Welcome

This booklet explains the process of receiving donated sperm at Leeds Fertility.

You can find further information at: www.leedsfertilityclinic.co.uk

How to contact us:
Please see page 38 for urgent and non-urgent contact details.
How do I prepare for a healthy pregnancy and boost my chances of success?

What are my fertility treatment options with donor sperm?

Preparation for treatment: Nurse consultation

Planning

Medication

Consents

Settlement of invoice

Treatment options:

Intrauterine insemination (IUI) in a natural menstrual cycle

IUI with ovulation induction

In vitro fertilisation (IVF)

Pregnancy test

Pregnancy scan

Treatment risks

Multiple pregnancy and the One at a Time initiative

Miscarriage

Ectopic pregnancy

Risk of equipment failure
What is sperm donation and why is it needed?

There are several reasons why some couples need donated sperm in order to have the best chance, or any chance of having a family.

Some men may have problems with sperm production within the testes. Some men and boys will lose their ability to produce sperm or will lose both testes as a result of surgery or cancer treatments including chemotherapy and radiotherapy. Sometimes, sperm production may spontaneously recover in the testes, but when this does not happen, sperm donation may be needed.

Sperm donation is required for fertility treatment for women in a same-sex relationship and for single women.

There are some rare conditions that are inherited through the male line. Some couples may choose to avoid the risk of having a child with a serious disability and even have a short life expectancy, by using sperm from a donor who does not carry the condition in his genes.

Who can be a donor?

Sperm donation is a remarkable and special thing to consider. It is a voluntary act of kindness to help a woman or couple to achieve their dream of having a family. In the UK, donating sperm is a gift, like blood and organ (kidney, heart etc) donation.

The HFEA permits limited financial compensation to the donor up to £35 per visit (see www.hfea.gov.uk).
The basics
Ideally, donors should be healthy men between 18 and 41 years with no known inheritable illnesses in their family.

Anonymous volunteers
Some men come forward voluntarily as a result of learning about the process through some form of publicity or knowing the story of someone in need.

Men recruited by the recipient couple in need of donor sperm
Some patients may choose to use the sperm from someone they know, for personal, ethnic, cultural or religious reasons. Donation between relatives is not uncommon e.g. brothers.

Where do I find a donor?
Men who come forward to offer their sperm are rare and special. Leeds Fertility has a bank of sperm donated from donors, and we also liaise with other sperm banks in the UK (London Sperm Bank) and internationally (ESB, Cryos and Xytex).

When importing sperm from an international sperm bank, it is essential that this fulfils UK Law in the HFEA Act 1990 (amended 2001). Therefore we advise you NOT to purchase sperm until you have spoken to our donor sperm co-ordinator. The matching process can be harder for some (e.g. ethnic minorities).
What do I need to know about being a sperm recipient?

Who can find out information about me and my treatment (and what can they access)?

Sperm donation treatment in the UK is licensed and registered by the Human Fertilisation and Embryology Authority (HFEA). Since 2005, children born from sperm donation have had the right to access identifiable information about their donor once they reach 18 years of age.

Counselling to make sure that you have considered all the implications to yourself and your partner, your potential child and those around you is an important part of the support that Leeds Fertility provides. One session is essential.

Both partners in a couple need to attend. Further sessions may be requested or advised. Leeds Fertility will encourage you to share the biological origins of your child with them and will assist you in doing this sensitively and appropriately according to the needs of your child.

From the age of 16 years, your child may request access to the following non-identifiable information about their sperm donor from HFEA:

• Physical description (height, weight, and eye, hair and skin colour).

• Year and country of birth.
• Ethnic group.
• Has their donor had any genetic children, and if so how many, when registering to be a donor and whether any other children have been born through their donation, and the number and sex of those children.
• Other details their donor may have chosen to supply (occupation, religion and interests).
• The ethnic group(s) of their donor’s parents.
• Whether their donor was adopted or donor conceived (if their donor was aware of this).
• Their donor’s marital status (at the time of donation).
• Details of any screening tests and medical history taken at the time of their donor’s donation.
• Skill, ability or talent that their donor has stated.
• Their donor’s reason for wanting to donate.
• Their donor may have also left a good-will message for you and may have provided a brief description of themselves as a person (pen-portrait).

Donors do not have to provide the last two items.

From the age of 18 years your child can access their donor’s name, date of birth and last known address (identifiable information):

When a person contacts the HFEA to request information about their donor, the Authority has a legal obligation to contact the donor and let them know the information has been passed on.
The Donor Sibling Link

From the age of 18 years, a donor-conceived child can choose to join the Donor Sibling Link to exchange their contact details with other adults who share the same donor, provided they’ve also joined the Donor Sibling Link or when they join in the future.

What information can your donor find out about children conceived through their donation?

Your donor can apply to the HFEA to find out the number, gender and year of birth of children born through their donation.

Legal parenthood: Who are the parents in the eyes of the Law if a child is born?

The recipient of the sperm who gives birth to the baby is the legal mother. The donor has no rights over the child.

Both donor and recipients (both partners in a couple who are married or in a civil partnership or a single mother) will sign consent forms clearly stating that this has been understood. The parents do not have to tell the child they were conceived from donated sperm but it is advisable and strongly recommended that parents are open and honest with their children from a young age.

There is always the possibility that they may find out if the fact is kept secret and this could be harmful. Knowing one’s genetic origins can also be important later on in life for medical reasons.
For couples who are not married or in a civil partnership, the partner (male partner in a heterosexual relationship or the female partner who is not having the fertility treatment in the same-sex female relationship) must give written consent that they will be the legal parent of the child before treatment starts.

Please ask for guidance if you and your partner are in this situation as it has implications such as for your child’s nationality and their inheritance rights, for your financial responsibilities and decision-making on behalf of your child (medical treatment, schooling, etc). It is also important for your child to be clear who their legal parents are. The legal parent’s name will appear on the child’s birth certificate.

Consent can be withdrawn up until treatment takes place (insemination of donor sperm or transfer of an embryo). You must inform Leeds Fertility immediately, and in writing, if you change your mind. See HFEA leaflet “Becoming the legal parents of your child” available from Leeds Fertility or online (hfea.gov.uk).

https://www.hfea.gov.uk/treatments/explore-all-treatments/becoming-the-legal-parents-of-your-child/

How does Leeds Fertility match recipients to donors in anonymous treatments?

We aim to match basic physical characteristics such as ethnicity (skin colour / tone), hair and eye colour, and physical build. The donor is invited to provide a short paragraph about himself, a ‘pen-portrait’ which they would be happy to be shared with the recipient couple and the child when appropriate.
Sometimes the child does not clearly look like either the sperm donor or the provider of the egg. This is no different to children who have been conceived naturally.

**What support is available to help us decide whether to go ahead or not, and what if we change our minds?**

All recipients of donated sperm are counselled in detail regarding the implications of their decisions and actions. Leeds Fertility has a duty to ensure that the welfare of any child resulting from any of our treatments is assured, to the best of our ability. You will be supported in reaching the decision that is right for you. There are many other resources available including the National Gamete Donation Trust, Donor Conception Network and local support groups of families with donor-conceived children. *(See Useful resources section on page 35).*

We would hope and expect that all parties are comfortable and sure of their decisions before treatment starts. It would be very unusual for a donor to withdraw his consent before the sperm or embryo (fertilised egg) is placed in the recipient. If any party has any doubts, treatment should NOT begin. Further counselling will be offered.

However, the sperm donor has the right to withdraw his consent any stage, up until the embryos are transferred.

This may include situations where the embryos created from sperm donation are in storage, and if the donor withdraws his consent, those embryos have to be removed from storage and allowed to perish. The donors are also counselled about the implications of their gift so the chance of a donor withdrawing their consent after they have donated is very low.
Does the donor get paid?
Sperm donation is a voluntary gift but there is compensation available up to £35 for the time and commitment required. This is managed by Leeds Fertility or the respective sperm bank where the sperm was donated.

What does it cost me to receive donated sperm?
Accessing sperm donation treatment is subject to the same criteria (e.g. age, body mass index, smoking status, stable couple) as other fertility treatments within the NHS for heterosexual couples. However, NHS funding is usually unavailable for couples in a same-sex relationship and for single women. Please consult your GP or Leeds Fertility for the current local policy for your area. Leeds Fertility will provide up to date costs for those needing to self-fund.

Could I do it more than once?
It is possible to have more than one treatment cycle of insemination or IVF using donated sperm from the same donor. Occasionally sperm from an individual donor may run out if all the samples have been used or have been allocated to other recipients. It is possible to purchase and reserve sperm from an individual donor in advance, to avoid this from happening unexpectedly.

This is advisable if you particularly want to try to have another child who is a full genetic relation to your first child. One donor is permitted to create up to 10 families but there may be several children born per family.
How do I / we access treatment with donated sperm?

Treatment with donated sperm may be funded by the NHS, particularly if you have not had any NHS-funded fertility treatment to date. Each Clinical Commissioning Group (funding body) has different criteria so you should check with Leeds Fertility whether you are entitled to funding or not. If you are not eligible, Leeds Fertility will be pleased to help through our private patients’ service, provided it is medically safe to do so.

How does the process work

You (and your partner if you have one) will be seen by a Leeds Fertility Counsellor to ensure that you have fully considered all the implications of receiving treatment with donated sperm and that you are comfortable with the process.

You will then undergo screening tests to enable a safe and appropriate match with your donor and to ensure your safe passage through the treatment.
The recipient will have the following tests:

- **Test to make sure your womb is healthy for pregnancy**
  - Internal pelvic ultrasound scan

- **Tests to make sure you are not at risk of transmitting any infection**
  - Blood tests for antibodies to viruses (HIV, Hepatitis A, B and C, Syphilis, CMV)
  - Confirmation of rubella immunity: Blood test or evidence of having received x 2 vaccinations e.g. MMR

- **Screening for current vaginal infections**
  - Vaginal swab for chlamydia and gonorrhoea detection

- **Tests of general well-being**
  - Up to date cervical smear according to the National Screening Program
  - Blood count, liver, kidney and thyroid function, blood group

The sperm donation coordinator will then look for a suitable match.
How do I prepare for healthy pregnancy and boost my chances of success?

• Stop smoking completely.
• Reduce alcohol intake to a minimum. No safe limit has been identified for women so no alcohol consumption is advised.
• Women should restrict their caffeine intake as this has been shown to lower IVF success rates.
• Women should have been vaccinated twice against German measles (rubella) or have confirmed immunity.
• Women should have an up to date, normal cervical smear test.
• Women should be taking folic acid (vitamin B) supplement at 400 micrograms daily before and during treatment, and for at least the first three months of pregnancy. Vitamin D 10 micrograms should be taken throughout. Over-the-counter multivitamins for pregnancy should contain the necessary ingredients.
• Women should aim for a body mass index ideally under 25kg/m$^2$, and absolutely under 30kg/m$^2$ to access NHS-funding. Treatment is less successful and more risky at heavier weights. Pregnancy is also less healthy with a higher risk of blood pressure problems and diabetes in heavier mothers.

• A healthy, varied diet and regular physical exercise are helpful for overall health, weight management and stress reduction.

**What are my fertility treatment options with donor sperm?**

**Preparation for treatment: Nurse consultation**
Your nurse consultation is a 45 minute long appointment with a nurse specialist and is the gateway into your treatment cycle. Both partners in a couple must attend.

**Tasks:**

1. **Planning**

You will be given a Treatment Diary explaining your individually tailored treatment program and the expected dates when key parts of the process should fall. Please be aware that our bodies do not always ‘read the textbook’ and sometimes we have to reschedule for minor delays such as your period coming later than expected. This is quite normal and the service will stretch to fit you in.
Please bring your treatment diary to every visit after this.

2. Medication

You may need to use medicines on a daily basis, some by injection. We will teach you both how to do this properly and safely.

Many patients find this worrying to start with, but get the hang of it very quickly. The medicines are dispensed by a home-delivery pharmacy who will bring them to the address of your choice.

The nurse will show you examples of what will arrive and advise you how to store them. More information is available on our website under Patient Information e.g. injection teaching video.

3. Consents

The consents are detailed legal documents and it is critical that they are completed correctly and truly express your wishes.
You will be guided through the consent forms by EngagedMD, a password-protected online program. The nurse will ensure that the online paperwork is all in order. You may take a copy away for your own records.

Please do not sign until you are completely clear and satisfied with your stated position. Both partners must sign all of the consent forms before we can proceed with your treatment.

Your consent advises us of your informed choice but does not commit you to undergo any form of treatment. You have the right to change your mind until, but not after the event. It is vital that all the issues are thoroughly considered beforehand and that snap decisions are not regretted afterwards. You must ask if you are not completely clear about your choices and you can speak to one of the counsellors if you need help to come to the right decisions for you.

4. Settlement of Invoice
If you are paying for your treatment, we respectfully ask that the bill is settled by the time of the nurse consultation appointment. This can be done by card over the telephone or in person on the day, with the Business Support Team (0113 206 3157).
Treatment options

Intrauterine insemination (IUI) in a natural menstrual cycle

Intrauterine insemination (IUI) in a natural menstrual cycle is often the first line of treatment for women who have regular ovulatory menstrual cycles which has been confirmed with ultrasound tracking.

You can do urine tests to check for ovulation at home (twice a day - early morning and at bedtime) and inform Leeds Fertility once the test detects a positive ovulation hormone surge (Luteinizing Hormone, LH). On the day the insemination is due, the donor sperm is thawed and “washed” to separate out the fast-moving sperm. The “washed” sperm is loaded into a small plastic catheter and inserted through the neck of the womb during an examination similar to having a smear test.

IUI with ovulation induction

This is advised for women who have irregular menstrual cycles (and cycles which are not ovulatory) and as a second line treatment when IUI in a natural menstrual cycle has not been successful. Medications are used to stimulate the ovaries and ultrasound monitoring is done. Ovulation may need to be triggered using a separate injection (hCG). The IUI procedure is otherwise similar as in a natural cycle IUI.

For further information, please see our information booklet on ovulation induction and IUI available on our website.
In vitro fertilisation (IVF)
Please refer to the patient information booklet (paper or online www.leedsfertilityclinic.co.uk) on the process of IVF treatment.

1) Egg production stimulated by hormone therapy
2) Egg retrieved from ovary
3) Sperm sample provided
4) Eggs and sperm combined to allow fertilisation
5) Fertilised eggs (embryos) introduced into womb

When donor sperm is used, it is thawed on the day of egg collection. The sperm and eggs will be put together on the afternoon of the harvest. Very occasionally, a sperm sample may be poorer than expected on the day of treatment. The embryology scientists will discuss the possibility of injecting the sperm instead of the standard IVF insemination, with the consultant on duty and with you. There is more information about sperm injection (ICSI) in the IVF / ICSI patient booklet online (www.leedsfertilityclinic.co.uk) or on request in paper form. Fertilisation of the eggs with the sperm happens overnight and the fertilised eggs (which are now called embryos) are kept in an incubator (to mimic the conditions within the fallopian tube and uterus) for five days. The embryos are then assessed for quality and the best one is selected for embryo transfer.
**Pregnancy test**

We will advise when your urine pregnancy test is due, depending on the timing of your IUI or embryo transfer. Instructions will be provided after your procedure.

**First pregnancy scan**

The first scan is done about five weeks after the IUI or embryo transfer when the pregnancy sac, fetal pole (baby) and a heartbeat should be visible.

If all is well at this stage, we will discharge you back to your GP to make arrangements with the midwife and antenatal clinic. We shall look forward to the news of your new arrival in due course, and will then complete the final information on your treatment in the HFEA register.
Treatment risks

Multiple pregnancy and the One at a Time initiative

It is our joint wish to achieve a healthy pregnancy and live birth. This is more likely with a single baby at a time, rather than twins or more. Fertility treatment has had a poor reputation for producing multiple pregnancies and these can be complicated for both mother and babies, sometimes with tragic outcomes.

Multiple pregnancies are rare after IUI in a natural menstrual cycle. It is more common after IUI with ovulation induction when multiple follicles develop and after IVF, especially if two embryos are transferred. Ovulation induction does carry a risk of multiple pregnancy when more than one follicle grows in response to the medication, but a delicate balance has to be made between efficacy and safety.

The risk of multiple pregnancy (especially of triplets or quadruplets) is higher if more than two mature follicles are seen on ultrasound scan, and in these situations we would need to consider cancelling the IUI cycle and not performing an insemination that month.

Similarly, it is not wise to take unnecessary risks by transferring more than one IVF embryo at a time in women with the highest chance of success. Therefore, it is our usual policy to transfer embryos singly in treatment where the egg has come from a women under the age of 38 years, during the first or second cycle of treatment, where the embryo development has been good overall. This practice is consistent with the HFEA Code of Practice (www.hfea.gov.uk) and the One at a Time initiative (www.oneatatime.org.uk).
The chance of a pregnancy is closely related to the age of the egg (and therefore its quality) and to the performance of the clinic as a whole. Our figures show clearly that if we have two good quality day 5 blastocyst embryos, and we transfer both together, there is a 50% chance that if pregnancy results, it will be a twin implantation. If we only transfer one, the chance of a pregnancy resulting at all is less than 1% lower than if two were transferred. So the price paid for avoiding twins is very small relative to the high risk of seeing a twin pregnancy through to two healthy live births.

The Law permits the transfer of a maximum of two embryos in women under 40 years of age. Over 40 years, the maximum number of embryos permitted is three at any one time.

We will be happy to discuss your embryo development and the context of your chances of pregnancy on the day of embryo transfer, if you have any concerns about the advice proposed.

**Miscarriage**

The risk of miscarriage after a positive pregnancy test is approximately 20-30%, whether the pregnancy has been assisted through IUI or IVF (fresh or frozen embryo) or occurred through natural means.

Once the pregnancy sac has been seen and the heart beat identified then the risk of miscarriage falls (<5%). The risk of birth defects in babies born after IUI or IVF is no greater than in naturally conceived pregnancies. Your personal risk is more likely to relate to your age, your previous pregnancy history, your family history and whether or not you have a multiple pregnancy.
Ectopic pregnancy
Ectopic pregnancy can occur after both IUI and IVF. There is a small chance that an embryo may wander up and settle in the Fallopian tube. This is an ectopic pregnancy which, if unidentified, may burst and cause serious internal bleeding. The risk of ectopic pregnancy is increased if there has been previous damage to the fallopian tubes or if you have had a previous ectopic pregnancy. Embryos do not implant immediately upon transfer. We will perform your first pregnancy scan early (6+ weeks) if you are at risk.

Please note
It is important to perform a pregnancy test even if you have bled, and attend for the scan after a positive test. If a pregnancy sac is not seen on scan, a blood test is taken to measure the pregnancy hormone (hCG) level in your blood. You may be asked to attend for more tests after a few days’ interval. If this hormone level is steady or slowly rising, then we may need to perform further investigations which may include a laparoscopy (key-hole surgery).

Risk of equipment failure
Leeds Fertility maintains service contracts for all our equipment. There are also many safety checks in the laboratory to give early warning of any possible problems. Despite all our efforts, and very uncommonly, equipment failure may sometimes lead to loss of sperm or embryos. This is a ‘Category A’ incident that will be immediately notified to our licensing body (HFEA), the Leeds Teaching Hospitals Trust and to you.
There would usually be a thorough investigation and steps taken to prevent a recurrence of similar problems. The HFEA also operates an Alert system which all clinics use to learn from incidents elsewhere and can then reduce risks locally.

**Treatment failure**

Sometimes we may not have an explanation for why a pregnancy fails to occur even when everything has apparently gone well. We suspect that in most of these cases, the embryos were, in fact, faulty in their genetic make-up and were never destined to produce a baby. Unfortunately, even in IVF, the time that the embryos spend under observation in the laboratory is short and we cannot identify everything about their (genetic) chances of continuing to develop normally, and as far as a baby. When IVF embryos do undergo genetic testing, they are found to carry the same rate of genetic faults as naturally conceived miscarriages. Genetically abnormal eggs can be as high as 50% of the total, and gets more common in women over the age of 40 years.

There are often no signs of these faults at the early stages of development that we are able to observe (such as in the Embryoscope). There is still much work to do to try to overcome what can often feel like a lottery. You may rest assured that we will not stop trying.

We welcome feedback on the various aspects of our service. We use it to ensure that we are maintaining a high standard of patient experience and to try to improve the service that we provide. We would be grateful if you would spend a few moments to complete our questionnaire once your cycle is over.
Counselling and patient-to-patient support

We recognise that struggling to conceive can be upsetting. We aim to provide supportive care for both partners through this process, regardless of the outcome. You will have met one of our team of counsellors during the preparatory phase of your treatment to discuss the implications of treatment with donor eggs. They also provide support in dealing with the social and emotional aspects of fertility problems and help to find ways to cope with the on-going situation.

Counselling is free and usually delivered on Leeds Fertility premises. Some counsellors offer evening appointments. Please call 0113 206 3124 to leave a message if you would like to make an appointment, or request a referral from the doctor or nurse attending to you.

The Donor Conception Network and National Gamete Donation Trust are helpful sources of support and some patients choose to support each other through social media. (See Useful resources section on page 35).

Infertility Network UK (www.infertilitynetworkuk.com) is the leading national charity for people having difficulty conceiving. They also offer emotional and practical support with a wealth of personal experience.
General legal information about how Leeds Fertility is regulated and conducts its work

The Human Fertilisation and Embryology (HFE) Act (1990, amended 2008) and the HFE Authority (HFEA) regulate all treatments involving human sperm, sperm and embryos. The HFEA issues the Code of Practice that we work by and it inspects us regularly to ensure standards are maintained. All UK clinic results are reported to them and are publically available (www.hfea.gov.uk).

HFEA register
The Authority keeps a confidential register of identifying information on all patients, their treatments, donors, recipients and children born after HFEA licensed treatments.

Since 2008, adults may request information from the HFEA as to whether they were conceived with donor material and the HFEA may disclose such identifying information as was available at the time of the treatment.

Confidentiality of fertility treatment
All information regarding your FERTILITY treatment is strictly confidential under our HFEA License and is subject to both the HFE Act and the General Data Protection Regulations (GDPR).

We may only communicate with your general practitioner, referring consultant and other carers with your written consent.

Once we have disclosed treatment information to individuals who are not subject to the HFEA Licence (e.g. your GP) that information can no longer be controlled by us in its onward travel.
It will still be regulated by the GDPR and General Law of Confidentiality, as for all private medical information. In general practice, information will be accessible to other GPs and staff working within the practice even if your consent specifically named only one of the several GPs in your practice. When changing GPs, your medical records will be transferred to your new GP practice without any regard for any specific named consent you gave us in the past. The General Law of Confidentiality will apply.

From time to time your notes may be inspected at LCRM for audit (standards checking) by other officials e.g. HFEA members, Care Quality Commission, Patient Safety Agency and National Care Standards Commission.

You have the right to decline consent to share your fertility information but we need to consider your reasons for declining consent in our assessments. Generally, it is advisable for us to keep your G.P. informed of the progress of your treatment in case you need them in an emergency.

**Welfare of future children**

The Law states that ‘a woman shall not be provided with treatment services unless account has been taken of the welfare of any child who may be born as a result of the treatment (including the need of that child for a father), and of any other child (other children in the household or the family) who may be affected by the birth’.

It is therefore our legal responsibility to have a written procedure for assessing the Welfare of the Future Child and that of any other existing child who may be affected by our treatment.
Factors considered in the assessment include:

1. Your (and your partner’s) commitment to having and bringing up a child.

2. Your (and your partner’s) ability to provide a stable and supportive environment for the child/children.

3. Your (and your partner’s) medical history and that of your families, considering factors that may risk the child’s wellbeing.

4. Your (and your partner’s) health (including their ages) and your ability to provide maternal and paternal nurturing to the child.

5. Your (and your partner’s) ability to meet the needs of the children in the event of a multiple birth.

6. Any risk of harm e.g. that of inherited disorders, transmissible disease, neglect or abuse.

7. Any risk a new born may put on the welfare of the existing child with in the family.

Our protocol has been approved by our local ethics committee. Under specific circumstances, we may also need to contact your general practitioner, other medical specialists, authorities and agencies e.g. social workers, police etc for information.

This is to enable the members of the team at Leeds Fertility or the Clinical Ethics Committee in The Leeds Teaching Hospitals Trust to formally consider the welfare of the future child when appropriate.
Glossary

- **Biochemical pregnancy**: This is a pregnancy where the embryo has tried to implant but has not continued to develop. Pregnancy hormone reaches the bloodstream and urine to make a pregnancy test positive but the level is invariably low / weak and falls to zero within days.

- **Blastocyst**: This is a particular stage of development of an embryo which should be reached by day 5-6 after egg collection. A blastocyst has 50-60 cells and they have begun to separate into those that will form the baby and those that will form the placenta (afterbirth). A small area of fluid separates the two types of cells. Shortly after this stage the embryo will hatch and should implant into the lining of the womb.

- **Cleavage**: Cleavage is the term used to describe the multiplication of the cells of the embryo.

- **Down-regulation**: This is the first phase of treatment in a recipient cycle where the natural cycle is switched off.

- **Ectopic pregnancy**: This is when the pregnancy implants somewhere other than the heart of the womb where it should be. The commonest location is in one of the fallopian tubes but ectopics can also occur in the cervix and the top corners of the womb where the tube comes into the main cavity (cornual ectopic).

- **Eggs**: A woman’s lifetime supply of eggs is present in the ovary at birth. They reduce in number and quality with time. They pass on the woman’s half of the genetic instructions to the embryo / baby.

- **Embryo**: Once the fertilised egg begins to cleave (multiply its cells) it is called an embryo.
• **Embryoscope**: This is a special incubator (‘oven’) that embryos are kept in whilst they are growing in the laboratory. It contains an internal camera which takes photographs of the developing embryos every ten minutes and provides information to guide the selection process of the embryo (s) most likely to result in a pregnancy. It also means that the embryos do not need to be removed from their warm and stable environment until one of them needs to be transferred back to the mother.

• **Fertilisation**: Fertilisation is when the genetic material from the egg and sperm combine to create a new and unique cell which may go on to develop into an embryo and then a baby.

• **Follicles**: These are the sacs in the ovary that contain the egg. One follicle develops in every natural monthly cycle. The IVF process should cause several to develop at the same time which makes the ovaries larger for a short time (several weeks).

• **FSH**: Follicle stimulating hormone causes the eggs to mature in the ovary.

• **GnRH Agonist**: A hormonal drug that first stimulates and then inactivates the pituitary gland e.g. Prostap, Buserelin, Naferelin. These can be used to block ovulation during long IVF cycles and cause ovulation in short IVF cycles such as those used for donor stimulation.

• **GnRH Antagonist**: A hormonal drug that inactivates the pituitary gland e.g. Orgalutran, Cetrotide, Fyremadel, only used to prevent ovulation in short IVF cycles, especially in donor cycles.
• **Gonadotrophins:** Hormones produced naturally by the pituitary gland to stimulate the ovary to produce and release eggs e.g. FSH, LH. These drugs are produced as medicines to over-stimulate the ovary of the donor during IVF to get lots of eggs ready at once e.g. Merional, Menopur, Gonal F, Puregon, Meriofert.

• **HCG:** Human chorionic gonadotrophin is also a gonadotrophin but it is not produced in the pituitary. Normally, it is only produced by the placenta (afterbirth) during pregnancy. It is able to act like LH, but is stronger. We often use it in injection form to begin the ovulation process (trigger) before the egg collection. It can also help to prepare the womb lining for implantation.

• **ICSI:** Intracytoplasmic sperm injection: a technique where an individual sperm is injected inside an egg. It is used to improve the chance of fertilisation when the sperm quality is not ideal.

• **IVF:** Fertilisation of eggs with sperm in the laboratory.

• **LH:** Luteinising hormone causes the release of the egg at ovulation and prepares it for fertilisation by the sperm.

• **Luteal phase:** This is the phase after egg collection, including the embryo transfer, up until the pregnancy test, when the recipient is taking progesterone.

• **Miscarriage:** Any positive pregnancy test which does not reach 24 weeks of pregnancy and the potential for a live-born child is a miscarriage. Miscarriage is as common after IVF as it is after natural conception. Bleeding in early pregnancy is not always bad news, especially if there is no cramping pain. Unfortunately some pregnancies miscarry without any outward signs (bleeding) and are not identified until a scan is done.
• **Oestrogen:** This hormone is naturally produced by the follicle in the ovary as the egg is growing. Its main job is to thicken the lining of the womb for the pregnancy to implant. It can also be given in tablet or skin patch form e.g. progynova, Elleste.

• **OHSS:** Ovarian hyperstimulation syndrome is a risk of IVF treatment which can be serious if not recognised and treated. It happens when the ovaries are over-sensitive to the stimulation (FSH) injections and produce too many follicles. It can cause pain, abdominal bloating, sickness, diarrhoea, dehydration and rarely, serious blood clots. Your donor will be warned if she are at risk, for the symptoms and signs to look out for and report to us for further advice.

• **Ovary:** Stores all the woman’s eggs for her whole life and produces hormones.

• **Pituitary gland:** In the head, behind the nose, produces many hormones including those that control the ovary and testis.

• **Progesterone:** This hormone is naturally produced by the follicle after ovulation and is also responsible for preparing the lining of the womb for implantation. It can also be given as a vaginal pessary e.g. Cyclogest or as an injection e.g. Gestone, Prontogest, Lubion.

• **Sperm:** The sperm develop in the man’s testis and continue to do so throughout adult life. They do not suffer the same deterioration with age as the woman’s eggs, as they are constantly being replaced. They pass on the man’s half of the genetic instructions to the embryo / baby.

• **Stimulation:** This is the phase where the daily injections stimulate the ovaries to produce eggs.
• **Trigger shot:** This is usually hCG (5000-10,000 units) but can also be buserelin (0.5-0.75ml). This injection begins the release of the egg before IUI or the egg collection for IVF.

**Useful resources**

**Donor Conception Network**

- **www.dcnetwork.org**
  
  A UK-based support network for families with donor-conceived children, those considering donor conception and donor-conceived individuals.

**National Gamete Donation Trust**

- **www.ngdt.co.uk**
  
  An excellent resource for donors and recipients covering the process in detail and from all aspects.

**Human Fertilisation and Embryology Authority, HFEA**

- **www.hfea.gov.uk**
  
  The regulatory body website has lots of information for patients.

**Infertility Network UK**

- **www.infertilitynetworkuk.com**
  
  The UK’s leading infertility support network offering extensive information and support through treatment. They provide advice regarding funding and a variety of factsheets.
British Fertility Society
• www.britishfertilitysociety.org.uk
  The UK professional society promoting high quality practice and research.

British Infertility Counselling Association
• www.bica.net
  The professional association of infertility counsellors in the UK.

The Daisy Network
• www.daisynetwork.org.uk
  This charity provides support and information for women who are facing premature ovarian insufficiency (premature menopause) and its consequences.

Multiple birth matters
• www.oneatatime.org.uk
  This site provides information behind the drive to reduce multiple pregnancies during assisted conception treatments.
• www.multiplebirths.org.uk
• www.tamba.org.uk
  These two sites offer a wealth of information on twins and multiple births / pregnancies.
Health information for before and during pregnancy


  This is a comprehensive NHS resource on preparing for and achieving a healthy pregnancy.

The Miscarriage Association

- [www.miscarriageassociation.org.uk](http://www.miscarriageassociation.org.uk)

  If you have been affected by miscarriage, ectopic pregnancy or molar pregnancy you will find information and support here.
Contact us

By post
- Leeds Fertility, Leeds Teaching Hospitals NHS Trust, Seacroft Hospital, York Road, Leeds, LS14 6UH

By Email
- lcrm.nurses@nhs.net

Online
- Web: www.leedsfertilityclinic.co.uk

By telephone

**Mon-Fri 08.00-17.00**
- For all NHS appointments: 0113 206 3100
- For clinical queries: 0113 206 3102

**Sat-Sun 08.00-12.00**
- Clinical queries only: 0113 206 3102

In an Emergency

**During working hours**
- Please call appointments or clinical queries as needed on the above numbers

**Outside working hours**
- Please call Leeds Teaching Hospitals Switchboard on 0113 243 3144 and request to be put through to the Duty Nurse / Dr for Leeds Fertility.