THE UNIT FOR ASSISTED REPRODUCTION
CONTACT DETAILS
The unit for Assisted Reproduction at the Women’s Clinic at Haukeland University Hospital.
We are located on the lower ground floor of the Women’s Clinic.

Opening hours
Monday to Friday, 08.00-15.30

Important telephone numbers
Secretary: (+47) 55 97 42 76
Nurse: +47 55 97 42 79 (between 12.30-14.30 every day.
Additional telephone hours 09.00-10.00 on Mondays and Tuesdays)
Laboratory: (+47) 55 97 42 74
Fax: +47 55 97 49 68

E-mail
assistert.befruktning@helse-bergen.no

Website
www.helse-bergen.no/no/OmOss/Avdelinger/Kvinneklinikken/
assistert-befruktning

Visitor address
The Women’s Clinic
Jonas Lies vei 72
NO-5058 Bergen, Norway

Postal address
PO Box 1400
NO-5021 Bergen, Norway

Forening for ufrivillig barnløse (the Association for the Involuntarily Childless)
FUB Ønskebarn
Telephone: (+47) 22 41 58 86
www.fub.no
WELCOME
We know that people who come to us are in need of information, and we want you to feel well looked after, safe and heard through the entire treatment process. We hope that this brochure will be able to answer some of the questions that you may have. If you have further questions, please write them down and bring them along to your next appointment and we’ll do our best to answer them.

PRELIMINARY CONSULTATION – OUR FIRST MEETING
At the pre-consultation you will both be seen by a doctor and it is important that you let the doctor know of any medication you are taking or if you have any allergies. In addition to this, the woman will have to undergo a gynaecological examination, and the man will have to submit a semen sample. A nurse will explain the routines at the unit and talk you through the normal treatment process for assisted reproduction. During the meeting with the nurse you will have to sign the assisted reproduction agreement (Avtale om assistert befruktning ved forsamtale) that you received together with your appointment confirmation. Remember to bring ID as you will have to show it in connection with signing the agreement. You will also be taught how to use the syringes for self-injection to be used in treatment. If everything is in order, we will then agree on a method and a schedule for further treatment.

The preliminary consultation appointment will take about one and a half hours in total, but you will also have to have blood tests taken at the Women’s Clinic laboratory before leaving the hospital. The laboratory is also located on the lower ground floor of the building and is well signposted. If any new medical issues arise after the preliminary consultation (e.g. new medication), you will need to contact the unit in order to be cleared for further treatment.

SEMEN SAMPLE
The man may choose whether to produce the sample at home and bring it to the unit, or produce it in a private room at the unit. If the semen sample is produced at home, it should be submitted to the unit no more than an hour later and transported close to the body in order to ensure that the right temperature is maintained. When producing the sample, no more than two or three days should have passed since the most recent previous ejaculation.

ASSISTED REPRODUCTION TREATMENT OPTIONS OFFERED

IVF In Vitro Fertilisation
In vitro means outside of the body. This treatment involves the retrieval of eggs from the ovaries and fertilisation of these using sperm from the partner. Fertilisation takes place at our laboratory.

ICSI Microinjection
This method is used for patients with reduced semen quality, or where IVF attempts have failed. Just like IVF, this method involves retrieving eggs from the ovaries. However, this technique involves the direct insemination of sperm into the egg using a thin glass syringe.

Cryopreservation of embryos
If egg retrieval results in a surplus of embryos of a good quality, these can be frozen and stored for use at a later time. You will then be sent a letter after egg retrieval stating the number of embryos that have been frozen and a brief explanation of how to proceed in order to make use of these for future treatment. Embryos can be stored at the unit for up to 5 years.

Thawed embryos can be transferred during a natural or hormone-regulated cycle, depending on whether or not the woman is experiencing regular menstruation with ovulation. Any
stored embryos will normally be used before retrieving any new eggs from the woman.

TESA Testicular Sperm Aspiration
This technique is applied in cases where no motile sperm are found in the semen. The doctor will retrieve sperm directly from the testicle under local anaesthetic. This method is used both for diagnosis and in connection with the actual assisted reproduction. ICSI is will be used as the method of fertilisation in connection with assisted reproduction treatment.

Cryopreservation of sperm
Men who are to undergo medical treatment that may result in infertility or reduced fertility may have sperm frozen for use in future assisted reproduction treatment.

Consent to treatment
You will need to sign a consent form prior to treatment. You should therefore always bring your ID when you visit the unit.

DIFFERENT TREATMENT PROTOCOLS
There are various treatment protocols to be followed by the woman before you will be offered assisted reproduction. We will outline the two most common of those protocols here.

1. LONG PROTOCOL, WITH NASAL SPRAY
Synarel nasal spray is used to down-regulate the hormonal activity of the ovaries in order to control ovulation. The woman will normally start taking the nasal spray on day 21 of her menstrual cycle. The nasal spray should be used for 2-3 weeks prior to starting injections/hormone stimulation and for the duration of the stimulation period, up until the day that you are to have an ovulation injection. One spray in one nostril represents one dose, and you need to take one dose every eight hours in order to make sure that the required effect is achieved.
You will start to menstruate (bleed) one to two weeks after starting the nasal spray treatment. This menstruation may be different to your normal period – it may be heavier, last longer and possibly be more painful. The bleeding may stop for a few days before starting up again. You do not have to have stopped bleeding before you start the stimulation injections.
In some cases, the nasal spray may cause side effects such as mood swings, hot flashes and headaches. These will disappear quickly when the body's oestrogen levels increase, once you start the hormone stimulation treatment.
Hormone stimulation is used to increase the chance of pregnancy by stimulating a larger number of eggs to mature than in a normal cycle. The hormone stimulation treatment will be individually adapted and you will receive a personalised, day-by-day stimulation plan. This plan will indicate on what day you are scheduled to start taking the various medication types, and the dates of ultrasound exams.
The medications used for hormone stimulation are Puregon, Gonal-F, Menopur, Bemfola and Pergoveris. These drugs contain follicle-stimulating hormone (FSH), which stimulates the development and maturation of the follicles (eggs). The medication is administered by way of an injection pen and needs to be taken at the same time each morning for approximately 10 days. The doctor will determine how long treatment should continue based on ultrasound examinations along the way.
The prescriptions are issued electronically, and the medications can be obtained from any pharmacy in Norway. The prescriptions are activated when you go to a pharmacy in person, and you will have to present ID. The medication must be ordered a few days prior to the treatment start. If you wish to check whether you have been sent an e-prescription, or what
type of medication the doctor has prescribed, log onto www.mineresepteter.no and follow the instructions. Do not hesitate to give us a call if you are unsure about anything.

**Recommended on-line resources**

www.fertility.com  
www.barnloshet.no

There are several instructional videos available on-line showing you how to use injection pens. Search for the medication you will be taking.

### 2. SHORT PROTOCOL, WITHOUT NASAL SPRAY

Hormone stimulation starts on day 1 to 3 of your menstrual cycle by way of injection. The different medications used for hormone stimulation are Puregon, Gonal-F, Menopur, Elonva, Bemfola and Pergoveris. Elonva is given as a single dose and lasts for one week. Puregon can subsequently be taken as a daily supplement if required. The other medication types are taken for about 10 days, as explained for the long protocol.

Instead of the nasal spray, you will be taking Orgalutran or Cetrotide. You will start on stimulation day five and this injection should be taken in the same way and in parallel with the hormone stimulation injection. This injection is intended to prevent premature ovulation.

**Ultrasound**

We will monitor the development and growth of the follicles using ultrasound. If you live far away from the hospital, you can have the ultrasound scan performed by your gynaecologist or at your nearest hospital. You will need to make the appointment yourself, ideally early on in the day. The gynaecologist/hospital must then fax the results to the unit for Assisted Reproduction as soon as possible. We will get in touch with you by phone afterwards to advise you on further treatment. Please call us if you haven’t heard from us by 14.00.

**Ovulation injection (Ovitrielle/Suprefact)**

The ultrasound will allow the doctor to see when the follicles have reached the desired size. Once this has been confirmed, you will be notified of when to inject the ovulation stimulant. It is extremely important that you take your ovulation injection at the right time, i.e. 23.30, two days (36 hours) before egg retrieval!

**EGG RETRIEVAL (OPU)**

You will be given an appointment at the unit for Assisted Reproduction at the Women’s Clinic for around 08.00 (you will be given the exact appointment time in connection with the ultrasound). You will both need to sign the treatment agreement and show ID.

**WHAT HAPPENS IN CONNECTION WITH EGG RETRIEVAL?**

**Woman:**

- Have a light breakfast without coffee.  
- Take 2 g of paracetamol (= 4 x 500 mg tablets) half an hour before the appointment.  
- When you get here you will be given a bed as well as painkillers and a mild sedative. You will not be able to drive on this day!  
- The doctor will administer a local anaesthetic to the vagina immediately before the start of the egg retrieval procedure.  
- The retrieval procedure itself will take 10-15 min.  
- The level of pain experienced in connection with egg retrieval varies from one woman to another, but most describe it as being similar to period pain in the lower back.  
- You will be kept in for observation for ½-1 hour before being allowed to return home
following egg retrieval.

- Some women experience abdominal pain that afternoon/evening, which can usually be alleviated by taking paracetamol and using a hot water bottle. You should not take ibuprofen or diclofenac due to the increased risk of bleeding.
- We can give you a medical certificate that will entitle you to up to three days off work following egg retrieval.
- The laboratory will call you between 12.30 and 13.00 (around 09.00 on Saturdays) on the day following egg retrieval to let you know how many eggs have been fertilised. You will also be given an appointment for embryo transfer at this time.

**Man:**

- Submit a semen sample produced either at home or at the unit (see previous section for information about the rules to follow in connection with semen samples).
- You may be present for the egg retrieval if you both so wish.
- You will need to take your partner home after the egg retrieval appointment. Once home, you need to make sure she is not left alone for the first few hours on account of the various types of pain medication she has received.

We recommend that you abstain from intercourse in the days immediately prior to egg retrieval.

**POST-TREATMENT**

We will administer progesterone treatment after egg retrieval. Progesterone is a hormone that helps rebuild the mucus membrane in the uterus and prepare it for receiving an embryo. This treatment will start on the day of egg retrieval. The medication is administered deep inside the vagina. Side effects of progesterone treatment can include increased vaginal discharge, vaginal itching, breast tenderness, tiredness and nausea.

The woman should not use a tampon, have intercourse, swim (in a swimming pool, lake or the sea), or have a bath during the first two weeks following egg retrieval. We also advice that you reduce your level of physical activity in these two weeks.

**EMBRYO TRANSFER**

On day two or three following egg retrieval, we will transfer a fertilised embryo. This process will involve the following:

- The woman will be positioned on a standard gynaecology examination table
- We will transfer the embryo by inserting a fine catheter into the vagina and the uterus.
- This will normally take 10-15 min.
- As the procedure is not painful, you will not be given any painkillers in connection with embryo transfer.

**PREGNANCY TEST**

We want you to take a blood test 14 days following embryo transfer, even if you have experienced vaginal bleeding. Some women experience period-type pains and spotting in the space of these two weeks but may still be pregnant.

If you have this blood test taken at the laboratory at the Women’s Clinic at 08.00 you will get the results the same day. If you have the test done at your GP’s clinic or anywhere else, you will have to wait until at least the following day. One of our nurses will call you to let you know the result of the test. If the pregnancy test is positive, you will be given an appointment for a vaginal ultrasound about five weeks after the embryo transfer took place. All further follow-up will be handled
by your GP. If you live outside of Bergen, you can have the vaginal ultrasound performed by a gynaecologist where you live. If you do so, it is important that you and/or the gynaecologist notifies us of the result of the ultrasound, either by telephone or in writing.

Psychological strain
For most people, undergoing assisted reproduction is very stressful psychologically, so it is best to be prepared for this. Many couples will already have been under strain in the time leading up to the treatment, as they will have been trying to conceive for a long time. Our experience is that a positive attitude is important in order to be able to manage the treatment process. However, it is also important to be realistic and aware that, unfortunately, not all treatments have a successful outcome. It is important that you are understanding of each other’s potential reactions. You should try to carry on with your day-to-day life as usual, even though the treatment should and will be at the forefront of your minds. It is probably best not to plan any other major projects or trips in the treatment period.

We will be happy to help should you have any questions over the course of the treatment. We will also invite you to attend a summarising meeting with the doctor after your third and final attempt. Please know that you can always give us a call!

**POTENTIAL TREATMENT COMPLICATIONS**

Side effects caused by medication
Possible side effects of medication are listed in the patient information leaflets accompanying each medication. Medication used in connection with assisted reproduction treatment causes a controlled over-stimulation of the ovaries, overriding your own menstrual cycle.

The most common side-effects are:
- **Synarela nasal spray** – head aches, hot flashes, night sweats and mood swings.
- **Hormone stimulation** – pain, nausea, abdominal bloating, a heavy or prickly sensation in the lower abdominal/genital area, slight weight gain and increased vaginal discharge.

**Ovarian hyperstimulation syndrome**
Ovarian hyperstimulation syndrome is a possible side effect of hormone treatment. This may, in extreme cases, require admission to hospital. Some women react strongly to hormone stimulation treatment, resulting in the formation of an excessive number of follicles. Treatment may have to be discontinued in this event. This means that we will either cancel egg retrieval or freeze all the fertilised eggs and perform embryo transfer in a later cycle.

Hyperstimulation can occur from the point that you inject the ovulation stimulant to up to one week following embryo transfer. Contact us if you experience any of the following symptoms: bloating and pain in the lower abdominal/genital area, nausea, vomiting, diarrhoea or breathing difficulties.

Call (+47) 55 97 42 21/25 if the unit is closed, or contact your nearest hospital.

**Allergic reactions**
Allergic reactions as a side effect of the treatment medication are rare. Contact the unit if you experience symptoms of allergic reaction.

**Infection following egg retrieval**
Infection is a rare but possible side effect of egg retrieval. Infection symptoms will generally appear within three days of egg retrieval and can include persistent and increasingly severe abdominal pains, in addition to fever. You should see a doctor as soon as possible if you experience any such symptoms.
Bleeding:
Although rare, abdominal cavity bleeding is a potential side effect of egg retrieval, which is why we want to keep you under observation at the unit for ½-1 hour following egg retrieval.
Cancer risk?
There is no documentation indicating that hormone stimulation administered in connection with assisted reproduction leads to an increased risk of developing ovarian or breast cancer.

WHAT CAN I DO?
• Take a folic acid supplement – it is recommended that all women who are attempting to get pregnant should take 0.4 mg of folic acid a day. You should continue to take folic acid in the first three months of pregnancy.
• Avoid using tobacco – Smoking impairs fertility in women and can lower the semen quality in men.
• Reduce your alcohol intake – During treatment, your alcohol intake should be as low as possible. Women should refrain from drinking alcohol altogether after embryo transfer.
• Reduce your caffeine intake – Caffeine is found in, among other products, coffee, tea and cola drinks. You should limit your caffeine intake. More than five cups of caffeinated drinks a day is considered a high intake and can reduce your chances of achieving pregnancy.
• Keep your weight stable – Being overweight or underweight can have an impact on your chances of getting pregnant. If you are overweight, we recommend that you lose weight before commencing treatment.
• Acupuncture – Many people are interested in trying acupuncture in connection with treatment. You will need to organise acupuncture treatment yourself.

HOW MUCH WILL THE TREATMENT COST?
Many people want to know how much it costs to receive assisted reproduction treatment in a public hospital. As of 1 April 2014, the Norwegian government will partially reimburse the cost of up to three attempts at assisted reproduction per child. The couple will have to pay a deductible of NOK 1,500 to the Women’s Clinic for each attempt. This amount cannot be charged to a deductible exemption card. Medication costs exceeding the limits set by the Norwegian Health Economics Administration (HELFO) will be covered by Norwegian National Insurance Scheme. For up-to-date information about the covering of expenses, please visit www.helsenorge.no.
Remember to keep all your receipts. They should be sent to HELFO together with a certificate of treatment in order for your expenses to be reimbursed within six months of the limit amount being reached. We will issue the certificate on the embryo transfer day.

Cryo
When thawed embryos are transferred, the couple will have to pay the same deductible rate as for public out-patient clinics, both for the ultrasound and for embryo transfer. Embryo transfer in connection with use of thawed eggs is included as part of the treatment attempt during which the egg was retrieved and is thus not considered a separate attempt.
Sibling attempts
If you have had a child conceived via assisted reproduction treatment and wish to have further children, you may be assessed for sibling attempts. Please call the unit on (+47) 55 97 42 79 or send us an e-mail (assistert.befruktning@helse-bergen.no).
You do not need a new referral/application. The woman should be no more than 40 years old. If you have embryos stored with us, these should be used before any new egg retrieval. After the birth of a child, you will need to pay the deductible again for any additional treatment cycles.
BEHANDLINGSFORLØP

Kort protokoll

Start hormonstimulering
FSH
Puregon, Gonal F eller Menopur

1. mens = 1. syklusdag

Eggløysingssprøyte

1 1/2 døgn

Etterbehandling med progesteron

2. - 3. syklusdag

Egguthenting

2-3 dagar

Ved graviditet: ultralydundersøkning 5 - 6 veke etter egginnsetting

Egginnsetting

14 dagar

Graviditetstest

Ultralydundersøking

7. u9. stiml øringsdag

Ved graviditet:
ultralydundersøking 5 - 6 veke etter egginnsetting

Ultralydundersøking

5. stiml øringsdag

FSH
Start Orgalutran / Cetrodine

2. - 3. syklusdag
BEHANDLINGSFORLØP

Lang protokoll

1. mens = 1. syklusdag
2. 21. syklusdag
3. Menstruasjonsliknende bløding 1-2 veker etter start med nesespray
4. 1 1/2 døgn
5. 2-3 dagar
6. 6. ul. stiml øg i dag
7. 14 dagar
8. Ved graviditet: ultralydundersøkelse 5 - 6 veker etter egginnsetting
9. Etterbehandling med progesteron

Start hormonestimulering
FSH, Puregon, Gonal F eller Menopur

Start nesespray
Synarel

Start
Egginnsetting

Eggøysingsføre

Graviditetstest

Ultralydundersøkelse