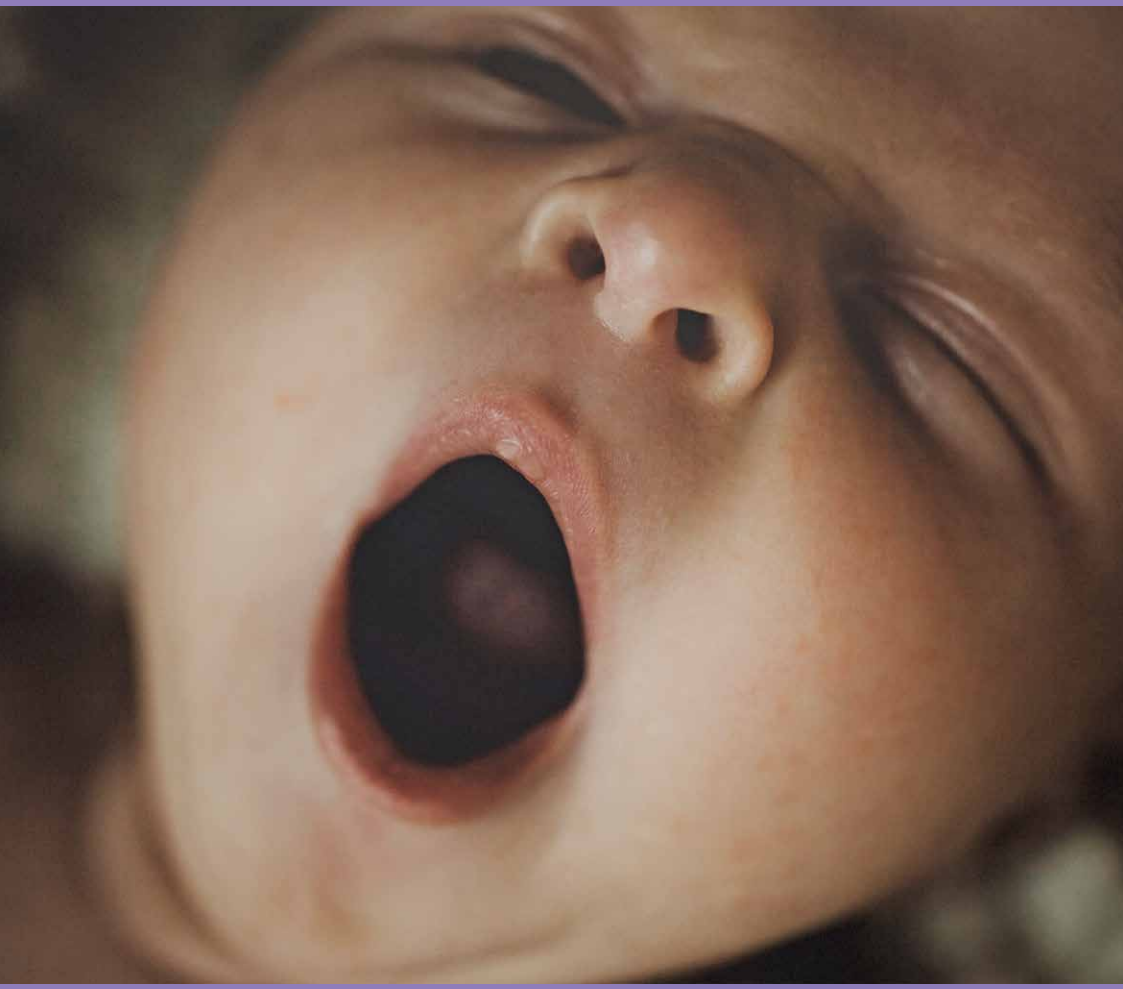
QueenslandFertilityGroup
A MEMBER OF VIRTUS HEALTH

Pathway of care

Your fertility journey starts here



qfg.com.au ◆ 1800 111 483

YOUR FERTILITY FAMILY

Contents

Welcome to Queensland Fertility Group

Thank you for choosing Queensland Fertility Group. We are very privileged that you have chosen us to help you achieve your dream and to share your fertility journey with you.

Expertise:

With clinics throughout Queensland, Queensland Fertility Group offers treatment coordinated by expert fertility specialists, who play a significant role in the scientific and clinical advances in assisted reproduction.

Our fertility specialists are supported by experienced teams of nurses, scientists, and counsellors using the highest level of technology available, enabling us to achieve high pregnancy rates.

Caring:

In a caring environment you will have access to some of the best and safest outcomes worldwide, as our approach is to provide the least invasive, most effective treatment option for you to maximise your chance of conception.

Excellence:

We are committed to providing you with excellence in fertility care and look forward to supporting you throughout your journey.

Treatment and Services:

This Pathway of Care booklet is a brief guide, to help give you an understanding of the different treatment options that may be available to you. This booklet is a quick reference for you and compliments our website. We have included the hyperlinks to our website (*qfg.com.au*) to help guide you.

Further information relating to your specific treatment will be provided by your fertility specialist, your nurses, and your scientists that are involved in your care.

Your fertility journey begins here, and we wish you every success.

Understanding your Fertility

Around one in six Australian couples of reproductive age experience difficulties conceiving a child. The advances in reproductive technology, IVF and other forms of assisted conception are now providing higher success rates than that of natural pregnancy. With the help of assisted conception, many are successful in achieving their dream.

The single most important factor affecting the chance of conceiving is the woman's age. Irrespective of age, if a pregnancy is not achieved within 6 – 12 months of trying to conceive naturally, seeking medical advice is recommended.

Our fertility specialists play a significant role in the scientific and clinical advances in assisted reproduction, giving patients access to some of the best and safest outcomes worldwide.

Your doctor will review your medical history, undertake some investigative tests, and then recommend an individualised treatment plan.

Back to Basics – Ovulation and Natural Conception

Not conceiving as quickly as you might have expected is extremely challenging. It often comes as a shock when pregnancy does not happen. For some, this can be the start of a long and difficult journey to achieving their dream of creating a family.

What if my cycle is longer or shorter than 28 days?

A typical menstrual cycle is 28 days (or at least somewhere between 26 and 32 days), with ovulation occurring halfway through the cycle. The second half of the menstrual cycle is fixed at approximately 14 days, so a woman can count back from her last period to see when she ovulated. So, if your cycle is longer (e.g. 35 days) you will ovulate later too, and similarly if your cycle is shorter you will ovulate earlier. For example, if your cycle is 35 days, you will ovulate around day 21, whereas if your cycle is 25 days, you will ovulate around day 11.

When should we be having sex?

Sex should be a fun and intimate activity, however many couples trying to conceive find that it can become a 'chore.'

To reduce the stress associated with getting the timing right, try to focus less on the day of suspected ovulation and instead make sure you are having regular sex – about every two days in the week around ovulation (around 2 weeks before your next period is due). For example, a woman with a 28 day cycle is best to have regular sex between day 11 and 17 of her cycle.

Menstrual cycle

When embarking on fertility treatment, it is important to have some understanding of the menstrual cycle. You may have been monitoring your cycles for some time and may have realised that your cycle is not quite "textbook."

Menstruation:

DAYS 1-5

Day 1 of your cycle is the first day of your period, meaning the first day of full flow (spotting does not count). During this time, the uterus sheds its lining from the previous cycle. Between days 1-5 of your cycle, new follicles (sacs of fluid containing eggs) begin to develop within your ovaries.

DAYS 5-12

The body selects a follicle to develop, and the dominant follicle begins to secrete oestrogen which in turn increases the thickness of the uterine lining (endometrium) preparing it for implantation.

Ovulation:

DAYS 12-15

The pituitary gland releases a surge of luteinising hormone (LH), triggering the release of the mature egg from the ovary and into the fallopian tube. Sperm can survive for up to 2-3 days in the fallopian tubes waiting for the arrival of the egg for fertilisation, however the egg has a window of 12-24 hours in which it can be fertilised after release. The dominant follicle that has released the egg then forms the corpus luteum. This important structure releases progesterone (and oestrogen) which assist in maintaining the uterine lining.

DAYS 15-28

If the egg is fertilised, the embryo (fertilised egg) travels into the uterus and implants in the lining of the uterus. Once implanted, the embryo begins to produce Human Chorionic Gonadotrophin (hCG). This drives the corpus luteum to continue production of progesterone to support the pregnancy.

If no fertilisation has occurred, the egg is absorbed by the body, the corpus luteum degenerates, progesterone levels fall and the uterine lining breaks down, restarting the menstrual cycle.

Fertility

investigations

www.qfg.com.au/trying-to-conceive/male-fertility

There are many causes of infertility – male, female, or a combination of both. Here is a brief overview of some of the initial tests that may be requested by your fertility specialist.

Male

A semen analysis is the most important evaluation of a male's fertility. This test provides information on the sperm numbers, volume, motility, morphology (size and shape) and consistency. You will be given further instruction regarding the requirements for this test.

Our scientists like to see:

- A normal shaped head, this is essential for the sperm to bind to the surface of the egg
- At least fifteen million per ml
- At least 40% progressive motility
- At least 4% normally formed
- None or little presence of sperm antibodies

A repeat test may be requested if the initial results are poor. IVF with Intracytoplasmic Sperm Injection (ICSI) may be the best option for treatment to avoid failed fertilisation, especially if the semen analysis is poor or if you have had treatment previously with failed fertilisation.

qfg.com.au/tests-treatments/fertility-treatments/icsi-treatment

ICSI is a delicate procedure and only performed by highly skilled embryologists. The scientist injects a single sperm into each mature egg using fine micromanipulation equipment. This is a successful technique in overcoming problems with male infertility.

If the repeat sample is severely compromised, our scientist may recommend that you have a DNA fragmentation test. This test assesses the number of sperm in a sample that have DNA damage that may affect fertilisation. This test may also be recommended for various other reasons. Your fertility specialist will discuss this with you if they feel it is required. If high sperm DNA fragmentation is discovered your fertility specialist will discuss your options with you.

A range of factors could result in no sperm (azoospermia) in the sample. Further investigations will be required if no sperm is seen in the initial sample. If the male has had a vasectomy in the past, there may be the option of a vasectomy reversal, or a surgical sperm collection followed by IVF with ICSI.

Female

www.qfg.com.au/trying-to-conceive/female-fertility

Blood Tests and Ultrasounds

Checking ovulation and your hormone profile is one of the first investigations that you may have.

It is important to establish if you are ovulating regularly and if your fertility hormones are within a normal range. Your follicle stimulating hormone (FSH), luteinising hormone (LH), Oestrogen (E2) and Progesterone (P4) all play a role in ovulation.

You may also have a vaginal ultrasound to assess your ovaries, endometrium (uterus lining) and uterus (womb). Your specialist may request an ultrasound to monitor ovulation.

It is well known that a female's Ovarian Reserve declines with age. This is because women are born with an infinite number of eggs, however once a woman reaches the age of 35 years, the egg reserve and egg quality may start to decline quite rapidly. This can significantly impact the chance of success with all fertility treatments when you are planning to use your own eggs. We can estimate the ovarian reserve with an Anti-Mullerian Hormone test (AMH) but there is no test to determine egg quality.

www.qfg.com.au/tests-treatments/fertility-tests

Combined Tests

www.qfg.com.au/tests-treatments/genetic-testing/karyotyping.

All male and female patients will require a blood test for infectious disease screening prior to any fertility treatment commencing. At the very least this will include HIV, Hep B and C. All patients will also have a Karyotyping blood test, as this can be a useful test in the diagnosis and management of fertility issues.

www.qfg.com.au/tests-treatments/genetic-testing/preconception-screening

You will also be given the option for further pre-conception screening blood tests. Your specialist will discuss this with you, and you can refer to our QFG website.

Specialist Review and Further Investigations

Once blood tests, ultrasounds and a semen analysis have been performed, your specialist will review your results. Depending on the results and your treatment options, they will then determine if further investigations are required.

Your specialist may also request the following:

- A Hysterosalpingogram (HSG) or ultrasound HyCoSy is commonly used to check for tubal blockage or any other structural abnormalities with your uterus. If this test shows possible tubal blockage, a laparoscopy or hysteroscopy may be required.
- A Laparoscopy is performed as a day case procedure, involving a general anaesthetic. The procedure checks the patency of both fallopian tubes and the condition of the uterus and ovaries and can be useful in diagnosing conditions such as Endometriosis.
- A Hysteroscopy assesses the inside of the uterus and is often requested if there has been a history of recurrent miscarriage or abnormal menstrual bleeding, it is helpful in diagnosing uterine abnormalities such fibroids, polyps, adhesions, and congenital abnormalities.

A laparoscopy and Hysteroscopy can be performed at the same time.

After these tests around 80% of couples experiencing difficulties conceiving, can be diagnosed with one or more causes for their infertility.

Male infertility accounts for around 40%, female infertility accounts for around 40% and 20% of couples will have no cause found and deemed to have unexplained infertility.

Being *prepared* physically and emotionally

ACCESS

ACCESS, Australia's National Support Group, is an independent consumer-based organisation which offers information via newsletter, fact sheets and self-help groups at access.org.au. For more information, please discuss ACCESS membership with the nurse/admin team at your initial nurse interview.

Being physically and emotionally prepared for treatment

To help you maximise your chances of conceiving with assisted technology and having a healthy pregnancy, we suggest that you consider the following factors:

- Reduce alcohol and caffeine intake.
- Adopt a healthy, well-balanced diet.
- Undertake regular moderate exercise.
- Assess your Body Mass index, evidence suggests that fertility improves dramatically if a couple who are overweight can achieve a 5% reduction in weight.
- Stop smoking and any recreational drug use.
- Consume a daily intake of 500µg folic acid 3 months pre-conception and during the first trimester of pregnancy to reduce risk of neural tube defect.

Embarking on fertility treatment often means coping with a mixture of emotions from joy and excitement to grief and great sadness. It is important not to wait until you are overwhelmed before seeking support. All of our team are experienced in helping patients cope with the emotional aspects of fertility treatment and can help guide you and discuss with you the option of speaking to our counsellors. Counselling gives you the opportunity to look at your responses, learn how to cope and develop emotionally as an individual and as a couple from the experiences. Hopefully, you feel reassured and strengthened from the counselling process. Our experienced fertility counsellors are all members of ANZICA (The Australian and New Zealand Infertility Counsellors Association) and:

- Provide independent support and someone to talk to about how you and your partner may be feeling.
- Prepare you for your fertility treatments and discuss options available when making decisions about changing or stopping treatments.
- Support you through the emotions involved in trying to achieve a pregnancy.
- Help you cope with other people's pregnancies and births by providing some protective (self-preservation) strategies for you when faced with emotional settings.
- Discuss reactions of families, friends, and work colleagues.
- Explore strategies to help you feel more in control.
- Help you cope with unsuccessful treatment cycles and/or miscarriage.
- Discuss anxieties of pregnancy with you and preparation for parenthood.
- Deal with specific issues relating to donor treatment cycles.

Treatment
options

Treatment Options

As every patient is individual, your fertility specialist will review your circumstances, along with your medical/surgical history, assess your results from any investigative tests that you have had and will recommend an individualised treatment protocol based on the information gathered about you.

Once a treatment protocol has been prescribed, your specialist will advise you to make an interview with one of our experienced fertility nurses. At this interview, your treatment plan will be explained to you in detail and your questions answered. Your nurse will advise you what you need to do next once you have had this interview.

Below is a brief description of the fertility treatment options that are available. Not every treatment option is suited to everyone, and your nurse will discuss in more detail the treatment option that has been recommended for you by your specialist. Please also refer to our website.

Ovulation Induction (OI) and/or Intrauterine Insemination (IUI)

www.qfg.com.au/tests-treatments/fertility-treatments/ovulation-induction

This treatment is best suited for women that are not of an advanced maternal age, who have healthy fallopian tubes and whose partner or sperm donor has a 'normal' semen analysis. This can also sometimes be used in situations where more complex fertility treatments are not an option.

Ovulation Induction involves taking oral or injectable medications to encourage the development of one or two dominant follicles on the ovaries. Your cycle will be closely monitored with blood tests, urine tests and vaginal ultrasounds to observe hormone levels and ovarian activity to establish the best time for your treatment. You may be given a 'trigger' injection prior to timed intercourse or Intrauterine Insemination (IUI). This injection contains human chorionic gonadotrophins (hcG) and triggers the process of ovulation. You will be advised when you and your partner should have intercourse or if you are planning an Intrauterine Insemination with partner or donor sperm - this will be planned accordingly.

The insemination process involves inserting a catheter with your partner's or donor's prepared semen through your cervix and into your uterus. It is less invasive than IVF, however the success rates can be much lower compared to IVF. If you do not achieve a pregnancy after several treatments, your specialist may recommend moving onto IVF.

In Vitro Fertilisation (IVF)

www.qfg.com.au/tests-treatments/fertility-treatments ivf-treatment-and-process

Treatment Regime

Your specialist will determine what treatment regime is best suited for you and what IVF medications and dosage you need, to achieve optimum ovarian stimulation. This will be determined by your previous tests, your age, your BMI, and your fertility history. There is no way of predicting how well you will respond to IVF medications: how many follicles will develop and how many eggs will be collected at egg pick up.

Most people find the concept of IVF overwhelming. It is important to try and break it down into steps, to help you understand the process.

It's important to contact your Fertility Specialist and the QFG clinic when you are ready to commence your IVF cycle. The team will guide you on the next steps to take before starting your individual IVF cycle regime. This will include ringing the Fertility Specialist and the QFG clinic on Day 1 of your cycle, collection of medications, return of consent forms and payment for the cycle.

Adjuvants are optional add-on treatments for patients having a routine fertility treatment. Adjuvants may have limited evidence to support them improving the chances of having a successful birth. The use of any adjuvants is to be decided between the fertility specialist and the patient.

There are several stages to IVF and they involve the following:

Step 01

Starting Treatment – Pituitary Suppression

You may be asked to commence the oral contraceptive pill, a nasal spray or an injection to assist with the programming of your IVF cycle.

Step 02

Stimulation of Ovaries

Stimulating your ovaries will allow us to collect more oocytes (eggs), increasing your chances of achieving fertilisation and a subsequent pregnancy.

These injections are given just under your skin with a very fine needle. Your fertility nurse will show you how to give your injections and you will be given all the equipment and information you need to give these to yourself at home. Your fertility nurse will support you as needed during this time.

You will commence your hormone injections either when you get your withdrawal bleed from the pill, your spray or with your natural period.

You may need to continue a nasal spray or commence a second injection to prevent ovulation prior to your egg collection.

You will be taking the injections the same time each day for around 8-12 days. Your Specialist or Nurse will advise you.

Step 03

Treatment Monitoring

You will be monitored during your IVF cycle with blood tests and/or ultrasounds to establish how well you are responding to the medications, to ensure your cycle is proceeding as expected and to help determine the best timing of your egg collection.

Occasionally your specialist may cancel your cycle if you are not responding as well as expected or if you are over responding to the medications.

Step 04

Trigger

Your egg collection will be planned once your leading follicles reach an optimal size. You will be advised when to have your last injections and when to take your trigger injection (Human Chorionic Gonadrophin hCG). The trigger injections are a timed injection that is given around 34-38 hours prior to your planned egg collection.

Step 05 Egg Collection/Egg Pick Up (EPU) and Sperm Collection

Your eggs are collected with an egg collection procedure (EPU). At some clinics you have the option to have your egg collection performed under a general anaesthetic or while you are awake with conscious sedation, and your specialist will discuss these options with you. Unfortunately, your partner cannot be in theatre/procedure room for your egg collection.

The egg collection procedure is performed under guided ultrasound. An ultrasound probe is placed into your vagina, the probe will have an egg collection needle attached to it, and this needle will be inserted through your vaginal wall into each follicle on your ovaries. The follicles are aspirated, and the fluid is immediately examined under a microscope by our scientists.

After your procedure you will be advised of how many eggs were collected.

If you are using your partner's fresh sperm, he will be asked to produce a sample at the clinic or at home the same day as your egg collection. He will be advised what time our scientists need his sample. The sample should be kept at body temperature.

If you are using frozen sperm, the sperm will be thawed on the same day as your egg collection.

You should be able to go home to rest within a few hours. You may experience some discomfort and minor bleeding after your egg collection. This is normal. Your nurse caring for you after your procedure will discuss this with you. If there is excessive pain or bleeding after your procedure, you should contact your Fertility Specialist or seek medical advice.

When you are discharged home, you will need someone to take you home and to stay with you. You will not be able to drive or return to work the same day as the egg collection.

Step 06 Fertilisation

Our scientists will prepare your eggs in culture medium in our laboratory. Your eggs are examined and later that day the prepared sperm is placed with your eggs. Your specialist will have previously determined what method of fertilisation needs to be used. It will be with either standard IVF, where prepared sperm and your eggs are simply placed together in a dish or ICSI, where an individual sperm is selected and under very delicate microscopic control, the egg, itself requiring extensive preparation, is injected with this single sperm. Your cycle may be unexpectedly converted to ICSI on the day of your egg collection if the sperm sample is compromised.

The following day after your egg collection, you will be informed of how many of your eggs have fertilised. The developing embryos will remain in culture in our Embryoscope for up to 6 days. Embryos which develop to a good quality blastocyst will be transferred into your uterus at a fresh transfer or frozen for a subsequent frozen embryo transfer cycle. It is important to note that not all embryos are suitable for transfer or freezing.

Step 07 Embryo Transfer

If you are planning to have a fresh embryo transfer, this will be planned on day 5 after your egg collection. You may be asked to commence Progesterone medications to supplement your own natural progesterone levels, to help your uterus lining to become more receptive to implantation. You will need to stay on this medication until you are advised to stop.

A speculum will be used to locate your cervix (like a pap smear). Your embryo will be placed into a fine catheter that is passed through your cervix and into your uterus. Your partner is welcome to attend for your embryo transfer. Any remaining suitable embryos can be frozen for future use. The transfer does not require sedation or a general anaesthetic.

QFG guidelines recommend transferring one embryo at a time, however in rare instances two embryos may be transferred. If more than 1 embryo is transferred, your Fertility Specialist with discuss this with you.

Step 08 Pregnancy Outcome

You will be asked to attend a blood test approximately 10-14 days after your embryo transfer.

If you experience any bleeding while you are waiting for your blood test, it is important to contact your clinic for advice.

Pre-Implantation Genetic Testing (PGT)

www.qfg.com.au/tests-treatments/genetic-testing

Some of our patients require assistance from our Geneticist and our PGT program. Our sophisticated genetic testing facilities enable screening of our patients prior to treatment commencing.

Pre-Implantation Genetic Testing aims to screen embryos for specific known or suspected genetic conditions, to prevent embryos carrying a genetic abnormality being transferred into the uterus. Due to the preparation phase required by the laboratory, there may be some delay with starting treatment involving PGT.

Embryo testing can also be carried out to screen the Chromosomes in developing embryos. This allows selection and transfer of embryos with the greatest likelihood of IVF success.

Embryos are biopsied on day 5 of development and then frozen while you wait 2-3 weeks for the results. Once your specialist has discussed your results with you, any suitable embryos will then be selected to be transferred into your uterus during frozen embryo transfer cycles.

Embryo Testing is recommended for people who are:

- Over 38, or
- Have a history of miscarriage, or
- Have experienced unsuccessful IVF, or
- Couples with hereditary chromosomal conditions.

Frozen Embryo Transfer Cycle (FET)

www.qfg.com.au/tests-treatments/fertility-treatments/frozen-embryo-transfer

Around 50% of IVF cycles have more than two suitable embryos for freezing, thereby reducing the need for repeated ovarian stimulation and further egg collections. Should your IVF cycle not be successful, and you have frozen embryos, you can consider a frozen embryo transfer cycle. Not all embryos will survive the thawing process, but it is expected that around 90-95% of frozen embryos will survive.

A frozen embryo transfer cycle can be undertaken with your natural cycle, with the use of ovarian stimulation (tablets or injections) or using Hormone Replacement Therapy (HRT). Your specialist will decide which protocol is best for you.

Your fertility nurse will discuss the process of the FET cycle with you. You will be asked to have a blood test with your period, and you will be monitored with scans and/or blood tests. The embryo transfer will be planned for around day 18-21 of your cycle.

Fertility Preservation

www.qfg.com.au/tests-treatments/fertility-preservation
female-fertility-preservation

There are a few reasons why our patients consider freezing ovarian tissue, freezing eggs, freezing sperm and/or freezing embryos to preserve their fertility.

- Diagnosis of a serious illness when essential medical treatment could hinder their chances of conceiving in the future.
- Single women that wish to 'hold off parenthood' but are concerned about the effect of aging on their fertility.
- Sperm freezing prior to vasectomy.
- The diagnosis of a low ovarian reserve.

If you are having treatment for egg or embryo freeze, you will need to have a full IVF cycle, as described previously.

Our healthcare facility is committed to providing a secure and caring environment for all patients and staff members. We firmly believe that every individual deserves to be treated with utmost dignity and respect. As part of this commitment, we want to emphasize that any form of aggressive behaviour towards our dedicated staff will not be tolerated under any circumstances. We understand that seeking medical care can be a challenging experience, but it is essential to maintain a culture of compassion and understanding. In situations where aggression or disrespectful behaviour towards our staff arises, we may need to reevaluate the continuation of care. Our primary concern is to promote a safe and supportive environment for everyone involved. By fostering a cooperative and respectful atmosphere, we can ensure that everyone receives the best possible care and support during their time here. We appreciate your cooperation in upholding these principles and contributing to a positive healing environment for all.

Donor Programs

www.qfg.com.au/tests-treatments/donor-programme

For some of our patients, their only chance to become a parent is through the use of donor sperm, donor eggs and donor embryos. Our patients can choose to have fertility treatment with a known donor or a de-identified donor. Our clinic has a dedicated donor team that have experience with the co-ordination of donor-recipient cycles. They will ensure that all legal, social, and ethical issues are considered and that all mandatory requirements are met prior to you commencing treatment.

Surrogacy Programs

www.qfg.com.au/tests-treatments/donor-programme/surrogacy

Occasionally our patients require the help of a surrogate to become a parent. Surrogacy involves a woman carrying a child in her uterus on behalf of another woman or couple. A Surrogacy arrangement is highly complex, our expert team will ensure that all legal, social, and ethical issues are considered and that all mandatory requirements are met prior to you commencing treatment.

Surviving The 'Two Week Wait'

This starts once the embryo has been transferred and patients often describe this as "the worst part" of their treatment. Not knowing if they are pregnant or not, often waiting for the slightest early sign to give them hope that their treatment has worked. There are strategies that you can put in place to help you manage at this time, they could involve the following: -

- Talk to your loved ones about how you are feeling.
- If you are feeling anxious, take slow deep breaths, using meditation and other strategies which may reduce anxiety.
- Try and refrain from negative thoughts.
- Avoid emotionally charged situations.

Our experienced counsellors can also guide you through this often difficult time.

Positive Pregnancy Test

If your pregnancy blood test is positive, you may be asked to have a repeat blood test at a later stage.

You will be asked to organise an early pregnancy scan at around two to three weeks after your positive result. The scan will confirm that your pregnancy is ongoing. Your Fertility Specialist and Nurse will guide you through the next steps.

Negative Pregnancy Test

If you receive the news that you are not pregnant, it is strongly recommended to make an appointment to see your specialist to discuss future treatment and to ask any questions.

The news of a negative pregnancy may present a range of emotions that the treatment has been unsuccessful. Chatting with the team or booking an appointment with our counsellors may assist, however there are other services available which may assist including Lifeline, Beyond Blue or Access Australia.

Support Groups

- Access Australia *www.access.org.au*
- Endometriosis Association *www.qendo.org.au*
- Polycystic Ovarian Association of Australia *www.posaa.asn.au*
- Beyond Blue *www.beyondblue.org.au*
- Donor Conception Support Group *www.dcsg.org.au*
- Andrology Australia *www.andrologyaustralia.org*
- Lifeline *www.lifeline.org.au*

Complications and Considerations associated with Assisted Reproductive Technology (ART)

Unfortunately, not all fertility treatment cycles are successful.

www.qfg.com.au/success-rates/ivf-technologies.

We believe it is important that you are aware of the possible disappointments as well as the joys that fertility treatment can bring. The following is a brief outline of where problems may arise.

Inadequate response to ovarian stimulation (approximately 5% of cycles started)

Occasionally your ovaries may not respond well to the drugs and an insufficient number of follicles develop. This is detected during the monitoring of your IVF cycle with scans and blood tests. It may be recommended that your cycle is cancelled. It may be possible to make some amendments to your subsequent cycles to achieve a sufficient response.

Adverse reaction to medication

The medication used in IVF treatment is generally of low risk and it is unlikely that you will have significant side effects. Some women may experience common side effects, including headaches, hormone symptoms, local skin reaction and flu-like symptoms.

No eggs collected at egg collection (approximately 1% of egg collections)

It is important to note that the number of follicles seen on your ultrasound does not always reflect the number of eggs collected at the time of your surgery. In fact, it is expected that not all follicles will contain an egg. For reasons that are not always clear, we sometimes see that no eggs are collected at egg collection. If this happens, it is important to have a follow up consultation with your specialist to discuss further.

No fertilisation (approximately 5% of egg collections)

It is expected that some eggs won't fertilise, however on occasions, all eggs collected may not fertilise. This could be due to a problem with your eggs and sperm binding together properly.

Sometimes the fertilisation timing may be delayed, and eggs may not show signs of fertilisation at the expected time. Eggs that don't show signs of fertilisation initially can sometimes divide subsequently and as such will be kept to see if the insemination timing has been early or late and embryo development to blastocyst stage occurs.

If you have experienced no fertilisation from your IVF cycle, ICSI may be offered next time to avoid the same thing happening again. It is important to note that even when ICSI is used, fertilisation and further embryo development does not always occur.

No embryo division

Not all embryos will continue to divide and grow throughout the laboratory incubation period following your egg collection. Occasionally on the planned day of your embryo transfer procedure there are no suitable embryos to transfer.

Additional embryos for freezing

While we aim for you to have an embryo for transfer and some extra embryos to freeze for future use, it is important to note that not all treatment cycles result in extra embryos for freezing. Any extra embryos need to be good quality to be able to survive the freeze thaw process. Even when the 'best' quality embryos are frozen, some embryos will not survive the freeze and thaw process. About 50% of treatment cycles do have more than two embryos suitable for freezing.

Complications of Egg Pick Up procedure

Ultrasound guided egg retrieval normally causes some discomfort during and after the procedure and can last for 2-3 days. This is not normally a sign of serious problems. However, some serious complications may occur:

- Infection occurs in less than 1/1000 cases. Although very rare, it is more common in women with previous pelvis disease, such as endometriosis or tubal damage.
- Damage to other internal organs, including blood vessels, bladder, and bowel. This is fortunately extremely rare, although cases have been reported, both in Australia and overseas. Remember that the complications listed are uncommon.

Ovarian Hyperstimulation Syndrome (OHSS)

www.qfg.com.au/about-us/media-releases ovarian-hyperstimulation-syndrome

This is a condition where women over respond to the fertility drugs and can develop fluid retention and abdominal swelling. Rarely, it can be severe and may require hospital admission for medical treatment.

If OHSS does occur, it usually becomes evident within 2-8 days after your egg collection and subsides 2-3 weeks later if a pregnancy does not occur. However, 50% of cases are associated with a pregnancy, in which case the symptoms may be more prolonged and severe, with the pregnancy hormone (hCG) being produced by the embryo worsening the symptoms.

The symptoms you should be aware of, and report immediately are:

- Severe nausea and vomiting
- Abdominal bloating
- Diarrhoea
- Shortness of breath
- Increasing thirst
- Decreasing urine output

The mild form of OHSS is usually adequately treated by rest, fluid, and mild pain relief. More severe cases may require hospitalisation with intravenous fluids and sometimes drainage of the fluid from the abdominal cavity. In its severest form this condition may be life threatening.

Miscarriage

Fertility treatment does not increase your risk of miscarriage. Miscarriage occurs in up to 25% of all pregnancies whether conceived naturally or by IVF.

Ectopic Pregnancy

An ectopic pregnancy is a pregnancy that implants outside of the uterus, usually the fallopian tube. It occurs in about 1-4 % of IVF pregnancies, usually only when there is pre-existing fallopian tube damage. Despite the embryo being placed into the uterus, ectopic pregnancies still occur.

The first signs of an ectopic pregnancy are abnormal hormone levels, vaginal bleeding and/or abdominal pain. Please contact your specialist if you are concerned. If you experience severe pain, you should attend your nearest hospital immediately.

If, at your early pregnancy ultrasound, your uterus shows no signs of a pregnancy an ectopic pregnancy may be suspected which your specialist will discuss this with you. Ectopic pregnancy is often diagnosed by a specialist ultrasound. Surgery may be required but this will depend upon the stage of the diagnosis.

Multiple Pregnancies

There is an increase in serious risks when the pregnancy is twins or more. The most common complications is a premature birth which can cause lifelong health implications for the babies.

There is a three-fold increase in the risk of a baby dying during or soon after birth as well as a fourfold increase in the chances of cerebral palsy. As well as the medical complications multiple births impact on the family financially, socially, and psychologically.

We normally recommend the transfer of one embryo at a time. Your fertility specialist will discuss this with you. It is not recommended to transfer any more than two embryos at a time.

Premature Birth

Prematurity is often associated with increased maternal age, uterine abnormalities, and multiple pregnancy.

Congenital Abnormalities

The risk of health problems at birth or in the first year of life in children conceived naturally is approximately 4%. However, recent research has suggested that in children conceived after IVF, the risk of health problems at the time of birth is slightly higher at around 5-6%. New research in this area is continually being undertaken and it is possible that these findings may change in time. If you have any concerns, or other consequences of a procedure, we encourage you to discuss these with your specialist.

If you do have any concerns regarding the possible complications, please discuss these with your treating specialist.

Your Rights & Responsibilities

As a patient of Queensland Fertility Group, you are entitled to expect:

- An environment that provides the diagnosis and treatment of infertility in a manner that meets recognised standards and practices.
- Awareness of your needs as an individual to be treated with dignity, empathy and respect for your beliefs and practices.
- Respect for your personal privacy and confidentiality of your personal information except where authorised by you or mandated by law.
- A clear understanding of your diagnosis and proposed treatment, including possible risks, expected outcomes, possible side effects and likely costs as part of informed consent.
- The right to withdraw consent for a treatment up until the actual time of treatment.
- The right to request information in writing and copies of any written consent given.
- The right to request access to your personal information.
- The right to lodge a complaint with Queensland Fertility Group about any aspect of your treatment with Queensland Fertility Group.
- Should you require a medical interpreter for any of your appointments, please let our staff know so this can be arranged.

As a patient at Queensland Fertility Group, it is your responsibility to:

- Provide the specialist and clinic staff, to the best of your knowledge, with accurate, up to date personal details, complete information on past and present medical history and treatments received, and details of any current medications that you are taking.
- Ensure that you have, from your specialist and clinic staff, a full understanding of your diagnosis, any proposed treatment, and the likely cost of the proposed treatments.
- Provide the specialist and the clinic with written consent for any proposed treatments.
- Follow all medical and nursing directions given to you and to report any unexpected side effects.
- Treat Queensland Fertility Group personnel as you would wish to be treated yourself, in a polite, friendly, and efficient manner.

Personal *information*

Personal Information

At Queensland Fertility Group our primary concern is providing you with treatment and healthcare of the highest quality. This requires a relationship of trust and confidentiality, one where we treat your personal health information appropriately and respect your privacy.

We take reasonable steps to ensure that the personal information we collect, use, hold or disclose is accurate, complete, and up to date and relevant to the functions and services we provide.

As such we handle your personal information in accordance with our privacy policy and in compliance with applicable privacy laws. Please refer to our website for Our Privacy Policy ***www.qfg.com.au/privacy-policy***

Our fertility specialists and staff collect information that helps us to provide the level of advice, care, and management you need, or where there is a statutory requirement for collection.

This information may include:

- Contact details
- Relationship status
- Medical history
- Family medical history
- Symptoms, diagnosis and recommended treatment
- Ethnicity
- Medicare/Private health fund details
- Billing or account information

We normally collect this information from you, but we may need to get it from other sources, for example, from other medical practitioners, health funds or health providers and with your consent, from family members.

Use and Disclosure of Personal Information

To ensure we provide you with the most appropriate treatment, our fertility specialists and staff may use or disclose your personal information.

Here are some examples:

- Sharing your information within the treatment team.
- Communicating with the referring practitioners.
- Referrals to other medical practitioners, hospitals, or health providers.
- Referring specimens for analysis.
- Accounts and billing, including Medicare and private health insurance claims.
- Managing our practice – including quality assurance, practice accreditation and keeping our records up to date.
- Complaints and incident handling and notification to our insurers.
- Disclosure, where legally required, to third parties, for example, in response to a court subpoena or for mandatory reporting of specific diseases.
- Provide a small sample of case notes for confidential review as part of annual Code of Practice audits by the national Reproductive Technology Accreditation Committee (RTAC) in compliance with regulatory requirements.
- Submit a summary of the Australia and New Zealand Assisted Reproduction Database (ANZARD) of every treatment we perform in compliance with regulatory requirements. In these cases, we remove any information that personally identifies you.

We may also use non-identifying information from your medical file for data analysis and research.

Where the diagnosis and treatment of infertility involves two partners, it is our policy to disclose all information to both partners.

In all but a few rare cases, you can access the personal information we hold about you (in part or full), or ask us to provide it to a third party such as another healthcare provider.

It is our policy to retain medical records for a period of 28 years following the birth of any child born as a result of any treatment or 10 years after legal action, whichever is the latter. Personal information that does not form part of a medical record will be destroyed or deidentified once it is no longer required for the purpose for which it was collected.

Regulatory Bodies and Clinic Accreditation

Queensland Fertility Group is required to meet statutory licensing and regulatory requirements under the Fertility Society of Australia's Reproductive Treatment Accreditation Committee (RTAC) for accreditation purposes. They are also required to provide statistical data to the Australia and New Zealand Assisted Reproduction Database (ANZARD). Health records held by Queensland Fertility Group may be accessed for these purposes.

Queensland Fertility Group is required to provide de-identified patient and treatment information to be recorded in the Australian and New Zealand Assisted Reproductive Technology Database (ANZARD). ANZARD data and information may be used for population analysis, research projects, and the publication of clinic success rates.

In addition, Queensland Fertility Group staff may be required to access treatment information for the purposes of audits by RTAC (Reproductive Technology Accreditation Committee).

Complaints and Compliments

At Queensland Fertility Group we welcome your feedback, this assists us in improving services to our patients. Please feel free to share your feedback with us by contacting us directly via phone or email. Patient feedback surveys are also emailed out to patients on a quarterly basis to ask for feedback on all aspects of our service.

In the event you wish to lodge a formal complaint, please submit this in writing, addressed to your treating clinic.

Each complaint will be investigated by relevant members of the management team, including the Medical Director where appropriate. An official response will be provided to the complainant following the investigation.

If you feel that your complaint has not been resolved to your satisfaction, you may wish to contact the Office of the Health Ombudsman (***oho.qld.gov.au***). The Office of the Health Ombudsman (OHO) is an independent body established under the Health Ombudsman Act 2013, and is the place to contact to make a complaint or a notification about a health service in Queensland.

Medications

Your specialist will prescribe all of the medications you require for your fertility treatment. You should only start and stop your medications when you are advised to do so by your fertility specialist or nurse. Your nurse will show you how to self-inject and will be happy to show your partner or support person how to inject the medication.

Below is a list of the more common fertility medications used during fertility treatment.

DRUG	ACTIONS	SIDE EFFECTS	STORAGE
Clomid or Serophene	Increase hormone production to help produce eggs and regulates ovulation	◆ Abdominal discomfort ◆ Nausea ◆ Breast tenderness ◆ Headaches ◆ Sleeplessness ◆ Mood swings	Below 30°C
Cetrotide Orgalutran	To prevent the natural ovulation of eggs from follicles.	◆ Itchiness ◆ Headaches ◆ Nausea ◆ Irritation at injection site	**Cetrotide** below 25°C **Orgalutran** below 30°C
Crinone Endometrin Oripro Utrogestan	Contains a natural progesterone hormone to support the lining of the uterus.	◆ Abdominal discomfort ◆ Nausea ◆ Breast tenderness ◆ Headaches ◆ Sleeplessness ◆ Mood swings ◆ Constipation ◆ Difficulty passing urine ◆ Thrush like symptoms	**Crinone** below 30°C **Endometrin** below 25°C **Oripro** below 25°C
Decapeptyl Lucrin Synarel	Prevents an LH surge and premature ovulation of eggs. It is a synthetic version of the natural gonadotropin releasing hormone.	◆ Abdominal Tenderness and swelling ◆ Tender Ovaries ◆ Breast tenderness ◆ Headaches ◆ Sleeplessness ◆ Mood swings ◆ Nausea ◆ Dizziness ◆ Fluid retention/OHSS	Refrigerate
Gonal F Elonva Menopur Puregon Bemfola Rekovellephins)	Used to stimulate the ovaries to produce one or more eggs.	◆ Abdominal Tenderness and swelling ◆ Tender Ovaries ◆ Breast tenderness ◆ Headaches ◆ Sleeplessness ◆ Mood swings ◆ Nausea ◆ Dizziness ◆ Fluid retention/OHSS	Refrigerate
Luveris	Helps to stimulate the follicles. Sometimes used for patients with low Luteinsing hormone (LH) levels.	◆ Irritation at injection site ◆ Nausea ◆ Headaches	Room Temperature below 25°C
OCP "The Pill"	Used to regulate and modify the timing of cycles during preparation for ART procedures	◆ Breast tenderness ◆ Headaches ◆ Elevated blood pressure ◆ Nausea ◆ Bloating	Room Temperature below 25°C
Ovidrel Human chorionic gonadotrophin (hCG)	Induces ovulation before EPU. Often referred to as the trigger injection.	◆ Nausea ◆ Abdominal bloating ◆ Constipation ◆ Breast tenderness ◆ Tender Ovaries ◆ OHSS ◆ Irritation at injection site	Refrigerate
Progynova	Builds the lining of the uterus to prepare for a frozen embryo transfer	◆ Headaches ◆ Bloating ◆ Mood changes ◆ Nausea ◆ Breast tenderness	Room Temperature below 25°C

Frequently Asked Questions

What is day 1?

- Day 1 of your period is the first full day of bleeding, not spotting. If your full flow starts in an afternoon, then the next day is considered day 1.

How long does the IVF process take?

- From the start of your IVF medications to the time of your pregnancy test is usually around 4 weeks.

Can I exercise during my fertility treatment?

- We ask you to avoid strenuous exercise during your fertility treatment, however gentle exercise is usually fine. If you are unsure, please discuss this with your nurse or specialist.

Do I need to fast for my blood tests?

- Fasting for blood tests is not normally required.

Does QFG offer treatment for single women and same sex couples?

- We have been helping single women and LGBTQ+ couples become parents for almost 30 years, and we have a wide variety of donor sperm available for reservation. We also have an active surrogacy program giving same-sex male couples the chance to become fathers.

Can I have intercourse during my fertility treatment?

- If you wish to have intercourse during your fertility treatment, we recommend that you have protected intercourse.

Does my age affect success?

- The female age is the biggest single factor in determining the chances of success with IVF. Once the female reaches the age of 30 the egg numbers and the quality of those eggs slowly start to decline, and it is well documented that the best chance of conceiving is before the age of 35. Once the female reaches the age of 40 the chances of a successful pregnancy naturally or with IVF diminish quite significantly.

Does IVF affect my ability to work and continue as 'normal,' will I need time of work?

- Unfortunately, there will likely be the need for you to have some of your appointments during your work time. Your specialist can provide you with a medical certificate if required.
- During your IVF cycle and after your egg collection, it is normal to experience some mild bloating and tenderness in your abdomen. You may also experience some breast tenderness, constipation, and headaches. It is OK to take paracetamol during your treatment.
- On the day of your egg collections, you will not be able to go to work and it is often best to arrange to have the day after your egg collection off work also.
- After your egg collection, you may get some vaginal bleeding. This shouldn't be excessive and should settle within a few days.

When do I collect my medications for my treatment cycle?

- Arrangements will have been made for you to collect your medications prior to your day one or on your day one of the cycle.

Can I take my usual medications and natural supplements during my treatment?

- Some medications and supplements can be contraindicated during your treatment. You will need to advise your specialist of any prescribed or complementary medications that you are taking or intend to take.

Can I go straight into another cycle if this one is unsuccessful?

- This would depend on which cycle you have completed but it is recommended that you see your specialist between cycles for review. Your specialist will determine what is best for you.

What is my chance of a successful treatment?

- The chance of success depends on many factors and differs from person to person. Please discuss this with your fertility specialist.

How many scan and blood tests will I need during my treatment?

- This will depend on your individual treatment plan and cycle type. Your specialist or nurse will be able to answer this question for you.

What do I do with my 'extra' frozen embryos?

- If you have completed your treatment and you do not wish to use any remaining frozen embryos, you have a few options. You can choose to dispose of your embryos or you may be able to donate your remaining embryos. Please contact your clinic to discuss your options.

What if my Day One comes at the weekend?

- If prior arrangements haven't been made in this instance and your period comes over the weekend or on a public holiday, please contact your clinic on the next working day.

Is there an 'Out of Hours' service?

- Each clinic has an arrangement for you to be able to contact a specialist or nurse 'out of hours' for urgent medical advice or in case of a medical emergency once your treatment has commenced. You will be given further information on the 'out of hours' service.
- If the matter is not urgent, please contact your clinic on the next business day.
- In a medical emergency, you are advised to call '000'.

Do you have interpreters?

- QFG does not have interpreters but is happy to assist with booking an appointment with the Translating and Interpreting Service (TIS National). Alternatively, patients may book this service online.

Glossary

A

AH (Assisted Hatching)

The procedure in which the outer layer of the egg (called the zona) is thinned.

Antisperm Antibodies

Antibodies developed in the bodies of either men or women that block the movement or function of the sperm.

ART (Assisted Reproductive Treatment)

A collective term for fertility treatments.

B

Blastocyst

The term for the development of an embryo for five days after fertilisation which consists of an inner cell mass, an internal cavity, and an outer layer of cells.

C

Cervix

The neck of the womb. The embryo transfer procedure normally involves passing a small soft catheter through the cervix.

Curettage

(D&C) Having the contents of the lining of the uterus removed under anaesthetic, either by abrading it with an instrument (called a curette) or by suctioning out with a soft plastic tube.

D

Donor Insemination

A form of treatment whereby frozen- thawed donated sperm is placed through the cervix at ovulation.

E

Ectopic pregnancy

An ectopic pregnancy is a pregnancy that occurs outside the womb (uterus), most commonly in the fallopian tube, where the baby cannot survive.

Egg collection

The stage of an IVF treatment cycle where eggs are collected under anaesthetic using vaginal ultrasound.

Embryo

Once the sperm has penetrated the egg & fertilises the egg, an embryo is formed.

Embryo Screening (PGS)

This test screens all 24 chromosomes in a developing embryo, allowing selection of the embryo with the greatest likelihood of pregnancy success.

Embryo transfer

The stage of an IVF treatment cycle where the embryo is transferred to the uterus via a fine catheter.

Endometriosis

The presence of the normal lining of the uterus called the endometrium found in abnormal locations in the body such as the fallopian tubes, ovaries and peritoneal cavity.

F

Fallopian tube

The fallopian tube runs from the ovary to the uterus. The egg normally travels along the fallopian tube and this is where the egg and sperm normally meet and the sperm penetrates the egg.

Follicle

The sac of fluid that surrounds the egg and which can usually be seen on the ultrasound scan.

Follicle stimulating hormone (FSH)

A hormone produced and released from the pituitary gland, to stimulate the follicle (and thus the egg) to grow.

Follicular Phase

The first half of an ovarian cycle following menstruation and during which the follicles grow.

G

Gamete

A word that describes both the male and female reproductive cells i.e. the sperm and egg.

H

hCG (human Chorionic Gonadotropin)

The hormone that is produced by the embryo and is measured in a pregnancy test. Injections of hCG can be used to trigger maturation of the egg followed by ovulation. Injections of hCG may also be used to maintain hormone levels in the second half (luteal phase) of the cycle.

HyCoSy/Sonar levovist

An ultrasound procedure to test whether or not the fallopian tubes are blocked. It involves the injection of a dye through the cervix and into the uterus.

Hypothalamus

An area of the brain that produces hormones, that control body temperature, appetite, and the release of hormones from the endocrine glands.

Hysterosalpingogram

A specialised x-ray procedure to test whether or not the fallopian tubes are blocked. It also involves the injection of a dye through the cervix and into the uterus.

Hysteroscopy

A procedure normally carried out under anaesthetic where the cervix is dilated to allow a small telescope to pass through the cervix into the lower end of the uterus to give a clear view of the lining of the uterus.

I

ICSI (Intracytoplasmic Sperm Injection)

The fertility technique where a single sperm is selected and directly injected into an egg.

Implantation

The embedding of the embryo in the lining of the uterus 6–7 days after fertilisation.

Intrauterine Insemination (IUI)

Treatment that involves inserting the partner's concentrated semen through the neck of the womb into the uterus itself, close to the time of ovulation.

IVF (In Vitro Fertilisation)

The procedure by which an egg and sperm are placed in a dish and sperm penetrates the egg to form an embryo. The embryo is grown in a protected environment for some days before being placed (transferred) into the uterus.

L

Laparoscopy

Keyhole surgery that involves inserting a small telescope (laparoscope) through the abdominal wall so that the pelvic organs can clearly be visualised.

Luteal Phase

The last 14 days of a menstrual cycle after ovulation.

LH (Luteinising Hormone)

A hormone produced and released by the pituitary gland. It is responsible for triggering ovulation.

O

Oestrogen (or Estrogen)

The primary female hormone produced mainly from the ovary from puberty until menopause.

Oocyte

The fully mature egg produced from the ovary each month.

Ovarian Hyperstimulation Syndrome (OHSS)

A condition where women over- respond to the fertility drugs and can develop severe fluid retention and abdominal swelling.

Ovaries

The female sex glands which produce eggs.

Ovulation

The time the egg is released.

Ovulation Induction

Medication used to stimulate growth and release of the eggs. This may be used in combination with intrauterine insemination.

P

Pituitary Gland

The gland located at the base of the brain, which controls most hormone functions in the human.

Preimplantation Genetic Diagnosis (PGD)

Testing the genetic makeup of the embryo before it is transferred.

Progesterone

The hormone produced by the ovary after ovulation to maintain the pregnancy.

S

Semen

The ejaculated fluid comprising sperm and other secretions of the sex glands of the male.

Sonohysterogram

A sonohysterogram (ultrasound) or hysterosalpingogram (HSG) are diagnostic tests used to discover abnormalities in the uterine cavity and test the patency of the fallopian tubes.

Spermatozoa (sperm)

The male reproductive cells (gametes).

Stimulated cycle

The use of super-physiological doses of FSH to allow many follicles to grow to maturity rather than the single follicle of the natural cycle.

U

Ultrasound (scan)

A modified form of radar used to visualise the follicles in the ovary and pregnancy in the uterus. This may be performed either through the abdomen or (more usual in IVF) through the vagina.

Uterus (womb)

The female reproductive organ that supports the developing fetus. It is the source of menstruation.

V

Vas Deferens

The tube that transports the sperm from the testes.

Vasectomy

A form of contraception for men where the vas deferens (the tube along which the sperm passes) is tied off or clipped.

Notes:

Notes:

Contact Queensland Fertility Group:

For General Enquires contact 1800 111 483

Or feel free to contact your clinic at any stage during your journey:

Gold Coast	07 5564 8455
Spring Hill, Brisbane	07 3015 3000
Watkins Medical Centre, Brisbane	07 3015 3195
Everton Park, Brisbane	07 3015 3193
Toowoomba	07 4638 5533
Sunshine Coast	07 5314 3500
Mackay	07 4977 5151
Townsville	07 4772 8900
Cairns	07 4034 0900

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