helping couples...

...become parents

Information

University Hospital Zurich

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The Most Natural Wish in the World ...

Dear prospective parents

You dream of having a child, but your wish has not yet been granted. You are not alone. Every sixth couple in Switzerland is involuntarily childless – and this statistic is rising. We can help you to make your dream a reality.

You may ask yourself why you have been unable to have a child, what you can do to help, and how to increase your chances of success? Our expert team at the Fertility Centre of the University Hospital Zurich can provide answers to these fundamental questions.

With this brochure we aim to provide you of all the basic knowledge and information you will need, from your first consultation right up to undergoing treatment. An understanding of the processes involved will assure you of our expert knowledge in this field, of our many years of experience and that we can work together to achieve the goal, your much wanted child.

We at this University based Fertility Centre have been involved in reproductive medicine since the early days of IVF technology and helped facilitate the birth of the first IVF babies in Switzerland. As a pioneering research centre, we are proud of the fact that several new fertility treatment methods were carried out successfully for the first time in Switzerland here at our department at the University Hospital in Zurich. This focus on innovation, together with over 30 years of experience in the field of assisted reproductive medicine, explains why our centre, which is validated by FIVNAT-CH (the Swiss National IVF-Register), regularly achieves very high pregnancy rates and remains at the very top of this specialised field.

An interdisciplinary approach is also vital to our treatment philosophy. As a leading University research centre, we are proud to be part of a national and international network of renowned specialists in reproductive medicine. To ensure the quality of our treatments and their continual improvement, our fertility centre has for many years been awarded DIN EN ISO 9001:2008 certification, and our laboratories are accredited to ISO/IEC 17025.

We are aware that any fertility treatment raises many personal and emotional issues. For this reason, you can be assured of professionalism and personal care of the very highest standard.

Thank you for the trust you have placed in us. Our dedicated team will do everything in our power to help you fulfill your desire to have a family, and we look forward to your visit to our Fertility Centre.

Prof. Dr. Bruno Imthurn, Director and Head of the University Hospital Zurich Fertility Centre
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Get Involved! Help Your Dream Become a Reality

Involuntary childlessness – recognised by the World Health Organisation (WHO) as a disease – can impose a tremendous stress on many couples. Nowadays, many of the causes of involuntary childlessness can be overcome by medical advances at a University-based fertility centre such as ours.

You can play an important role in this process. We are happy to take time to explain in detail the possible causes of your childlessness, the underlying reasons and the possible treatment options open to you. Such informative and detailed consultation will allow you, in partnership with us, to evaluate and judge the processes involved and decide on the way forward. This not only creates a solid foundation of knowledge for the decisions that you will need to make, it also increases the chances of success and reduces the stress of treatment.

Get involved! Help your dream of having a child become a reality. Book a consultation appointment – we are here for you!

The Fascinating World of Human Reproduction

Every four weeks an ovum matures in the ovary of a sexually mature woman under the influence of female sex hormones. The ovum resides in a follicle, which ruptures (ovulation) about 14 days after the start of menstruation, releasing the fertilisable ovum into the fallopian tube.

The growing follicle produces hormones (including oestrogens, e.g. oestradiol) that direct the thickening of the uterine lining as well as the opening of the neck of the womb (cervix), making it easier for semen (sperm) to penetrate into the cavity of the uterus (Fig. 1).

Following ovulation, fertilisation can take place in the fallopian tube. An egg and a sperm cell, representing the mother’s and father’s genetic traits, respectively, fuse with one another (Fig. 1). Human growth begins with the division of this fertilised cell. Within 4–5 days, the embryo migrates into the uterine cavity, where it imbeds into the uterine lining.

The early embryo sends hormonal signals (e.g. hCG) to the mother, resulting in maintenance of the corpus luteum (which is formed in the ovary after ovulation) for 3–4 months. Hormones (e.g. progesterone) produced by the corpus luteum maintain the pregnancy until the developing child takes over all the required regulation itself via the placenta.
When Achieving Pregnancy Fails – Causes of Involuntary Childlessness

If you decide to seek our professional help, we will first acquaint you with the most important basic aspects of the process of natural procreation to help you understand the steps of a proposed fertility treatment.

Infertility due to reproductive disorders can be traced back to a variety of reasons. A common misapprehension is that in most cases the problem lies with the woman. This is not true; the underlying causes of infertility are just as common in men as in women.

An important factor is age: in men, fertility drops from age 40–45 years, while in women, the chances of becoming pregnant fall sharply from age 35 onwards. The risk of genetic defects rises simultaneously. These natural changes in fertility also influence the prognosis and chances of success of any fertility treatment, and we would urge any woman over the age of 35 who has not achieved a pregnancy naturally within 6 months to seek specialist medical support without delay.

Further general factors that can contribute to involuntary childlessness are stress and smoking, as well as being underweight or overweight. In addition to these general factors, specific problems can also occur.

Examples of specific problems include:

In women:
- Missing, blocked or damaged fallopian tubes
- Hormonal defects affecting ovum maturation
- Endometriosis

In men:
- Poor semen quality, e.g. too few sperm, insufficient mobility or too few normally formed sperm

Cases where no reason for childlessness can be found in either the man or the woman are called unexplained infertility.

There are different approaches to infertility. You can seek our professional help and undergo fertility treatment. Alternatively, couples may choose to accept that they will remain childless or may adopt a child.
In Depth Investigation from the Outset – Finding the Reason

Before beginning fertility treatment, different diagnostic tests are carried out.

For women, these include:
• Hormonal tests
• Assessment of the patency of the fallopian tubes, as well as the shape and size of the uterus
• Examination for infections

For men, the most common tests include:
• Extensive examination of the ejaculate (spermiogram)
• Testing for infections

Depending on the results, further tests may need to be carried out before treatment.

Fertility treatment can be stressful. Our treatment plans can be tailored to include psychological support, autogenic training (see p.19), or referral to further services, e.g. a specialist in traditional Chinese medicine (TCM).

To maximise the chances of success of the treatment, and to minimise the risks, it is important that both you and your partner have sufficient knowledge of at least one of the languages used by the centre (this includes English, as well as the Swiss national languages German, French and Italian).

What Happens Now? – Possible Treatment Options

Following discussion of the results of the initial tests with you, we will help you choose the most suitable treatment. It is important that you understand fully what is happening in your body, and the reasons why we are recommending a particular therapy. This trust and understanding help increase the chances of success as well as reducing stress during the treatment cycle.
Hormonal Treatment

Hormonal treatment (we use both tablets and injection) is used to correct defects in the egg maturation process, and to ensure maturation of an optimal number of eggs.

These hormones have been used for many years and are very well tolerated. Because the reaction of the ovary to hormonal stimulation cannot be predicted precisely, we regularly monitor the process. Sometimes we need further blood tests and ultrasound scans to determine the number and size of follicles. In this way we can control the process of egg maturation and determine the ideal time to trigger ovulation.

Intrauterine Insemination (IUI)

In an intrauterine insemination (IUI), following sperm preparation, the highest possible number of active, fertile sperm are transferred to the uterus at the time of ovulation. In most cases, egg maturation is supported by mild hormone treatment. During this process, only a single egg cell (or a maximum of two, in consultation with you) is allowed to mature. This reduces the risk of multiple births (triplets or higher).

The main prerequisites for successful IUI are open fallopian tubes and a sufficiently high quality of sperm.
Fig. 1: Fertilisation in the ampulla (= outer end) of the fallopian tube with migration of the fertilised ovum through the fallopian tube. On day 5, the free blastocyst reaches the cavity of the uterus. Implantation in the uterus happens on day 6 after fertilisation.
In Vitro Fertilisation (IVF)

Reasons for Carrying Out IVF

The most common reasons for carrying out IVF include:

1. **Blocked, damaged or missing fallopian tubes.**
2. **Unexplained infertility** (no obvious cause).
3. **Inadequate semen quality.** Under these circumstances, ICSI treatment is usually chosen (see page 14).

Current Swiss legislation (Fortpflanzungsmedizingesetz; FMedG – Reproductive Medicine Act) allows fertility treatment only for heterosexual couples living in a stable relationship, although you do not need to be married.

Ovarian Stimulation

Before beginning hormone treatment, we perform an ultrasound scan of the uterus and ovaries in order to confirm that everything is optimal for a successful treatment. There follows a 2- to 3-week period of hormone treatment. This is usually very well tolerated. Occasionally, some fatigue may occur, or temporary hot flushes. This pre-treatment serves to optimise the subsequent step of “ovarian stimulation” (Fig. 2). The treatment lasts 10–13 days. We tailor it individually to each patient in order to optimise the hormone treatment and minimise any side effects – you may barely notice any. We use naturally occurring hormones (FSH from various producers) to stimulate the ovaries. Our goal is to promote the growth and maturation of a couple of eggs. The ovarian stimulation treatment is delivered in the form of daily injections that you or your partner can perform yourselves at home. Of course, we will provide you with full instructions on how to administer these injections.

![Fig. 2: Process of ovarian stimulation](image)

In order to prevent the body’s own hormones from disrupting the stimulation, we apply a derivative of another hormone, a so-called GnRH-agonist (e.g. Decapeptyl®) or GnRH-antagonist (e.g. Orgalutran®) at the same time.

We strive to keep the appointment time needed to a minimum. Thus, we organise the pre-treatment phase so that no check-up appointments are needed. The first phase of stimulation can also be carried out by yourself at home or by your GP. From day 8 of stimulation onwards, we will...
carry out the necessary hormone analysis and ultrasound scans here at our Fertility Centre.

The hormone levels measured in the blood determine the dose of drugs administered. We use ultrasound scans to check the development of the egg follicles. In this way, we are able to determine the best time to retrieve mature fertilisable ova.

When the hormone and ultrasound scan findings have reached the required stage (usually between the 9th and 13th day of stimulation), we induce final ovum maturation and ovulation with an injection of the hormone hCG (e.g. Ovitrelle®). Two days later, shortly before ovulation, we carry out follicle puncture to retrieve the mature and fertile ova.

Natural IVF

We also offer IVF without or a very low dose of hormonal pretreatment (Natural IVF) if you wish. We are happy to provide a personal consultation on when Natural IVF is appropriate, about the exact procedure and the advantages and disadvantages of Natural IVF compared to IVF with hormonal stimulation.
Ovum Pick Up

Follicle aspiration to retrieve the ovum is an outpatient procedure carried out by means of an ultrasound scan. We use a fine, hollow needle to aspirate the ovum from the ovary, together with the follicular fluid (Fig. 3). This short procedure takes 10–15 minutes in the operating theatre. Depending on your preference, we conduct the procedure under full anaesthetic, or you can be awake, supported by a mild analgesic/sedative. In either case, you can be discharged from hospital 1–2 hours after the procedure. As with any intervention involving narcosis or a sedative, you may be tired for several hours, and should not drive a vehicle on the day of follicle aspiration.

Fig. 3: Transvaginal follicle aspiration guided by ultrasound scan to pick up an ovum
Insemination

During the follicle aspiration procedure, an embryologist carries out an examination in the laboratory directly next to the operating theatre to see whether ova are present in the retrieved follicular fluid (Fig. 4).

After ovum extraction, the retrieved sperm are prepared in the laboratory (sperm preparation). During this process, we separate fertile from infertile sperm. The prepared sperm are added to the ova 3–6 hours later. For insemination, 100,000 motile sperm are used per ovum.

Fertilisation and Embryo Cultivation

We cultivate the ova for 2–5 days in an incubator under precisely determined conditions very close to those found in the natural tube. The ovum is first checked under the microscope 1 day after insemination (Fig. 5). At this point in time we can see the first signs of fertilisation with the appearance of pronuclei. After 2–3 days, a second check of the embryos (now at the 2–8 cell stage) is performed. From this stage, the embryo is ready to be transferred.

![Fig. 4: In vitro fertilisation process; step 1](image1)

![Fig. 5: In vitro fertilisation process; step 2](image2)
In cases where we have retrieved a large number of ova or if a pre-implantation diagnosis is planned, we cultivate embryos further, until the blastocyst stage on day 5, and perform the transfer at this stage. At this point, the blastocyst consists of around 100 cells.

Embryo Transfer (ET)

We transfer one or two (following discussion with you) embryos/blastocysts. The embryos/blastocysts are transferred into the uterus in a tiny amount of culture medium using a fine flexible transfer catheter. This procedure is completely painless.

Luteal Phase

From the day of follicle aspiration onwards, you will receive the natural luteal hormone progesterone. So we can prepare the uterine lining optimally for pregnancy. This hormone, which you may choose to take in the form of vaginal suppositories, vaginal cream, in tablet form or by means of injection, must be used by you daily at least until the pregnancy test, and beyond in the case of a positive test indicating a pregnancy.

Cryopreservation of Embryos and Blastocysts

If several embryos or blastocysts (see Fig. 5) are produced during the course of an ongoing treatment, following discussion with you, 1 or 2 embryos are transferred. If you wish, the remaining embryos or blastocysts can be frozen and preserved for a maximum of 10 years (according to Swiss Reproductive Medicine legislation).

In a later cycle, we can thaw and transfer these frozen embryos or blastocysts to your uterus. With this procedure, we reduce the risk of multiple births, and can offer a second chance to achieve a pregnancy without the need to undergo a further round of hormonal stimulation and follicle aspiration.

To prepare the uterine lining for the transfer of thawed embryos/blastocysts, we use the natural ovarian hormones oestradiol and progesterone. We determine by ultrasound scans the optimal time for transfer.

Cryopreservation of fertilised ova is only performed with the consent of the couple. The exact terms are laid out in a separate agreement.
Intracytoplasmic Sperm Injection (ICSI)

ICSI is a specialised method of insemination. We use it where there are severely altered spermiogram findings or in cases of unexplained infertility. In the event of altered spermiogram findings, before we begin ICSI, a detailed preliminary examination of the male partner will be carried out by a specialist in andrology. According to the results of this examination, we can suggest therapies that can help improve sperm quality and the chances of success.

ICSI represents a further development of IVF. Accordingly, the stimulation of the ovaries, retrieval of the ovum, cultivation of embryos and embryo transfer are identical to IVF (see pages 9–13).

ICSI differs from IVF (see page 12 and Figs. 4 and 5) in that, with ICSI, the ovum is inseminated under the microscope. Our experienced embryologist injects a single sperm directly into the ovum using a very fine glass pipette (Fig. 6b).

Testicular Sperm Extraction (TESE)

The sperm we need for ICSI usually come from the ejaculate. If we detect no sperm in the ejaculate, then a small tissue sample taken from the testes can be retrieved by a specialist urologist in a small operation at our Urology Department. In many cases, we can extract sperm from this sample (TESE = testicular sperm extraction) that we can then use for ICSI.
Preimplantation Genetic Diagnosis (PGD)

Preimplantation genetic diagnosis (PGD) combines the latest techniques in reproductive medicine with the newest possibilities offered by genetic analysis, and allows us to test the embryo for any genetic changes before transfer to the uterus.

After an ICSI procedure, we take a few cells carefully from the blastocysts (Fig. 7). We pass on these cells to specialised geneticists at the Genetics Institute of the University of Zurich for analysis. The blastocysts are frozen until the result of the genetic tests are known. These results are discussed with you in a personal consultation. We transfer the indicated blastocyst during the next cycle.

Application of PGD can achieve the following:

• Prevention of the transfer of serious familial genetic disorders
• Enhancement of the probability that the embryo transfer will lead to pregnancy and birth
• A reduction in the risk of miscarriage (Preimplantation Genetic Screening; PGS)

The application of PGD is governed strictly by Swiss law. For this reason, every single case must be individually justified and carried out in strict accordance with the requirements of the Swiss Reproductive Medicine Act.

If PGD is conducted to avoid a serious known inherited genetic disorder, we always refer you to a medical geneticist for full genetic counselling and explanation prior to treatment. We also recommend ongoing psychological advice and support throughout this process.

Despite the most stringent precautions, misdiagnoses do sometimes occur. If you wish to further rule out this risk, we can offer chorionic villus sampling in the 12th week of pregnancy or amniocentesis at a later point in time to confirm an earlier PGD diagnosis.

As with ICSI, the cost of PGD is not covered by health insurance. You should be aware that the additional costs involved could range from 2000 to 5000 Swiss Francs per treatment cycle.
Polar Body Diagnosis (PBD)

If a PGD is not legally allowed, you have the possibility of a polar body diagnosis (PBD). In PBD, we perform a genetic analysis on the polar body of the ovum rather than on the embryo.

Polar bodies are cellular parts discharged by the ovum. The genetic material in the polar body mirrors that of the ovum, and thus, information on the genetic composition of the ovum can be extracted.

With PBD we can examine only maternal genetics, as the material examined originates only from the ovum, thus PDB is limited to checking for genetic conditions carried only by the mother. In addition, for this procedure we need more cells than PGD, which makes the investigation more complex and more expensive. Otherwise, the procedure is similar to that of PGD.

Fig. 8: Extraction of a polar body for polar body diagnosis (PBD)

Social Freezing – Elective Freezing of Unfertilised Eggs

Elective egg freezing gives you the potential to increase your opportunity to have a child even if you only start trying for a baby after the age of 35 years. In women, fertility drops sharply from age 35 onwards, and, unfortunately, we cannot counter the pace of this reduction with classical fertility treatments. However, with proper planning and forethought, we can help retain fertility through the freezing and storage of unfertilised eggs for future use.

There are many good reasons for elective egg freezing. But even when your egg cells have been stored and preserved, these reserves should only be used if you do not achieve pregnancy naturally.

When it comes to elective egg freezing, the procedure, chances of success, risks and costs are similar to those of IVF (pages 9–13). Unlike IVF, the process is halted following pick up of the egg cells for freezing, and the procedure is only restarted upon later infertility.

We are happy to answer any further questions you may have regarding elective egg freezing in a face-to-face consultation.
Chances of Success

About two weeks after intrauterine insemination or embryo transfer, we perform a pregnancy test on a blood sample. Urine-based pregnancy tests are reliable nowadays, but have not quite achieved the certainty of a pregnancy blood test.

Our centre achieves above average levels of success, with seven out of every ten couples realising their dream of having a baby. Nevertheless, several treatment cycles may be needed to achieve the desired outcome.

Depending on the underlying reason for infertility, the probability of pregnancy can be reduced, particularly with increasing age. In some cases the test results force us to advise couples against treatment. We will be happy to discuss your individual case and chances of success at your first consultation at our centre.

Organisation and Costs

As soon as you are ready for a treatment cycle, we ask that you contact us by phone (044 255 50 07) or email (endo@usz.ch) on the 1st, 2nd, or (at the very latest) 3rd day after menstrual bleeding has started. We can answer any remaining questions at that time.

Obviously, you will wish to know from the outset what costs you will be expected to bear yourselves.

Any initial diagnostic tests and analyzes are covered by health insurance.

Pure hormone treatments will, depending on the product used, be paid by your health insurance for up to one year.

Health insurance companies will pay for three cycles of intrauterine insemination – mostly, however, only until the female partner is in her 40th year.

With in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI), treatment costs must be borne by yourself from the start of hormone treatment onwards. For each treatment cycle, you must expect costs of CHF 5000.– to 8000.–. A treatment cycle includes the hormone therapy (stimulation), the retrieval of ova (aspiration), the cultivation of ovum and embryos (laboratory), as well as the placement of embryos into the uterus (transfer).
Legal Aspects

Naturally at the University Hospital Zurich Fertility Centre we comply strictly with the Swiss Reproductive Medicine Act (FMedG). This is confirmed by regular inspections of the supervisory authority (Kantonsarzt).

Quality Assurance

At the University Hospital Zurich Fertility Centre we strive constantly to improve the quality of our treatment processes. As evidence of our success, we have been certified under the quality management system DIN EN ISO 9001:2008. Our fertility laboratories have been accredited to ISO/IEC 17025.

Furthermore, our fertility centre was a founding member of FIVNAT-CH, the Swiss National IVF data register, which existed since 1993. The Fertility Centre at the University Hospital Zurich regularly is one of the centres producing top pregnancy rates in Switzerland. The data we publish are verified periodically by independent international experts (external audits).

Where applicable, the cost of freezing of excess fertilised ova/embryos is an additional CHF 700.–, plus an annual storage fee of CHF 400.–.

Hormones are required for maturation of the ovum. The additional costs for the necessary hormones can reach CHF 1000.– to 2000.–, depending on the products required. We will explain the difference between the available products before initiating treatment.
Psychological Aspects

For many couples, having a child happens as a matter of course. If, however, your desire for a child is unfulfilled, the searching questions that result can impose an increasing psychological burden.

The medical support we provide can help many couples to have a child – a beautiful outcome that we still experience as the miracle of nature in every single case. However, we also know that couples in our care experience this period of medical treatment as an emotional roller coaster.

You may be asking yourself the following questions:

• Have we done something wrong?
• What can we do to help our wish to have a child come true?
• How can we help our friends to better understand our problem?
• Our relationship and sex life are under a lot of strain as a result of childlessness and the treatments we are undergoing. How should we deal with that?

Psychological Care

Relaxation techniques: A balance between tension and relaxation is important for our inner well being. Overwhelming stress and strain disturb the natural balance of the body. We can help improve the success of our fertility treatments with important methods of support such as relaxation exercises specially tailored to childless couples, autogenic training or progressive muscle relaxation (PMR).

Psychological support: We can offer support on a spiritual level if you so wish by a gynaecologist in our team who is trained as a physically-oriented psycho- and sexual-therapist. Such counselling can help reduce the strain of involuntary childlessness as well as stress during treatment.

Take advantage of this offer to ensure this period is as stress free and fulfilling as possible. You are welcome to book an appointment by phone (044 255 50 09) or email (endo@usz.ch).
Important Points to Note

**Poor response:** If our analyses show that no sufficient ovum maturation has taken place in the current simulation cycle, we will cancel the follicle aspiration due to the very low chances of success.

**Hyperstimulation:** It is possible for the ovaries to react too strongly to the normal doses of hormone applied. In the most common, mild cases, the patient will only notice a temporary feeling of bloating in the belly and no specific treatment is necessary.

In rare cases (<1/100) the symptoms are more severe, manifesting as lower abdominal pain, nausea and vomiting. In such cases, we monitor our patients with regular medical check-ups. In either case, symptoms disappear a few days later after the onset of menstruation. However, if a pregnancy results, recovery from hyperstimulation can take several weeks, and occasionally a hospital stay may be necessary.

**Operative complications:** Follicle aspiration is an operative procedure. In very rare cases it can lead to injury of the abdominal organs or a blood vessel. In such cases, the abdominal cavity must be opened immediately in order to treat the injury surgically. This complication arises in less than 1 in 1000 aspirations. Therefore, to be prepared for such an emergency, all patients are prepared for anaesthetic even if follicle aspiration without anaesthetic is planned.

**No pregnancy:** Unfortunately, despite our high success rates, a pregnancy cannot be achieved with every treatment cycle. For example, it is possible that the ovum is not fertilised or that the ovum does not develop further after fertilisation. These problems are not due to the treatment, but are a consequence of the generally low fertility of human beings.

**Multiple births:** The transfer of two embryos is known to increase the probability of pregnancy compared to the transfer of a single embryo. However, this can result in twins, and can lead to a higher risk of a premature birth. These factors must be considered carefully when deciding how many embryos to transfer.

**Miscarriages/ectopic pregnancies:** The risk of miscarriage is no higher than usual, taking into account the age of the mother. The treatment carries a risk of an ectopic pregnancy of up to 5%, if the fallopian tubes show any kind of abnormality.

**Malformations/complications in pregnancy:** The birth weight of children born following IVF or ICSI is slightly lower than average. It is also possible that the risk of congenital malformation is slightly increased. Recent research suggests that children born in the early years of IVF are more prone to weight gain and high blood pressure later in life. The risk of complications during pregnancy, for example placenta previa, are also slightly increased. However, these problems are linked more to the reasons underlying infertility rather than to the IVF or ICSI treatments themselves.
After ICSI, in cases of severe reduction in sperm quality, specific genetic changes ("chromosomal aberrations") can arise more often. If you wish, a prenatal diagnosis from the 11th week of pregnancy can provide clarity. Furthermore, any resulting male child could have the same fertility problems as his father.
Frequently Asked Questions

How long does the treatment last?
Each IVF or ICSI treatment cycle lasts about 2–3 weeks. In addition, depending on the protocol, there may also be a 2- to 4-week pre-treatment period, during which no visit to your treating doctor is necessary. Around two to three check-ups are usual during the hormonal stimulation period. We can plan an exact appointment schedule with you when you register for IVF/ISCI treatment at the start of your period. In total, fertility diagnosis and subsequent therapy can encompass a period of several months, and possibly longer.

Who will treat me?
We place great value on the constancy of our care and support, and thus, you will meet your senior consultant at your initial appointment. She will be responsible not only for your treatment, but also for addressing your concerns and answering your questions, and is supported by an experienced assistant physician and our competent and caring nursing team.

Can I also be supported by complementary medicine?
Of course you may also access the possibilities offered by traditional Chinese medicine (TCM). TCM can complement Western medical therapy and thus improve the probability of achieving a successful pregnancy through relaxation and emotional balance. During IVF or ICSI treatment, any supplements or teas should be taken only in consultation with your assigned senior consultant at our Fertility Centre.

What are the risks associated with IVF and ICIS treatment?
Like all medical treatments, IVF/ICIS offers not only solutions but also risks. Answers to some of your questions can be found in this brochure under the heading “Important Points to Note” (page 20). We will gladly answer any remaining questions in consultation with you. If specific preliminary examinations are required, these can all be carried out under one roof by competent specialists at the University Hospital Zurich.

Can I continue to work while undergoing IVF or ICIS treatment?
At the start of treatment, we will arrange your appointments together with you. You will then know several weeks in advance exactly when you need to come to us for check-ups, and how much time this will take. This approach enables you to plan any absences from work well in advance.
Blastocysts
Embryos on day 5 of development. A blastocyst consists of about 100 cells and is divided into the embryoblast (from which the foetus develops) and the trophoblast (which later develops into the placenta).

Corpus luteum
Yellowish remains of the egg follicle after rupture. Produces the hormone progesterone.

Cryopreservation
Freezing and preservation of sperm, ova, ovarian tissue, fertilised ova, and embryos in liquid nitrogen (-196°C).

Embryo
Developmental stage of a human being. Lasts from the two-cell stage until the completion of organogenesis.

Embryo transfer
Replacement of an embryo into the cavity of the uterus after fertilisation outside the body.

Endometriosis
Uterine lining lying outside the cavity of the uterus, which can cause scars. Endometriosis is a common cause of involuntary childlessness.

Follicle
Egg follicles in the ovary. A follicle contains fluid and an ovum. The larger the follicle, the more mature the ovum inside.

Follicle aspiration
Retrieval of follicular fluid and ova from the ovary.

FSH (follicle stimulating hormone)
A hormone produced by the pituitary gland that stimulates maturation of ova in the ovary. FSH can be produced artificially and used for the stimulation of ovaries (see also “Ovarian Stimulation”, page 9).

GnRHa (GnRH-agonist)/GnRH-antagonist
Drugs that block the release of the body's own FSH and LH. They prevent the premature induction of ovulation.

HCG (human chorionic gonadotropin)
A pregnancy hormone that can be measured in urine or in blood to verify a pregnancy. HCG has another important function: like LH, hCG leads to ovulation. As it is cheaper to produce, hCG is used in fertility treatment instead of LH as a drug to induce ovulation.

ICSI (intracytoplasmic sperm injection)
Fertilisation outside the body where a single sperm cell is injected directly into the ovum.
Insemination
Insertion of mobile fertilisable sperm – mostly in the uterus (intrauterine insemination).

IVF (in vitro fertilisation)
Fertilisation in a Petri dish outside the body. Here, many sperm cells are added to an ovum in a culture medium.

LH (luteinising hormone)
A hormone produced by the pituitary gland that induces ovulation.

Oestrogen
Collective term for female sex hormones that are produced in the ovary and, amongst other functions, support development of the uterine lining.

Ovarian stimulation
Pituitary gland hormones, mainly FSH, stimulate the ovary to bring one or more eggs to maturity.

The hormones can be injected under the skin using a fine needle. This is a simple procedure that most patients can carry out themselves following instruction from our care team.

Polar body
Cellular matter discharged from an ovum. Contains a chromosomal reflection of the ovum.

Polar body diagnosis (PBD)
Extraction and genetic examination of a polar body.

Preimplantation genetic diagnosis (PGD)
Recovery and genetic testing of one or more cells from an embryo or blastocyst.

Progesterone
Female sex hormone produced in the ovary mainly after ovulation. Progesterone prepares the uterine lining for implantation of the embryo and, in case of pregnancy, prevents the onset of menstruation.

Pronuclear stage
The first sign that successful fertilisation has taken place. After penetration by sperm cells, ova produce two pronuclei that, before fusing, represent both maternal and paternal genetic traits.

Spermiogram
Examination of semen for number, mobility and shape of sperm. In addition, other markers can also be detected.

Sterility
No pregnancy after 1 year despite regular unprotected sexual intercourse. In women over 35 years, beginning investigation after 6 months of absence of pregnancy is advisable. Increasingly, the term “sterility” is being replaced by the term “infertility”.

TESE (testicular sperm extraction)
Extraction of sperm directly from a small operatively retrieved piece of testes.
**Zona pellucida**
Transparent skin that encloses the ovum and embryo until implantation into the uterine lining.
Your team at the University Hospital Zurich Fertility Centre
You can reach us from the main station HB Zurich by taking tram no. 10 or 6 to stop ETH/University, or from Bellevue with tram no. 9 to the same stop.
Reception: Main entrance NORD1, Frauenklinikstrasse 10

If arriving by car, please allow sufficient time to find a parking space. Underground carparks are situated at NORD2 and Careum.