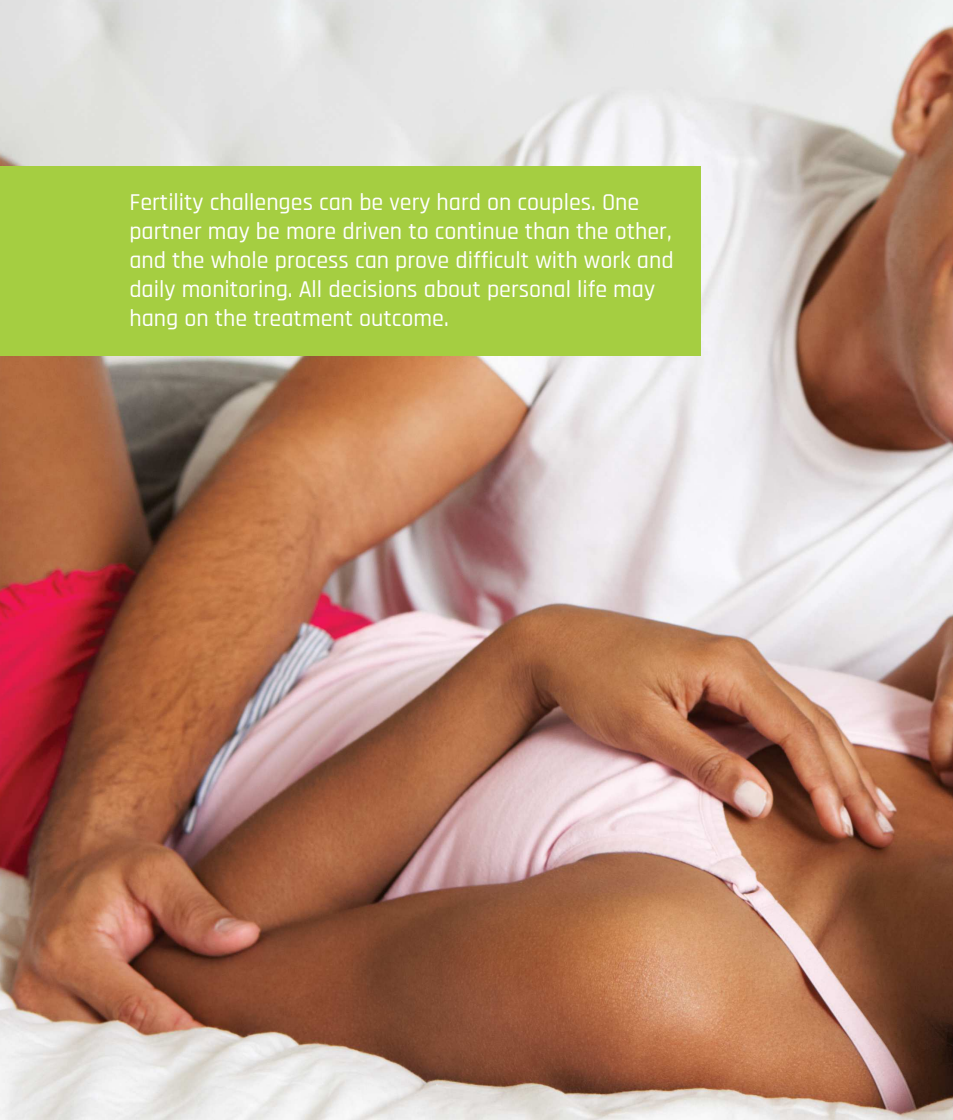
- Kindness. Give yourself and your partner the same kind of loving support and understanding you would offer a close friend. Celebrate your accomplishments and stay positive. Be proud of yourself for having the courage to undertake this journey.

- Counselling. A psychologist, social worker or professional counsellor will help you work through and cope with your fears. Some fertility clinics have their own staff psychologist who deals specifically with issues related to fertility, or will know specialists in yout area.

- Slow down and set priorities. Don't try to be a "superwoman"! Undergoing fertility treatments can be a very demanding process, both physically and emotionally. You may have to make nearly daily trips to the clinic, and complete a variety of bloodwork and tests that go along with this process. On top of that, you likely have a busy work schedule. Ask for help from family, friends and your partner, and eliminate unnecessary or stressful optional activities or appointments.

Please refer to page 8 for more tips on coping with emotions associated with your fertility journey

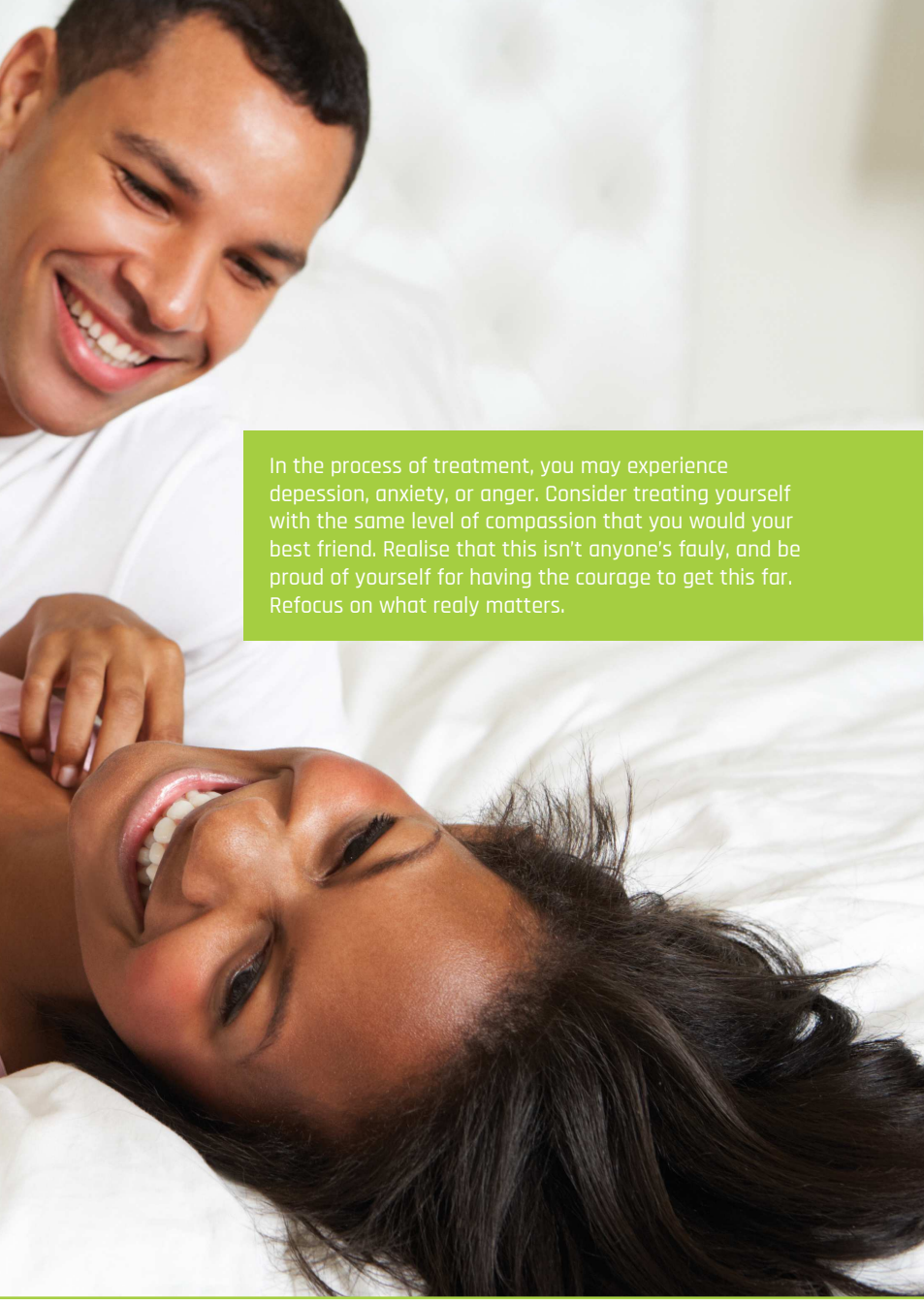
* B. Peterson et al, « Gender differences in how men and women who are referred for IVF cope with infertility stress », Human Reproduction, vol. 21, no 9, September 2006, p. 2443-2449.



Fertility challenges can be very hard on couples. One partner may be more driven to continue than the other, and the whole process can prove difficult with work and daily monitoring. All decisions about personal life may hang on the treatment outcome.

Discovering a fertility problem can be devastating to a woman. Some may read too much into the hormone levels and other statistics. Others will try everything and anything to have a baby.

- Alternative therapy. Acupuncture, massage therapy and meditation may help ease anxiety and stress. Look for acupuncturists or naturopaths who specialize in fertility treatment. But please be aware that the benefit of these interventions towards fertility remains uncertain.



In the process of treatment, you may experience depession, anxiety, or anger. Consider treating yourself with the same level of compassion that you would your best friend. Realise that this isn't anyone's fauly, and be proud of yourself for having the courage to get this far. Refocus on what realy matters.

- Information. Arm yourself with good information, from your doctor, clinic nurse, counsellor or books. Talk to others who have been through fertility treatments, but remember that everyone is unique and your experience may not be the same.






Healthy Living to Prepare for Pregnancy

Your overall health affects your fertility, so now is the time to take extra care of yourself. Both you and your partner should pay special attention to:

- Diet. Being either overweight or underweight may cause extra difficulties conceiving, so work towards a healthy weight. Follow a nutritionally balanced diet and avoid fad diets.

- Supplements. Talk to your doctor about appropriate supplements, such as folic acid, iron, calcium and vitamin D. There are lots of online advertisements for "fertility enhancers" and other alleged "fertility boosters." While some supplements may be helpful or even recommended by your fertility specialist, others can be harmful. Talk to your doctor before you take any supplements, and if possible, bring the supplement bottles to you first appointment.

- Exercise in moderation. Regular physical activity will contribute to your health, mood and stress management. Start slowly, with simple activities such as walking, swimming, stretching or yoga. Light exercise will help relieve stress. Talk to your doctor before you significantly change your physical activity levels.

- Caffeine. Limit the amount of coffee, tea or soft drinks you consume to no more than two cups per day, and consider decaffeinated versions where possible. Caffeine may affect your fertility and may increase the risk of miscarriage.

- Heat. Prolonged use of hot tubs or saunas may decrease sperm quantity and quality.

- Illegal drugs. Drugs such as marijuana, steroids and cocaine may Drugs such as marijuana, steroids and cocaine may increase the risks to your baby, and may lower sperm counts.

- Smoking. Quit smoking if you can. Smoking is strongly associated with the increased risk of miscarriage, or premature birth and low birth weight which may affect the child's health. Smoking may also decrease sperm counts and quality.*

- Alcohol. Avoid alcohol, which can increase the risk of having a baby with birth defects. Some studies also indicate that alcohol may decrease sperm counts or sperm quality.

- Medications. Inform your doctor if you are taking any medications. Some medications, such as those treating ulcers, high blood pressure and depression, can affect a man's sperm count and sex drive. Anesthetics can also damage sperm, so be sure to let the clinic know before the male partner goes in for any surgery.

- Lubricants. If you are undergoing Ovulation Induction, avoid using petroleum jelly, vaginal creams or products containing spermicide for lubrication during intercourse. Ask your nurse or doctor about which lubricants they recommend.

- Environment. Check your possible exposure at work to toxins such as lead, pesticides and chemicals. You may be able to arrange temporary reassignment to avoid risks. If you are unsure, talk to your human resources department or occupational health and safety advisor.

* American Society for Reproductive Medicine (ASRM) « Patient Fact Sheet – Smoking and Infertility » http://www.asrm.org/publications/detail.aspx?id=1494

Building a Support Network that Works for you

Discussing fertility issues can be uncomfortable, and at first, many people choose to keep details of their fertility treatments private. It's reasonable given how stressful and invasive tests can be. You may want to keep matters to yourselves until you know what's going on. But there are many good reasons to also reach out for support.

Use as many sources of support as you feel comfortable with. Each will have something different to offer and you will find what works for you best.

- Your treatment journey can be less stressful. Fertility treatment triggers strong emotions. Hiding your situation may add to the burden. A number of people close to you may be able to provide support. However, these people cannot be supportive if they do not know that there is a problem. No one, especially fertile friends or family, can fully understand your feelings. So remember, you are not expecting others to understand completely, you are seeking their acceptance and support.

- You'll realize that you're far from alone. Tens of thousands of patients go through treatment each year. Patient groups offer many kinds of support. They include people like yourselves and others who've been through fertility treatment and now want to offer insight.

- Professional counsellors can offer practical suggestions to lessen your stress. Your doctor can put you in touch with a counsellor (e.g. a psychologist specializing in fertility issues). You may want to go alone or together with your partner.

My Support Network

The right friends and close family members can provide great comfort and support. Think of the kind of help your support network can provide and let them know. For example, some may be good listeners, some give useful suggestions, others are fun to be with and distract you from thinking about fertility issues. So, think about how you would like to spend time with them and let them know.

Write your friend/family member's name here	
How you can support me?	
To cheer me up when I'm down	
What I won't discuss with you	
	How my partner is feeling
How I want to spend time with you	

With a little planning time will pass

TIPS TO HELP YOU PLAN YOUR LIFE DURING TREATMENT

As mentioned before, it is normal for couples to experience strong emotions and feel uncertain during a cycle of fertility treatment. The hope they feel at the outset may be replaced with marked disappointment and sadness if a cycle fails. Taking a long-term perspective can help.

Pregnancy is a result of a complex combination of factors and events. So, even if doctors do their best to remove barriers causing conception difficulties, there is also a matter of chance to getting pregnant every time you try. Put some effort into organizing your life during treatment. Things will not always go as planned. Please try to keep your personal goals in mind as you pursue this treatment.

Don't put your life on hold. Continue to focus attention and energy on activities that you enjoy and on goals where you have a degree of control. With a little planning, treatment will be more manageable, time will pass more easily and you'llnd the strength to continue from cycle to cycle.

Keep yourself busy during "waiting time"

For many women, the most stressful stage of the treatment cycle is the "waiting period" i.e. the time between insemination (from timed intercourse or intrauterine insemination-IUI) or embryo transfer, and the pregnancy test. You may find yourself looking for signs of early pregnancy and wonder what more you can do. Your doctor may have advice, but largely it's up to nature to follow its course. While you wait, keep yourself busy with people whose company you enjoy. Fill your time with a variety of activities and stay as positive as you can. At the same time, thinking positively will make you feel better. You can't control the process of getting pregnant. You however can try to manage your thoughts and feelings during this stage. The Positive Reappraisal Technique below can help you manage your worries.

Don't put your life on hold. Try to continue with your usual activities and find time to do things that you like. With a little planning, the time will pass.

Positive Reappraisal Technique*

The Positive Reappraisal Technique can help you manage your worries by encouraging you to think positively about the situation the Positive Reappraisal Technique involves actively thinking about any positive aspects of fertility problems or fertility treatment itself.

Thinking about the positive aspects of a difficult situation does not mean pretending that everything is wonderful when you do not feel it is, or thinking that you will definitely get pregnant when you feel unsure; nor does it mean ignoring all the negative aspects of a difficult situation.

What it does mean is choosing to recognize the positive, alongside the more negative aspects of the situation, and reminding yourself that even very challenging situations have some positive elements. Taking the positive aspects into account will help you feel better during the two-week waiting period.

Thinking more about the positive aspects of a difficult situation and dwelling less on problems or uncertainties for the future help people feel better. This is especially true during the challenges of the fertility treatment waiting period when there is not much a person can do to influence the outcome of treatment.

Positive Reappraisal Card

To help people use "the Positive Reappraisal Technique", a card has been designed containing ten different ways of thinking positively. The statements are general and do not refer to any one specific positive aspect because we know that different people will have different ideas about what is or isn't positive. This small card can be put in a purse or a pocket so you can remind yourself of the Positive Reappraisal Technique whenever and wherever you feel the need. You should read the statements and think about how each statement applies to you personally. For example, what do you feel you have learned from this experience?

Think about the parts of your fertility journey that have led to something positive or some benefit, or think about other positive dimensions of your life that help you to carry on even when the situation gets really difficult.

What do you consider to be some positive aspects of this situation?

We suggest that you read the following Positive Reappraisal Card at least twice a day, once in the morning and once at night, and then any other time you feel the need. As with any new way of thinking and behaving, it can take time for the Positive Reappraisal Technique to become second nature. Thinking differently can feel strange and unnatural at first. However, practice will help, so try and persevere.

Positive Reappraisal Card

We suggest that you read the card at least twice a day, once in the morning and once at night, and then any other time you feel the need.

During this experience I will:

- Focus on the benefits and not just the difficulties
- Try to think more about the positive things in my life
- Try to do something meaningful
- Learn from the experience
- See things positively
- Make the best of the situation
- Look on the bright side of things
- Find something good in what is happening
- Try to do something that makes me feel positive
- Focus on the positive aspects of the situation

With timing

THE CRITICAL ROLE HORMONES PLAY IN YOUR NATURAL CYCLE

Why all the focus on counting days? Nature follows a fairly precise schedule, and each step in your cycle is controlled by hormones that must be produced in the correct amounts, at the right times, for you to conceive.

Your fertility treatments may include hormonal therapy that adds to or replaces your natural hormones. Here's a quick review of how nature works, to help you better understand how your medications work.

Ovulation, at about day 14 of a typical 28-day cycle, divides the cycle into two phases – the follicular phase, and the luteal phase. These phases are described in more detail below. (See Illustration to the right.)

Follicular Phase (Days 1-14)

Count the first day of menstrual flow as Day 1. During the next 12 days, your body releases follicle-stimulating hormone (FSH), which stimulates the development of a follicle (a id-filled sac) in one of the ovaries. This follicle produces a single mature egg. While this is happening, the follicle secretes estrogen, which prepares the cervical mucus at the entrance of the uterus to receive sperm. The estrogen also causes the lining of the uterus (endometrium) to thicken.

A surge in luteinizing hormone (LH) around the 14th day prepares the final step of the maturation of the egg and triggers ovulation. The egg is released from one of the ovaries and travels down a fallopian tube. When a couple has intercourse, the sperm attempts to swim past the cervical mucus and into the fallopian tube where it can fertilize the egg.

Luteal Phase (Days 15-28)

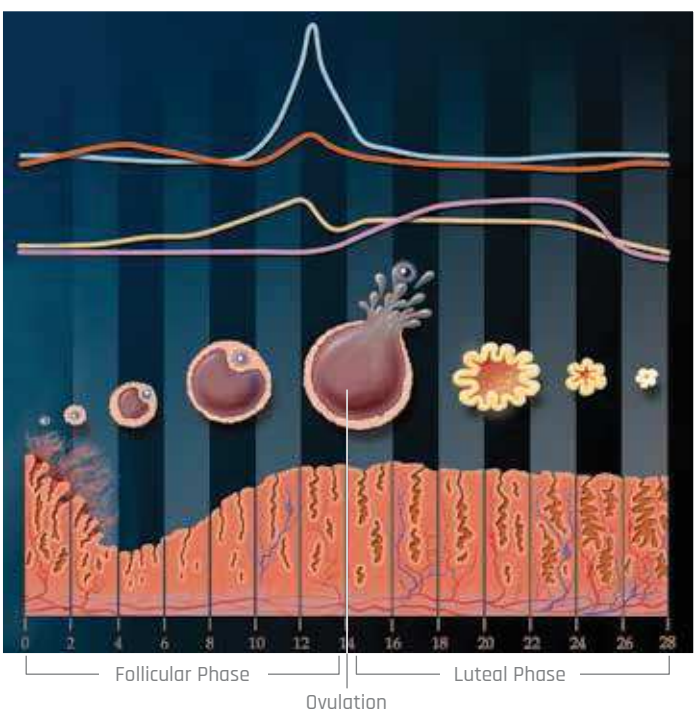
Following ovulation, the hormones progesterone and estrogen develop and maintain the endometrium, so it's ready to receive a fertilized egg.

- If the egg is fertilized, the embryo travels down the fallopian tube to implant itself into the endometrium; this happens about the 20th day of the cycle. Here it will develop into a fetus.

- If the egg is not fertilized, it still continues its journey into the uterus, but the uterus does not receive a message from the hormones that fertilization has occurred. Without this hormonal message, the uterus ends its preparations for pregnancy, shedding the endometrial lining through menstruation.

Typical 28 Day Cycle Calendar

- Luteinizing hormone (LH) produced by the Pituitary Gland
- Follicle-stimulating hormone (FSH) produced by the Pituitary Gland
- Estrogen produced by the Ovaries
- Progesterone produced by the Ovaries



With assistance

AN INTRODUCTION TO ASSISTED REPRODUCTIVE TECHNOLOGIES (ART)

The treatment process can be overwhelming at times. The clinic staff is there to answer all your concerns which can help reduce your anxiety significantly.

Assisted Reproductive Technologies (ART) is a broad term that includes all sorts of fertility treatments. Some stimulate ovulation in those with ovulatory problems. The more advanced ones typically remove eggs from a woman's ovaries, fertilize them in the lab with partner or donor sperm, and then the resulting embryos are put back into the woman's uterus. When it comes to ART, people usually think of in vitro fertilization (IVF), but there are several other different procedures, and your doctor will pick the one that's best for you. A quick overview of the main procedures is outlined below.

Medications

Most procedures include one or several medications. These add to or replace your natural hormones, working hand in hand with medical treatments to help you get pregnant.

Some medications stimulate the development of follicles (the sacs that hold the eggs). Some signal the pituitary gland (located in the brain) to release your natural hormones, controlling the timing of the reproductive cycle. Some help the eggs mature and release, ready for fertilization.

To understand how these medications work, you need to understand how hormones work during a natural monthly cycle. This is because the medications mimic those hormones during your fertility treatments, at doses higher than are naturally present in the body to encourage one or several eggs to develop.

Medical Treatments

In combination with medications, the procedures most commonly used in fertility treatments are listed below. No one treatment works best for everyone – your doctor will determine the best one for you based on your individual characteristics such as age, weight and ovarian condition as well as any factors affecting your partner.

1. Ovulation Induction (OI)

This procedure, with the help of medication, aims to facilitate the production of fully matured eggs in ovaries, or to trigger ovulation. It is usually combined with timed intercourse or intrauterine insemination (IUI).

2. Ovarian Stimulation

This procedure aims to stimulate the follicles in your ovaries so that multiple eggs can be produced in one cycle. It is usually combined with timed intercourse, intrauterine insemination or in vitro fertilization (described on the following pages) to increase the probability of successful fertilization.

During a normal monthly cycle, a single egg matures. Mild ovarian stimulation uses fertility drugs to stimulate the ovaries to help a very limited number of eggs (one or two) mature. Controlled ovarian hyperstimulation (COH) or controlled ovarian stimulation (COS) utilizes fertility drugs to stimulate the ovaries to help multiple eggs mature. With more eggs, it is easier to find good quality eggs to fertilize and that will help to increase the chance of a successful pregnancy.

Usually you will take the medication from 5 to 14 days. Vaginal ultrasounds will determine when you have one or more good-sized follicles for ovulation or retrieval. You may also require regular blood tests to measure your estrogen levels.

When the ultrasounds show that the single or multiple follicles are the appropriate size, you may receive a single injection of another medication to trigger ovulation. This provides final maturation of the egg(s) and releases the egg(s), ready to be fertilized.

3. Intra-uterine Insemination (IUI)

This is the most common type of artificial insemination. IUI is usually combined with Controlled Ovarian Stimulation, so you would follow all the steps outlined in the section above. When the injection has triggered ovulation, your doctor inserts sperm directly into your uterus by a catheter to improve the chances of fertilizing the egg (See diagram A in the With Helpful Visuals section). The sperm injected has undergone a procedure where it is separated from the semen and washed to obtain the strongest and most active sperm.

IUI may be used if you have poor or absent cervical mucus, or your partner has low sperm volume, low sperm concentration or decreased sperm motility. IUI is usually a relatively simple and painless procedure performed in your clinic or doctor's office.

4. In vitro Fertilization (IVF)

In vitro fertilization is used, for example, to overcome sperm abnormalities in men, and fallopian tube problems or endometriosis in women, as well as other indications. During this procedure, the eggs produced with the help of fertility drugs are retrieved and then fertilized by sperm in a laboratory. The resulting embryo(s) are transferred by catheter to the uterus.

The IVF cycle generally involves four stages:

- Stage One: You are injected with medication containing follicle-stimulating hormone or FSH. This stimulates your ovaries to develop follicles and produce eggs.

- Stage Two: You are injected with another medication containing a hormone that stimulates the release of mature (See diagram B in the With Helpful Visuals section). After eggs are retrieved, your doctor may also prescribe you with progesterone supplementation.

- Stage Three: The eggs are combined with sperm in a laboratory dish for fertilization (See diagram C in the With Helpful Visuals section).

- Stage Four: The fertilized eggs (or embryos) are placed into the uterus, where (we hope!) they will implant. This looks similar diagramatically to the IUI process, except that embryos rather than sperm are transferred (See diagram D in the With Helpful Visuals section).

5. Intracytoplasmic Sperm Injection (ICSI)

This procedure is used in conjunction with IVF, where a highly skilled embryologist injects a single sperm directly into each egg. ICSI may be recommended if your partner has very low sperm count, low sperm motility or poor quality sperm. If fertilization occurs after ICSI, the embryo(s) may then be transferred into the uterus (See diagram E in the Helpful Visuals section).

Helpful visuals

ILLUSTRATIONS TO DESCRIBE TREATMENT PROCEDURES

The following diagrams in this fold-out section illustrate the procedures most commonly used in fertility treatments as listed in the With Assistance section.

Embryo Development and Implantation

Medical and Lab Procedures:

A: Intrauterine Insemination (IUI)

B: Oocyte Retrieval

C: In vitro Fertilization (IVF)

D: Embryo Transfer

E: Intracytoplasmic Sperm Injection (ICSI)

Embryo Development and Implantation

Diagram A: Intrauterine Insemination (IUI)

Diagram B: Oocyte Retrieval

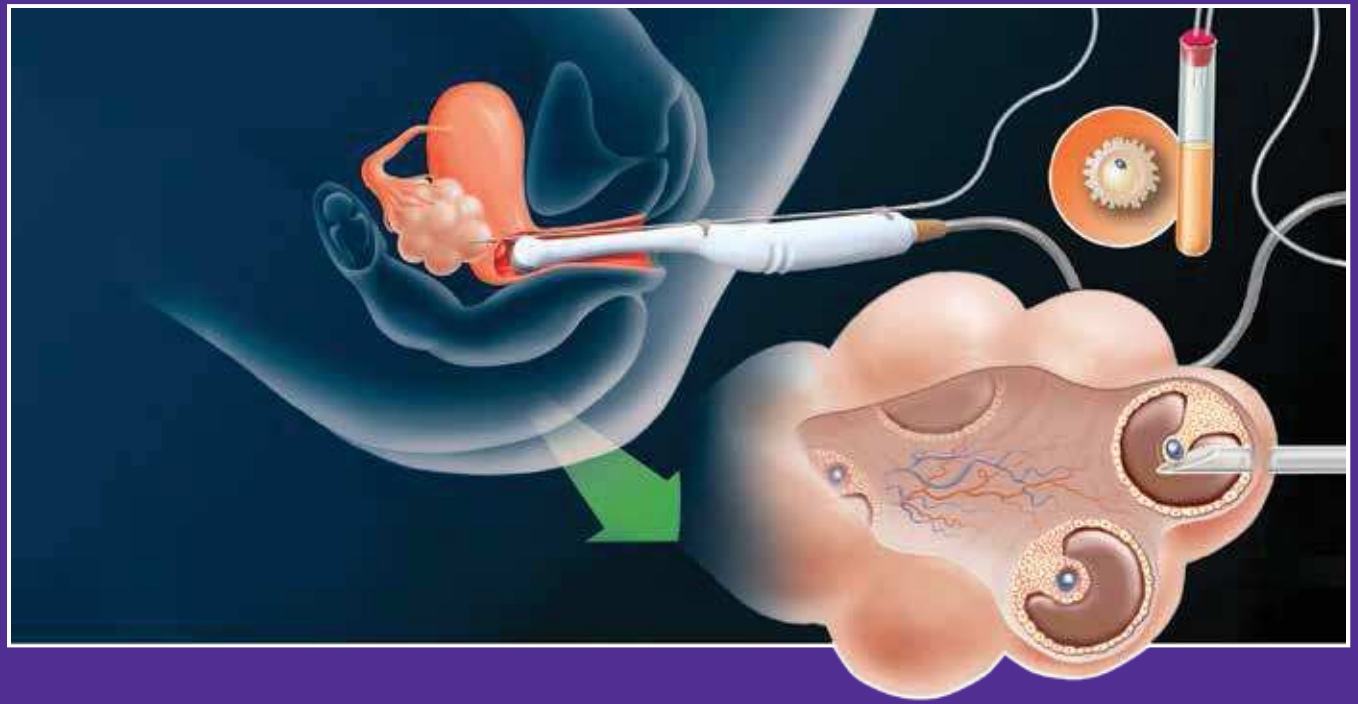


Diagram C: In vitro Fertilization (IVF)

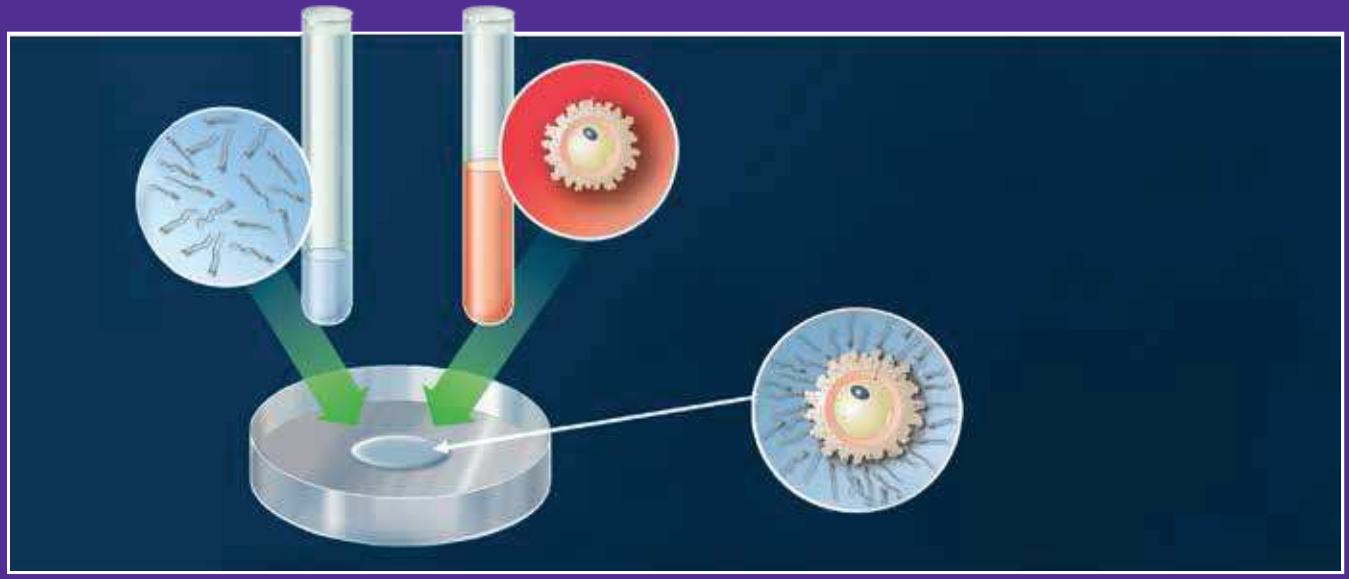


Diagram D: Embryo Transfer

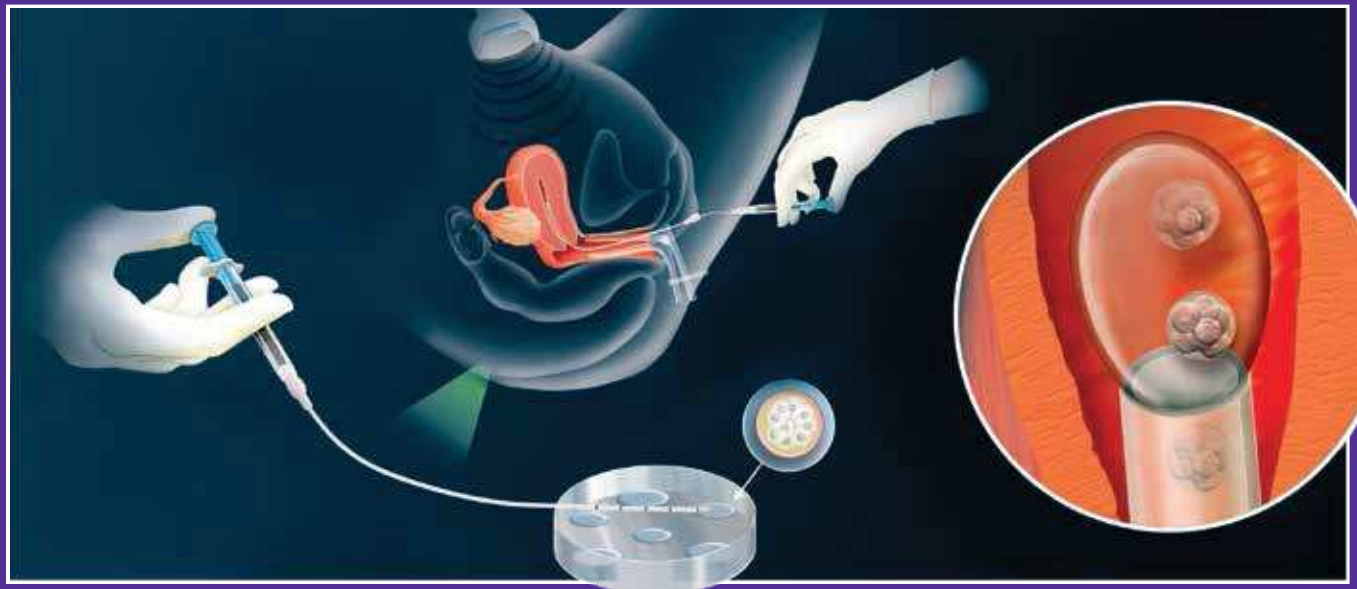
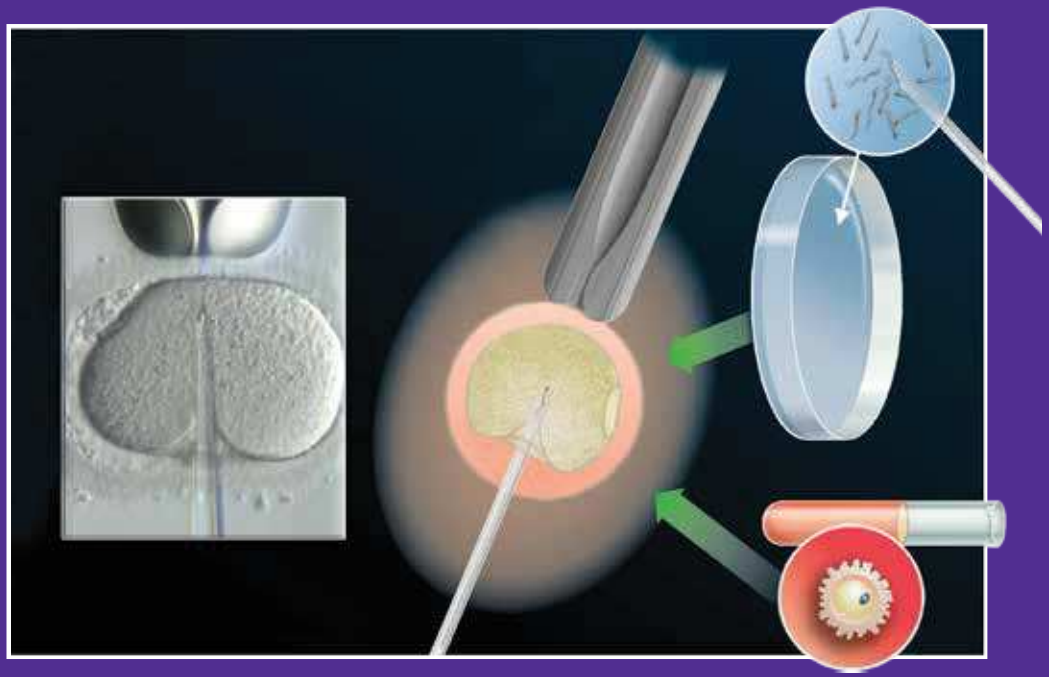


Diagram E: Intracytoplasmic Sperm Injection (ICSI)



With strength to try again

TIPS TO HELP YOU NAVIGATE THIS EMOTIONAL TIME

We've talked before about the roller coaster ride your emotions can take during fertility treatments. Your hopes and dreams all hang on this cycle or that procedure, and it can be extremely challenging when you don't get pregnant.

Don't give up. Fertility procedures are complicated, and success depends on many factors (talk to your fertility specialist to get a better idea of your own situation). While undergoing treatment, there may be a lot of anxious moments as you wait for the results.

If a cycle is unsuccessful, look to what inspired you to begin the process in the first place – this can help you to stay motivated to begin your next cycle.

Recognize that your partner, despite his or her support, has also experienced a loss and shares your despair.

Take Time to Grieve

Although an unsuccessful treatment cycle or miscarriages are relatively common, it may still be heartbreaking. In your mind you may have already imagined holding a baby in your arms, or have come up with baby names. And yet, others may not understand your sadness or recognize your sense of loss, especially if it was perceived to be an embryo of only few weeks old. So if you have experienced a loss, please allow yourself time to experience and manage these emotions, whether it's sadness, disappointment or even grief, before you try again.

The suggestions under Tips in helping you cope (on page 3) may assist you during this trying time. It is usually helpful to talk about your feelings and fears with your partner, family, friends or support groups. There are many online support groups and books that may help. A professional counsellor can help you work through any frustration, sadness or grief and move forward.

Recognize that your partner may feel helpless or uncertain about how to deal with an unsuccessful treatment cycle. A man might feel he can't indulge in his own feelings, but must be strong for his partner or, not acknowledging sadness. He might even express other strong emotions such as anger or resentment. Others may try to protect you by not talking about the unsuccessful treatment cycle or miscarriage, acting as if it never happened. Let others know what you need, or figure out together with your partner or other supports how you can recognize your sense of loss and move forward. Sometimes, expressing or sharing your thoughts and feelings, through letters, poems or a journal can be helpful.

After both you and your doctor agree that you are physically and emotionally ready, you may want to consider trying again. You've already done so much to make this dream come true. Whether or not you decide to try again, be proud of your efforts, and the courage and strength it took to get this far. Try to look to the future and recognize the strengths that motivated you on this journey in the first place.

Keep hope in your heart. In the words of author Napoleon Hill, "Every adversity, every failure, every heartache carries with it the seed of an equal or greater benefit."

With a little explanation

A GLOSSARY OF TERMINOLOGY

Anovulation
The total absence of ovulation.

Assisted hatching
This procedure involves making a small hole in the protective layer that surrounds the embryo to help implantation.

Assisted Reproductive Technologies (ART)
The term for fertility treatments in which a woman's eggs and a man's sperm are handled outside the human body. These include IVF, IUI, donor egg or donor sperm cycles.

Baseline Ultrasound
An examination conducted before starting fertility treatment, used to determine the general position and condition of the ovaries and uterus.

Blastocyst Transfer
Transfer of embryos that are developed for 5 to 6 days, until they reach blastocyst stage.

Cervical Mucus
The cervix produces mucus that permits passage of sperm during ovulation and prevents infection.

Cervix
The lower section of the uterus that protrudes into the vagina, through which the sperm pass to reach the uterus.

Chemical Pregnancy
Occurs when a fertilized egg does not implant in the uterus.

Conception
Fertilization; when the sperm meets and penetrates the egg.

Controlled Ovarian Stimulation (COS) or Controlled Ovarian Hyperstimulation (COH)
Stimulating the ovaries with various medications to develop an optimal number of follicles. Medications may also be used to control the timing of ovulation.

Corpus Luteum
A structure that forms in the ovary at the site of the released egg. The corpus luteum releases estrogen and progesterone, two hormones necessary to maintain a pregnancy.

Cryopreservation (Freezing)
Storage of organs or tissues such as sperm or embryos at very low temperatures. Embryos that are not used in an ART cycle can be frozen for future use.

Ectopic Pregnancy
A pregnancy in which an embryo develops in a place other than the uterus, and cannot grow into a healthy pregnancy.

Egg Retrieval
A procedure used to obtain eggs from ovarian follicles for in vitro fertilization. This is performed through the vagina using ultrasound to locate the follicle in the ovary.

Endometrial Biopsy
Removing a sample of the lining of the uterus for examination.

Endometrium
The lining of the uterus.

Embryo
The early stages of fetal growth, from conception to the eighth week of pregnancy.

Embryo Transfer
Placing an egg fertilized outside the womb into a woman's uterus.

Estrogen
The hormone that stimulates secondary female sexual characteristics such as breasts and controls the course of the menstrual cycle. Also produced in low quantities in males.

Fallopian Tubes
Ducts through which eggs travel to the uterus once released from the follicle in the ovary. Sperm normally meet the egg in the fallopian tube, the site at which fertilization usually happens.

Fertility Specialist or Reproductive Endocrinologist
A doctor specializing in the treatment of people with fertility problems. These Obstetrician/Gynecologists receive extra training in the study of hormones and infertility.

Fertilization
Combining the genetic material carried by sperm and egg to create an embryo. Normally occurs inside the fallopian tube (in vivo) but may also occur in a Petri dish (in vitro). (See also In vitro Fertilization.)

Fibroid
Benign (not malignant or life-threatening) tumor of fibrous tissue that can occur in the uterine wall. It may exist totally without symptoms or may cause abnormal menstrual patterns or infertility.

Follicle Stimulating Hormone (FSH)
A pituitary hormone that stimulates the growth of egg follicles in the ovaries of a woman or sperm development in a man.

Follicles
Fluid-filled sacs in the ovary, which contain the eggs released at ovulation. Each month an egg develops in a follicle inside the ovary.

Freezing
(see Cryopreservation)

Gonadotropin Releasing Hormone (GnRH)
This hormone, produced by the hypothalamus, enables the pituitary to secrete LH and FSH, which stimulate the ovaries and testicles.

Gonadotropins
Hormones secreted by the pituitary gland that control reproductive function, such as LH (luteinizing hormone) and FSH (follicle stimulating hormone).

hCG (Human Chorionic Gonadotropin)
The hormone produced in early pregnancy and released by the placenta after implantation. This keeps the corpus luteum producing estradiol and progesterone and thus prevents menstruation.

Hypogonadotropic Hypogonadism (HH)
This is a rare condition in which impaired activity of the hypothalamus or pituitary glands results in below-normal function of the gonads (female ovaries and male testicles). This also results in abnormally low levels of the hormones normally produced, i.e. FSH and LH, estrogen, progesterone and testosterone.

Hypothalamus
The gland at the base of the brain that controls the release of hormones from the pituitary glands.

Idiopathic Infertility
The term used when the cause of infertility cannot be explained.

Implantation
The embedding of the embryo into tissue so it can establish contact with the mother's blood supply for nourishment. Implantation usually occurs in the lining of the uterus; however, in an ectopic pregnancy it may occur elsewhere in the body.

In vitro Fertilization (IVF)
During this procedure, the eggs produced with the help of fertility drugs are retrieved and fertilized by sperm in a laboratory. The resulting embryo(s) are transferred by catheter to the uterus.

Infertility
The inability to conceive after a year of unprotected intercourse (six months for women over age 35).

Intracytoplasmic Sperm Injection (ICSI)
A procedure done under a microscope, in which a single sperm is injected directly into the egg. This enables fertilization with very low sperm counts or with sperm that don't swim effectively toward the egg. The resulting embryo(s) are then transferred to the uterus by a catheter.

IUI (Intrauterine Insemination)
A procedure in which sperm is directly placed into the uterus through the cervix using a catheter. Most often used as a treatment for unexplained infertility and mild male factor.

Luteal Phase
Days of the menstrual cycle after ovulation when progesterone is produced by the corpus luteum.

Luteinizing Hormone (LH)
A pituitary hormone that stimulates the ovaries and testicles. In a woman, LH is necessary for the production of estrogen. In a man, LH is necessary for spermatogenesis and for the production of testosterone.

Luteinizing Hormone Surge (LH Surge)
The release of luteinizing hormone that causes release of a mature egg from the follicle.

Menstruation
Shedding of the uterine lining by bleeding. In the absence of pregnancy, this normally occurs about once a month in the mature female.

Miscarriage
Spontaneous loss of an embryo or fetus in the womb.

Morphology
The physical structure and configuration of sperm cells.

Motility
The ability of sperm to swim or move. Poor motility means the sperm have a difficult time getting to the egg.

Multiple Pregnancy
A pregnancy with two or more fetuses.

Oocyte
The egg.

Ovarian Failure
The failure of the ovary torespond to FSH stimulation from respond to FSH stimulation from the pituitary. This may be due to damage or malformation of the ovary, or a chronic or autoimmune disease. Diagnosed by elevated FSH levels in the blood.

Ovarian Hyperstimulation Syndrome (OHSS)
Severe ovarian enlargement accompanied by fluid accumulation in the abdominal cavity. This may occur with or without pain, and with or without accumulation of fluid in the lungs. OHSS is caused when the ovaries become over-stimulated by the various hormones that cause follicular development.

Ovaries
The two reproductive organs of a woman where the eggs are stored. The ovaries also produce the hormones estrogen and progesterone.

Ovulation
The release of the egg (ovum) from the ovarian follicle.

Ovulation Induction (OI)
Medical treatment to start ovulation.

Pituitary Gland
A gland located at the base of the brain. This secretes a number of important hormones that regulate fertility, as well as normal growth and development of the body.

Polycystic Ovarian Syndrome (PCOS)
This common reproductive endocrine disorder involves the ovaries producing excessive amounts of androgens, which prevents regular egg development. Despite the name, not all women with PCOS have small cysts (fluid-filled sacs) in their ovaries which are visible on ultrasound.

Progesterone
The hormone produced by the corpus luteum during the second half of a woman's cycle. It thickens the lining of the uterus to prepare it to accept implantation of a fertilized egg.

Sperm (Spermatozoa)
The microscopic cell that carries the male's genetic information to the female's egg. Also called the male reproductive cell or the male gamete.

Sperm Count
The number of sperm in an ejaculate. Also called sperm concentration and given as the number of sperm per milliliter.

Sterility
An irreversible condition that prevents conception.

Subcutaneous (sc) Injection
Delivering medication with a fine small needle into tissue just below the surface of the skin.

Testes
The two male reproductive organs that produce sperm as well as the male hormone testosterone.

Testosterone
The male hormone responsible for forming secondary sex characteristics (such as facial hair) and supporting the sex drive. Testosterone is also necessary for sperm development.

Tubal Pregnancy (a type of Ectopic pregnancy)
The development and attachment of an embryo in a fallopian tube.

Ultrasound
A medical imaging technique used to visualize the reproductive organs. Transvaginal ultrasound may be used to monitor follicular development.

Uterus
The hollow muscular organ where the fetus grows until birth.

Vagina
A muscular opening in a woman extending from the vulva (the female external genitalia) to the cervix of the uterus.

With thanks

OUR SINCEREST THANKS TO THOSE WHO CONTRIBUTED

We'd like to thank all of you reading this booklet. We hope it has been helpful to you, and we wish you much success on your fertility journey.

Notes

QUESTIONS I WANT TO ASK MY HEALTHCARE PROFESSIONAL

Notes

QUESTIONS I WANT TO ASK MY HEALTHCARE PROFESSIONAL

The following patient booklet in the interest of patient education was proudly bought to you by Merck

Reference: Data on file.

For full prescribing information, refer to the package insert approved by the Medicines Regulatory Authority.
Report adverse events to drug.safety.southeastafrica@merckgroup.com or +27 11 608 2588 (Fax line).
Merck (Pty) Ltd. Reg. No. 1970/004059/07. 1 Friesland Drive, Longmeadow Business Estate South,
Modderfontein, 1645. Tel (011) 372 5000 Fax: (011) 372 5252. SEA/GON/0317/0009 March 2017

Dedicated to the details that matter

MERCK