

genea
WORLD LEADING
FERTILITY

**Your Fertility
Journey**





Welcome to your fertility journey

Welcome to Genea, Australia's leading IVF and fertility treatment clinic. We've been helping people with fertility treatment for over 37 years and we're excited you've chosen us to partner with on your fertility journey. Our approach is unique. We understand what a profound time this is for you, and our team of fertility experts are here to make your experience with us as comfortable, supportive, and stress-free as possible. Alongside your dedicated Fertility Specialist, you also have access to a dedicated team of nurses, scientists and counsellors who know everything happening on your journey. They will work together to tailor your experience and communicate with one another to ensure you receive a comprehensive and personalised plan. They'll be with you every step of your treatment to offer guidance and support.

At Genea, we strive to give our patients the best chances of achieving a pregnancy. Genea virtually doubled success rates in the mid-nineties and continues to deliver advances today to improve outcomes. In Australia, assisted reproduction treatments can only be provided by accredited clinics. Independently reviewed data shows that Genea success rates are consistently better than the average of all clinics in Australia.*

We have designed this booklet to provide you with important information you'll need to be well-informed about what you may encounter during your fertility treatment at Genea. The information in this booklet should be read with the consent forms you must sign before your treatment cycle begins.

Professor Robert Jansen's book *Getting Pregnant* is also a helpful resource to refer to along your journey.

More detailed information can also be found at genea.com.au

* Combined Genea data independently audited and provided directly to Genea after review by NPESU in November 2021. Measure is from completed egg retrieval cycles performed in one year at all Genea clinics (2018) with follow-up period 2018-2019. Age is female age at time the cycle was initiated (based on cycle date). Data includes autologous cycles only (where a woman intended to or used her own eggs).

There can be a lot to take in when your Fertility Specialist first explains the plan for your fertility treatment. We understand it can be hard to keep track of all the different parts of the treatment cycle and what you need to do and when. The MyGenea + Grow app is designed to take some pressure off by giving you one simple place to check next steps, appointments, medication instructions and more. Your patient care coordinator (PCC) will introduce you to the MyGenea + Grow app as part of your new patient orientation. There's a great deal of helpful information on the app. Check out the Resources section for your "must reads".

Alongside our world-leading science, the high care level we provide to our patients sets us apart from other clinics.

We receive a consistently high satisfaction rating from our patients. If you have any concerns or feedback – good or otherwise – please let us know so we can continue to improve our care and service. If you need additional assistance or information interpreted, please contact your care team, who will assist you.

There are psychological aspects to needing fertility treatment as well as physical effects. Feelings of frustration, sadness, anxiety and lack of control are common, even for people who don't normally experience these emotions and feelings. Genea has a dedicated, supportive team of nurses and fertility counsellors who can provide advice, support and understanding, so please ask for help.



Contents

Understanding infertility

Initial assessment and monitoring cycles	6
------------------------------------------	---

Types of Assisted Reproduction

• In vitro fertilisation (IVF) and related treatments	9
• Preimplantation Genetic Testing for Aneuploidy (PGT-A), for chromosomal Structural Rearrangements (PGT-SR) and Monogenic/Single Gene Disorders (PGT-M)	16
• Ovulation tracking (OT) and Ovulation induction (OI)	21
• Intrauterine insemination (IUI)	21

Important information about the potential risks and hazards of assisted reproduction	22
-----------------------------------------------------------------------------------------	----

Risks in the day surgery/procedure area	25
-----------------------------------------	----

Risks in the laboratory	27
-------------------------	----

Risks during pregnancy	30
------------------------	----

Getting started – information we would like you to be aware of	32
----------------------------------------------------------------	----

Your next steps	35
------------------------	-----------

Charter of patients' rights	37
-----------------------------	----

Privacy Collection Statement	32
------------------------------	----

Glossary	44
----------	----

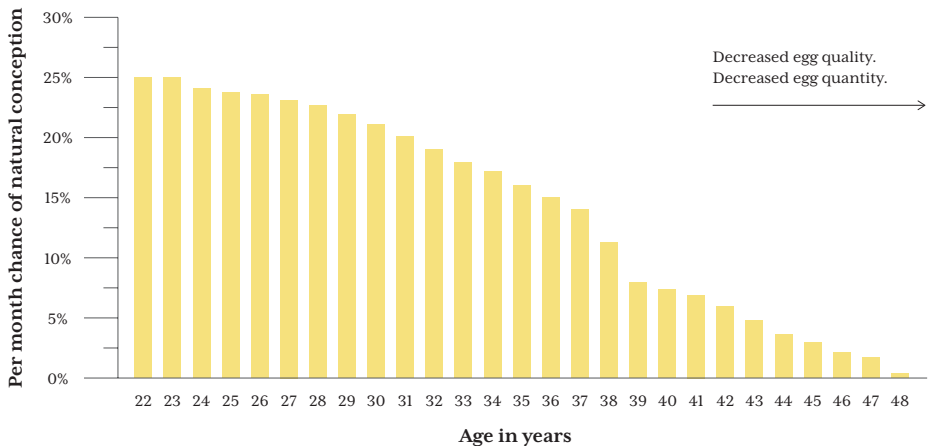
Your Fertility Journey

Understanding infertility

Infertility affects many people. Up to one-in-six couples have difficulty getting pregnant and having a baby.

Infertility can be caused by:

- Ovulation problems, often caused by hormonal problems, resulting in failure to release eggs or absence of viable eggs
- Fallopian tube damage or obstruction, or problems with the uterus, such as fibroids
- Endometriosis
- Genetic factors
- Male factors – such as problems with quantity or quality of sperm, including complete absence of sperm, or its ability to reach and fertilise an egg
- Sperm antibodies present in either the male or female
- No obvious cause (unexplained infertility)
- Female age – older eggs (especially beyond 38 years of age) have a lower chance of resulting in a successful pregnancy.





Monitoring cycles: Where timing is everything.

All assisted reproductive techniques involve the monitoring of key hormones to encourage optimal outcomes.

Frequent monitoring during assisted reproductive technology allows for our Fertility Specialists to precisely adjust the timing and medication doses of your treatment based on your body's individual response.

During monitoring you can expect:

- Blood tests to measure hormone levels.
- Vaginal ultrasound examinations of the uterus and ovaries to monitor the number and size of the follicles and the thickness of the endometrium.

Patients should plan on frequent visits to our clinics during monitoring cycles for blood tests and ultrasounds. At Genea, we try not to interfere with your day-to-day life. Blood tests and ultrasounds for cycle monitoring are done early in the morning, before 9am, enabling you to get on with the rest of your day. Your nursing team will consult with your Fertility Specialist about your results and provide you with your next steps. Your treatment may be adjusted based on the results.

Initial assessment and types of assisted reproduction

During your initial consultation with your Fertility Specialist, they will discuss various investigations focused on identifying the cause of your fertility difficulties so that a treatment plan can be recommended. Unfortunately, a cause cannot always be found, with up to 10 per cent of cases remaining unknown. This is called unexplained infertility.

Following a comprehensive evaluation of your fertility health, individual circumstances and family-building goals, your Fertility Specialist will recommend a specific approach to help you conceive and will develop an individualised treatment plan for you. There are a number of different assisted reproductive technology treatments that may be part of your plan, depending on the reason/s you're having difficulty conceiving.

1. In vitro fertilisation (IVF) and related treatments such as intracytoplasmic injection (ICSI), preimplantation genetic testing for Aneuploidy (PGT-A) and pre-implantation genetic testing for monogenic/single gene disorders (PGT-M), or translocations and inversions (PGT-SR).
2. Freezing eggs for fertility preservation, sourcing donated gametes (eggs or sperm), surrogacy arrangements and the transfer of frozen embryos.

3. Ovulation tracking (OT).
4. Ovulation induction (OI).
5. Intrauterine insemination (IUI).

The chance of pregnancy with any assisted reproductive technology techniques will depend on:

- The type of treatment
- The woman's age
- The reason/s why pregnancy hasn't happened naturally
- The quality or availability of the embryos and/or sperm.

Your Fertility Specialist will give you more information on your likelihood of success when you talk through your treatment plan.

Some patients embarking on treatment may have special moral, cultural or religious requirements. Please make these known to us and we will ensure your beliefs and requirements are respected.

1. In vitro fertilisation (IVF) and related treatments

If your treatment plan involves in vitro fertilisation (IVF), intracytoplasmic injection (ICSI), egg freezing, egg donation or surrogacy, the following steps may be part of your treatment plan:

- 1 Stimulating the ovaries with injections of Follicle Stimulating Hormone (FSH)
- 2 Preventing premature ovulation (the Luteinising Hormone (LH) surge), so that the eggs can be collected
- 3 ‘Triggering’ ovulation by replacing the LH surge at mid-cycle with an injection of Human Chorionic Gonadotropin (HCG) or GnRH agonist.
- 4 Collecting the eggs and sperm
- 5 Fertilising and culturing embryos in the laboratory

- 6 Pre-implantation genetic testing for aneuploidy (PGT-A), structural rearrangements (PGT-SR), or monogenic disorders (PGT-M).
- 7 Transferring the embryo into the uterus
- 8 Supporting the endometrium in the luteal phase with hCG or progesterone



Step 1

Stimulating the ovaries to produce eggs (oocytes)

A follicle is a fluid-filled sac in the ovary that has the potential to nurture a single egg to maturity. Depending on a woman's age, between one and 30 follicles will begin to develop in each menstrual cycle. Only one of these developing follicles will dominate and ovulate during an average menstrual cycle. With IVF, the goal is to utilise injections of Follicle Stimulating Hormone (FSH), to encourage more of the follicles to grow and develop more mature eggs.

FSH is given by injection under the skin with a fine needle and may be self-administered with pen-like devices (similar to those used by diabetics to administer insulin).

Side effects of using FSH can include bloating, as the ovaries are stimulated, and mood changes, as oestrogen levels rise.

Firstly, it's important to understand that no amount of FSH will stimulate more follicles than are available to be recruited. Each menstrual cycle, a woman will have multiple follicles that began developing months before. During a natural cycle, the non-recruits – those that don't release mature eggs – are absorbed and lost.

During a stimulated cycle, the dose of FSH needs to be enough to stop the usual competition that takes place among follicles, but once that threshold is reached, there isn't a lot of control possible over the number of recruits that will grow. Secondly, using FSH injections does not use up follicles and their eggs any faster than they're already being used.

Sometimes, other medications are used as well as FSH. Your Fertility Specialist will put together a personalised medication schedule for you, and you will need to collect your medication from a pharmacy or clinic.

Please note, not all pharmacies will stock fertility medications. Your nursing team will be able to advise when and where to collect your medications.

It's important that you do not have unprotected intercourse once you start treatment (and for at least two days after the egg collection procedure) because sperm can remain alive for several days within the female reproductive tract and there is a chance of spontaneous conception, resulting in an increased risk of a multiple (twins, triplets or more) pregnancy. People having fertility treatment might think twins are a blessing, but complications to both mother and babies are much more common in multiple pregnancies than singleton pregnancies (read more on this later).

Step 2

Preventing premature ovulation before egg collection

During ovulation, the body recognises a mature follicle and releases a hormone called Luteinising Hormone (LH) to stimulate the follicle to expel the egg into the fallopian tube. During fertility treatment, a medication is prescribed that inhibits this natural release, so that the eggs produced in the follicles can instead be collected surgically under vaginal ultrasound guidance by your Fertility Specialist.

Step 3

‘Triggering’ ovulation

When your blood tests and ultrasound results indicate the time is right, we will let you know that it’s time to take your trigger medication. Your nursing team will give you instructions on how to administer this medication, which mimics the body’s natural LH surge. The medication is administered at a specific time, and the egg collection procedure is typically scheduled 34 to 36 hours later.

Step 4

Egg collection procedure (Oocyte pick-up; OPU)

Ahead of your egg collection, please talk with your Fertility Specialist about their recommendation and your preference for pain relief during the procedure. This is a decision that needs to be made and communicated with your team well before the day of your procedure.

Egg collections can be conducted with:

- Intravenous pain relief and local anaesthetic;
- Under sedation; or
- A general anaesthetic.

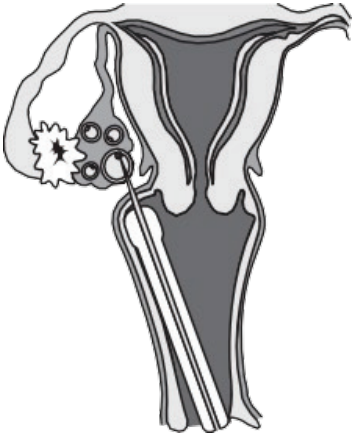
While some discomfort due to pressure on the ovary is normal, in Genea’s experience, a minority of women will experience significant pain, although it is usually very short in duration. The day surgery nurse will assist with pain relief, if needed, to help manage any discomfort during and immediately after the procedure.

Your nursing team will let you know ahead of the procedure if you need to fast and when to have your final meal and drink. Once you are taken into the day surgery procedure room, your ovaries will be scanned using a vaginal ultrasound.

The OPU procedure will take around 30 minutes and you should be ready to go home approximately one hour after the procedure.

To numb the area, local anaesthetic is injected into the wall of the vagina.

A needle (attached to the ultrasound probe) is then passed through the wall of the vagina beside the cervix and into the ovary to collect the fluid contained in each follicle (each of which is now large enough to possibly contain an egg). As the follicles are emptied, the collected fluid is passed to your embryologist, who locates any eggs and transfers them into a specially prepared dish. **Not all follicles will contain eggs, and some eggs may not be mature.**



Ultrasound-guided egg collection from the ovary.

Some women may feel faint or lightheaded after the procedure. Don't worry – nurses will remain close by to monitor and provide you with support. There can be minor bleeding (spotting) from the vagina, during and after your egg collection procedure. If this happens, please use liners or pads (not tampons) for the next week, to minimise the risk of infection.

For egg donors, your treatment finishes at this stage and the eggs will be taken to the laboratory on behalf of the recipient.

For egg vitrification (freezing) procedures, your treatment will pause at this stage. The eggs will be taken to the laboratory, frozen and safely stored for future use. When you are ready to grow your family in the future, you will return to our clinic to resume the rest of the IVF process that comes after this stage.

There can be some side effects over the next few days, such as tiredness, discomfort and bloating. While rare, ovarian hyperstimulation syndrome (OHSS) is a serious potential complication at this stage in the process. Please refer to the OHSS section later in this booklet for the symptoms to watch out for. The risk of severe OHSS is around one in 200 (0.5 per cent) of egg collections.

Step 5

Sperm collection

The sperm used to inseminate the eggs can be either fresh or frozen. Your Fertility Specialist will advise you which option is the most suitable for you.

Fresh semen can be collected in one of our private rooms at our clinic; at home (for those who live within 45 minutes of the clinic); or through a surgical sperm retrieval procedure. If collecting at home, you must use one of the clinic's home collection kits and the sample must be kept at body temperature and be delivered to the clinic by the person who's sample it is. Sperm can also be frozen in advance of the day of the egg collection procedure for reasons such as:

- previous difficulties in collection;
- a partner is unavailable on the day of the egg collection procedure; or
- cycles involving donor sperm.

Known sperm donors must produce onsite, and the sperm must be frozen and quarantined for the legally specified time according to the relevant state or territory legislation, before it can be used. All samples are prepared for use by a washing procedure that removes the seminal plasma, debris and immotile sperm.

Step 6

Culturing embryos in the laboratory

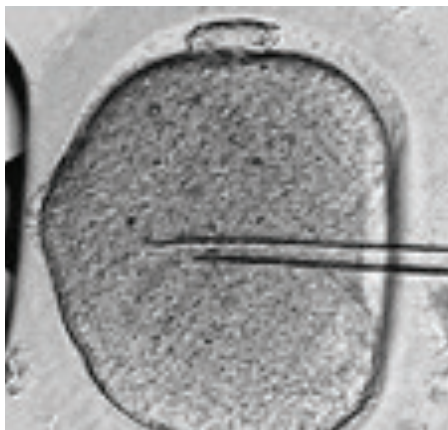
After the egg collection procedure (or egg thawing if the eggs were previously frozen), your embryologist will review the maturity of the eggs for suitability for insemination by either IVF or ICSI. It is important to understand that not all eggs will fertilise and, unfortunately, occasionally no eggs will successfully fertilise.

IVF (In vitro fertilisation)

In conventional IVF, washed sperm are placed in a dish with the eggs. The following day, the embryologist examines them to assess if they have successfully fertilised. In normal fertilisation, the embryologist should see two pronuclei (structures which contain genetic information) – one from the sperm and one from the egg – contained within a single cell.

ICSI (Intracytoplasmic sperm injection)

The suitability of ICSI is determined by your Fertility Specialist in each individual treatment. ICSI may be recommended due to low sperm numbers; decreased sperm motility; barriers to the fertilisation process (such as anti-sperm antibodies); or if there has been previous failure to fertilise using IVF. The embryologist will select sperm based on appearance and activity and then inject a single sperm into each mature egg. Even with ICSI, fertilisation is not guaranteed.



A single sperm injected into an egg during the ICSI process.



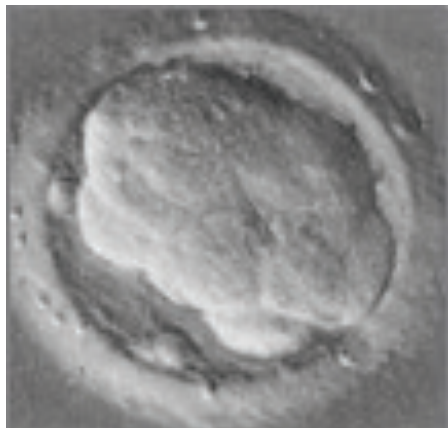
Day 2: 3-4 cells.

Blastocyst culture and selection

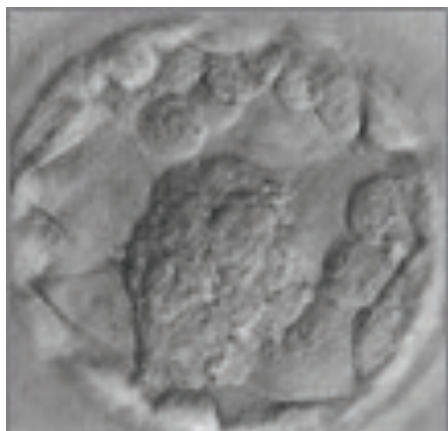
Once fertilisation has occurred, the embryo should divide and rapidly increase in cell numbers over the next few days. While many embryos survive two or three days to reach the four-to-eight cell stage, only the strongest and most viable embryos will have the ability to keep developing into a blastocyst, which contains between 75 and 100 cells, by Day 5. We believe that the best way of identifying the embryos with the strongest developmental potential is to let them grow up to 5 days in the laboratory and to transfer them at the blastocyst stage.



Day 3: 6-8 cells.



Day 4: Morula.



Day 5: Blastocyst.

An embryo needs two things to reach day 5:

Energy

An embryo's energy supply comes from tiny structures inside its cells called mitochondria.

The embryo needs to survive on the energy produced by the mitochondria it inherits from the egg until it has implanted and formed a placenta. Because all the mitochondria in an embryo comes from the egg, they are inherited from the mother.

And because women are born with all their eggs for their lifetime already formed, the mitochondria in your eggs are as old as the eggs themselves.

Chromosomes

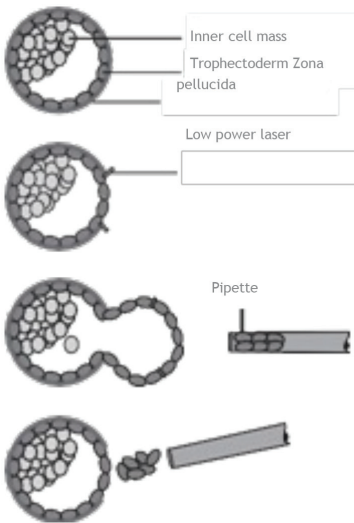
Embryos must also have the right genetic make-up to develop normally. In humans, genes are contained in 23 pairs of chromosomes.

An incorrect number of chromosomes increases the chance of non-implantation or miscarriage, or can lead to a child being born with a chromosomal condition. This is called aneuploidy.

Pre-implantation genetic testing for aneuploidy (PGT-A), structural rearrangements (PGT-SR), and monogenic disorders (PGT-M)

Unlike conventional IVF, where the embryologist chooses which embryo will be transferred to the uterus based on a visual assessment, we offer both pre-implantation genetic testing for aneuploidy (PGT-A), structural rearrangements (PGT-SR), and monogenic disorders (PGT-M).

Genetic screening and diagnosis using PGT takes the IVF process one step further, allowing a more informed choice of which embryo to transfer, based on the genetic or chromosomal make-up of the embryo.



The blastocyst biopsy process in pre-implantation genetic testing (PGT).

If your treatment includes PGT, your embryos will undergo a procedure called hatching, where a small opening is made in the outer layer of the embryo using a laser.

After hatching, the embryos are cultured until they reach the blastocyst stage. At this point, the embryologist performs an embryo biopsy by removing a small sample of cells (5-10) from the trophoblast (the structure of the embryo that becomes the placenta in a successful pregnancy). To the best of our knowledge, hatching the embryos or taking a biopsy from the trophoblast is not harmful to the embryo or future baby. In fact, embryos must hatch in order to implant in the uterus.

Karyotypes

For PGT-A to be an option, karyotypes are mandatory for the reproductive couple having PGT. Karyotypes are a chromosome test which looks to see if the couple have any rearrangements in their chromosomes which would increase the chance of an embryo having aneuploidy beyond general age related risk. This information will then be incorporated into the development of the test.

Genetic screening and your individual circumstances should be discussed with your Fertility Specialist before commencing treatment. Below are some of the genetic tests you may wish to consider.

Pre-implantation genetic testing for aneuploidy (PGT-A) and for structural rearrangements (PGT-SR)

PGT-A assesses the chromosome make-up of embryos and this may be appropriate for people who:

- Have had recurrent miscarriages;
- Have experienced previous unsuccessful IVF attempts;
- Have a previous history of chromosome problems;
- Need to choose the sex of their baby in order to avoid a sex-linked genetic condition; or
- May develop a high number of healthy appearing blastocysts, in which case PGT-A can help to choose the most viable embryo to use sooner.

As a woman ages, the chance of an embryo being aneuploid also increases. PGT-A is used to check that each embryo has the correct number of chromosomes present.

On average, approximately half (50%) of embryos which are tested using PGT-A are shown to have chromosomal problems that reduce the likelihood of a healthy ongoing pregnancy.

As the PGT-A test itself takes some time, all of the biopsied embryos are frozen while our PGT scientists perform the testing and determine the results.

Following testing, suitable embryos can be thawed and transferred to the uterus.

Because we are excluding a proportion of embryos from transfer for the cycle,

the number of available embryos will be lower, but the implantation rate per embryo transferred is higher.

An embryo may return a result indicating a mixture of abnormal and normal cells (referred to as mosaicism) and you will be required to undergo additional genetic counselling before these embryos can be considered for transfer. The decision to transfer an embryo with mosaicism is made with the understanding that there may be an increased risk of an adverse clinical outcome. Your Fertility Specialist will support you in making the decision whether to transfer such an embryo and will help answer any questions you may have.

Please also refer to the PGT-A embryo screening brochure and PGT-A patient information.

Pre-implantation genetic testing for structural rearrangements (PGT-SR)

PGT-SR is highly beneficial for patients who have been identified as carrying a pre-existing chromosomal rearrangement. The vast majority of such rearrangements are balanced translocations and inversions that have no adverse health effects for the carrier. However, the eggs or sperm from these individuals are much more likely to pass on an unbalanced amount for the chromosomes involved in their rearrangement. PGT-SR embryo testing is very similar to PGT-A and offers all the same benefits, detecting random aneuploidy as well as chromosome imbalances due to the rearrangement.

Pre-implantation genetic testing for monogenic/single gene disorders (PGT-M)

- PGT-M may be appropriate for people who are affected by or carry a known genetic condition; or
- Have a family member who has a genetic condition.

For some patients who have a known genetic condition or risk factors, a genetic test is performed to check for those specific diseases. The first step involves a review of your suitability for either karyomapping or PCR test development.

This work-up phase will usually take between 6-8 weeks to develop for karyomapping or 10-12 weeks for PCR linkage. Once the work-up is completed, an IVF cycle can be started. Generally, fertilisation is achieved using ICSI, and on Day 5 or 6 of embryo development, the embryologist will take a biopsy sample to diagnose the genetic status of the embryo.

The diagnosis is done by a combination of karyomapping, DNA sequencing or PCR technology. PGT-A and PGT-M techniques can be combined to obtain the benefit of both tests.

In this situation, all embryos are frozen and full results are available when both embryo tests are complete.

Following analysis, an embryo that is unaffected by the familial gene variant will be transferred to the uterus. Embryos reported as affected will not be available for transfer unless there is a prior agreement with Genea and your Fertility Specialist.

We are committed to offering our patients the latest technology. PGT is not automatically performed during IVF, so these treatment options should be discussed specifically with your Fertility Specialist to determine if they're suitable for your circumstances. There may also be circumstances that come to light while you are undergoing your treatment indicating PGT could improve your chance of having a baby.

Your Fertility Specialist will discuss this with you if clinically appropriate.

Step 7

Embryo transfer and excess embryo storage

Embryo transfer options that you will discuss with your Fertility Specialist include:

- Fresh transfer following the egg collection procedure; or
- Fresh transfer following cycle monitoring to receive an embryo created from donor eggs; or
- Fresh transfer following egg thawing and fertilisation; or
- Frozen transfer of a thawed embryo following cycle monitoring (includes PGT tested embryos and surrogate cycles where offered).

Patients having an embryo transfer that is not part of the stimulated cycle (such as frozen embryo transfers, recipients

of donor eggs and surrogate cycles) will have their menstrual cycle monitored so that the embryo can be transferred to the uterus at the right time. This might be undertaken in your natural menstrual cycle or might involve your Fertility Specialist developing an individualised medication regimen.

An embryo transfer is usually straightforward and painless, generally no more (or less) uncomfortable than having a cervical screening test and usually does not require sedation. A fine soft catheter that has been loaded with the embryo is passed through the cervix into the uterus with ultrasound guidance. Generally, little recovery time is required.

Worldwide, some clinics transfer more than one embryo to try to increase success rates. Our technology allows us to achieve world-leading success rates with single embryo transfers. Transferring just one embryo at a time dramatically reduces the chance of a multiple pregnancy and, therefore, the associated risks.

Freezing spare embryos does not lower the chance of implantation. In fact, freezing your spare embryos means you can utilise them, if needed, at another time. Using frozen embryos does not alter your chance of falling pregnant. It is important to note that not all embryos are suitable for freezing and some may not survive the thawing process.

58 per cent of our patients who've achieved a live birth and returned for a frozen transfer have had a second child from their initial IVF cycle.*

It is important that you avoid having unprotected intercourse during a frozen embryo transfer cycle to reduce the chance of spontaneous conception and the associated increased risk of multiple pregnancy.

Step 8

Extra hormonal support after embryo transfer

In some instances, the ovaries do not produce enough hormones on their own to support a pregnancy. When this occurs, additional medication is prescribed to support embryo implantation.

Step 9

The two-week wait for your pregnancy test

A pregnancy test is not reliable until approximately 9-11 days after an embryo transfer. Some patients find this period of waiting unsettling. Others will feel simultaneously elated as there is a new chance of pregnancy and deflated as there is much less to do and not as much contact with your team at the clinic. Some refer to this time as the 'two-week-wait'. We have a team of dedicated counsellors who are available (either in person, over the telephone or via Microsoft Teams) at no extra cost. So please use this service if you or your partner feel additional support would be beneficial during this time.

Please note, a pregnancy test is mandatory if you have received treatment with donated gametes or are a surrogate.

Many factors will contribute to the success of treatment, including age and cause of infertility. For our latest success rates, please refer to our website: www.genea.com.au/successrates

You can also look at success rates from all Australian fertility clinics on the independent website: www.yourivfsuccess.com.au

Step 10

After your pregnancy test

Even with the best science and care, not every embryo will implant and result in a pregnancy. If you are not pregnant, your team is available to support you and help you plan your next steps.

For those with a positive pregnancy test, an ultrasound is required at seven weeks' gestation (three weeks after the initial positive test) to further monitor the pregnancy. From that point, our team will hand over care to your preferred GP, obstetrician or midwife.

We are required to provide de-identified cycle outcome information to various authorities, so even after your treatment with us is over, we may need to make contact to confirm any details.

2. Ovulation tracking (OT) and Ovulation induction (OI)

Ovulation tracking monitors your menstrual cycle with blood tests to guide timed intercourse. Ovulation induction involves using medications to stimulate the ovaries. The menstrual cycle is then monitored with blood tests and ultrasounds (as discussed above for IVF and related treatments) that generally commence at Days 7 to 12 of the cycle. Once it is identified that there is a follicle growing, and ovulation occurs (spontaneously or via an injection to trigger ovulation), your nursing team will provide guidance on when to have intercourse.

After ovulation and intercourse, your Fertility Specialist might prescribe medication to support the lining of the uterus. Further cycle monitoring may be required. A pregnancy (blood) test may be undertaken 14-16 days after ovulation to determine the outcome of the cycle.

3. Intrauterine insemination (IUI)

Intrauterine insemination involves monitoring the menstrual cycle with blood tests and ultrasounds (as discussed above for IVF and related treatments) that generally commence at Days 7 to 10 of the cycle. It may also involve using medications to stimulate the ovaries. Once we identify that there is a single follicle growing, and ovulation occurs (spontaneous or via an injection to trigger ovulation), you will be advised when to attend the clinic for the insemination procedure.

The procedure involves depositing washed sperm directly into the uterus using a catheter. The outcomes after an IUI are very much dependent on the underlying cause of infertility but are generally lower than IVF.

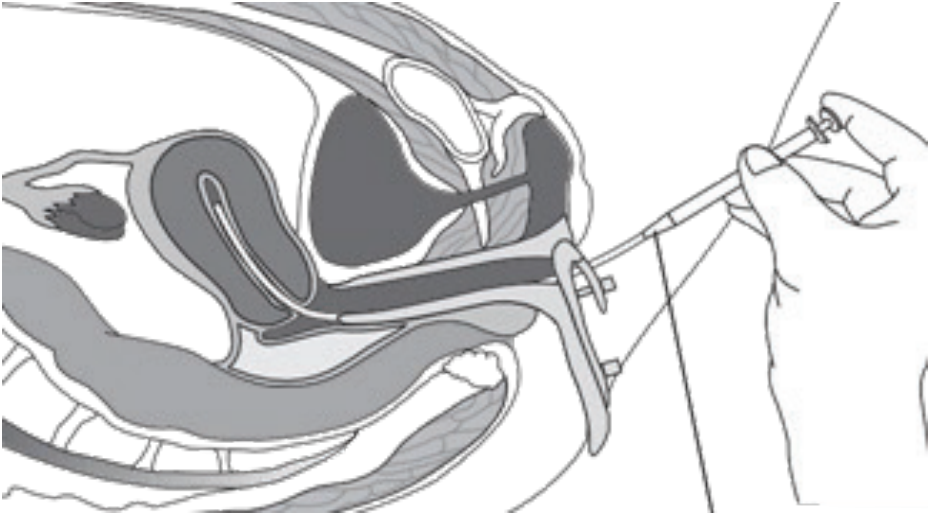
For those using a fresh semen sample, this will require the provider of the sperm to attend the clinic a few hours prior to the scheduled procedure to ensure there is time to prepare the sample.

Otherwise, sperm that has previously been frozen can be thawed and used. Those using donated sperm may commence treatment following quarantine and clearance for use.

Follow-up medication to support the lining of the uterus and further cycle monitoring may be required. A pregnancy (blood) test may be undertaken 14-16 days after ovulation to determine the outcome of the cycle.

Intrauterine insemination procedure.

Sperm injected into uterus.



Important information about the potential risks and hazards of assisted reproductive technology

In appropriate circumstances, assisted reproductive technology significantly increases the chance of getting pregnant.

However, as with any medical treatment, there are risks. We provide in-depth information below about the key potential risks during the assisted reproduction process.

You should discuss this information and any questions you may have with your Fertility Specialist before you start any treatment.

Cycle risks, including during stimulation

Medication side effects: It's not usual to experience some mild side effects from the medications prescribed to you. These side effects tend to be similar to, but more pronounced than the symptoms you may experience in the lead-up to your period, or what you might know as pre-menstrual syndrome (PMS) – bloating, headaches,

nausea, irritability, mood swings and breast tenderness. All potential side effects are outlined in the Consumer Medicines Information sheets provided by the medication manufacturers and enclosed with each medication. It's important that you read this information and discuss any concerns with your Fertility Specialist or nursing team.

Exposure to human substances: Certain medications that may be used in your treatment are derived from the urine of pregnant women who are recruited in different parts of the world by the relevant pharmaceutical company concerned. In over three decades of worldwide use of urinary products, no case of infection transmission has been confirmed.

Medication supply: It is important that you are responsible for monitoring your personal medication supply as failure to do so may affect your treatment. Please contact your nursing team to arrange a prescription or collection of medication.

Premature ovulation/unprotected intercourse: There's a small risk of spontaneous (premature) ovulation during stimulation for a medicated frozen embryo transfer cycle; fresh recipient transfer cycles; prior to timed intercourse with ovulation induction or IUI; and at the time of egg collection.

Sperm can remain alive for several days in the female reproductive tract and this means there's a risk of spontaneous conception (and an increased risk of multiple pregnancy) if you have

unprotected sex at this time. To guard against this risk, you should refrain from unprotected sexual intercourse from the start of your cycle until two days after your egg collection procedure or as advised by your nursing team. This is particularly important if you're an egg donor, surrogate, (or a PGT-M patient having embryo testing for a genetic condition). We recommend you use barrier contraception.

Cancellation of a treatment cycle: Although it is uncommon for cycles to be cancelled, your Fertility Specialist may find it necessary to recommend the cancellation of your treatment cycle. A cycle could be cancelled because:

- Your follicles are not responding to hormone treatment, or ovulate prematurely; or
- Your follicles are over-responding to the medication, and you are at risk of ovarian hyperstimulation (OHSS); or
- Multiple follicles have developed prior to planning timed intercourse or IUI; or
- Unexpected uterine problems (such as fibroids or polyps) are detected on ultrasound examination; or
- Unforeseen circumstances (for example an illness); or
- Inability to access services/medications required for safe and effective treatment.

Ovarian hyperstimulation syndrome (OHSS): This condition sometimes occurs when the medication used to stimulate ovulation causes too many follicles to mature at once, resulting in enlargement of the ovaries and an increase in the amount of hormones produced. This in turn can cause fluid to build up in the abdominal cavity and lungs. Symptoms of mild OHSS are similar to premenstrual symptoms, such as abdominal bloating, nausea and weight gain (due to fluid retention), which all resolve without treatment. These symptoms are worse in women with moderate OHSS. Women with severe OHSS usually have vomiting and an increase in discomfort from swelling of the abdomen and, in the worst cases, can develop shortness of breath and require hospitalisation. The risk of severe OHSS is around one-in-200 (0.5 per cent) egg collections. In severe cases, OHSS can also result in very enlarged ovaries, dehydration, fatigue and the collection of large amounts of fluid in the abdomen and lungs. Very rarely, OHSS can lead to blood clots and kidney failure, which, even more rarely, can be fatal. (These symptoms can be exacerbated by air travel, so please speak with your Fertility Specialist regarding any travel plans). Symptoms usually begin within a week but can take up to two weeks to develop.

If you experience vomiting, diarrhoea, shortness of breath, or pain that has not subsided 40 minutes after taking pain relief, contact your nursing team and, if in doubt, present to the nearest Emergency Department. Please let us

know if you are hospitalised at any stage during your treatment (for any reason).

Ovarian torsion: In around one-in-1,000 cycles, an enlarged stimulated ovary can twist on itself because the ovary is heavier from more follicles. This twisting can cut off the blood supply and cause acute pain that necessitates immediate hospital admission. Unless corrected quickly by surgery, the affected ovary may need to be removed. If you experience vomiting, diarrhoea, shortness of breath, or pain that has not subsided 40 minutes after taking pain relief, contact your nursing team and, if in doubt, present to the nearest Emergency Department.

Freeze all embryos: If you are at risk of OHSS or if a problem is discovered in the uterus, or for other reasons, such as being unwell, your Fertility Specialist might suggest that you have a 'freeze-all' cycle rather than cancel the cycle completely. In a freeze-all cycle, the eggs are collected, fertilised and cultured to Day 5, but no embryo will be transferred in this cycle and any suitable embryos will be frozen for possible future use.

Long-term health effects: There have been very few studies examining the long-term health effects of IVF for women, other than some studies relating to cancer. A number of large studies have investigated the relationship between the use of fertility medications and breast cancer.

Combining these studies, the risk of using fertility medications has been investigated in over 45,000 women

and no overall increase in the rate of breast cancer has been found. Ovarian and uterine cancers are much more uncommon and therefore more difficult to study. However, most studies have shown no significant increase in the risk of developing these cancers due to fertility medications.

Some studies have raised questions about whether there is an increase in cancer risk associated with the duration of fertility medication use or use of specific types of fertility medications among certain groups of infertile women. To date, there is no conclusive evidence that these factors increase the risk of cancer.

Although the findings of these studies are reassuring, it is important to remember that IVF has only been available for just over 40 years and that it is only in the past three decades that IVF has been used by large numbers of women. Therefore, questions remain about the very long-term risks of using fertility medications, particularly for rare forms of cancer. Also, little is known about the effect of fertility medications in women with a strong family history of breast or ovarian cancer, or in women with a personal history of cancer prior to fertility treatment.

Finally, some studies show that simply having infertility may place a woman at higher risk (i.e. a risk independent of treatment).

Risks in the day surgery/procedure area

Effects of anaesthetic/sedation: The nature of the anaesthetic or medication routinely used will normally permit you to leave the day surgery/procedure area after a short recovery period. You must plan to have a responsible adult accompany you home. This responsible adult must also stay with you overnight. You should not drive, operate machinery or make important decisions for 24 hours following your procedure.

Complications of anaesthetic: Our procedures are normally performed under sedation but on occasions it may be necessary to use a general anaesthetic.

General anaesthesia has increased risks. It's important that you follow the nil by mouth instructions from your nursing team (no food or fluids, including chewing gum, for at least six hours before your procedure). This will reduce the risk of aspirating any stomach contents into your lungs whilst you are unconscious. More serious complications, including nerve damage and death, are extremely rare. These risks will be explained to you in more detail on the day by your anaesthetist.

Major bleeding: Any invasive medical procedure carries a small risk of unexpected bleeding. Major bleeding may rarely occur if there is damage to an internal organ or blood vessel. This may require emergency surgery to correct and a blood transfusion if blood loss is severe.

Following the procedures involved in your treatment, a small amount of vaginal bleeding is normal. The puncture sites through the vaginal wall will heal quickly, and the bleeding will stop, however, this remains a potential site of infection for the next few days. It is safe to use sanitary pads or liners. You should not use tampons for one week and also avoid saunas, hot water spas and very hot baths for at least 48 hours.

Infection: Any invasive medical procedure carries a small risk of infection. Hand hygiene, wearing of protective attire (gloves, scrubs, gowns, eyewear and masks for example), high standards of cleaning and the use of aseptic or sterile techniques and equipment are all part of Genea's processes and procedures to ensure your timely recovery and to reduce the risk of infection. All needles used for any purpose (such as collecting blood or eggs), and all of the plastic that comes into contact with your gametes or embryos in the laboratory are new. Surgical instruments are cleaned and sterilised after every occasion of use in line with National Standards that meet or exceed those approved by the relevant state Health Department for day surgery units.

Some patients are at a higher risk of acquiring a serious pelvic infection (in particular ovarian abscess) as a result of egg collection. These situations include prior pelvic inflammatory disease, obstructed fallopian tubes (hydrosalpinx), endometriosis, ovarian cysts or difficult-to-access ovaries. The overall risk of a serious infection is small, but higher in these situations.

Additionally, all patients are screened for infection risk on admission to the day surgery/procedure area, so that additional precautions may be taken to protect other patients and staff.

These additional precautions range from applying dressings to protect wounds/skin, to requesting patients with respiratory symptoms to wear a mask. In severe cases as medically indicated, the procedure may be cancelled or postponed until you are well. You should talk to your Fertility Specialist or nursing team if you are not feeling well in the lead up to or following any planned procedures.

Injury to organs near the ovaries:

The physical manipulations required to access the follicles to collect your eggs may occasionally result in injury to the organs near the ovaries, such as the bladder, bowel or blood vessels. Rarely, injury to an adjacent structure, such as the bowel or blood vessel, can be a severe complication and may require blood transfusions and surgery for repair.

Falls and injury: The unfamiliar environment of the day surgery/procedure area, combined with the fact you may have medication during your admission, can increase the likelihood of falls and injury whilst in our care. Our nurses will ask you a series of questions when you are initially admitted to identify any pre-existing conditions and the need for increased resources or supervision during your visit. If you normally use any mobility aids or visual aids, please bring them with you to the day surgery/procedure area. Our nurses will orientate you and ensure the environment is as safe as possible, but you should still:

- Take special care when walking or standing, particularly after a procedure where anaesthetic, sedation, or administration of pain-relieving medication has been involved.
- Tell your nurse or Fertility Specialist if you notice any tenderness or soreness over a bony area or you notice any reddened, blistered or broken skin.

Risks in the laboratory

Exposure to human and animal substances: During the course of your fertility treatment you will be exposed to a limited set of biological materials.

For couples, we assume that any semen or sperm-containing fluid you or your partner provide the clinic for use in your treatment is that of your partner, with whom you usually have unprotected sexual intercourse. Therefore, we infer that any possible infectious or genetic hazards brought about by using the semen or sperm you give us are not new to you.

In the case of donated semen, the gametes must come from a donor sample which has been quarantined for at least three months:

- With us; or
- Another gamete bank appropriately licensed or accredited in accordance with relevant legislation; or
- An overseas gamete bank that uses the same screening criteria against infectious diseases as is required by law and by regulation in Australia.

In the case of donated eggs, there is a potential for transfer of infectious agents, which we reduce by; i) creating embryos and freezing for a quarantine period before transfer; or ii) freezing eggs for the quarantine period. In some cases, your Fertility Specialist may consider that the risks from treatment are low enough to warrant you consenting to waive the quarantine period to permit a fresh transfer. Your Fertility Specialist will discuss this with you, and you will be asked to sign a consent document regarding the infection risks.

Many substances and supplies are used in laboratory culture systems. These are always purchased from the most reputable suppliers and are of the highest possible grade of purity. However, whilst the best possible care is taken in their use, we cannot guarantee that impurities or contaminants that affect laboratory results might not occur.

In particular, human albumin forms part of the culture solutions used to prepare gametes and embryos, and some of this albumin is therefore transmitted along with transferred eggs or embryos. The albumin is prepared by prolonged heat treatment that kills viruses. It is purchased from overseas suppliers and is a pharmaceutical quality product.

The enzyme (hyaluronidase) that is used to prepare eggs for ICSI is derived from animals and is also prepared by prolonged heat treatment. The use of these products is standard in IVF programs everywhere and, to date, there have been no reported disease complications from their use.

Infection: There can occasionally be an undetected infection within the reproductive tract. Some of this infectious material may be collected with the eggs or sperm. Because the culture solutions used in the laboratory are designed to promote biological growth, the infection can grow in the embryo culture dishes and destroy the embryo(s).

Handling error: The provision of assisted reproductive treatment is a highly specialised area and involves human manipulation of gametes (eggs and sperm). Gametes and embryos can only be seen under the microscope. Very precise movements and manipulations of gametes and embryos must be undertaken in the laboratory. It takes years of training to become a competent embryologist. Nevertheless, occasional handling errors can still occur even by the most experienced embryologists. There are also circumstances where there will be no embryos to transfer, which is not due to human error.

However, very rarely, gametes can be lost due to unpreventable human error. Everything that we do is designed to avoid such incidents. However, if such a loss does occur, you will always be fully informed of the circumstances and supported. We will, at your election EITHER refund the relevant cycle fees to you OR provide further treatment at no out-of-pocket cost to get you to the same position in your treatment as before the loss occurred. These circumstances are very rare, and you will always be fully informed of any incident that affects your treatment.

External factors: We are not (and will not be) liable in circumstances where there has been an error, mistake, failure, damage or loss caused by, or caused in substantial part by, circumstances or people beyond our direct control or practical ability to detect. This includes, but is not limited to situations of damage or loss caused by:

- Faulty or defective equipment or consumables that have been used in accordance with manufacturer's instructions and/or maintenance schedules and/or generally accepted practice; or
- Events, including natural disasters and catastrophic accidents not attributable to our conduct, whether innocent, intentional, negligent or malevolent; or
- A person or persons or company or government agency outside of our control, including but not limited to criminal acts, acts of terrorism, changes to laws or regulations, industrial action, third party corporate collapse or orders of a court.

Health risks for children conceived by ICSI: After intracytoplasmic sperm injection (ICSI) there is a slightly increased chance of health risks for children. Whether this is due to the laboratory process itself, or whether it is due to the inherent sperm problem that has led to the need for using ICSI, is unclear. Your Fertility Specialist can discuss the specific risks with you. It's advisable for men with significantly low sperm counts to have genetic tests

performed to detect causes that can increase these risks before starting ICSI treatment. These include testing for:

- The genes associated with cystic fibrosis;
- Changes in the number of sex chromosomes; and
- Errors in the Y chromosome.

There is also a higher risk that an unknown genetic cause of male factor infertility might be passed on to male children.

No fertilisation or embryo development:

Fertilisation can fail and fertilised eggs can fail to divide or undergo proper development. The reason can lie with the sperm, with the egg or both.

Sometimes it can lie with the laboratory. There are occasional genetic causes of difficulty with eggs or sperm that might not become apparent or be suspected until you have undergone one or more cycles of treatment.

PGT biopsy: It may be that not all embryos will be suitable for embryo biopsy and PGT analysis, but in some cases could develop should they be transferred to the uterus. Your Fertility Specialist may discuss transferring embryos that have no information available and inherently would then have the same risk of carrying the condition for which PGT was considered.

False diagnosis with PGT: All medical tests have a small risk of an incorrect result. This means either:

- False negative – where the chromosome count is normal; or where no abnormal gene is identified, but the embryo is actually abnormal or affected by the genetic disease in question. This may be caused by contaminated genetic material or a mixture of normal and abnormal cells in an embryo or a faulty test result that has failed to identify the abnormal genes or chromosomes.
- False positive – where an embryo is diagnosed as having abnormal chromosomes or having the genetic disease in question, but this does not represent the true status of the embryo. This is usually caused by a mixture of normal and abnormal cells in an embryo, but a faulty test or contaminated genetic material can also be a cause.
- No diagnosis – due to failure of development or inconclusive genetic results, the genetic status of the embryo may remain unknown. As such, these embryos would inherently have the same risk as an untested embryo of carrying the condition for which PGT was considered and should be transferred at your own risk after consultation with your Fertility Specialist.

Due to the tiny amount of material available for testing, PGT as a process is less accurate than prenatal diagnosis by non-invasive prenatal screening,

amniocentesis or chorionic villus sampling (CVS). Also, even in a blastocyst, embryo cells are not in the final form that they will have as a foetus and placenta after implantation. PGT does not completely exclude errors as the embryo can continue to change as it develops further. So even if you have PGT, you should still have the usual first trimester pregnancy screening tests that you and your obstetrician, GP or midwife would otherwise consider.

Following PGT analysis, affected and/or abnormal embryos are classified as clinically unsuitable and will not be available for transfer unless there is prior agreement with your Fertility Specialist and Genea. Embryos are reported as affected based on current understanding of the gene variants tested and the known association with the condition and its severity. Affected embryos will be discarded based on current local guidelines. They may be used for training purposes or frozen for future follow-up confirmation testing or possible research (your consent for research would be sought separately).

PGT may reveal new genetic

information: If undergoing PGT it is important to note that the molecular genetic testing can reveal information that you may not have been aware of before embarking on treatment. This could include information about the parentage of those individuals being tested, or the genetic status and health of other family members. Other family members may be required to have genetic counselling before providing samples for

your PGT testing work up.

New knowledge: Assisted reproductive technologies are constantly evolving and new knowledge can alter the information provided to patients. We encourage patients to stay informed and visit our website. Once you are no longer receiving treatment, we do not have an obligation to inform you of new information that may or may not turn out to be relevant.

The long-term effects of the technological interventions on patients or children who result from them are not fully understood. The newer or more innovative the procedure, treatment or test, the more uncertainties, hazards, or risks there could be, and these uncertainties, hazards, or risks are inherent in assisted reproductive services, and cannot be entirely eliminated.

Risks during pregnancy

You may not become pregnant: Not all embryos that are transferred will result in a pregnancy. The embryo may fail to implant, or when a pregnancy is established, it may not carry to term. This may be for various reasons, including, the energy stored in the embryo(s), chromosome abnormalities or other physical causes.

Ectopic pregnancy: The embryo may occasionally implant within the fallopian tube or elsewhere instead of the uterus. If you are pregnant and experience a sharp, stabbing pain (that has not subsided 40 minutes after taking pain relief); vaginal spotting or bleeding; dizziness or fainting; shoulder tip pain; low back pain or low

blood pressure (from blood loss), call your nursing team immediately and, if in doubt, present to the nearest Emergency Department. There is a one-in-50 risk of an ectopic pregnancy (potentially higher if you have a past history of tubal damage). If an ectopic pregnancy occurs, you will usually need medication to end the pregnancy or surgery to remove it.

Miscarriage: The rate of pregnancy loss or miscarriage following IVF is similar to the rate following natural conception, with the risk increasing with advanced maternal age. The rate of miscarriage may be as low as one in seven for women in their 20s, to more than one-in-two for women in their mid-40s. There may be a genetic cause of the miscarriage, including chromosome errors in the gamete providers or foetus; or there may be a physical reason. If you experience recurrent miscarriage, your Fertility Specialist can arrange investigations of the cause. Pre-implantation genetic testing for aneuploidy (PGT-A) can be of assistance in some situations (where available).

Multiple pregnancy risk: We would like to help you grow your family one baby at a time. If you have had difficulty conceiving, the idea of having two babies at one time may be appealing. However, multiple pregnancies place an increased physical burden on the body, including an increased risk of miscarriage, high blood pressure, bleeding and premature birth, and death of the babies. Severe prematurity is much more likely when carrying twins, leading to abnormalities and developmental delay. Perinatal mortality in twin pregnancies is

approximately five-times higher than in singleton pregnancies. Overall, twins are at an approximately five-fold increased risk of foetal death, seven-fold increased risk of neonatal death, and four-fold increased risk of cerebral palsy, compared with singletons.

Premature babies can have difficulty with breathing, feeding problems and other developmental delays. Caring for more than one baby can cause challenges associated with emotional, physical and financial stress.

Furthermore, there is the potential for one of the foetuses to be chromosomally normal and the other abnormal; which has the potential to put the entire pregnancy at risk.

For these reasons, the Reproductive Technology Advisory Committee (RTAC) requires clinics to recommend no more than one embryo is transferred in the first treatment cycle of an IVF cycle where the gestational carrier is less than 35 years. Also, an embryo can sometimes divide to produce two or more embryos, creating identical twins. The risk of a twin pregnancy after a single blastocyst transfer is approximately one-in-100. The risks of birth defects and stillbirth(s) are often higher with identical twins, depending on whether they share the placenta. While we generally only transfer one embryo, in certain circumstances, such as advanced maternal age, or previous unsuccessful treatment, we may consider transferring two embryos following detailed consultation with your Fertility Specialist.

RTAC requires mandatory single embryo transfer for a gestational carrier in surrogacy arrangements.

Outcomes for babies: Every pregnancy, whether conceived naturally or by reproductive technology, has a risk that the baby may be born with a serious medical condition, either from a chromosome error or the combination of genetic material from both parents. The risk of birth defects in children conceived naturally is one-in-50 to one-in-33 (2-3%) whereas the risk of birth defects in children conceived by IVF is estimated by the American Society for Reproductive Medicine (ASRM) to be one-in-38 to one in 26 (2.6-3.9%). Also, there may be an increased risk of sex chromosome abnormalities, hypospadias (urinary opening not at the tip of the penis) and imprinting disorders when intracytoplasmic sperm injection (ICSI) is performed as part of IVF. There may be other rare conditions that are more common in children born after IVF; for example, Beckwith-Wiedemann syndrome, which is thought to be increased from about one-in-14,000 to 35,000 in spontaneously conceived babies to about one in 4,000. For up-to-date information, you should consult your Fertility Specialist. You should not assume that genetic testing or PGT-A is automatically conducted.

Getting ready to start - information we would like you to be aware of

We would like you to be in the best possible health by preparing your body to commence treatment with us. We recommend you consider doing the following before starting treatment.

Have a check-up: Before starting assisted reproductive treatment and preparing for a possible pregnancy, it is ideal to have a check-up with your GP.

You should ensure that you:

- Are up to date with your cervical screening testing;
- Have had a recent breast exam, ruling out any unexplained lumps;
- Have been immunised against rubella (German measles), varicella (chickenpox), whooping cough and influenza;
- Have had your recommended COVID vaccinations;
- Consider genetic screening;
- Have had all viral screening blood tests, vaginal swabs, diagnostic ultrasounds and sperm tests, as ordered by your Fertility Specialist; and
- Know your blood group.

If you do not have a GP and require a referral for one of our Fertility Specialists, Genea offers Telehealth appointments with our Fertility GPs. Please speak to us to arrange an appointment or visit genea.com.au and book online.

Consider genetic screening to reduce your risk of conceiving a child with a serious genetic syndrome. Discuss this with your Fertility Specialist.

Nutrition and supplements: You should follow a nutritionally adequate diet and, where this is not possible, talk to your Fertility Specialist about the value of supplementation or seek alternative dietary advice. You must be careful to not take more than the recommended daily allowance of Vitamin A, because higher amounts can cause birth defects. Taking folic acid before and after the time of conception greatly decreases the risk of neural tube defects, such as spina bifida. It is recommended you take at least 0.8 mg per day (unless otherwise directed by your Fertility Specialist). Many women also require supplementation of Vitamin D and iodine.

Herbal preparations contain active ingredients that are not standardised and their mechanism of action is largely unknown. We recommend you discuss your supplement regime with your Fertility Specialist prior to commencing treatment.

Weight: An increased body mass index (BMI) in women and men can reduce the chance of pregnancy and success with IVF, and in women, significantly increase the risks from IVF procedures and in any achieved pregnancy. If your BMI is greater than 35, national guidelines recommend against assisted reproduction, and your Fertility Specialist may not treat your infertility until you attempt to lower your BMI (this may also be a requirement for admission for procedures). Please note

your BMI is required to be measured at the commencement of each treatment cycle. If you have experienced significant weight gain between cycles and are over Genea's BMI limit > 38, unfortunately you may not be able to commence treatment. If you need assistance, we can refer you for weight and lifestyle management.

Smoking, vaping and recreational drugs: Cigarette smoking and vaping is harmful to sperm, eggs, and very early embryos. If you are a smoker, we encourage you to stop smoking now. Any recreational drug or steroid use should be stopped completely.

Reproductive carrier screening: Genetic carrier screening looks to see whether a healthy couple has an increased chance of having a child with a serious, childhood-onset genetic condition.

This test is for anyone, regardless of family history, ethnicity or your own health.

There are hundreds of inherited genetic conditions, some common and others very rare. Common inherited genetic conditions include cystic fibrosis, spinal muscular atrophy and Fragile X syndrome. Some tests are rebated and some have out-of-pocket costs. Genetic testing is advancing rapidly, so if you had carrier screening, in the past, you should talk to your fertility doctor about updated options.

For more information about carrier screening please read 195616-GEN46723 - High-risk carrier screening result (003). You can also contact the Genea Genetic Counselling team at genetic.counsellors@genea.com.au

Karyotypes: A karyotype is a chromosome test which is recommended for any couple undergoing IVF treatment to assess the chance of a couple having a pregnancy with a chromosome issue such as a translocation. This is Medicare rebated test which can be ordered by your GP or fertility specialist. If you are found to have a chromosome change, there may be options available which can reduce the chance of a pregnancy with a chromosome issue.

If you have elected PGT-M, PGT-A or PGT-SR testing of embryos, a karyotype is mandatory for the reproductive couple.

Genetic testing: We recommend that you consider your family history (where possible) and ensure you have discussed your detailed medical and family history with your Fertility Specialist. There are tests for genetic diseases available that should be considered, depending on your or your family medical history, age or ethnic origin. It might be possible to test for your carrier status and prevent transmission of genetic disorders to your future children. It should never be assumed that any kind of genetic testing will be performed unless this has been specifically discussed and consented.

Your psychological well-being: Your fertility treatment may add extra stress and increase the strain on your relationships. These feelings may also be increased by the side effects of the medications.

IVF treatment can be stressful and intrusive. There are various reasons for this including:

- Demands of stimulated treatment (daily injections, the need for blood tests early in the day, ultrasounds, etc)
- Stresses associated with procedures (having an invasive procedure; the discomfort sometimes experienced; providing a semen sample on the day of the egg collection)
- Stresses associated with time spent waiting for fertilisation results; embryo checks; and between transfer and pregnancy test, followed by the pregnancy test result
- The possibility of treatment not being successful.

Luckily, stress itself does not jeopardise the chance of IVF success. Many people have remarked that they have felt worn down by the stresses and the losses associated with infertility. It's not uncommon for people to experience grief in response to the many losses experienced, as well as other emotional responses, such as depression and anxiety. With this in mind, you should be aware that Genea provides counselling services that can greatly assist in managing this emotional roller coaster.

Strategies for coping

Talking to supportive friends or family members can be helpful for some people, while others find it only adds to their burden. Some people have found distraction to be a useful coping strategy – pursuing activities or hobbies that require their full attention – in order to ‘take time out’ from the process of treatment.

Other people have reported that engaging in activities that gives them a sense of achievement was of some benefit. Some people learn specific relaxation techniques, for example yoga or meditation, to help them manage some of the stresses, while also reducing muscle tension and general anxiety.

Others have reported that being able to talk to one of the nurses, who can answer questions and provide reassuring support, was helpful to them.

Counselling

At Genea, we have a team of dedicated professional counsellors who are available to see you before, during or after treatment.

People undergoing fertility treatment often wonder if or when they should seek counselling. The treatment process can mean that some people experience a roller coaster of emotions, depending on the length of treatment and its outcome. The understandable stresses associated with fertility difficulties can start to impact on all aspects of one's life. Undertaking counselling is one strategy to help manage these stresses.

Dealing with infertility can be isolating and lonely, particularly if you have chosen not to confide in anyone about your treatment. It is also not uncommon for partners to react to infertility very differently and this can put a strain on any relationship. Maintaining a sense of balance and equilibrium at this time can be difficult.

Sometimes, just finding out how others cope and whether your reactions are 'normal' can alleviate some anxiety.

You can choose to see a counsellor with your partner or on your own. We also provide telephone counselling if you are not able to come for a face-to-face session. There is usually no charge for the counselling service provided to Genea patients. There is a charge for counselling that precedes egg donation, sperm donation, or surrogacy.

At regular intervals throughout the year, the counselling department runs Mind/Body groups for patients, to teach stress management and relaxation within a supportive environment.

Other information seminars are also held several times a year.

Australia

www.genea.com.au/counselling or by contacting 1300 361 795.

<https://wa.genea.com.au/patients/counselling-and-support-groups>

External support can also be accessed through the consumer support group, ACCESS www.access.org.au

Even though we understand that you may be frustrated, we will not tolerate verbal or physical abuse, or discriminatory behaviour towards staff members, other patients or external contractors. We have a duty of care to provide a safe working environment for our staff and to provide the safest, most supportive environment for our other patients. This also includes discriminatory behaviour towards staff and other patients e.g. comments based

on ethnic background, current pregnancy or physical disability. We understand that this is a difficult time and we will do everything in our power to support you.

Your next steps

Use the checklist below to ensure you have completed all steps prior to Day 1 of your treatment:

- Carefully reviewed and signed the attached 'Request and Consent for Treatment' document and returned to the clinic.*
- Have a valid and current referral for Medicare claimable cycles. This must be dated and received by your treating doctor prior to Day 1 of your cycle. If you do not have a valid referral you will be unable to claim a Medicare rebate. (Applicable for those with Medicare coverage) Please note, a GP referral is valid for 12 months and a Specialist referral is valid for three months.
- Completed the online payment registration and returned your signed quote to the clinic (refer to your quote for registration instructions). This will allow Genea to process your payments and lodge any applicable claims with Medicare and/or your health fund on your behalf.

*You may withdraw your consent for treatment at any time prior to the procedure, in writing.

The consenting process: You will be provided with consent documentation in advance of your treatment. A consent form is a legal document which gives permission for treatment and acknowledges that you accept the

risks and benefits of the treatment. It is your decision whether to be treated (or to continue treatment). It would be a criminal offence for us to provide treatment without your consent.

Before you commence your treatment, it is important that you understand the procedures your Fertility Specialist is planning for you and the potential risks and benefits. This booklet is an outline to your treatment, but you should talk with your Fertility Specialist or your nursing team if you have any questions before you sign the consent forms. Depending on your type of treatment, you will be required to sign one or more consent forms. Your circumstances may change over time. You may complete your family, or simply decide on no further treatment. Some couples may separate.

You are able to withdraw your consent for treatment at any time by advising us, in writing.

Please note, where embryo transfers are concerned, consent is required from both partners. We will not, for example, undertake a frozen embryo transfer cycle unless there is signed consent to do so, from the patient's partner.

Nothing in the consent forms seek to exclude or limit the application of any applicable legislation. We are not (and will not be) liable in circumstances where there has been damage or loss caused, or caused in substantial part by events or actions beyond our control or practical ability to detect, including but not limited to accidents not attributable to our conduct, changes to laws or regulations, industrial action or orders of a court.

Preparing for the future: Consideration should be given to the future outcome of any eggs, sperm or embryos that result from your treatment. This includes both what you would like to happen to gametes/embryos that are in excess to your reproductive needs and in the event that one or both partners die, you separate, or become unable to vary your instructions.

Our team can assist you in considering your options and our counsellors are available to help you make a decision that is right for you. You should include instructions in your Genea consents, and we recommend that you also include details in your Will(s).

Legislation, regulations and guidelines vary between state jurisdictions. We recommend that you read your Genea consents carefully and consider whether legal advice is appropriate for your particular situation.

These rules may restrict (or prohibit) the use of reproductive tissues after death, especially in the absence of written consent. In the event of no instructions, impractical or conflicting instructions, gametes/embryos may be discarded upon your death or in the case of a couple, either partner without requiring further consent.

Charter of Patient Rights

In Australia, we have adopted the principles of the Australian Charter of Healthcare Rights, which is an initiative of the Australian Commission on Safety and Quality in Health Care. You can find

out more about the Australia Charter of Healthcare Rights (second edition) by visiting the Commission's website: www.safetyandquality.gov.au where you will find additional resources and access to alternative versions, including audio, Braille and translations.

1. **Access** – A fundamental right to adequate and timely healthcare. We will provide you with access to appropriately trained healthcare professionals during your treatment; facilitate appropriate referrals as required and provide you with the tools to access the care you need. You can contribute to the right of access during treatment by informing us of your needs and any changes in your circumstances, being available to receive your instructions and results, being on time for your appointments and ensuring timely payment of any fees. Sometimes healthcare may be provided by external health practitioners. Please be aware that as a private healthcare provider, we reserve the right to cease treatment or discontinue the storage of gametes/embryos if fees remain outstanding.
2. **Safety** – A right to safe and high-quality care. You can contribute to the right of your safety by alerting your Fertility Specialist and/or your team if you are unsure about what is happening to you, or if you think something has been missed in your care, or if there are any circumstances that might make your healthcare riskier. We request that all staff and patients are treated with respect.

Please make suitable arrangements for the care of your children when you visit us – our staff are not permitted to care for your children. Medical equipment in our clinics may be hazardous to children and Department of Health license requirements do not permit children in the day surgery area at any time. Please be aware that we have a duty of care to refuse or discontinue treatment if your actions compromise the safe delivery of your care/treatment, or the safety of others.

3. Respect – A right to be shown respect, dignity and consideration. You are entitled to receive care in a way that is respectful of your culture, beliefs, values and individual circumstances. It is important to tell your Fertility Specialist and your team of any special requirements you may have and any changes in your circumstances. You can also contribute to the right of respect by being mindful and considerate of our staff and other patients. Some of our patients have told us that the presence of children in our waiting areas is distressing. Where possible, we request that you please make alternative arrangements.
4. Information – A right to be informed about services, treatment, options and costs in a clear and open way. So, you can give informed consent, your Fertility Specialist and your team will tell you about the care you are receiving and help you understand what is happening. You can contribute by being open and honest, being

available to receive results and instructions, and attend appointments as required during your treatment.

To understand the instructions given to you, we encourage you to ask questions if you would like more information. We can arrange an interpreter for you if English is not your first language.

5. Partnership – A right to be included in decisions and choices about care. Your Fertility Specialist should give you a clear explanation of your diagnosis, your treatment and any associated risks, as well as other treatments available. When you become our patient, you will receive information about your proposed course of treatment, including medications and side effects, and anticipated procedures. You will also be provided with detailed information about our fees, including any likely out-of-pocket costs. You are encouraged to ask questions if you are unsure about what is happening, or you'd like more information. Involve your support people or family if this makes you more comfortable.
6. Give feedback – A right to comment on care and have your concerns addressed. We are committed to continuously improving our services, and your feedback is important to us. From time to time, we may contact you for quality assurance purposes to offer you the opportunity to provide

feedback. If at any time you have any specific feedback or concerns about any aspect of our service, please raise this with us by calling:

- ACT, NSW, WA, VIC, QLD, and SA – (02) 9229 6420; in writing to Clinic Manager at your specific clinic or through our website www.genea.com.au/feedback.

You may also address concerns about us to your relevant Health Complaints Commissioners:

- Australian Capital Territory – Health Services Commission (02) 6205 2222 or email: human.rights@act.gov.au
 - New South Wales – Health Care Complaints Commission (02) 9219 7444 or email: hccc@hccc.nsw.gov.au
 - Western Australia – Health and Disability Service Complaints Office (08) 6551 7620 or email: mail@hadsco.wa.gov.au
 - Victoria – Health Complaints Commissioner 1300 282 113 or online via www.hcc.vic.gov.au/contact or email: hcc@hcc.vic.gov.au
 - Queensland - Office of the Health Ombudsman 133 646 or online via <https://www.oho.qld.gov.au/contact-us>
 - South Australia - Health and Community Services Complaints Commissioner 1800 232 007 or email: info@hcscc.sa.gov.au
7. Privacy – a right to privacy and confidentiality of provided information. The personal information you share with us during your

treatment will be safeguarded in accordance with Australian Privacy Act 1988 and in accordance with our Privacy Policies. Please see below Genea's Privacy Collection Statement, which we are required to make available to individuals as we collect personal information or beforehand.

Genea Privacy Collection Statement: We collect personal and health information from individuals enquiring about or seeking health services.

We may collect your information in the following ways

- During conversations with you, over the phone, face-to-face, or your use of our website;
- From your referring doctor, other treating doctors or Fertility Specialist; or
- When you complete our forms and paperwork.

Sometimes we may obtain health information about you from a third party i.e. your partner or other family member (when it is not practical to obtain it from you). This information will always be confirmed with you when it does become practicable to do so.

All information is held securely on an Australian-based information platform.

If any of the personal or health information you provide is not accurate or complete, it may detrimentally affect the services that we can provide and may result in us being unable to provide you with our services.

For what purposes do we collect, hold, and use your personal and health information?

Your personal and health information is collected and used to ensure you can be informed about the services that we provide, that you receive the best possible care if you become our patient, and for us to manage the health services we provide to you effectively. It will also be used to:

- send communications (including results) to you and your referring and treating doctors;
- Provide information and advice;
- Conduct business processing functions;
- Update our records and keep your contact details up-to-date;
- Respond to any complaint made by you; and
- Comply with any law, rule, regulation, lawful and binding determination, decision or direction of a regulator, or in cooperation with any governmental authority.

It will also be used internally for the administrative, marketing, planning, product or service development, quality control and research purposes.

To whom may we disclose your information?

The only people who ordinarily see your health information are the ones who really need it – the health professionals directly involved in your treatment. However, if you are hospitalised as

a result of your treatment and your records are needed urgently, they will be forwarded to the relevant medical professional without waiting for written consent.

We may disclose your personal and health information to our employees, related bodies corporate, contractors and service providers for the purposes of us providing the health service to you and managing our business (i.e. our computer systems), subject to strict confidentiality obligations.

Health information may also be provided to third parties if we are legally obliged to do so by a court subpoena, statutory authority, search warrant, coronial summons or to defend a legal action. If information is requested by a third party connected to you, it must be accompanied by an original written authorisation from you to release that information.

There may be instances where mailing houses, couriers, payment processors, data entry services providers, electronic network administrators and debt collectors are provided with some of your personal details. They will never have access to your treatment information and are subject to strict confidentiality obligations.

We undertake and participate in medical research with collaborators that sometimes involves identifiable health information. Such research proposals must be presented to our Ethics Committee for approval prior to any project commencing and must follow

strict guidelines. We will always request your permission to be involved in such research and your written consent to release your information to third party researchers.

Your personal and health information will not be disclosed other than as described in the Privacy Policies.

Do we disclose your personal information to anyone outside Australia?

No personal or health information is disclosed to parties outside Australia, except in circumstances where you request and consent to its release (i.e. the shipment of biological material to an overseas clinic).

Our Privacy Policies: Our Privacy Policies are available at privacy@genea.com.au, and contain further information about how you may access your information and how we will handle any complaints.

Our contact details: Australia-privacy@genea.com.au or Privacy Officer, Genea Limited, Level 2/321 Kent Street, Sydney NSW 2000.

Please also note that with this approach in place:

1. As part of our obligations as a registered provider of assisted reproductive technologies and in order to deliver treatment, we are required to send a summary of each treatment cycle in a de-identified manner to the University of New South Wales, Sydney, for inclusion in the Australia and New Zealand Assisted Reproduction Database (ANZARD). The data will be used for national statistical reporting,

regulatory review and population-based research by the National Perinatal Statistics Unit (NPSU).

2. Certain information, including participant identifying information, may be required to be held in state Department of Health (DOH) registers, which may only be viewed by authorised DOH staff.
3. Some information will be provided to Medicare (Australia) and/or your approved health fund on your behalf, if requested to do so.
4. Medical records may be internally audited by our staff for quality improvement activities and externally audited by officers or certifying bodies performing inspections for the purpose of clinical audit, licensing or institutional accreditation, including, RTAC, ISO 9001, National Standards for Safety and Quality in Healthcare, Reproductive Technology Council and the Victorian Assisted Reproductive Treatment Authority (VARTA). If you are also under the care of a GP or external O&G, we may provide information to them on your behalf for your continued treatment.

Open disclosure framework: We have adopted the Australian Open Disclosure Framework (2013). Genea also has a Complaints Management Policy in place that commits the company and all staff to fair and effective complaint management aligned with these principles:

- Complaints are acknowledged and responded to promptly and with sensitivity.

- Complaints are assessed and dealt with fairly and effectively.
- People making complaints are provided with information about the outcome of their complaint.
- People making complaints will not suffer any detriment because a complaint has been made by them or on their behalf.

Should you experience an adverse outcome (through error or incident) at any stage during your fertility treatment, we and our representatives will:

- Apologise and maintain an open dialogue with you;
- Give a factual explanation of events (which may take time to investigate and determine) – including the potential consequences as they relate to your individual circumstances; and the steps taken to manage the event and prevent reoccurrence; and
- Give you an opportunity to relate your experience.

Research: We have achieved our world-leading results by a continuing commitment to scientific research and the generous participation of our patients. Our Australian research projects are approved by our independent Ethics Committee and are strictly governed by the National Health and Medical Research Council (NHMRC) of Australia. Clinically unsuitable oocytes/embryos are excluded from your IVF cycle in order to maximise treatment outcomes and would normally be discarded. There are a limited number of research projects in which clinically

unsuitable oocytes and/or leftover sperm may be used without the need for further consent forms.

Oocytes/embryos originally frozen for future cycles, may at some point become excess to a patient's clinical need for different reasons (e.g. when the patient's family is complete). With your specific consent, these excess or clinically unsuitable oocytes/embryos can also be donated to research projects. Our research team is undertaking a number of research activities to continuously improve the way in which we treat our patients and to further medical knowledge for the treatment of genetic or acquired diseases. Not all research projects are suitable for every patient; our research consent team may contact you with information specific to your circumstances over the course of your treatment. Separate specific written consent for research projects has to be given and no research activity will go ahead without it. Your participation is entirely voluntary and your relationship with your team will not be harmed if you decide not to take part. If you have any questions about our research projects please contact the research consent team on (02) 8484 7692 or research.info@genea.com

Clinical trials: Our ability to conduct world-leading treatment is greatly assisted by the ability to offer clinical trials to our patients. New protocols, culture media and devices are extensively tested in preclinical studies. Apart from giving our patients access to the most advanced IVF protocols, clinical trials

are usually conducted to determine final validation and usability studies in a clinical setting. Participation in clinical trials is entirely voluntary. Your decision will not affect the standard of care you receive or the relationship you have with your team. Details specific to current trials, including study description, information about confidentiality, consent processes, potential risks and benefits of active clinical trials will be provided to you during your treatment. Please note, not all current clinical trials will be relevant to your specific clinical circumstances. Your Fertility Specialist may contact you (or may have already spoken to you) with information about the clinical trial most relevant to your treatment, if applicable.

New technology: We are constantly seeking to provide the best possible care to our patients and to constantly improve our laboratory methods. This involves the validation and implementation of new and improved IVF techniques, IVF devices and IVF media during a clinical treatment cycle. For example, sperm may be prepared for use in your treatment in more than one way to compare new technologies with standard technologies. Eggs, sperm or embryos may be prepared or grown in more than one kind of culture medium or vitrified using different techniques. De-identified images of your gametes/embryos may be used for marketing/research purposes.

Quality improvement and training:

Our ability to conduct high-quality IVF procedures is dependent upon method development and ongoing training. During your journey with us, staff under training may be involved in your treatment and laboratory work. At all times trainees work under the direct supervision of fully qualified staff. Eggs or embryos not suitable for clinical use and leftover sperm would normally be discarded. These may be used for quality improvement and training purposes as governed by the NHMRC guidelines.

Glossary of Terms

Agonist (GnRH): a GnRH-analogue that briefly stimulates the pituitary gland to release follicle stimulating hormone (FSH) and luteinising hormone (LH), then within a few days reduces these hormones to low levels. Can be used to suppress the LH surge that otherwise can spoil the timing of egg retrieval in an assisted reproductive technology technique such as IVF. Agonists are also commonly used in “antagonist” IVF stimulation cycles to trigger ovulation, instead of hCG (especially when there is risk of OHSS).

Amniocentesis: the sampling of fluid from the amniotic or gestational sac, usually performed around 14 weeks of pregnancy, to check the genetic normality of the foetus by determining its karyotype or for performing biochemical tests.

Antagonist (GnRH): a GnRH-analog that (unlike GnRH-agonists) immediately stops the pituitary gland from releasing the gonadotropins follicle stimulating hormone (FSH) and luteinising hormone (LH). Because of this immediate impact, antagonists are commonly used to prevent the premature release of eggs in IVF stimulation cycles.

ART: assisted reproductive technology

Blastocyst: stage of development of the embryo in which a fluid-filled cavity forms in the formerly solid ball of cells (the ‘morula’), about 5 days after fertilisation. For the first time, a distinction can be made between a sheet of cells to one side, which will form the embryo proper (the inner cell mass), and the remaining, peripheral cells, which – after the blastocyst ‘hatches’ through the zona pellucida and undergoes implantation – will form the placenta (the “trophoblast”).

Chorionic villus sampling (CVS): a test performed at about 10 weeks of pregnancy during which, under ultrasound guidance, a small sample of tissue is taken from the placenta for genetic testing, such as a karyotype.

Chromosome: the visible structure formed by a single long strand of DNA with its supporting and regulatory proteins. There are 46 chromosomes in the nucleus of every human cell, 22 pairs of autosomes (common to both sexes) and the two sex chromosomes, XX in a female and XY in a male. Each chromosome has thousands of individual genes along its strand.

Culture medium: a solution of nutrients required for the growth of an embryo or tissue in culture.

Cytoplasm: the part of a cell that is not the nucleus (the nucleus contains the chromosomes). The cytoplasm is contained by the cell's 'plasma membrane' and contains all the other cellular structures, including the mitochondria. Genetic inheritance is mostly by way of the nucleus (with a contribution from mother and father); a small part is by way of the cytoplasm (with a contribution only from the mother). It's the cytoplasm of the egg into which a sperm cell is injected during 'intracytoplasmic sperm insertion' (ICSI).

DNA: deoxyribose nucleic acid, a molecule made up of a sequence of nucleotides, the order of which forms the genetic code.

Embryo: In IVF, the term is generally used to describe the fertilized egg, onwards until blastocyst development and to the point of implantation. However, the term also relates to development post implantation, up to fetal development. After implantation, a group of cells (the inner cell mass) differentiates to form the embryo itself (later the foetus), whereas remaining cells go on to form the placenta, namely the pregnancy membranes and placenta.

Embryo biopsy: the procedure whereby five or six cells are removed from an embryo (performed at the blastocyst stage, on Day 5 or 6 after fertilisation) for genetic analysis.

Embryo transfer (ET): procedure by which the embryo is placed in the uterus or into the fallopian tube after in vitro fertilisation.

Fallopian tube: the hollow organ, about 10 to 12 centimetres long, that effectively joins the ovary to the uterus on each side. Composed of the fimbrial end, the ampulla, the isthmus and the interstitial segment.

Fertilisation: the fusion of gametes, a spermatozoon with an oocyte to form an embryo and, potentially, to create a new individual.

Gamete: the generic term for a male or female germ cell, i.e. the spermatozoon or oocyte.

Gene: a specific part of the DNA that contains the genetic code for a single molecule, such as an enzyme or other protein.

Genome: the entire genetic code of an individual cell or organism.

Implantation: the process whereby the blastocyst-stage embryo burrows into the lining of the uterus to establish a pregnancy.

In vitro fertilisation (IVF): literally, fertilisation "in glass" (but in reality "in plastic"). This technique, whereby oocytes and spermatozoa are mixed in the laboratory to achieve fertilisation, is used as a fertility treatment when the process has not occurred naturally.

Intrauterine insemination (IUI): a form of assisted reproductive technology involving assisted insemination into the uterus, either for donor insemination (DI) or with a male partner's semen (AIH). IUI can be carried out with natural cycles or with ovarian stimulation (superovulation) using clomiphene or follicle stimulating hormone, with ovarian monitoring.

Karyomapping: a single nucleotide polymorphism (SNP) based linkage test used to track inheritance of disease gene regions.

Karyotype: a preparation made from one or more cells in the laboratory to study whether an individual has a normal set of chromosomes. A normal male is 46, XY while a normal female is 46, XX.

Mutation: a change in the coding sequence of a gene, which usually alters its function, often causing harm.

Next Generation Sequencing (NGS): molecular genetic technique that allows determination of the number of chromosomes in an embryo.

Nucleotide: one of the molecular building blocks of DNA. A set of three nucleotides forms one letter in the genetic code.

Nucleus: the central part of each cell where the genetic code carried in the chromosomes resides.

Oocyte: the scientific term for the unfertilised egg.

OPU: oocyte pick-up, the term used to describe the clinical procedure during which unfertilised eggs are collected from the ovaries. Also called TVOA (transvaginal ovarian aspiration).

Pre-implantation genetic testing for monogenic disorders (PGT-M): formerly known as preimplantation genetic diagnosis (PGD). Testing performed on the embryo using Genea's technology involving embryo biopsy and analysis of cells using genetic techniques. This test is beneficial for individuals who know they are at an increased risk of having a child with a specific genetic disorder.

Pre-implantation genetic testing for aneuploidy (PGT-A): formerly known as pre-implantation genetic screening (PGS), this testing is performed on the embryo involving embryo biopsy and analysis of cells using next generation sequencing technology.

Pre-implantation genetic testing for structural rearrangements (PGT-SR): this testing is very similar to PGT-A, except that a karyotype has identified a pre-existing chromosomal rearrangement in the patient, such as a balanced translocation or inversion.

Polar body: one of the two small cell fragments produced and discarded during each of the two cell divisions that comprise meiosis in women, subsequently yielding an egg with one, not two sets of chromosomes.

Polymerase chain reaction (PCR): a molecular genetic technique that allows a single copy of a genetic sequence to be amplified geometrically to produce vast numbers of copies that can then be measured and analysed. PCR is used for linkage and direct mutation detection.

Polymorphism: a variation of a gene comparable to a mutation but common enough in the population not to be strictly “abnormal”; may be advantageous or disadvantageous, depending on circumstances.

Sequence: the specific order of nucleotides, the basic building blocks of DNA, in a gene. This can be determined using an automated sequencer machine.

Spermatozoon: the scientific term for the male sex cell, often referred to as the sperm.

TVOA: transvaginal ovarian aspiration. See OPU.

For a more detailed glossary please visit genea.com.au/glossary

ENGLISH: If you need this information interpreted for you please advise the receptionist when you book your appointment.

MAORI: Ki te hiahia koe ki ēnei kōrero i tō ake reo, tēnā whakamōhitia te kaiwhakataua manuhiri i te taupaepae i te wā e whakarite ana koe i tō hui.

دن ع ل ا ب ق ت س ا ل ا ف م ط و م غ ا ل ب ا ی ج ر ی ک ت غ ل ی ف
کل رسفت تامول عمل ا هذه ل ا ة ج ا ح ب ت ن ک ا ذ ا
ز ج ح ل ا . ARABIC:

CHINESE:
如果您需要为您翻译
此信息，请在预约时
告知接待员。

Rúguò nín xuyāo wei nín fānyì cǐ xīnXī,
qǐng zài yuēyuē shí gāozhǐ jiēdài yuán.

ITALIAN: Se avete bisogno di questa informazione interpretato per voi nella vostra lingua si prega di avvisare la reception quando si prenota il tuo appuntamento.

VIETNAMESE: Nếu bạn cần thông tin này được giải thích cho các bạn vào ngôn ngữ của bạn Xác nhận các nhân viên tiếp tân tại khi bạn cuốn sách cuộc hẹn của bạn.

1300 361 795
genea.com.au

The information in this brochure does not replace medical advice.
Medical and scientific information provided in print and electronically
by Genea might or might not be relevant to your own circumstances and
should always be discussed with your own doctor before you act on it.

GEN07023

