Information Leaflet about IVF and ICSI
Information about IVF/ICSI treatment.

This leaflet aims to explain the stages of your IVF/ICSI treatment cycle and the effects of the drugs you will be taking. It gives you some information that will help you to make some of the decisions needed during your treatment. This important information will be of use to you throughout your treatment. Please keep it for reference. If you have any further queries or require any additional information please do not hesitate to contact the nursing team on 0191 2138213

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1. Preparation for treatment

**Folic Acid:** All women who are trying to conceive are advised to take FOLIC ACID 400mcgms daily to reduce the risk of a baby born with spina bifida. It is often cheaper to buy this over the counter at a chemist than on prescription. In some situations – if there is a personal or family history of spina bifida or when the woman is taking some medications eg some antiepileptic drugs it is advisable to take a higher dose. If you are uncertain about this please don’t hesitate to ask.

**Weight:** Being overweight has serious health implications and can cause complications during pregnancy. If you are overweight we will discuss this with you during your consultation and advise you to lose weight. We may defer your treatment until you have lost weight. It is important that you maintain your weight loss throughout the time you are having treatment.

**Smoking:** Research suggests that women who smoke are less likely to conceive following IVF treatment. There is good evidence that smoking reduces the quality of sperm in addition. There are well known health benefits in stopping smoking. It is therefore strongly recommended that both men and women stop smoking before embarking on fertility treatment. If you would like help to stop smoking please speak to the nurses who can offer you advice or telephone the NHS Smoking Helpline 0800 169 0 169.

**Alcohol:** The Department of Health advises that pregnant women or women trying to conceive should avoid drinking alcohol. If they do choose to drink, to minimise the risk to the baby, they should not drink more than one to two units of alcohol once or twice a week and should not get drunk. The Department of Health also advises that men should not regularly drink more than 3 - 4 units of alcohol per day.

**Cervical smears:** It is advised that you ensure that your smears are up to date prior to commencing fertility treatment so that any further assessment or treatment can be undertaken before any potential pregnancy.

**Genetic problems:** Please inform us if you aware of any conditions or illnesses that exist in your family. This will allow us to investigate any risks to you or any child that you may have and ensure that you receive appropriate advice and counselling. We may refer you to a genetics specialist who can offer you specialist advice and arrange further investigations.

**Infections:** Sexually transmitted diseases caught at any time may create further problems when trying to conceive. It is also possible that vaginal infections at the time of embryo transfer reduce the chance of IVF working. If you are worried about this at any time we encourage you to visit your local genitourinary medicine clinic.

**Blood Tests:** Prior to treatment a series of standard blood tests are taken:

<table>
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<tr>
<th>Female Partner</th>
<th>Full blood count – this allows us to check that you are not anaemic. An abnormality may warrant further investigation or simply a recommendation to take iron supplements.</th>
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<td>Thyroid function – ensures that we don’t need to give a thyroid supplement prior to achieving pregnancy. In the event of an abnormality, further tests will be recommended and treatment instituted as appropriate.</td>
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<td>Rubella - we can ensure that you are immune to German measles (rubella) infection prior to achieving pregnancy. If you are not immune we would recommend that you are immunised prior to embarking upon treatment since rubella can cause significant problems to the baby if infection occurs in early pregnancy.</td>
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Ovarian reserve - this allows us to estimate how well your ovaries will respond to stimulation treatment. The result may have a bearing on how we treat you and also your chances of success – the result will be discussed in the clinic.

Both Partners

Screening for HIV, Hepatitis B and Hepatitis C –

These viral infections have implications for individuals’ health and wellbeing as well as those of any child who can be infected during pregnancy and childbirth. It is therefore valuable to be screened prior to planned fertility treatment so that if necessary appropriate management can be planned. A positive result does not prevent a couple from undergoing fertility treatment but further assessment and or treatment is likely to be necessary before proceeding. We are required to screen for these viral infections prior to storing embryos, sperm or eggs. We are currently unable to store embryos, sperm or eggs for couples where one or both partners test positive. The screening tests for these infections will occasionally result in an equivocal or false positive result. A diagnosis of infection is not made until a formal diagnostic test confirms it.

You may require further blood tests for assessment of any fertility or medical problems prior to treatment. These tests will be explained to you as they are undertaken.

2. Counselling Service

We are aware that undergoing fertility investigations and treatment is stressful and invades the most personal and private aspects of your life. Counselling can help to lessen your feelings of isolation and confusion, encourage you to recognise and understand your emotions and allow you to explore the options that you have available to make the decisions that are right for you.

We offer a counselling service that gives you the opportunity to talk to a sympathetic and impartial counsellor in a confidential setting. You may attend together or individually. Each session usually lasts for one hour and further sessions may be arranged if necessary.

If you would like to see a counsellor please contact Barbara Hanson on 0191 2825503 or 0191 2829724 for an appointment.

Support Groups

- Infertility Network UK
  www.InfertilityNetworkUK.com  01424 732361

- Fertility Friends
  www.fertilityfriends.co.uk

- Donor Conception Network
  www.dcnetwork.org  0208 2454369
  Email: enquiries@dcnetwork.org

- Daisy Network (Premature Menopause Support Group)
  www.daisynetwork.org.uk/
  Email membership&media@daisynetwork.org.uk
3. Prescriptions

Private patients will be issued a private prescription and drugs will be charged on this basis. You will be charged for the drugs when they are dispensed by the pharmacy. NHS patients will be issued a NHS prescription and will have to pay the usual NHS prescription charges.

Both private and NHS prescriptions may be obtained at the Royal Victoria Infirmary hospital pharmacy (New Victoria Wing). A home delivery service is available for private patients if requested. **Prescriptions must be collected within one month of issue. You can collect your needles and syringes from the Fertility Centre.**

Please ensure that you have collected your drugs before you are due to start the treatment cycle. **Check the expiry dates and storage instructions on each drug as some items may need to be stored in the fridge.**

4. Appointments

We understand that getting time off work for appointments can be difficult. It may be helpful to discuss what is happening with your employer. We can provide proof of your appointments if necessary. Ideally you should both attend each appointment. It is **essential** that you both attend on the day of egg collection and embryo transfer. Please remember that the treatment dates are only an estimate of how your body will respond to the drugs. This means that we may have to alter the treatment dates in response to the scan results to ensure that you have the best chance of conceiving. This can sometimes be at very short notice.

5. Medication and injections

There are several different stages from starting the treatment until the treatment outcome is known. These are

- Controlling your natural cycle
- Stimulating the ovaries
- Egg collection and sperm preparation
- Embryo transfer
- Pregnancy test

The treatment cycle will take approximately seven weeks from starting the first drug until the pregnancy test although this may vary depending on your response to the drugs. We will discuss the treatment cycle in detail and give you a list of appointment dates before you start treatment. We will also explain each stage of treatment to you as reach it. If you need any further explanation please telephone the nurses on 0191 2138213

**Controlling your natural cycle**

Buserelin Acetate (Suprecur) injections or Nafarelin (Synarel) nasal spray will temporarily ‘switch off’ your natural cycle to allow us to control the timing of your treatment cycle.

**When do I start taking the drugs?**
The date for you to start is on your programme.

**How do I take it?**
You will have a session with the nurse who will give you instructions about how to do the injection or take the nasal spray. These need to be taken about the same time each day.
When do I stop taking the Buserelin/Nafarelin?
You must continue taking this medication until you have the hCG injection. This will be 2 days before your egg collection.

What are the side effects?
After taking the medication to ‘switch off’ your ovaries and you may suffer from headaches, hot flushes and forgetfulness. You may also feel slightly depressed. Some women suffer from vaginal bleeding. It may be intermittent and it can be light or heavy. This is a normal side effect for this stage of treatment and is not a cause for concern.

Where do I keep the Buserelin/Nafarelin?
The bottles should be kept in the fridge or a cool place away from direct heat or sunlight. They can be kept for a long time but check the expiry date on the bottle before you use them. Keep using each bottle until it is empty.

Open bottles of medication should be disposed of at the end of your treatment cycle and not kept for subsequent treatment cycles.

Stimulating the ovaries
Follicle Stimulating Hormone injections (Menopur) stimulate the ovaries to produce eggs. Menopur is administered by a daily injection under the skin (subcutaneous). Follicles are tiny fluid filled sacs that grow on the ovary and contain the eggs. In your normal monthly cycle, only one egg is produced. To increase the chances of pregnancy with IVF treatment, we need several eggs. The average number of eggs retrieved is eight.

We will teach you or your partner to administer the injections. Some couples are surprised to hear this, but it really is simple to learn, and much easier than having to visit your doctor every day. If you choose not to administer your own injections and wish to go to your GP, you must make arrangements for this yourself, remembering that some injections have to be given at weekends or evenings.

Unfortunately, we cannot arrange for injections to be given in the unit as we do not have the staff available. We are happy to teach whomever you wish, such as a relative or a friend, the injection technique. We will also supply you with the needles and syringes you need. We will provide a special container for the disposal of used needles and glass. Please do not put these in your household rubbish.

When do I start taking the Menopur injections?
The expected date for you to start the injections is given on your treatment programme. The date will be confirmed once we are sure that the Buserelin or Nafarelin has been effective.

How is it taken?
We will arrange an appointment to teach you or your partner to give these injections. We will ensure that you can do it properly before your treatment begins.

Before you start, wash your hands thoroughly. Assemble the syringe and the needle as demonstrated. The dose is usually 3 ampoules daily. We will let you know if you require a different dose.

Preparing an injection
1. Ensure that all the contents of the dilutant ampoule are in the main body of the ampoule and not in the neck of the ampoule. Break off top of the ampoule. Remove the blue cover from the powder vials.

2. Draw up dilutant into syringe using the green needle.
3. Syringe the dilutant into the first vial of powder (Menopur). It will dissolve immediately. There is no need to shake the vial.

4. Draw the mixture back into the syringe and repeat the same process with the remaining powder vials.

5. Change the needle to the orange needle. Hold the syringe upright with the needle pointing upwards and gently tap out any air bubbles. Slowly push the fluid up the syringe until a drop of fluid appears at the top of the needle.

Giving the injection
- Give injection into correct sites shown during your injection teaching.
  Menopur –thigh or abdomen
  Use alternate sites.
- It is better to sit or lie down while the injection is given and to stay resting for five minutes afterwards, to prevent soreness and stiffness at the injection site.

How often do I take it?
The injection is given once each day and should be given at about the same time each day, preferably in the morning.

Disposing of Sharps
All needles drug ampoules and syringes must be disposed of safely. You will be given a sharps box for this. Please bring it back to the clinic for disposal – Do not place in domestic waste.

Where do I keep the Menopur?
Menopur should be kept in the fridge or a cool place. It can be kept for a long time but check the expiry date on the ampoules before you use them.

When do I stop taking it?
We will tell you when to stop taking the injections or to change the dose, depending on your scan and blood test results.

What are the side effects?
You may get a reaction at the site of the injections. This can be redness, swelling or stiffness. This is normal and if one leg becomes worse than the other, rest that leg and have the injection in the other leg for a couple of days. Use alternate sites to prevent soreness. If you have a severe local reaction or experience flu like symptoms, please contact the nurses on 0191 2138213. FSH injections may cause mild abdominal discomfort as the eggs start to grow in the follicles in the ovary. You may also find that your stomach becomes swollen at this time. You may experience some increase in vaginal discharge, upset tummy and mood swings.

How do I know if the injections are working?
We watch the number of eggs growing in your ovaries by doing a series of scans. The first scan is usually a week after you start the injections. Your treatment programme will tell you when to attend for a scan.

The egg is microscopic in size and cannot be seen, but it grows in a small cyst or follicle, which shows on the scan as a black shadow. The follicle gets bigger as the egg grows. We will count the number of follicles developing in the ovaries, and measure them. When the follicles reach about 16mm in size, we would expect the egg inside to be ready to respond for the next stage of treatment, the hCG injection.
Sometimes the ovaries respond inadequately to the drugs and produce very few, if any, follicles. A decision will be made as to whether the treatment cycle is to be continued, in spite of the very poor chance of success or cancelled. If the latter option is chosen you will be offered a consultation to see a doctor during which other treatment options (if there are any) will be discussed. Occasionally a blood test will be needed to confirm the scan results.

6. Egg collection

When you are ready for egg collection you will be asked to take your hCG injection. It is carefully timed to your egg collection and is usually given in the evening. You will be told in writing when exactly to take the hCG injection after you have the last scan before egg collection. On this day take your usual Menopur injection in the morning and continue taking your Nafarelin or Buserelin injections at your usual times until you have the hCG. Do not take any more Buserelin injections or nasal spray following the hCG injection. Your partner should ejaculate on the day you have your hCG injection and not again until he produces the sample for egg collection. You should not have unprotected intercourse during this time and until after embryo transfer.

You will be given an admission form at your last visit before egg collection. Please read this carefully because it will tell you when and where to come and what to bring with you.

What happens when I am admitted?
On admission to the ward a nurse will take your temperature and blood pressure. You will need to change into a theatre gown. You will then walk with a nurse to the treatment room. Just before the egg collection a small needle will be used to introduce a plastic tube into a vein in your hand or arm.

What medication will I be given
The nurse Sedationist will give you two drugs through the tube in your arm. The first drug is a pain killer and the second is a drug to make you feel calm and relaxed. You will not be asleep but you may not remember the procedure.

If you have any worries or concerns or would just like to talk to the nurse sedationists, you can contact them via the unit phone number. A CD player is available if you would like to listen to some music during the egg collection.

How are the eggs collected?
Your legs will be put in special supports and you will then have an internal examination and scan. A very fine needle is inserted through your vagina and into the ovary. This is uncomfortable for just a few moments. We can then drain the fluid from each follicle. This will be passed to the embryologist in the next room who will identify the egg and place it in an incubator compartment that is clearly labelled with your name. The procedure is repeated on the other ovary. The whole procedure lasts for about 10 minutes depending on how many follicles you have grown. We expect to obtain eggs from approximately 70% of follicles. Occasionally the egg recovery may be much lower than this. If an egg isn’t retrieved it is probably because it wasn’t a good egg.

What happens after the eggs have been collected?
You will be taken back to your bed in the ward on a trolley. You will feel drowsy following the procedure, we encourage you to rest and sleep for the first hour. It takes at least 2 hours for the initial effects of the drugs to wear off so you must stay in hospital for that time. It takes 24 hours for the sedation drugs to wear off completely. Prior to discharge you will be given an IVF discharge information sheet ( PID 25 )

What will happen after I go home?
You may have some abdominal discomfort. You can take 2 Paracetamol tablets every 4 hours but be careful not to take any more than 8 tablets in 24 hours. If the pain is severe and persistent or you
are vomiting please telephone the Centre. A little brown spotting or discharge is not uncommon and will usually settle after approximately 48 hours. The sedation drugs may leave you with a dry mouth, you may feel drowsy and you may have the inability to perform complex tasks. So when you get home put your feet up and have a quiet relaxing evening. You must have someone with you at all times until the following morning. Do not drink alcohol Do not sign any legal documents, use electrical equipment or machinery or drive for 24 hours. If you live more than 40 mins away we advise you to stay locally.

**What medication is needed after the egg collection?**
Cyclogest pessaries are used after the egg collection. One should be inserted vaginally or rectally, just with your finger, morning and evening until the pessaries are finished. They contain a hormone called progesterone, which may help with the implantation process.

7. **Sperm preparation**

**When is the semen sample needed?**
A semen sample will be needed and this will be at about the same time as your partner’s egg collection. The nurse will tell you when to do this. You are then welcome to stay in the unit but we will ask you to sit in the waiting room until your partner has recovered from the sedation. On rare occasions a second semen sample may be needed so please do not leave the unit within the first hour of producing your sample to allow time for the embryologist to check the sample. If you do wish to leave the unit please leave a mobile number with the nurse or receptionist for us to contact you should the need arise.

8. **IVF or ICSI?**

**What is ICSI?**
We want to give you the best possible chance that the eggs will be fertilised. At the same time we do not want to carry out any unnecessary interventions. There are two ways to fertilise the egg. If the sperm count is normal, we put about 100,000 sperm with each egg. This is IVF. If the sperm count is of poorer quality, we put just one sperm directly into the egg. This is ICSI (intracytoplasmic sperm injection). ICSI is much more complicated, can sometimes damage the egg and costs more than IVF. For these reasons, we prefer to do IVF where possible.

**Is there a difference between the fertilisation rate for IVF and ICSI?**
Following both IVF and ICSI we expect to have successful fertilisation in about 7 out of 10 eggs (70%). In a small proportion of both IVF and ICSI, there is unexpectedly no fertilisation. If this occurs with IVF, we may recommend ICSI in any future treatment.

**Is there a difference in the pregnancy rate and safety of IVF and ICSI?**
There is no evidence that the pregnancy rates differ whether the eggs were fertilised by IVF or ICSI. If you have an extremely poor sperm count, there is theoretically a very small risk that your infertility could be passed on to a male child. If appropriate, we will discuss this in more detail with you in the clinic.

**How do we decide if you need IVF or ICSI?**
The embryologist will advise you about whether you need IVF or ICSI. Initially we base this advice on the sperm test before treatment and your previous medical history. The final decision cannot be made until we have analysed the sperm sample given on the day of egg collection. The advice also depends on the number of eggs collected. Sometimes the advice is very clear. A normal sperm sample indicates IVF and a poorer quality sample indicates ICSI. Analysing sperm samples is complicated and sometimes difficult to
interpret. Furthermore, there is considerable daily variation in sperm counts. In the clinic we will recommend either IVF or ICSI based on the evidence at that time. We will let you know on the day of egg collection if our advice changes so that you can make a final decision.

**Who needs sperm retrieval?**
Occasionally, some men produce no sperm at all in their ejaculate e.g. men who have had a vasectomy. We now have a technique whereby in selected cases sperm can be aspirated directly from the testicle or surrounding tubes using a small needle (PESA) or retrieved from a testicular biopsy. This is usually done using a local anaesthetic. More complicated sperm retrieval procedures are done under general anaesthetic. The sperm would be injected into the egg by the ICSI method to achieve fertilisation. If you need a sperm retrieval operation, it will be discussed with you fully at the clinic.

**What happens to the egg and sperm?**
After insemination, the eggs and sperm will be left in an incubator overnight.

**How do we prevent laboratory identification errors?**
A rigorous system is in place to cross check your eggs, sperm and embryos against your name(s). You are assigned a separate compartment in the incubator that is labelled with your name(s). Each laboratory dish (containing eggs, sperm or embryos) that is used in your treatment is labelled with your name(s). This identification system is tracked by RFID tags that link your eggs, sperm and embryos and record all actions taken.

**Failed Fertilisation**
Failure of fertilisation is unusual. Occasionally, this happens even when both sperm and eggs appear normal. If this happens, we will make you an appointment to see you for individual advice and to discuss further treatment options. You should discontinue using the pessaries.

9. **Would the baby be normal?**
This is a question that all parents ask during a pregnancy. If you conceive naturally there will be a 3-5% chance of having a baby with congenital abnormality. This increases to 4-7% if you have a baby after IVF/ICSI but the absolute risk still remains low. Many babies have now been born after being conceived by ICSI and there is no conclusive evidence that they have a higher rate of abnormality than IVF children. The oldest individuals conceived by IVF or ICSI are not yet into middle age so there will still be ongoing studies that you may hear about in the future.

10. **Embryo transfer policy and multiple pregnancy.**

**Why are we being asked about this?**
Couples in your situation often consider that having 2 healthy babies in a twin pregnancy is the best outcome of treatment, but there are risks in a twin pregnancy and you need to be aware of them. The overall chance of twin pregnancy remains significant if 2 embryos are replaced. All clinics are now required by our regulators, the HFEA, to reduce this multiple pregnancy rate. We are thus giving you some information here to help you decide whether to have one or two embryos transferred.

**What is the risk to the baby of being a twin?**
Being a baby in a twin pregnancy is more risky.

The chance of a baby dying between 24 weeks of pregnancy and 7 days after birth (perinatal mortality rate) is:

- Singleton (one baby)
- Twin (two babies)
6.9 in 1000   27.2 in 1000
The chance of a baby having cerebral palsy is
Singleton (one baby)         Twin (two babies)
2.3 in 1000               12.6 in 1000
Further information about the outcome of twin pregnancies is found on:
www.CEMACH.org.uk

What is the risk to the mother of a twin pregnancy?
Almost all complications of pregnancy for the mother are increased in a twin pregnancy. This
includes premature delivery, problems with blood pressure, bleeding, Caesarean section and blood
clots. And don’t forget that looking after twins, even if they and you are fit and well, is much more
difficult.

Who should have a single embryo transfer?
Those women with the greatest risk of twins are 37 or younger and are having their first treatment.
This does not mean that twins do not occur in women over 37 years but it is less likely.
We can only give you a realistic estimate of your risk of twins when we know more about your
embryos. That will not be until at least 3 days after the eggs are collected.
There is information below about our recommendations for embryo transfer. It gives several options
because the individual recommendations that we give to you may change as we see your embryos
develop.

What is the change in pregnancy rate if I have only one embryo transferred?
Evidence shows that if you have only one embryo transferred and you have other embryos frozen
and transferred later if required, your overall chance of a baby is not reduced.

11. When will we get information about our embryos?

When will we be telephoned?
We will phone you on the day after egg collection (Day 1). We will let you know how many eggs
have fertilised normally.
We will phone you before 11am 2 days later (Day 3) to let you know if we recommend monitoring
your embryos for a further 2 days before transfer (Day 5). You need to be prepared to come in for
embryo transfer that day (Day 3). If you are advised to come in on Day 5, we will give you a time
when we phone you.

12. Embryo transfer

What is the transfer policy?
We will look at the embryos 3 days after egg collection (Day 3). The decision about what to do
then is not based on a rigid policy and we might vary it depending on your specific circumstances
and your views. Generally, if you are 37 years or younger and you have at least 2 top or good
quality embryos on Day 3, we recommend growing them for a further 2 days so that we can select
the best embryo to transfer. Otherwise we will recommend transferring your embryos on Day 3. If
there are spare embryos suitable to freeze, this will be done on the same day that you have the fresh
embryo transfer. We will discuss this with you when you attend for the embryo transfer.
What do embryos look like?

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<tr>
<th>Day 1</th>
<th>Day 3</th>
<th>Day 5</th>
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<tr>
<td>Normally fertilised egg</td>
<td>8 cell cleaved embryo</td>
<td>Blastocyst</td>
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How many embryos do we recommend are transferred?

Day 3.
You may have either 1 or 2 embryos transferred depending on your specific circumstances. These will be discussed with you.

Day 5.
If you have at least one blastocyst on Day 5, we will only transfer one blastocyst. This is to reduce the risk of twins.
If you have embryos on Day 5 that have not yet reached the blastocyst stage, you may have 2 or 1 embryos transferred as you wish.

What do I/we do before coming in for embryo transfer?
Have your breakfast/lunch as usual then come to the Centre at the time arranged. Please do not wear perfume, aftershave or strong deodorants as strong smells can be detrimental to your embryos.

What happens when I am admitted?
There may be a little time between your arrival at the Centre and being called for your transfer. Take this time to relax. When called for transfer we will ask you and your partner to cover your clothes with a theatre gown and remove your outside shoes and put on theatre shoes/slippers.

What happens when the embryos are transferred?
Immediately before your procedure, the embryologist will tell you about your embryos. We will confirm with you again the number of embryos you wish to have transferred. We will confirm your name and check it against your embryos with the embryologist. We will be able to show you your embryos on the monitor screen if you wish. The procedure usually only takes a few minutes and is usually quick and painless. You may go home straight afterwards as resting or lying down does not improve the success rate. You may also empty your bladder!

Mostly the procedure is straightforward. However, sometimes it may take longer to pass the catheter into the womb. After the embryo transfer procedure the catheter is checked to confirm that the embryos have gone. Occasionally one or more may have stuck inside the catheter and the procedure has to be repeated.

After the embryo transfer
We advise you to lead as normal a life as possible after the transfer without doing anything too strenuous. There is no need to abstain from sexual activity after the embryo transfer. There is nothing more you can do at this stage to help the embryos to implant. Please don’t hesitate to telephone the Centre if you have any problems. Remember that we are here to support you throughout your treatment.

13. Should we have embryos frozen?
We understand that there are different ways to think about your embryos whilst they are in the embryology laboratory and at this very stressful time in your treatment it may be very difficult to decide whether or not to freeze embryos. The embryologist will discuss the quality and the suitability of your embryos for freezing with you at the time of the embryo transfer. We hope that the information below will help you with this choice.

**How does the embryologist decide which embryos are of good quality?**
There is no absolute test that tells us whether or not an individual embryo can make a baby. The embryologist will look at the embryos each day and assess how quickly each embryo is dividing and whether all the cells are dividing evenly. We always transfer the best quality embryos to give the best chance of a pregnancy.

**How do we decide whether to offer you embryo freezing?**
This decision is based on our experience of how embryos survive freezing. Freezing and thawing is stressful to the cells of an embryo. For some embryos all of the cells remain intact while in others all of the cells break up and are no longer viable. Only the best quality embryos are suitable for freezing. Poor quality embryos very rarely survive this thawing process. Thus we only recommend freezing good quality embryos.

**How many people have embryos frozen?**
In the UK, no more than 1 in 4 couples will have embryos frozen. This is because not many couples have good quality embryos remaining after embryo transfer. The most likely outcome for you therefore is that you will not have embryos to freeze.

**What is the chance that a frozen embryo will make a baby?**
We have analysed our results by looking at all the embryos that are frozen. For every 100 embryos that are frozen, we estimate that there will be about 6 babies born. If your embryos survive thawing and are transferred, there is about a 20% chance of pregnancy. There is no evidence that any babies resulting from thawed embryos have an increased risk of harm or abnormality.

**Do we have to pay for freezing?**
If you are NHS patients, the cost of freezing is included in your treatment if freezing is recommended. If you decide to freeze against our recommendations you may have to pay. The NHS funds storage of embryos for one year.

**Ongoing costs**
If you have a successful pregnancy you would then need to pay for embryos to be thawed for further treatment. There is an annual fee for ongoing storage. The costs of freezing and storage are available in our private patient information.

**So should we have embryos frozen?**
The decision is yours and will usually depend on how you view your embryos. We hope that the information above has helped you make this decision. The embryologist will talk to you about the quality of your embryos on the day of embryo transfer and you will need to make a decision then. If you want to talk to anyone about this before then please let us know.

**What do we do if we want embryos frozen?**
If you decide that you want embryos frozen, you must both attend on the day of embryo transfer. You will need to sign the appropriate consent forms and the freezing will be done immediately after the embryo transfer.

**What happens to the embryos is they are not frozen?**
Embryos that are not suitable for freezing are put into a solution that stops them growing then they are discarded. Your embryos will not be given to another couple. Embryos may be donated to research or training but only with your written consent.

What do we have to decide later about the frozen embryos?
If you have embryos frozen, we will contact you each year to ask for your decision about ongoing freezing. If you wish to have the embryos transferred, we will see you both in the clinic to discuss this. 38% of couples decide not to use their frozen embryos. This can be a difficult decision and we would be happy to talk to you about this at any time.

14 Ovarian Hyperstimulation Syndrome

A small number of women who are having treatment to stimulate the ovaries will develop a problem called “Ovarian Hyperstimulation Syndrome”. Overall it affects only about 2% of women, but we will tell you if you are at higher risk. Detailed below are some specific answers to the questions you might ask.

What is ovarian hyperstimulation syndrome?
It is a combination of symptoms including enlargement of the ovaries, swelling and discomfort in the abdomen. Often it is associated with nausea and vomiting. Although we know that it is caused by the drugs we give you to simulate the ovaries, we do not know why only a small number of women develop these problems.

When will I start getting symptoms?
The usual time to start getting problems is a few days after the egg collection.

When will I get better?
If you are not pregnant, the symptoms will resolve completely when you have your period. If you are pregnant, you may continue having problems until about the second month of the pregnancy. It will then resolve completely.

Does it effect my chances of pregnancy?
Hyperstimulation syndrome will have no effect on your chances of pregnancy. In fact some studies suggest that women who have this problem have a higher chance of pregnancy.

What treatment is given?
If the problem becomes severe, you may need to come into hospital. Often we simply need to give you rest and mild painkillers. Specific treatment depends on your symptoms and may include daily blood tests, an intravenous drip to stop you becoming dehydrated and injections to thin your blood and prevent blood clots. If you collect a lot of fluid in your abdomen, it may cause you to feel very uncomfortable and under these circumstances we may drain the fluid away using a fine needle.

What do I do if I feel unwell?
You will most likely develop some of the symptoms described above and it may be difficult for you to know whether to be worried. If you are concerned at any time you should contact us directly (Tel: 0191 2138213). In particular we need to know if you are concerned about abdominal discomfort, start vomiting or are unable to drink anything.

15 Pregnancy test

After the embryo transfer we will give you a date to attend for a pregnancy test. This is usually 14 days after the egg collection. It is important to attend for the blood test even if you have started bleeding. If the pregnancy test is positive we will arrange a scan in 3 weeks to ensure that the pregnancy is continuing. If the test is negative we will arrange an appointment for you to discuss
your future options. Occasionally the pregnancy test is inconclusive and we may have to repeat it, we will let you know if this affects you.

16. What do we do if treatment fails?
You will be sent an appointment to come back to the clinic to see a nurse or doctor to review your treatment. Unfortunately most couples will not be successful in achieving a pregnancy. The estimated success rate for each couple is discussed in detail prior to the start of treatment and can vary between 1-40% approximately. We are aware of the great disappointment you may feel if your treatment fails. People cope with this in different ways. If you wish to talk to us, please phone at any time and we would be happy to see you. A counselling service is available if necessary.

17. Pregnancy scan
We will offer to do a pregnancy scan about 3 weeks after a positive pregnancy test. On occasion we may arrange a slightly earlier scan. The 3 week scan is about 5 weeks from embryo transfer and the equivalent of 7 weeks into a traditionally timed pregnancy (estimated from the last menstrual period in natural conceptions). A vaginal scan will be undertaken and would expect to see a growing pregnancy with a small fetus and evidence of fetal heart activity, in other words a baby measuring about 1-1.5 cm and a heart beat. We are able to diagnose a multiple pregnancy at this scan also. Unfortunately occasionally we pick up pregnancies that haven’t grown to this stage which may be miscarriages waiting to happen or may not even be visible on ultrasound scan. In those cases we need time sometimes to confirm a diagnosis, including occasionally of an ectopic pregnancy (one which is growing outside the womb). This further assessment may require more scans and blood tests and sometimes specific treatment. This will be discussed with you on an individual basis but because of this possibility we would advise that you make no firm plans to be away from home until we have had the opportunity to confirm that all is well with your pregnancy or undertake any necessary treatment if not.

18. Research and Training
This Centre has an active research program because we believe that there are still too many unanswered questions about early human development. We undertake studies that are aimed not only to improve your treatment but also to develop new treatments that may help others in the future. We carry out surveys about your views on your problems and at the treatments offered. We also train laboratory staff in routine techniques and may ask if we can use your eggs, sperm or embryos to help in this training if they are not needed for your treatment.

We will ask you when you first come to discuss treatment if you have objections to donating cells to research or training. If so, we will respect that decision without question and we will not ask you about it again. Whether or not you agree will have no impact on your clinical treatment. Our principal aim is to help you achieve a family and the research or training that we carry out will not alter your chances of a pregnancy. We will only use embryos or eggs which are not required or not wanted for treatment and would otherwise be allowed to perish. It is unlikely to provide any relevant information about you but we will let you know any results if appropriate. Cells that are used in research or training cannot be then used for treatment and will be allowed to perish.

If you wish to know more about our research and training procedures, we would be happy to discuss this with you when you come to the clinic. For information about some of our current research, please follow these links: http://www.newcastle-hospitals.org.uk/services/fertility-centre_research.aspx

GOOD LUCK