

# Fertility Centre

## Partner insemination



**azdelta**

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Sint-Andriesziekenhuis Tielt	

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Dear patient,

Based on your and your partner's fertility examinations, it has been suggested that you proceed with inseminations with your partner's sperm. In this leaflet we hope to inform you about what this treatment involves, so that you can make the right decision for you.

We recommend that you take the time to go through this leaflet before your fertility treatment. This leaflet gives you a clear overview of the eligibility criteria, the treatment itself, and the practical organisation in our centre.

This leaflet serves as a guide during the treatment period. Everything in the leaflet has already been discussed during the consultation with the gynaecologist or fertility consultant. You can refer back to this written version whenever you have any new questions or doubts about the practical arrangements. You can also find our contact details here so that you can always get in touch with us if you don't find a clear answer to your question.

The AZ Delta fertility team

# 1

## Theoretical view of treatment

### What is intrauterine insemination or IUI?

In some cases, the natural fertilisation process can be brought to an end both literally and figuratively by placing the sperm directly into the uterus at the right time through a catheter (fine tube).

The partner's sperm must be prepared and processed in the laboratory beforehand. This operation is called "capacitation". During capacitation, the most active sperm cells are selected and the harmful components removed from the semen. This treatment is often used when the couple's reduced fertility is caused by moderate sperm abnormalities or when the swimming of sperm in the uterus is prevented by the presence of antibodies in the cervical mucus plug. It is also used with fertility problems for which no cause has been found.

Intrauterine insemination (IUI) is a form of treatment which involves processed sperm cells from the man being inserted high in the woman's uterus around the time of ovulation.

### Course of treatment

#### Egg cell preparation

Depending on the fertility problem, IUI can be performed in a natural or stimulated cycle.

If a stimulated cycle is chosen, the woman will have hormonal treatment to promote ovulation. This hormone treatment is specific to each patient and may involve taking Clomid® or Letrozole® (tablet form) or having hormone injections. This often leads to several egg cells developing, which increases the chance of fertilisation. When several egg cells are "offered" to the sperm, each of these egg cells has the chance of being fertilised. However, the "disadvantage" is that this can lead to the patient becoming pregnant with more than one baby (twins, triplets, etc.).

The number of egg cells that develop and can be fertilised can be determined fairly accurately by hormonal examination

(blood samples) and ultrasounds. The time of ovulation, for example, can be accurately determined.

Therefore, in order to keep the chance of multiple embryos developing as low as possible while keeping the chance of pregnancy high enough, medical monitoring is required as part of this treatment. If three or more egg cells are ready to be released from the ovaries, the treatment will be cancelled.

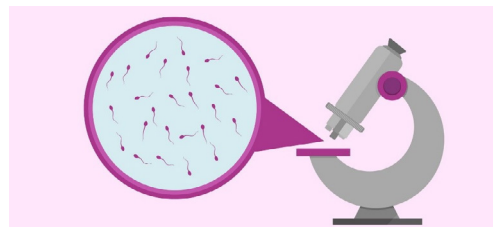
### **Preparation of sperm or sperm capacitation**

On the day of insemination, the partner's semen is carefully prepared in the laboratory. The preparation takes about an hour and a half and ensures that the semen is stripped of harmful substances and dead or weak sperm cells. The fluid part of the semen contains substances that weaken the spermatozoa and may thus have a reduced ability to penetrate the cervical mucus.

The semen produced is placed on two layers of capacitation fluid and centrifuged. This usually causes the most active spermatozoa to sink to the bottom. This sediment is washed after centrifugation and contains the better spermatozoa without other materials present in semen. A special liquid is added to these spermatozoa in which the sperm cells can survive for more than 24 hours. This capacitated sample is suitable for insemination in the afternoon.



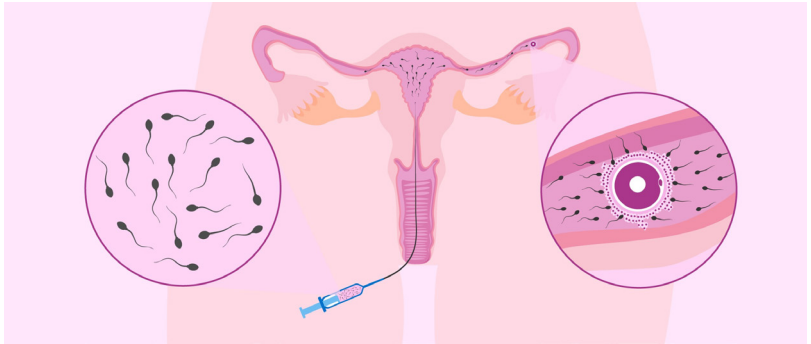
*Sperm sample*



*Microscopic view of spermatozoa*

## Intrauterine insemination

The capacitated sperm is passed through the cervix into the uterus using a catheter. At this point the syringe is slowly emptied. This procedure is completely painless (similar to having a smear test), although the woman may feel some cramps in the lower abdomen some time after insemination. After about five minutes of rest, the woman may return home.



After insemination, the gynaecologist will instruct you to take a pregnancy test after 16 days if you do not get your period. This can be with a urine test (classic pregnancy test). If the test is positive, make an appointment with your gynaecologist for the first pregnancy ultrasound. If the test is negative and you get your period, you may start a new round of treatment.

With a supported or stimulated cycle, treatment will be evaluated by the physician after each attempt and adjusted as necessary. In this case, please contact the fertility consultant by telephone as soon as possible.

If you are not pregnant after six rounds of intrauterine insemination, we recommend that you make an appointment with your gynaecologist to discuss your best treatment options.

## Chances of success

The chance of pregnancy with this method is approximately 15% per round. Experience shows that most pregnancies occur within the first three to six rounds of treatment.

The pregnancy probability remains approximately the same (35%) for the first three rounds, but decreases gradually over the next three rounds.

## Risks

When sperm is inserted through the cervix, there is a rare risk of bacteria entering the sterile uterine cavity. Usually the woman's immune system will eliminate any such bacteria, but there is still a small risk of infection of the uterine cavity (less than 1 in 100). This is generally easy to cure with antibiotics. If you experience severe pain and/or fever after insemination, contact the treating gynaecologist.

With stimulation treatment with injections, there is also a risk of becoming pregnant with multiple babies.

## Eligibility criteria

### Control of infections in both partners

Both the couple and the staff who come into contact with blood, sperm cells and egg cells need to know that the biological material is not infected with HIV, syphilis or hepatitis B or C. Before the initial treatment can start, blood will therefore be drawn from both partners and tested for these viruses.

If one of these pathogens is detected, treatment is postponed for extensive medical review. If one of the prospective parents is a carrier of HIV or hepatitis C, they cannot participate in inseminations at our centre and will be referred to a suitable fertility centre.

## Smoking and lifestyle

It is well known that smoking during pregnancy is harmful to the child, both in the short and in the long term. However, many people do not know that smoking also has a major impact on fertility. In women, this results in lower-quality eggs, impaired reproductive system function, delayed conception and early menopause. In men, this has a negative effect on the quantity and quality of the sperm, causes damage to the sperm DNA and erection problems.

Smoking therefore results in a lower chance of a successful treatment and makes more treatments necessary. Smoking also involves a higher risk of miscarriage and ectopic pregnancy.

It is therefore highly recommended to stop smoking before starting fertility treatment. If desired, you can be referred to the tobaccologist who can assist you to stop smoking. Feel free to ask the fertility doctor or consultant for more information.

In general, a healthy lifestyle has a positive impact on fertility treatment. This means a healthy diet, moderate alcohol consumption and adequate exercise. An increased body mass index (BMI) may affect the menstrual cycle. Even more so, an excessive body mass index is often the cause of complications during pregnancy and childbirth. You can always contact the nutritionist or the endocrinologist at our centre for guidance.

## Prevention of spina bifida

The risk of the spinal cord not developing properly during pregnancy causing a gap in the baby's spine is about 1 in 1000. This probability is the same in spontaneous pregnancies as in medically-assisted pregnancies.

If the child is born with spina bifida, they will have a permanent disability. Recent research has shown that the majority of spina bifida cases are caused by folic acid deficiency during the first weeks of pregnancy. It is therefore recommended that you take a folic acid supplement, although

the majority of women are likely to get enough folic acid through the food they eat (cereal products, leafy vegetables, pulses, liver).

Thanks to these supplements, the number of cases of children with spina bifida has fallen drastically. You should start taking the supplements a few weeks before conception and continue until the 12<sup>th</sup> week of pregnancy.

### **Psychological counselling**

It is perfectly understandable that you are strongly motivated by your desire to have children. As long as you do not know whether you will eventually have children, you are inclined and willing to pursue this. The fears and worries associated with this can sometimes be strong and take you by surprise. The courage and optimism can also sometimes slip away. During the course of the treatment people generally have hopes and expectations, but at the same time don't dare to get their hopes up too much so as to avoid disappointment if they don't get pregnant.

It is good to have a healthy dose of realism when it comes to the treatment. Try not to see pregnancy as the be-all and end-all and have a trusted person that you can share your feelings with. It is also possible that you might not get pregnant and you need to learn to cope with this uncertainty. It is important that whatever happens you talk about it and don't get bogged down: talking is a sure way to reduce stress and makes you feel better. Talking about it can help you avoid disappointment and prevent grief from potentially developing into depression. As well as consulting the gynaecologist about this, feel free to speak to the fertility consultant. You are also welcome to seek advice and guidance from the psychologist who works with our centre.

## Eligibility criteria for insemination at our centre

For inseminations at our centre, a few important factors are taken into account as much as possible.

We endeavour to increase the chance of pregnancy by reinforcing the reproductive capacity of the sperm (capacitation). At our centre we only work with the partner's sperm and a consent form must be signed by both partners and their gynaecologist. By signing this form, the couple consent vis-à-vis each other to develop their stable relationship with a pregnancy using this treatment. Couples keen to get started are screened by their gynaecologist or the psychologist who works with the fertility centre. Single women or lesbian couples are referred to a fertility centre with a sperm bank.

Our centre aims to accompany inseminations to achieve pregnancy. Patients referred to our centre will be referred back to their referring gynaecologist for care during pregnancy.

The treatment is subject to legal restrictions. Due to the age limits established in the Belgian legislation, only women aged 18 to 45 can request to participate in inseminations. Treatment can then be performed on patients up to and including 47 years old.

## Cost

This treatment costs about 550 euros. This amount includes insemination, capacitation (processing of the sperm sample), consultations, follicle measurements, laboratory costs and the costs of medication.

The patient's contribution amounts to approximately 150 euros per round, with the rest being reimbursed by health insurance.

Patients who do not have Belgian health insurance will not be reimbursed. In this case, the treatment costs are therefore to be fully borne by the patient. You will be asked to pay the estimated amount per round in advance.



# Practical arrangements

## Presentation of the fertility team

### **Fertility doctors**

- Dr. Veerle Dewulf
- Dr. Elvira Serkei
- Dr. Danielle Vandenweghe
- Dr. Sofie Neutens

### **Andrologists**

- Dr. Xavier-Philippe Aers
- Dr. Francis Duyck
- Dr. Katrien Spincemaille
- Dr. Jan Van den Saffele
- Dr. Stéphanie Desmedt

### **Clinical biologists**

- Inge De Cuyper
- Hilde Vanpoucke

### **Quality coordinator**

- Kimberly Ver Eecke

### **Fertility consultants**

- Anne-Marie Breyne
- Evi Delarue
- Tine Desodt
- Anneleen Jongbloet

### **Fertility laboratory**

- Ineke Debruyne
- Freya Houthoofd
- Annelies Ver Eecke
- Aylien Vanraepenbusch

### **Psychologist**

- Joke Corneillie

## Preparation for insemination

### **Before the new round can be started: intake interview**

In preparation for the insemination, your part in the insemination will be discussed with you personally. Our centre's fertility consultant will discuss the necessary steps and provide the necessary explanation. During this intake, the necessary administrative part will also be taken care of. You can also always contact the consultant with any questions by phone, email or by appointment. Contact details can be found at the back of this leaflet.

### **The start of a new round: menstruation**

As soon as you get your period, you should contact our centre's fertility consultant by telephone or email to report that you are starting a new cycle.

If you are to take Clomid<sup>®</sup> or Letrozole<sup>®</sup>, start on the third day of your period and take it for five consecutive days. If you have to get injections, you need to start on the second day of your period.

Contact the secretarary's office of your treating gynaecologist to make an appointment for follicle measurement 10 days after you start your period. The gynaecologist will give you a prescription for the necessary medication. Make sure that you have enough medication at home in plenty of time so that it can be administered at the weekend. Other documents, such as a prescription for the home nurse, can also be requested from your gynaecologist. Blood samples must also be taken with each follicle measurement.

Once the results of the blood test and follicle measurement have been discussed, a fertility consultant will give you a call. The consultant will then explain the next step to you.

## Guidelines for obtaining a suitable sperm sample

It is important that the sample is collected and transported in a standardised manner. For this, use the sterile container that you can get from the fertility centre or your gynaecologist. Open the pot by turning the white lid. The numbered sticker that is torn when you open the pot must be kept on the pot.

Please observe the following collection and transportation instructions.

1. No ejaculation for two to seven days before producing the ejaculate is desirable.
2. Urinate before ejaculation.
3. Wash the penis with water.
4. Stimulate the ejaculate by masturbation and capture all of it in the sterile pot. Under no circumstances may a different method (e.g. condom) be used. Ensure that both the beginning and end of the sample are properly collected.
5. If the sample was not completely collected, report this to the person receiving the sperm sample. This is important for the interpretation of the results.
6. Close the container tightly and keep it at body temperature (37°C, by keeping the container in contact with the body: under your armpit, under your arm, in your pocket, etc.) until it is given to the lab.
7. Bring the sample within a maximum of one hour of the ejaculation, together with the forms your doctor gave you.

## Organisation of the day of insemination itself

### Bring the sperm sample on the day of insemination

On the day of the insemination, we expect one of the partners to come with the sperm sample in the morning to the reception of the fertility centre at AZ Delta Rumbeke campus. You should enter the hospital via the East (“Oost”) entrance. Here, you register using the kiosk to get the identification stickers. You can print these stickers after inserting your ID card in the machine. If the man brings in his own sample, he should use his own ID card for this. If this isn’t possible and the woman comes to bring the man’s sample instead, she will need to bring her partner’s ID card.

To get to the fertility laboratory take lift B8 to route 1.G4-5 on the first floor.

If the insemination is on a weekday, please sign in at 7:30 a.m..

If the insemination is on a Saturday, please sign in at 8:00 a.m.. On arrival, please take a seat in the waiting room.



**East (“Oost”) entrance**



**Fertility waiting room**

You can read about how to do the sample in the previous chapter under “Guidelines for obtaining a suitable sperm sample”.

You will receive the sterile pot in advance from the fertility consultant or your treating gynaecologist.

## Registration for insemination

The instructions for registering for the insemination (time, place) are provided by telephone by the fertility consultants. The necessary paperwork can be requested at any time from the gynaecologist.

## After insemination

If 16 days after insemination you have not had your period, you should take a pregnancy test. This can be with a urine test (classic pregnancy test).

If the test is positive, make an appointment with your gynaecologist for the first pregnancy ultrasound. If the test is negative and you get your period, you may start a new round of treatment.

With a supported or stimulated cycle, treatment will be evaluated by the physician after each attempt and adjusted as necessary. If you want to start again immediately, you should contact the fertility consultant as soon as possible. Don't forget to inform the fertility consultant at our centre that you want to do it again.

# 3

## Organisation of the various services

Below you will find an overview of the relevant services at each hospital campus.

### AZ Delta Roeselare – Rumbeke campus

Every time you come you will have to make new identity stickers (consultations, blood tests, scans, etc.). You can print these stickers at the kiosk at reception by inserting your ID card.

#### **Fertility Centre**

Insemination, consultation of fertility consultant, etc.

**t** 051 23 63 82

You should enter the hospital via the East (“Oost”) entrance. You sign in here at the kiosk. The fertility consultation can be reached via route 1.G4-5 on the first floor. Take lift B8 for this.

#### **Gynaecology Secretary’s Office**

Consultation with the fertility doctor, follicle measurements, etc.

**t** 051 23 63 96

Enter the hospital through the central entrance. You sign in here at the kiosk. The gynaecology secretary’s office can be reached via route 1.G1 on the first floor. Take lift B1 to B5. For each consultation you must report to the gynaecology secretary’s office.

#### **Laboratory**

Enter the hospital through the central entrance. You sign in here at the kiosk. The laboratory can be reached via route 1.D4 on the first floor. Take lift B1 to B5.

Blood tests are taken on weekdays from 7:30 a.m. to 8 p.m., and on Saturdays from 7:30 a.m. to 2 p.m..

## AZ Delta - Menen campus

Every time you come you will have to make new identity stickers (consultations, blood tests, scans, etc.). You can print these stickers at the kiosk at reception by scanning your ID card.

### **Gynaecology Secretary's Office**

Consultations with the gynaecologist, follicle measurements, inseminations, etc.

t 056 52 22 44

Follow route 50 from reception.

### **Laboratory**

Follow route 60 from the entrance.

Blood tests are taken on weekdays from 7:30 a.m. to 8 p.m., and on Saturdays from 8 a.m. to 12 noon.

## AZ Delta - Torhout campus

Every time you come you will have to make new identity stickers (consultations, blood tests, scans, etc.). You can print these stickers at the kiosk at reception by scanning your ID card.

### **Gynaecology Secretary's Office**

Consultation with gynaecologist, follicle measurement, insemination, etc.

t 050 23 24 46

Follow route 910 from reception.

### **Laboratory**

Follow route 740 from reception.

Blood tests are taken on weekdays from 7:30 a.m. to 8 p.m., and on Saturdays from 8 a.m. to 12 noon.

## Sint-Andriesziekenhuis Tiel

Every time you come you will have to make new identity stickers (consultations, blood tests, scans, etc.). You can print these stickers at the kiosk at reception by inserting your ID card.

### **Gynaecology Secretary's Office**

Consultations with the gynaecologist, follicle measurements, etc.

**t 051 48 51 70** or 051 42 52 78

Follow route 51 from reception.

### **Laboratory**

Follow route 78 from reception.

Blood tests are taken on weekdays from 8 a.m. to 12:30 a.m. and 1 p.m. to 6:30 p.m., and on Saturdays from 8:30 a.m. to 11:30 a.m..

### **Maternity Ward – Delivery Centre**

Insemination

Follow route 89 from reception.

# Notes

A series of 20 horizontal dotted lines for taking notes.

# Contact

## **CAMPUS RUMBEKE**

Fertility Consultant

**t** 051 23 63 82

**e** [fertiliteit@azdelta.be](mailto:fertiliteit@azdelta.be)

Gynaecology Secretary's Office

**t** 051 23 63 96

## **CAMPUS MENEN**

Gynaecology Secretary's Office

**t** 056 52 22 44

## **CAMPUS TORHOUT**

Gynaecology Secretary's Office

**t** 050 23 24 46

## **SINT-ANDRIES HOSPITAL TIELT**

Gynaecology Secretary's Office

**t** 051 48 51 70 or 051 42 52 78

[www.azdelta.be](http://www.azdelta.be)