LISTER FERTILITY CLINIC

part of HCA Healthcare UK

CYCLE INFORMATION BOOKLET – EGG SHARING

A STEP-BY-STEP GUIDE TO TREATMENT

We recognise that you are likely to have received a considerable amount of information at your consultation and the treatment process may, to begin with, seem a confusing process. Coping with subfertility and IVF treatment itself can also be an emotional process for patients and their partners. This booklet aims to help you through your treatment from start to finish, answer any questions and outline potential complications of treatment.

STEP 1: Passport & NHS number provided to reception on registration.
Pre-initial consultation AMH test and vaginal ultrasound scan are recommended.
During Initial consultation, doctor assesses suitability for egg sharing and proposes a treatment plan.
This is followed by a counsellor consultation and a meeting with the egg sharing nurses
Complete GP consent to correspond with the Lister Fertility Clinic form.

STEP 2: Nurse team confirm receipt of GP letter and blood test results.
Nurse to contact couple with proposed treatment plan.

STEP 3: Read through Cycle Information Pack and complete Consent Forms.
Synchronisation of treatment is made between the egg sharing patient and the recipient couple.

STEP 4: Collect Medication & follow instructions and treatment plan given by egg sharing nurse team.

STEP 5: Book first scan as instructed according to treatment plan

STEP 6: First Scan: Consents verified and daily diary of treatment given, payment of HFEA License fee and ICSI/IMSI (if required).

STEP 7: Regular monitoring with scans and blood tests over 10-14 days of stimulation to monitor follicle growth

STEP 8: Trigger injection to mature eggs ready for collection once they achieve optimal size

STEP 9: Vaginal Egg Collection (VEC) 33-39 hours after trigger injection / Semen sample

STEP 10: Laboratory Work: Eggs inseminated (IVF) or injected (ICSI) with prepared sperm

STEP 11: Progesterone hormone pessaries commenced the day after VEC to prepare womb for implantation (luteal support)

STEP 12: Fertilisation confirmed by phone the day after VEC and embryos cultured for 2-6 days

STEP 13: Embryo transfer 2-6 days after VEC and possibility of embryo freezing discussed

STEP 14: Pregnancy Test 14 days after VEC

STEP 15: Contact us with result and to plan further care

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STEP 1: The Consultation

Patients and their partner (if applicable) will see a doctor for their consultation(s) and planning of their treatment. The male partner (if applicable) will have a semen analysis performed on day of the initial consultation prior to seeing the doctor, unless this has been performed in the last 3 months. An egg sharer will be required to discuss both their own and their family's medical history in detail. The doctor will review the results of your Hormone Profile blood test (FSH, LH, Estradiol and AMH) between Day 2 to 5 of your cycle.

The unit will also need to obtain permission to contact the egg sharer's GP to enquire about all relevant past and present medical history and the GP's opinion regarding the egg sharer's suitability to share their eggs with another couple.

At your consultation you will receive a treatment pack containing important documentation:

- This Information Booklet that may answer any outstanding questions
- Consent forms to be completed
- Egg Sharing Price List

A consultation with a counsellor and the egg sharing nurses will follow.

Investigations

You will need to have tests for certain diseases, including any serious genetic diseases, before you can donate.

It is very important you tell the Lister Fertility Clinic about any problems in your or your family's histories. If you or your family have a serious physical or mental condition and you do not tell your clinic about it, you could face legal action if a child born from your donation inherits it.

It is a HFEA license requirement that **Virology** screening tests, as outlined below, are done prior to fertility treatment. The egg sharing nurse will perform the following mandatory egg sharing screening tests.

The **female patient** will need the following tests:

Initial Screening Tests :

- **HIV 1 and 2: Anti-HIV – 1, 2, Hepatitis B : HBsAg (Surface Antigen), Hepatitis B: Anti-HBc (Core antibody) and Hepatitis C : Anti-HCV-Ab**
- **VDRL (Syphilis) testing**
- **HTLV I & II** (if living/lived in, originating from, male partners parents from high prevalence areas or with sexual partners originating from: Japan, Caribbean, South America, Romania, Iran, Sub-saharan Africa i.e. all but Egypt / Libya / Tunisia / Morocco / Algeria / Sudan
- ***Chlamydia -** urine sample tested by the nucleic acid amplification technique (NAT)
- ***Gonorrhoea** – urine sample tested by the nucleic acid amplification technique (NAT)
- ***Full Blood Count (FBC)**
- ***Thyroid profile**
- **Blood Group**
- **Cystic Fibrosis (CF) –** we screen all prospective egg sharers, especially if they emanate from a population group which contains a high frequency of cystic fibrosis carriers.
- **Chromosome study -** We screen all prospective egg sharers. The karyotype test shows the total number of chromosomes and if there are any structural abnormalities with any of the individual chromosomes. This test does not screen for specific genetic abnormalities or conditions.**If any abnormality is found the doctor will contact them to inform them of**

the result and refer them on to an appropriate medical practitioner. Counselling is available at the LFC.

- **Haemoglobinopathy** – we screen all prospective egg sharers.
- **Tay Sachs** - if egg sharer is Jewish
- **Cervical smear** (within 3 years)
- **Trypanosoma Cruzi (American Trypanosomiasis)** - blood screening if egg sharer travelled to Mexico or elsewhere in central or South America within the last 30 days.
- **Malaria** – blood screening if egg sharer travelled to areas where Malaria endemic within the last 30 days.

Subsequent Screening Tests prior to commencing fertility injections or prior to starting the nasal spray :

- **HIV 1 and 2: Anti-HIV – 1, 2, Hepatitis B : HBsAg (Surface Antigen) and Hepatitis C : Anti-HCV-Ab (NAT-PCR).**

* within 12 months of treatment*

All other screening tests are within 6 months apart from Cystic Fibrosis, Chromosome Study, Blood group, Haemoglobinopathy and Tay Sachs.

The female patient's tests are free of charge under egg sharing programme.

The **male partner** will need to have the following tests performed **prior** to his partner being matched with a recipient, the egg sharer will not be matched with a recipient until the results are available: (These tests are chargeable if performed at The Lister. Please see current Egg Sharing Price List)

- HIV 1 and 2: Anti-HIV – 1, 2
- Hepatitis B: HBsAg/Anti- HBc
- Hepatitis C: Anti-HCV-Ab
- Semen Analysis (within 12 months of treatment)

If this is the first fresh treatment cycle, the male must have a blood test for HIV, Hepatitis B, Hepatitis C within 3 months prior to your egg collection. If this is a subsequent cycle the results are valid for 24 months as long as treatment is with the same partner. His GP may be able to performed these tests.

It is your responsibility to ensure that all requested tests are completed to ensure your treatment can commence.

NB. We must have a copy of your passport & NHS number before we can proceed with treatment.

IMPORTANT:

It is a HFEA licensing requirement that individual tests must be accredited by UKAS, the national accreditation body for the UK, or another accreditation body recognised as accrediting to an equivalent standard

Therefore, HIV, Hepatitis B and C tests *must* be performed at the Lister prior to starting treatment to ensure this licensing requirement is complied with as our individual virology tests are UKAS/ISO 15189 accredited.

Only in the circumstance where you have already had treatment elsewhere, and virology screening is still in date with written confirmation that the test was carried out in a UKAS accredited lab will this not apply.

To confirm, we cannot accept any results that do not include the laboratory's details and confirmation that this laboratory is UKAS accredited. Even if already done prior to initial consultation, these tests will need to be repeated at the Lister Fertility Clinic who use a UKAS Accredited laboratory unless we have this confirmation. UKAS provides accreditation to the internationally recognised standard ISO 15189 Medical Laboratories.

STEP 2:

On receipt of your GP letter, cervical smear result and mandatory egg sharing blood test results the doctor will review your suitability as an egg sharer. The egg sharing nurse will contact you to discuss the results. If the results are abnormal a doctor will discuss these with you. If you are suitable the nurses will match you with a recipient couple and advise you of your treatment plan.

STEP 3:

All egg sharers will be asked to take the contraceptive pill (if suitable) for a minimum of one calendar month leading up to the donation cycle to ensure that synchronisation between both parties commences at the correct time. However, in some cases this may not be necessary.

If you are not taking the oral contraceptive pill you should use barrier contraception in the month before treatment, during the treatment and following egg collection until your next period.

Consent Forms

Prior to starting your cycle you will be required to read and sign forms consenting to your treatment and operation. If you do not understand these forms you should discuss them with a nurse/doctor who will explain them. Similarly, if they bring up any moral or ethical dilemmas please feel free to speak to one of our counsellors or a member of the medical, embryology or nursing team. The HFEA Donor Information Form needs to be completed prior to egg collection. The original will be held by the centre and we recommend you make a copy for your own records.

Signed consent must be obtained from **both partners** (if applicable) before any procedures are performed. **It is important that your consents are compatible, otherwise they are invalid and the future use of your embryos may be affected.**

We cannot start your treatment until all consent forms have been completed, signed, dated and returned to the nurse at your first scan. Your treatment start date will be delayed if you do not return the completed forms on time.
The accompanying information leaflet (HFEA Consent Form Information) explains what the consents mean and why the HFEA (Human Fertilisation and Embryology Authority) requests they are completed.

In summary they are:

- **Consent to Disclosure (CD)** The patient and the partner need to complete one form each:

  CD – General Purposes: gives us permission (or denies permission) to communicate with non-HFEA licensed persons (such as your GP or other referring doctor) in relation to your treatment and to seek medical information we may require. If you wish us to correspond by letter with your GP or referring doctor please ensure that you tick all relevant boxes.

– Research Purposes: During the course of your treatment, information about yourself and your cycle is collected, some of which is sent to the HFEA and recorded on the HFEA Register. This information could be of use to researchers investigating, for example, how treatment can be improved. This form also allows you to consent for identifiable information to be disclosed to researchers.

- **MT / WT forms**: These forms (MT for the man and WT for the woman) ask for permission to use your sperm and eggs to create embryos for your treatment. You can also give your consent for us to freeze suitable embryo/s (**for an initial period of 10 years or less** which may be renewed in 10 year increments if the criteria are met) and requests clarification of what you would want to do with such embryos in the event of your death or mental incapacity.

- **WD forms**: This form if to be filled in if you are a woman donating eggs for the treatment of others, for research or for training.

- **GS form**: Egg/sperm freezing and storage.

- **Lister Consent Forms**: ES VEC & ET consent form and agreement, ICSI/IMSI (if required).

- **Egg Collection Procedure Consent**: This will be explained to you and should have been completed in clinic with the doctor. You will be given a copy of the signed consent form. Confirmation that you understand the procedure and are aware of the risks will be re-iterated on the morning of the procedure.

- **Other Specific Forms**: These will depend on the particulars of your treatment cycle e.g. use of donor sperm / eggs or storing sperm and eggs etc.

In the event of withdrawal of consent to anything previously consented to on an HFEA form from either patient and or partner for any type of treatment she/he must be complete

- **WC Form**: This form should be used to withdraw your consent or to state your lack of consent to your partner's treatment. You and your partner can make changes to withdraw consent at any time until the point of sperm, egg or embryo transfer.

- **LC Form** : This form should be used if you are the intended birth mother and wish to state that your spouse or civil partner does not consent to your treatment.

You must inform us immediately of any change in your personal circumstances (e.g. name, address, contact numbers or relationship status). This is particularly important if you have embryos/sperm/eggs frozen as we need to contact you to confirm their continued storage. The storage period is governed by law and we do not require your consent to remove these embryos from storage at the completion of the statutory storage period.

STEP 4: Medication

The egg sharing nurses will provide you with a written timetable outlining your treatment schedule. Before you start treatment the egg sharing nurses will give you a prescription for the medications that you may require. There is no charge for these medications if dispensed by The Lister Hospital Pharmacy.

Our pharmacy is open Monday – Friday (8.30am – 7.00pm) and Saturday (9.00am – 12.30pm). The use of our pharmacy allows your prescription to be left there and the medication collected as you proceed through the cycle as and when you need it.

The dose of the medication prescribed for each patient will vary. The accompanying drug schedule details the individual drugs, their use and side effects. In summary, the drugs you will be prescribed will fall into one of six groups:

1) **Oral Contraceptive Pill (OCP)**: Many patients are prescribed "the pill" (OCP) from the month before they start their fertility drugs. This enables the ovaries to rest and can be used to bring on a bleed in women with irregular cycles. By manipulating the number of pills taken, the dates of the treatment can be scheduled which may help many patients and their partners plan treatment.

2) **Down-regulation drugs**: These drugs work to switch off your natural hormone production so that do you not ovulate and release eggs we are aiming to collect. They work by suppressing the production of the gonadotrophin hormones such as luteinising hormone (LH) and follicle stimulating hormone (FSH) produced by the pituitary gland in the brain and this prevents the natural LH surge that causes ovulation. There are two types called Gonadotrophin-releasing Hormone (GnRH agonists)or GnRH antagonists):
   i) the agonists (injectable in the evening or nasal spray taken two/three times per day as instructed) work more slowly and are therefore commenced before FSH injections are given (Synarel, Suprecur nasal spray or subcutaneous injection).
   ii)the antagonists (injectable only taken in the evening) work very rapidly and can therefore be commenced after FSH injections (Cetrotide/Orgalutron).

   If you think you have become pregnant whilst on the GnRH analogue (Suprecur (Buserelin) S.C, Suprecur nasal spray or Synarel (Nafarelin)) you must inform us immediately.

3) **Stimulation drugs**: The "superovulation" techniques used in assisted reproduction are designed to stimulate the ovaries to grow several eggs (oocytes) rather than the usual single egg produced in a natural cycle. If multiple eggs can be collected in one cycle this increases the potential availability of multiple embryos (fertilized eggs) from which we can select the most appropriate for transfer. These are given as injectable versions of the FSH usually produced by your pituitary gland.

4) **Trigger drugs**: Once the follicles have reached the optimal size and you are ready for egg collection, this trigger injection of hCG (Pregnyl, Ovitrelle) is taken approximately 33-39 hours before your vaginal egg collection (VEC). The purpose of this injection is to help mature the eggs within the follicles and it mimics the natural surge of hormone that occurs just before ovulation.

   NB. For ES patient's on the Cetrotide protocol, an agonist trigger - Suprecur – (if advised) can be given prior to egg collection instead of hCG.

5) **Luteal support drugs**: Following ovulation in a natural cycle, the corpus luteum that remains in the ovary at the site of ovulation produces Progesterone hormone to prepare the womb lining for implantation of an embryo. The use of down-regulation drugs in a treatment cycle means that the ovary is unable to produce Progesterone in sufficient quality and vaginal / rectal suppositories are therefore given (occasionally a gel/injectable version may be advised.

6) **Miscellaneous drugs**: Other drugs may be prescribed depending on past medical and previous cycle history as discussed by your consultant.

STEP 5: Commence Medication / Book first scan as instructed

The timings for your first treatment scan and for commencing appropriate drugs will depend on the treatment protocol. This would have been recommended by the egg sharing nurse who will have provided you with a written timetable. You are not expected to remember the whole process as you will be guided through it by the egg sharing team.

Egg sharer protocol with pill (OCP)

If you have been instructed to take "the pill" (OCP) it is essential to start your medication between Day 2-5 of your cycle (period). Day 1 of the cycle (period) is the first day of full menstrual flow. If your period starts after midday, the following day is Day 1. If your period starts over a weekend please telephone us on Monday.

You must contact the egg donation nurses to inform them that you have started taking the pill (OCP) and to arrange your first scan and nurse consultation appointment. At this scan the nurse will advise you when to stop the pill (OCP) and start the down regulation drugs if applicable

Egg sharer protocol without pill (OCP)

Patients who are unable to take the pill will have been given a different treatment protocol. If you have been instructed not to take the pill it is essential that you contact the nurses on Day 1 of the cycle prior to commencing treatment. You will then start the Suprecur medication on Day 21 of your cycle and contact the egg sharing nurses on Day 1 of your period to book a scan.

Appointments for first treatment scans are available on Monday - Friday 9:00am – 3:45pm.

If you still have any queries or are unsure please contact the egg sharing nurses.

STEP 6: First Scan

The scan performed prior to commencing the fertility injections is a baseline scan. It is carried out in order to check that there are no abnormalities in the ovaries, fallopian tubes or uterus that might affect the outcome of your treatment. All the scans are performed vaginally.

Following this scan you will be seen by one of the egg sharing nurses who will:

- Confirm that the scan is normal
- Complete a checklist/booking form
- Confirm your contact details
- Check the appropriate consent forms are completed correctly
- Check that the required blood test results are valid
- Plan a daily treatment diary and give written instructions
- Book your next scan and blood test
- Explain the injection technique and give you the appropriate equipment
- Give you an invoice for you to make immediate payment of your treatment cycle

Most fertility injections are given subcutaneously (fatty layer under the skin) and after instruction can be simply administered by either you or your partner. Used needles and syringes must be disposed of in a sharps box (available from an egg sharing nurse) and the sealed box must be returned to the nurses once it is full. Please do not throw needles and syringes in the waste bin.

If you would like to have the injections administered by your GP, practice nurse or at your local hospital, you will need to approach them to arrange this. If you would like to have the injections administered at the Lister Hospital, this can be arranged by one of the nurses. Appointments **are** necessary and you must have the appropriate paperwork supplied by the clinic.

We recommend you take both the FSH injections and the downregulation injections in the evening (7pm or later) unless otherwise instructed.

Payment of Treatment

Patients who are donating eggs as part of the egg sharing programme will not be charged for standard IVF treatment. Payment for the HFEA license fee and any additional procedures that you have been recommended to have such as ICSI or IMSI, need to be paid at the first scan.

Additional procedures such as cryopreservation of excess embryos will incur additional charges which will be invoiced after the egg collection.

Please settle your account by visiting one of the two Accounts Offices in our unit or on the ground floor adjacent to the Lister Hospital main reception. Unfortunately you will not be able to proceed to egg collection if payment has not been made.

If you decide to withdraw from the egg share programme and would have had enough eggs to share (8 or more) you will be required to pay the normal IVF treatment cycle fees including additional procedures and medication used. Please refer to current price list.

If you have less than 8 eggs collected and decide to withdraw from the egg sharing programme keeping all the eggs collected, there will be a charge at this stage (please refer to the ES price list), plus the cost of any medication and additional procedures such as ICSI and IMSI. In the event that the treatment is not successful it would not be possible to have any further attempts as an egg sharer.

STEP 7: **Stimulation Scans**

Once stimulation of the ovaries begins, you will have regular monitoring of your response with scans to measure the number and size of the developing follicles in the ovaries and blood tests to measure your hormone levels (principally oestrogen) levels in the blood.

The ultrasound does not show the eggs themselves, but the fluid-filled sacs (follicles) containing the eggs. In the majority of treatment cycles women will have approximately 4 scans. The scans are performed at intervals during the treatment cycle.

The first stimulation scan is usually 5-7 days after starting the stimulation FSH injections and usually every 2-3 days thereafter until the follicles reach the optimal size which for most is after 10 to 16 days. Vaginal scans carry no appreciable risk but may cause slight discomfort, particularly as you near the point of egg collection.

Following each scan you will be seen by one of the egg sharing nurses who may do a blood test (no charge) and instruct you about further steps. Your blood test and scan results are reviewed by a doctor in the evening and occasionally you may be contacted and advised to alter the dose of your medication. Please ensure that you have sufficient FSH medication in case the dose needs to be increased.

NB. Appointments for these stimulation scans are available between Mon-Fri 08.30–12.30

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EGG SHARE AGREEMENT

Following your initial consultation with our team today we would like you to read the information below. The decision to egg share can be stressful and it is therefore important that you have discussed, agreed and understood the implications of the egg sharing programme. The expected waiting time for treatment is approximately 8 weeks.

1. If less than 8 eggs are collected you will be given following options to consider and discuss prior to egg collection:

   a) Donate 4 eggs and keep the remaining eggs for your own treatment, and if this cycle is not successful you could have a further cycle of egg sharing treatment,

   b) Keep all the eggs. If you abandon the egg sharing programme you will incur a charge for IVF treatment (please see the Egg Sharing Price List).

2. In the event we collect more than 8 eggs, you and the recipient will receive an equal share of the eggs. If an uneven number of eggs is collected, you will keep the extra egg.

3. **If we collect 8 or more eggs and you then decide to withdraw from the egg sharing programme, you will be charged the standard cost of IVF treatment cycle and any medication used** (please see the ES Price List).

4. In the event we collect 21 eggs or more, you will keep half of the eggs and the other half to be donated will be shared between 2 recipients, as long as you have consented to donating to more than 1 family (1 recipient already matched with and the second to the egg bank to be donated to another recipient).

5. We can inform egg sharers whether a live birth has resulted from their donation and if so, the number of such births that have resulted, the sex and the year the children were born.

6. Recipient parents are entitled to find out the number, sex and year of birth of their child's donor-conceived genetic siblings.

7. The amount of cycles can differ from patient to patient depending on the previous treatment cycle and individual circumstances.

PLEASE BE AWARE THAT THIS DOES NOT AFFECT YOUR RIGHT TO WITHDRAW FROM TREATMENT AT ANY TIME SHOULD YOU WISH TO DO SO.

It is occasionally possible that both the donor and recipient agree on accepting less than four eggs each.

The cost of ICSI, IMSI, freezing and storage, pregnancy scans and any medication following treatment is not included in the egg sharing programme and are charged separately. You will need to pay the HFEA fee for each treatment cycle.

STEP 8: Trigger injection to mature eggs ready for collection

When the leading follicle(s) reaches the optimum size of 17-22mm, preparations will be made for your egg collection. It is important to remember that the number of follicles shown on the scan does not indicate the number of eggs collected as some of the follicles may be empty.

You will be given an instruction sheet with the appropriate timings of:

- The last dose of FSH injections
- The last dose of agonist (GnRH analogue) or antagonist
- **The timing of the "trigger" hCG (Ovitrelle, Pregnyl) injection** maturing the eggs in preparation for collection. This will be from 9pm onwards and your egg collection will be timed accordingly 33-39 hours later.

NB. For donors on the cetrotide protocol, an agonist trigger (if advised) can be given prior to egg collection instead of hCG.

Please note that you will therefore have no **fertility** medication on the day before your egg collection.

If you are taking Cabergoline, please continue until you have taken it for 8 days.

IVF or ICSI/IMSI cases are scheduled depending on your clinical case.

STEP 9: Vaginal Egg Collection / Semen Sample

Before the Egg Collection:

- **DO NOT** have food or drink from midnight on the night before your egg collection.
- **DO NOT** take the morning dose of medication such as Metformin or Prednisolone.
- Leave all valuables at home.
- Please do not bring children with you on the day of egg collection.
- Remove make-up, jewellery and nail polish.
- Report to the Lister Hospital Main Reception on the Ground Floor at 7am for admission.
- You will be taken to the Day Unit where you will share a room with another patient.
- The doctor performing your egg collection will confirm your consent.

The Egg Collection procedure

The egg collection is usually performed under trans-vaginal ultrasound guidance under general anaesthetic. Rarely, in difficult cases where the ovaries are in an inaccessible position, a trans-abdominal or laparoscopic approach is necessary.

The ultrasound probe is introduced into the vagina, the ovaries are visualised and then an aspiration needle (attached to the probe) is passed through the top of the vagina into the follicles within the ovaries. The follicular fluid is drawn up into a test tube and then the fluid is examined under the microscope to identify the eggs. It is difficult to accurately predict the number of eggs available from the ultrasound scan picture. We may collect either more or fewer eggs than we had anticipated preoperatively. In rare circumstances we fail to collect any eggs despite the appearance of follicles on the scan picture. If this

occurs, the treatment cycle cannot proceed to embryo transfer and you will be given a free follow up appointment to see the doctor to discuss your further options.

Although most patients have a general anaesthetic (GA) for this procedure, some may prefer to have it performed under intravenous (IV) sedation, if you would prefer IV sedation please advise the IVF nurse and discuss it with the anaesthetist on the morning of your egg collection.

After the Egg Collection

Generally, the egg collection takes 15-20 minutes and following the procedure patients are given antibiotic and painkilling suppositories in theatre. After the operation patients are transferred from theatre to the recovery area for approximately 15-30 minutes, not all patients are fully awake at this time. Patients are then transferred from the recovery area to the Day Unit. Patients may feel drowsy and nauseous with symptoms of abdominal pain and backache but these quickly settle.

A ward nurse will inform the patient about the procedure, provide a post egg collection instruction sheet and discharge them if all is well approximately 4 hours after the procedure unless the doctor advises otherwise. Egg collections are performed as day case procedures.

Any eggs collected will be split between yourself and the recipient. In the event of less than 8 eggs being collected, a Ovum Donation nurse/LFC doctor will come and discuss the options with you. Some patients may be called or visited by an embryologist if there are any issues regarding sperm quality or if additional procedures are necessary. Patients wanting to talk to a doctor will need to wait until the operating list is finished.

You must not drive for 24 hours following the operation due to the possible effects of the anaesthetic and you should have somebody to accompany you home.

Collecting the semen sample

A semen sample will be required from the male partner on the day of the egg collection. The laboratory usually requires partners between 8.30am – 1.00pm and they are advised to wait in their partner's room until called by a member of the laboratory team. Partners should ejaculate 2-3 days prior to providing the sample.

On occasion men may find it difficult to produce a sample and many options are available under these circumstances:

- To allow you to help your partner to produce a sample, the sample could be produced before arrival at the hospital, or in the hospital before your operation. Please inform the nurses should you require either of these alternatives as appropriate arrangements must be made in advance
- You can arrange for sperm to be frozen prior to egg collection. You will need to contact our laboratory in advance to arrange this. Additional charges will apply.
- If your partner is worried that he may not be able to produce a sample by masturbation, special condoms are available so that the sample can be produced during intercourse
- We may sometimes prescribe medication (Viagra and Yohimbine) to improve the chances of producing a sample. (there is a charge for this medication).
- If a fresh ejaculate cannot be produced on the day and frozen sperm is not available, the eggs may need to be frozen or a surgical sperm retrieval may be performed (if an urologist is available) with additional cost implications.

STEP 10: Fertilisation of Eggs

Following collection of the eggs and sperm sample, the sperm sample is prepared to concentrate the highest quality sperm together and remove impurities that are present in the fluid around the sperm. The eggs are then fertilised by either conventional **in-vitro fertilisation (IVF) or intra-cytoplasmic sperm injection (ICSI/IMSI**).

In conventional IVF the gametes (eggs and sperm) are mixed together in a dish and sperm penetrate the eggs to fertilise them naturally. Using ICSI, introduced in 1992, a single sperm is taken up in a fine glass needle and is injected directly into an egg. It offers the opportunity to men who would previously have had little or no chance of fathering their own genetic offspring real hope of having their own genetic child. Not all eggs collected will be mature enough to be suitable for injection and not all eggs survive the injection process.

ICSI bypasses the natural processes involved in a sperm penetrating an egg, and is therefore used when there are issues that make it impossible to achieve fertilization naturally or by conventional IVF. Circumstances in which ICSI may be appropriate include:

- When the sperm count is very low
- When the sperm cannot move properly or are in other ways abnormal
- When sperm has been retrieved surgically
- When there are high levels of antibodies present in the semen
- When there have been previous fertilization failures, although ICSI is generally unsuccessful when used to treat fertilisation failures that are primarily due to poor egg quality
- When frozen sperm is thawed for use the embryologist assesses the sperm quality to determine it if it is suitable for conventional IVF or ICSI

Please be aware that there is an additional charge for ICSI (please see ES price list).

IMSI

IMSI stands for Intracytoplasmic Morphology Selected Sperm Injection and is a modification of the standard ICSI procedure. It is suggested that it may improve pregnancy rates in *some* patients. The major difference between IMSI and ICSI is that a higher magnification is used to assess sperm morphology. At a higher power the embryologist can identify tiny defects in the sperm head that would not otherwise be visible with standard ICSI. The selection of those sperm may improve results for couples with embryo implantation failures, severe teratozoospermia (abnormal sperm shape) or high levels of DNA fragmentation. To be eligible for IMSI you must have discussed it first with your clinician. The doctor will decide if you meet the IMSI criteria. Please refer to the enclosed IMSI information sheet.

Please be aware that there is an additional charge for IMSI (please see ES price list).

STEP 11: Luteal Support

The day after egg collection, you will be asked to commence progesterone supplementation. This medication will usually be in the form of pessaries, however injections or gels may sometimes be advised, which you will need to continue taking until the pregnancy test. Administration of these medications after egg collection/embryo transfer has been shown to create a more favourable uterine environment for the embryos, which therefore increases pregnancy rates. This supplementation will continue until 12 weeks of pregnancy by which point the placenta will be providing more than enough hormonal support to the uterus. Occasionally you may alternatively be given oestrogen tablets (Progynova) to take the day after egg

collection or be given a course of 3 Pregnyl injections which will commence on the third day after the egg collection. The doctor will decide the most appropriate medication for you.

NB. The pessaries, gels or injections (Cyclogest, Crinone or Prontogest) are a chargeable item following your pregnancy test.

STEP 12: Embryo Culture

After either IVF or ICSI the eggs are incubated overnight and the embryologists will assess for successful fertilisation the next morning. You will receive a call from the embryologists (usually by midday) to discuss the fertilisation results and to plan your potential embryo transfer. Please ensure you have given us all your contact numbers.

In spite of having normal eggs and sperm, in 5% of cases eggs fail to fertilise. Patients who have poor quality eggs and/or sperm however do have a higher risk of fertilisation failure. Similarly, in some circumstances eggs do fertilise but the embryos may not develop normally or may not develop at all. Embryos that display any abnormal development will not be transferred. You will be offered a free follow up consultation to discuss this with the doctor.

The eggs that have fertilized normally (embryos) will be allowed to develop until the appropriate day for transfer:

By Day 2, embryos are expected to be between 2-4 cells.
By Day 3, embryos are expected to be between 5-8 cells.
By Day 5-6, blastocyst stage

Our default is now to recommend embryos be cultured to Day 5 regardless of number of embryos available on Day 2-3. This is because the genetic competence of embryos becomes more apparent between Day 3 and 5 and if an embryo does not develop to the blastocyst stage it will not have the capacity to create a pregnancy. Natural selection will see the most viable embryos continue to grow to Day 5 whilst those of poor quality and less likely to be genetically normal will case growing between Day 3-5.

We are confident that the conditions in the lab mirror that in utero. Although you can request to have embryos transferred in Day 2-3 if you only have one/two available, we will routinely recommend waiting to Day 5 (or occasionally to Day 6) until they reach blastocyst stage before transfer.

There is a chance that no embryos will develop to Day 5 especially with poor quality embryos on Day 2-3 so no transfer may occur. However, as mentioned above if these embryos do not proceed to blastocyst stage in the lab, we are confident that they would not have survived in utero. Therefore pushing to Day 5, even in these circumstances, may glean useful information that would otherwise not be available on embryo quality, avoid unnecessary medication use and the anxiety of the two week wait.

We will recommend against transfer of blastocysts of very poor quality (of any D grading) or that have not moved on between Day 5-6.

(There is an additional charge for blastocyst culture, but this is waived if no embryos are available for transfer on Day 5-6 please refer to the current price list).

STEP 13: Embryo transfer / freeze

Embryo transfer

Once a decision has been made on the best day for your embryo transfer, you will be given a time to come in for the procedure. The embryo transfer procedure is usually very straightforward and will take no more than 15-20 minutes. It feels similar to a cervical smear test, causing minimal discomfort. If you have had previous problems with having a smear test performed or embryo transfer before, please advise the nurses or a doctor at the start of treatment as we may need to arrange for you to have a dummy embryo transfer.

You should be aware that:

- On the morning of embryo transfer, Cyclogest should be used rectally

- On arrival for your embryo transfer you should start drinking plenty of water as the transfer is performed with the aid of an abdominal ultrasound scan for which a semi-full bladder is needed

- The actual time of your procedure will depend on the complexity of the cases taking place that day. Sometimes this simple procedure can be difficult to perform in some women and may therefore take longer than expected, resulting in some delay. Please be patient with us as we work through the list of embryo transfers

- In exceptional circumstances the procedure may be extremely difficult and this might lead to the transfer being performed under general anaesthetic or rarely into the fallopian tubes laparoscopically. (There is a charge for this procedure – see ES price list).

The number of embryos to be transferred would have been discussed with you at the initial consultation but the final number will be decided on the day of the transfer. The aim is to maximise the birth of healthy babies which is best achieved by avoiding multiple pregnancies if possible in view of the increased pregnancy risk.

As egg sharer have to be under the age of 36 you can legally have no more than 2 embryos transferred. Younger women with high quality blastocyst embryos available for transfer are advised to transfer only 1 embryo as this does not compromise pregnancy outcome, minimises multiple pregnancy rate and any extra embryos can be frozen.

Cryopreservation (Freezing) of Excess Embryos

We recommend freezing surplus good quality blastocysts as the implantation potential of frozen-thawed blastocysts remains reasonably good. However, the quality or quantity of the embryos resulting from IVF may be insufficient to allow their cryopreservation. Also, embryos considered to be satisfactory for cryopreservation do not always survive the freezing and thawing process.

If you have fresh blastocysts transferred, the remaining embryos may be cultured until Day 6 to decide if they are suitable for freezing.

If you have cleavage embryos (Day 2-3) transferred, the remaining embryos may be cultured until Day 5 to decide if they become blastocysts and are suitable for freezing.

This provides you with the potential opportunity of subsequent frozen embryo transfer (FET) cycles without having to undergo stimulation and egg retrieval. The FET is relatively simple and can be done in a medicated or a natural cycle. There is no guarantee that the transfer of thawed embryos will result in a pregnancy and the results of FET are generally lower than with fresh treatment.

Extensive research with human and animal embryos has shown no greater incidence of abnormalities compared to naturally conceived pregnancies.

Any suitable excess embryos can be stored for an initial period of ten years from the date of cryopreservation. After this period of ten years, there is a possibility of extending the storage period in further ten-year increments, if it is shown that the criteria for extended storage continue to be met. You and your partner will need to complete an **HFEA ES form** each to apply for storage extension. There is a maximum storage period of 55 years.

Please be aware that there are charges for freezing and annual storage as listed on the current ES price list.

The Days after Embryo Transfer

Following embryo transfer you will be advised to:

- Drink at least 2 litres of water per day to maintain good hydration
- Continue Folic Acid supplements
- Continue Luteal Support medication
- Continue other medication as recommended by medical staff (e.g. oestrogen, aspirin, metformin, clexane, prednisolone) if appropriate
- Return to normal activities. There is no evidence that rest improves the chances of success.

STEP 14: **Pregnancy Testing**

We advise you to undertake an initial pregnancy test 9-12 days following a embryo transfer. This can be either a:

- Home pregnancy test (that can be bought over-the-counter) using an early morning urine sample
- Blood test at the Lister Fertility Clinic (please refer to current price list). These are carried out between 1.00pm and 3.00pm Monday to Friday and the blood sample will be sent to our main laboratory for more accurate (quantitative) pregnancy hormone (beta hCG) testing. You will be called the following day with your results.

If your home pregnancy test is negative you may be advised to continue your medication and re-test in 48 hours.

If your home pregnancy test is negative and you are:

- Having irregular bleeding/pain
- Experiencing pregnancy symptoms
- In doubt of the result; we advise that you have a blood test for quantitative reading of the pregnancy hormone at either the Lister (a charge will apply) or at your local GP's practice or hospital.

If you experience any of these symptoms please contact the OD nurses.

STEP 15: After Pregnancy-Test Care

It is a statutory requirement of licensed clinics to report all treatment outcomes (both negative and positive pregnancy results) to the HFEA. Please contact the OD nurses on 020 7881 4036 as soon as possible with your result.

Positive Test

We suggest that you arrange a scan appointment for approximately two and a half weeks after the positive pregnancy test and continue with all medications until further instructed. Pregnancy scans are usually carried out on Tuesdays, Wednesdays and Thursdays (10.00am – 3.00pm).

The early pregnancy scan at this point should be able to detect:

- Whether this is a singleton or multiple pregnancy
- Whether the pregnancy is in the correct place within the uterus
- That there is a normal fetal heartbeat (unlikely if scanned earlier than this)
- The possibility of a miscarriage or a pregnancy outside the uterus (ectopic)

Once all is confirmed to be well, we recommend an appointment with your GP to discuss your obstetric care and refer you accordingly. We are also happy to offer advice and recommendations.

NB. Pregnancy scan is chargeable (see current ES price list)

Negative Test

Please call to book a follow up appointment to see one of our doctors to discuss future treatment plans. The amount of times a patient can take part in the egg sharing programme depends on individual circumstances.

Treatment Cycle Complications

Although significant complications are uncommon, the following list outlines the potential pitfalls of a cycle and should have been discussed with you at your consultation. If you have any queries you should discuss them with one of the nurses or your doctor.

Pre-Egg Collection

- Medication side-effects
  - Hormonal
  - Allergic reactions
  - Bruising at site of injections
- Cycle Cancellation
  - Poor Response
  - **Ovarian Hyperstimulation Syndrome (OHSS):** OHSS is the over-response to the stimulating fertility drugs with the production of numerous follicles leading to high levels of oestrogen. You are regularly monitored by scan and oestrogen levels to allow dose changes to minimise this risk or even cycle cancellation. You may be asked to stop the FSH injections and continue Synarel/Suprecur/Cetrotide/Orgalutran **(coasted)** until the oestrogen levels fall to safer levels before the hCG trigger is given. The cycle is sometimes cancelled as it is the trigger hCG injection given prior to egg collection that can cause the potentially serious symptoms to occur. This minimises but does not eliminate the risk.

A few patients however may still have a risk to develop OHSS anytime in the two weeks following egg collection. The majority will develop a mild or moderate form of the condition. In exceptional cases, severe OHSS may occur.

- **Mild OHSS** is essentially an effect of the stimulation regime because the ovaries become enlarged following stimulation and may cause abdominal discomfort and in essence is the presence of larger ovaries than normal.

- **Moderate / Severe OHSS** may result from dehydration due to the passage of fluid into other compartments of your body (chest and abdomen). The symptoms are:
  - Nausea / Vomitting
  - Weakness
  - Shortness of Breath
  - Abdominal Pain / Swelling
  - Weight Gain (5kg or more)
  - Thirst
  - Decrease Urine Output

If you have a combination of the above symptoms and are at risk of OHSS after egg collection please contact the nurses who will discuss your problems with a doctor and advise you accordingly. If you need to contact somebody out of hours, the emergency phone number is 07860 464 100. Sometime patients with severe OHSS are advised to be hospitalised for further management.

The management of **severe OHSS** may include aspiration of the ascitic fluid from the abdomen and may also include maintaining the circulating blood volume by administering intravenous fluids. The majority of patients however, are pregnant and those who are not should recover by the time their next period is due. These symptoms do not persist after the first three months of pregnancy.

Risks of egg collection include but are not limited to:

- Potential reactions from the drugs and procedures used in the administration of anaesthesia
- Failure to collect eggs because:
  - The follicles are empty
  - The eggs inside the follicles are all immature
  - The eggs inside the follicles are all abnormal
  - Pre-existing pelvic scarring and/or technical difficulties prevent safe egg recovery
  - Ovulation has occurred before the time of egg recovery
- Risks associated with the passage of the needle through the vagina into the ovaries
  - Infection
  - Bleeding
  - Inadvertent damage to adjacent structures such as:
    - Bowel
    - Uterus
    - Bladder / Ureter
    - Blood vessels
  - Adhesion formation

Although complications are uncommon, if significant bleeding or damage to the bladder or bowel is suspected, further surgery may be required to repair such damage.

Post egg collection

- **Failed Fertilisation** of eggs / **Failure of embryos** to cleave

- **Miscarriage** – risk is dependant on your age and is not significantly affected by the use of IVF / ICSI. Approximately 25% of all pregnancies miscarry and this risk rises with age. If you require further information we have a dedicated "miscarriage" information pack.

- **Ectopic / Heterotopic** - An ectopic pregnancy is a pregnancy occurring somewhere other than in the uterus, most commonly in the fallopian tubes. The incidence of ectopic pregnancy with fertility treatment is approximately 2.5%. It is a potentially serious condition but can be detected very early in the pregnancy by ultrasound scan. If two embryos have been transferred there is the small chance of a "heterotopic pregnancy" where one implants in the correct place and one implants in the tube.

- **Congenital Anomalies** – Some studies have suggested a small increase although this may well be as a consequence of the cause of infertility rather than the treatment

- **Pregnancy complications:** – Some studies have also suggested an increase in certain pregnancy-related risks such as preterm labour, growth restriction and placentation problems (placenta praevia and vasa praevia) in babies born through fertility treatment. Again, studies have suggested this may well be as a consequence of infertility itself (and the risks higher even if you conceive naturally) rather than the treatment. However, we would recommend consideration of a Doppler Scan at 20 weeks to assess location of placenta in more detail and growth scans later in pregnancy with your obstetric team although they will make the final decisions on management at this point in your pregnancy.

- **Genetic Risks** – if there is a potential underlying genetic cause of male infertility, this may be passed on to male offspring produced by an ICSI cycle. As a consequence you are likely to be advised to undergo certain genetic tests if you have a low sperm count or no sperm.

- **Multiple Pregnancy** – The accompanying leaflet outlines the increase in obstetric risk to both mother and baby that makes multiple pregnancy an undesirable outcome of IVF / ICSI

- **OHSS** – as above.

Who do I contact to make appointments?

USEFUL TELEPHONE NUMBERS

New Appointments	020 7881 2000	Mon – Fri	9.00am – 5.00pm
Egg Sharing Nurses	020 7881 4036	Mon – Fri	9.00am – 4.30pm
Egg Sharing Nurses	020 7881 4078	Mon – Fri	9.00am – 4.30pm
Secretaries	020 7730 5932	Mon – Fri	9.00am – 5.00pm

Are there counselling services available?
Our counsellors offer a confidential, non-judgmental and free service available to all patients before, during and after treatment. Patients are encouraged to explore their own feelings in order for them to make appropriate decisions for themselves. Appointments to see a counsellor can be made through the secretaries. In some circumstances such as use of donor sperm or donor eggs counselling sessions are routinely provided before treatment.

Who do I contact during my treatment if I have any queries?
The nurses are usually the first line of communication in your treatment and are able to answer the vast majority of queries. If you do not understand your treatment plan or anything else pertaining to your care, do not hesitate to contact them on the number above.

We aim to answer telephone calls where possible however if the allocated nurse is already on a call you will be diverted to the answer machine. If you do need to leave a message please clearly state your full name, hospital X number and contact number. Please do not leave multiple telephone messages as this creates unnecessary additional work and delays our response. If the clinic has been particularly busy there may be delays in getting back to you. Any messages left before 4:30pm will be returned to the same working day (Monday to Friday excluding Bank Holidays). Messages left out of these hours will be returned the next working day.

If you are sending an email please ensure you leave your full name (as registered with the clinic) and hospital number. If your enquiry is urgent please phone (see above).

If there is an occasion when you need to contact your doctor, please e-mail them or leave a message with the secretaries and they will contact you. Alternatively, contact the secretaries to book a follow up with a doctor to discuss your treatment in more detail. Please do not leave messages on multiple extensions.

Who do I contact in the event of an emergency?
As part of the support provided in your treatment cycle and in the event that you have a clinical emergency, we have a dedicated emergency phone for in treatment patients. This phone is manned by a senior nurse between the hours of:

4.30pm – 12 midnight; Monday to Friday
12 midday – 12 midnight; Saturday
8am – 12 midnight; Sunday and Public Holidays

Our out of hours emergency phone number is: 07860464100
Alternatively, call the Lister Hospital Duty Sister on 020 7730 7733 who will contact a member of the fertility team.

What do I do if I want to withdraw consent to treatment?
You and your partner can make changes to or withdraw consent at any point until the time of sperm, egg or embryo transfer. If you would like to change or withdraw your consent, you should ask the clinic for a HFEA WC form.

When will I have to make relevant payments for a treatment cycle?
Payments for a treatment cycle **must** be made when you attend the first scan of the treatment cycle. Please settle your account by visiting the Accounts Office in our unit or on the ground floor adjacent to the Lister Hospital main reception.

What time does the hospital pharmacy open?
Our pharmacy (on the ground floor) is open Monday – Friday (8.30am - 7.00pm) and Saturday (9.00am - 12.30pm).

Who do I contact to make a complaint?
We constantly strive to achieve excellence however we appreciate that you may feel there are some areas of our service which did not meet your expectations. Please speak to a member of staff if you would like to raise any issues and we will aim to resolve them for you. If you would like to make a formal complaint, please call or write to:

Unit Manager
Lister Fertility Clinic
The Lister Hospital
Chelsea Bridge Road
London SW1W 8RH

Telephone: 020 7730 5932

How do I obtain a copy of my medical notes?
You have the right to access a copy of your medical records. If you wish to do so please contact the secretaries for a Copy Request Form. A charge is payable for the copying of your notes. Please allow 10 days to prepare your records.

Who do I inform of any change in personal circumstances?
You must inform us immediately of any change in your personal circumstances (e.g. name, address, contact numbers or relationship status) by contacting the secretaries. This is particularly important if you have embryos/sperm/eggs frozen as we need to contact you to confirm their continued storage.
The storage period is governed by law and we do not require your consent to remove these embryos from storage at the completion of the statutory storage period.

Are there specific issues I should be aware of when using donor sperm?
It is important to be aware of legal, social and ethical implications of donor assisted conception. These issues are discussed fully at the implications counselling appointment. Under the terms of the Human and Fertilisation and Embryology Act 1990, the HFEA licenses and regulates clinics which practise donor insemination. Your partner can be the legal partner of any child born from your treatment – as long as both you and your partner give consent (**WP, PP and PBR**) to this in writing. The donor is not the child's legal father and has no legal responsibilities for the child.