Information on female fertility preservation

Patient leaflet based on the ESHRE Guideline on Female Fertility Preservation

Version 2020.1
www.eshre.eu
Introduction

This booklet is for you if:

- You are considering or advised to undergo preservation of female gametes, embryos or ovarian tissue
- You are considering or advised to undergo ovarian protection through ovarian transposition or use of medical treatment (GnRHa)
- You are considering using stored reproductive cells or tissue to achieve pregnancy

This booklet is intended for patients, but may also be useful for their family members and caregivers.

This booklet aims to:

- increase awareness on fertility preservation
- provide women with information on appropriate fertility preservation interventions
- provide women with tools to discuss their options with their doctor.

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This booklet and the information presented are entirely-based on the ESHRE Guideline on Female Fertility Preservation. All the information and recommendations in the guideline are built upon the best available evidence from research. Where there is insufficient evidence from research, a group of experts has formulated recommendations based on their clinical expertise. The experts also formulated areas of research to improve research in the field of Female Fertility Preservation.

We have added the following symbols to explain the strength of the recommendations and whether or not they are based on results from studies.

Recommendation based on research evidence

Recommendation based on considered opinion of the guideline development group

More information is available in the last pages of this booklet, including a list of medical and research terms and their meanings. The full guideline is available on the website of ESHRE (www.eshre.eu/guidelines)
What is Fertility Preservation?
Fertility preservation is a term used for interventions and procedures aiming at preserving the chance of achieving pregnancy and completing their family.

Fertility preservation can be indicated for several indications:
- for women diagnosed with cancer
- for women having a disease, surgery or treatments that may affect future fertility, this includes lupus, endometriosis, Turner Syndrome,..
- for transgender men
- for women worried about age-related fertility loss

Male fertility preservation, through sperm freezing and other techniques in not covered in the current booklet.

A Guide to patients on Fertility preservation will be published shortly describing the situations in which fertility preservation may be considered, the available techniques for cryopreservation and the possible use of stored cells, tissues and embryos. It aims at providing readers with clear, accurate and balanced information to guide them through the different options so they can ask their treating team the right questions and make informed decisions according to their needs and values.

This booklet will be available via www.eshre.eu

This document outlines the specific information and recommendations for fertility preservation according to the 4 indications as included in the ESHRE Guideline for Fertility Preservation. The information complements the Guide to patients on Fertility preservation.
Information for women with cancer

Discussion of fertility preservation with your oncologist

You should receive information about:
1) impact of cancer and anticancer treatments on reproductive function;
2) impact of cancer and anticancer treatments on fertility,
3) fertility preservation options;
4) cryopreservation related issues after FP,
5) infertility and fertility treatments;
6) pregnancy after anticancer treatment or underlying condition; and
7) other childbearing and parenting options.

You should be referred for a detailed discussion with a fertility doctor.

Your oncologist and fertility doctor should collaborate in providing you with information and ensuring that fertility preservation treatments and anticancer treatments are aligned. There may be a coordinator in the centre that could help you communicating to both your oncologist and FP doctor.

Fertility preservation options

There are different options for fertility preservation:
- Egg and/or embryo freezing
- Ovarian tissue freezing
- Medical treatment to protect the ovaries (GnRH agonist) during chemotherapy
- Ovarian transposition to protect the ovaries during radiotherapy

Combinations of the above fertility preservation options are also feasible.

To decide which option is the best for you, 3 factors need to be considered:

Based on the information you receive on the different options for fertility preservation, you may have a preference on whether to proceed with fertility preservation or not, and which is the most appropriate intervention for you.

In making any decision on fertility preservation, the advice of your doctor should be a key factor. Ask your doctor to explain the options and her/his advice.

Your doctor will make an assessment of the indications and risks prior to fertility preservation interventions. Your doctor will take into consideration:
- Your health, including type of cancer and any other conditions
- Your age
- Your ovarian reserve (assessed by a blood test or ultrasound)
- The anticancer treatment you will need to have
- The time available before starting anticancer treatment

Egg and embryo freezing can be performed in most IVF centres, but some other treatments may not be available in all centres. Furthermore, there are different regulations in each country with regards to which interventions are allowed, whether the costs are to be paid by the patient, and how long eggs, embryos and ovarian tissue can be stored. Your doctor should be able to provide you with the correct information for your country.

You should be offered psychological support and counselling to help you dealing with decisions on fertility preservation.

More support in decision making can be found at https://cancerfertilityandme.org.uk/
Fertility preservation interventions and anticancer treatment
The fertility preservation options you and your doctor have decided on, will be performed before and/or during anticancer treatment

Egg/embryo freezing (called cryopreservation):

Egg and embryo freezing are established options for fertility preservation.

Any woman should be offered the option to freeze unfertilized eggs or to split the eggs to attempt both embryo and egg freezing.

You will receive medication for hormonal stimulation of the ovary (which can take 8-12 days) followed by egg aspiration. Once the eggs have been collected, they are frozen in the laboratory and stored at a very low temperature in liquid nitrogen. They can then remain frozen for many years, not affected by the length of time they are frozen.

For embryo freezing, collected eggs are fertilised with husband or donor sperm before being frozen. It is important to know that embryos originate from 2 people (unless donor sperm was used), meaning that you may not be able to use the embryos if your partner does not agree, for example in the case of a separation or death.

When hormonal stimulation is not feasible, immature eggs can usually be collected from the ovary, and matured in the IVF lab before freezing (called in vitro maturation or IVM).

Ovarian tissue freezing

Ovarian tissue freezing may be recommended in patients undergoing moderate/high risk anticancer treatment where egg/embryo freezing is not feasible, or at patient preference.

A small piece from the ovary (ovarian tissue) or a whole ovary, will be removed during a ‘keyhole’ surgery under general anaesthesia. The procedure usually takes less than an hour to perform. The tissue is frozen in the laboratory and stored.

Medical treatment to protect the ovaries (GnRH agonist)

GnRH agonists during chemotherapy should be offered as an option for ovarian function protection in breast cancer patients receiving chemotherapy. Even in case of GnRH agonists during chemotherapy, freezing of eggs, embryos or ovarian tissue is still advised.

GnRH agonist is a medical treatment (monthly injection) which stops the activity of the ovaries, putting them into a state of hibernation. This has been shown to protect the ovaries from damage during chemotherapy. When treatment with a GnRH agonist is stopped, the activity of the ovaries resumes.

Surgical treatment to protect the ovaries

Women scheduled to undergo radiotherapy to your abdomen (but no chemotherapy) may be offered ovarian transposition with the aim to prevent premature ovarian insufficiency.

Ovarian transposition is a technique in which, through keyhole surgery, one or both ovaries are moved so they are less impacted by the radiation. After radiotherapy, they are placed back in their normal position (through another keyhole surgery).

Getting pregnant after anticancer treatment

Preconception counselling and appropriate obstetric monitoring is recommended in women intending to become pregnant after anticancer treatments.

An interval of at least 1 year following chemotherapy completion should be considered before attempting a pregnancy in order to reduce the risk of pregnancy complications.

During anticancer treatment, your menstrual periods may stop due to the impact of the treatments on the ovaries.
If your menstrual periods restart after anticancer treatment is finalised, you may not need the frozen eggs/embryos or ovarian tissue to achieve pregnancy. Please discuss a pregnancy with your oncologist and fertility doctor. S/he will assess and advise you on whether pregnancy is safe, and whether some additional monitoring during pregnancy (additional scans, tests) is needed.

If your menstrual periods do not restart, your fertility may be lost and you may need your frozen eggs/embryos or ovarian tissue to achieve pregnancy. If you decided not to have fertility preservation (or if it was not advised for you), you still have options to complete your family. Please discuss with your oncologist and your fertility doctor.

Before the use of stored material, physical fitness for pregnancy should be thoroughly assessed, taking into account the late effects of anticancer treatment, your age and the interval since ending anticancer treatment.

You should be offered psychological counselling, pre-conception counselling and fertility treatment counselling.

This overview of the options of achieving pregnancy for each scenario of fertility preservation can help in discussion your options for pregnancy with your doctor.

<table>
<thead>
<tr>
<th>Reproductive planning after cancer</th>
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<tbody>
<tr>
<td><strong>No fertility preservation</strong></td>
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<tr>
<td>If low impact of cancer on fertility</td>
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<tr>
<td>If high impact of cancer on fertility</td>
</tr>
<tr>
<td><strong>Frozen eggs</strong></td>
</tr>
<tr>
<td>If low impact of cancer on fertility</td>
</tr>
<tr>
<td>If high impact of cancer on fertility</td>
</tr>
<tr>
<td>If insufficient number of frozen eggs</td>
</tr>
<tr>
<td><strong>Frozen ovarian tissue</strong>¹</td>
</tr>
<tr>
<td>If low impact of cancer on fertility</td>
</tr>
<tr>
<td>If high impact of cancer on fertility</td>
</tr>
<tr>
<td><strong>Frozen embryos</strong></td>
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<tr>
<td>If low impact of cancer on fertility</td>
</tr>
<tr>
<td>If high impact of cancer on fertility</td>
</tr>
<tr>
<td>If insufficient number of frozen embryos</td>
</tr>
<tr>
<td>If new partner (and embryos with sperm of former partner)</td>
</tr>
</tbody>
</table>

For some patients, pregnancy may not be advisable. Again, your doctor should explain and ensure you receive support.

¹ In patients with BRCA pathogeni variants, it is recommended to remove the transplanted ovarian tissue again after pregnancy.
Healthy pregnancy after anticancer treatment

Preconception counselling and appropriate monitoring during pregnancy is recommended in women intending to become pregnant after anticancer treatments.

In general, pregnancy is feasible after cancer and anticancer treatments. However, depending on the cancer you were diagnosed with, the treatments you received (or medication you are still using), you may have an increased risk of some pregnancy complications.

Your doctor will where needed perform some tests and give you specific information on any complications you may have during pregnancy. S/he will also organise that, if needed, your pregnancy is monitored more closely (for instance with more frequent scans).
Information for women having a disease, surgery or treatments that may affect future fertility

Discussion of fertility preservation with your doctor

You should receive information about:
1) impact of your disease or treatment on reproductive function;
2) impact of your disease or treatment on fertility,
3) fertility preservation options;
4) cryopreservation related issues after FP,
5) infertility and fertility treatments;
6) future pregnancy; and
7) other childbearing and parenting options.

You should be referred for a detailed discussion with a fertility doctor.

Your doctor and fertility doctor should collaborate in providing you with information and ensuring that fertility preservation treatments and other treatments are aligned. There may be a coordinator in the centre that could help you communicating to both your doctor and fertility doctor.

Fertility preservation options

There are different options for fertility preservation:
- Egg and/or embryo freezing
- Ovarian tissue freezing
- Medical treatment to protect the ovaries (GnRH agonist) when chemotherapy is administered

Combinations of the above fertility preservation options are also feasible.

To decide which option is the best for you, 3 factors need to be considered:

Based on the information you receive on the different options for fertility preservation, you may have a preference on whether to proceed with fertility preservation or not, and which is the most appropriate intervention for you.

In making any decision on fertility preservation, the advice of your doctor should be a key factor. Ask your doctor to explain the options and her/his advice.

Your doctor will make an assessment of the indications and risks prior to fertility preservation interventions. Your doctor will take into consideration:
- Your health (your disease and any other conditions)
- Your age
- Your ovarian reserve (assessed by a blood test or ultrasound)
- The treatment you will need to have
- (The time available before starting treatment)

Egg and embryo freezing can be performed in most IVF centres, but some other treatments may not be available in your centre or your country, or they may not be available for non-cancer diseases. Furthermore, there are different regulations in each country with regards to which fertility preservation interventions are allowed, and whether or not the costs are to be paid by the patient, or can be reimbursed.

2 By your doctor we mean, your rheumatologist, endometriosis specialist, pediatrician, .. whomever is guiding treatment for your medical condition.
Your doctor should be able to provide you with the correct information for your country.

You should be offered psychological support and counselling to help you dealing with decisions on fertility preservation.

**Fertility preservation interventions**
The fertility preservation options you and your doctor have decided on, will be performed before and/or during diseases treatments.

**Egg/embryo freezing (called cryopreservation):**
Egg and embryo freezing are established options for fertility preservation.

Any woman should be offered the option to freeze unfertilized eggs or to split the eggs to attempt both embryo and egg freezing.

You will receive medication for hormonal stimulation of the ovary (which can take 8-12 days) followed by egg aspiration. Once the eggs have been collected, they are frozen in the laboratory and stored at a very low temperature in liquid nitrogen. They can then remain frozen for many years, not affected by the length of time they are frozen.

For embryo freezing, collected eggs are fertilised with husband or donor sperm before being frozen. It is important to know that embryos originate from 2 people (unless donor sperm was used), meaning that you may not be able to use the embryos if your partner does not agree, for example in the case of a separation or death.

If there is no time for hormonal stimulation, immature eggs can be collected from the ovary, and matured in the IVF lab before freezing (called in vitro maturation or IVM).

**Ovarian tissue freezing**
Ovarian tissue freezing may be recommended in patients undergoing moderate/high risk anticancer treatment where egg/embryo freezing is not feasible, or at patient preference.

A small piece from the ovary (ovarian tissue) or a whole ovary, will be removed during a ‘keyhole’ surgery under general anaesthesia. The procedure usually takes less than an hour to perform. The tissue is frozen in the laboratory and stored.

**Medical treatment to protect the ovaries (GnRH agonist)**
GnRH agonist is a medical treatment (administered through monthly injection) during chemotherapy. GnRH agonists stop the activity in the ovaries, putting them into a state of hibernation. This has been shown to protect the ovaries from damage resulting from chemotherapy. When treatment with a GnRH agonist is stopped, the activity of the ovary resumes.

**Getting pregnant**
Before the use of stored material, physical fitness for pregnancy should be thoroughly assessed, taking into account the late effects of treatment, your age and the interval since ending treatment or ongoing treatments.

Preconception counselling and appropriate obstetric monitoring is recommended in women intending to become pregnant after treatments.

When considering the pregnancy, your doctor will assess your fertility and physical fitness for pregnancy and advise you on whether pregnancy is safe, and whether some additional monitoring during pregnancy (additional scans, tests) is needed.
Depending on the impact that your disease and associated treatments have had on your fertility, your doctor will advise you on whether to try to conceive naturally, or whether to pursue fertility treatments, with your stored eggs, embryos or tissue.

You should be offered psychological counselling, pre-conception counselling and fertility treatment counselling.

This overview of the options of achieving pregnancy for each scenario of fertility preservation can help in discussing your options for pregnancy with your doctor.

<table>
<thead>
<tr>
<th>Reproductive planning</th>
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</thead>
<tbody>
<tr>
<td><strong>No fertility preservation</strong></td>
</tr>
<tr>
<td>If low impact of disease/treatment on fertility</td>
</tr>
<tr>
<td>If high impact of disease/treatment on fertility</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Frozen eggs</th>
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</thead>
<tbody>
<tr>
<td>If low impact of disease/treatment on fertility</td>
</tr>
<tr>
<td>If high impact of disease/treatment on fertility</td>
</tr>
<tr>
<td>If insufficient number of frozen eggs</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Frozen ovarian tissue[^3]</th>
</tr>
</thead>
<tbody>
<tr>
<td>If low impact of disease/treatment on fertility</td>
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<tr>
<td>If high impact of disease/treatment on fertility</td>
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<tr>
<td>If low impact of disease/treatment on fertility</td>
</tr>
<tr>
<td>If high impact of disease/treatment on fertility</td>
</tr>
<tr>
<td>If insufficient number of frozen embryos</td>
</tr>
<tr>
<td>If new partner (and embryos with sperm of former partner)</td>
</tr>
</tbody>
</table>

For some patients, pregnancy may not be advisable. Again, your doctor should explain and ensure you receive support.

[^3]: In case of frozen ovarian tissue in women with genetic/chromosomal disorders, genetic counselling is recommended.
## Healthy pregnancy

In general, pregnancy is feasible. However, depending on the disease you were diagnosed with, the treatments you received (or medication you are still using), you may have an increased risk of some pregnancy complications.

| Your doctor will where needed perform some tests and give you specific information on any complications you may have during pregnancy. S/he will also organise that, if needed, your pregnancy is monitored more closely (for instance with more frequent scans). | ![Lab Test](image) |
Information for transgender men

Discussion of fertility preservation with your transgender team
You should receive information about:
1) impact of your transition on your reproductive function;
2) impact of your transition on your fertility,
3) fertility preservation options;
4) cryopreservation related issues after FP,
5) infertility and fertility treatments;
6) pregnancy after your transition; and
7) other childbearing and parenting options.

You should be referred for a detailed discussion with a fertility doctor.

Your transgender team and fertility doctor should collaborate in providing you with information and ensuring that any fertility preservation treatments are aligned with your transition. There may be a coordinator in the centre that could help you communicating to both your transgender team and fertility doctor.

Deciding on fertility preservation
There are different options for fertility preservation, but for transgender men, egg freezing is mostly applied. Ovarian tissue freezing can be considered when your ovaries are removed during your transition. However, the option of ovarian tissue freezing is not recommended, as transplanting the ovaries back to reach pregnancy is usually not preferred by patients.

To decide whether to proceed with fertility preservation, 3 factors need to be considered:

Your preference
Based on the information you receive on the different options for fertility preservation, you may have a preference on whether to proceed with fertility preservation or not, and which is the most appropriate intervention for you.

In making any decision on fertility preservation, the advice of your doctor should be a key factor. Ask your doctor to explain the options and her/his advice.

Your doctors’ advice
Your doctor will make an assessment of the indications and risks prior to fertility preservation interventions. Your doctor will take into consideration:
- Your health
- Your age
- Any (previous) interventions as part of your transition

What is available/allowed
Egg and embryo freezing can be performed in most IVF centres, but there are different regulations in each country with regards to which fertility preservation interventions are allowed for transgender men, and whether or not the costs are to be paid by the patient, or can be reimbursed.

Your doctor should be able to provide you with the correct information for your country.

You should be offered psychological support and counselling to help you dealing with decisions on fertility preservation.
Fertility preservation interventions
The fertility preservation options you and your doctor have decided on, will be performed at a relevant timepoint in your transition.

**Egg/embryo freezing (called cryopreservation):**
Egg and embryo freezing are established options for fertility preservation.

For ovarian stimulation in transgender men aiming at egg freezing, certain medications GnRH antagonist protocols can be preferred (based on studies showing they are feasible and effective. Treatment with testosterone will have to be interrupted before starting ovarian stimulation.

You will receive medication for hormonal stimulation of the ovary (which can take 8-12 days) followed by egg aspiration. Once the eggs have been collected, they are frozen in the laboratory and stored at a very low temperature in liquid nitrogen. They can then remain frozen for many years, not affected by the length of time they are frozen.

For embryo freezing, collected eggs are fertilised with male partner or donor sperm before being frozen. It is important to know that embryos originate from 2 people (unless donor sperm was used), meaning that you may not be able to use the embryos if your partner does not agree, for example in the case of a separation or death.

Getting pregnant after transition
Stored eggs/embryos from transgender men can be used in 3 ways, by the patient himself, if he still has a uterus, in a female partner, or in a surrogate (see the overview below).

In case you want to carry the pregnancy, your doctor will perform an assessment of your health, taking into consideration any previous treatments you had, and any hormonal treatments (for instance testosterone) you are using.

This overview of the options of achieving pregnancy for each scenario of fertility preservation can help in discussion your options for pregnancy with your doctor.

<table>
<thead>
<tr>
<th>Reproductive planning with female partner</th>
<th>Reproductive planning with male partner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No fertility preservation</strong></td>
<td>IUI or IVF: Partner oocytes + Donor sperm</td>
</tr>
<tr>
<td><strong>Cryopreserved oocytes</strong></td>
<td>IUI or IVF: TM cryopreserved eggs + Donor sperm</td>
</tr>
<tr>
<td><strong>Cryopreserved ovarian tissue</strong></td>
<td>Transplanted tissue or matured oocytes + Donor sperm</td>
</tr>
<tr>
<td><strong>Cryopreserved embryos</strong> <em>(Partner or donor sperm)</em></td>
<td>Embryo transfer to partner</td>
</tr>
</tbody>
</table>

Abbreviations: FP, fertility preservation; IUI, intra-uterine insemination; IVF, in vitro fertilization; IVM, in vitro maturation; OTT, Ovarian tissue transplantation; TM, transgender man

Healthy pregnancy
Some transgender men feel depression or suffer from increased gender dysphoria during and after pregnancy.

Your doctor should be aware of this and, if needed, refer you for counselling and support.
Information for women who want to delay having children

First discussion of fertility preservation
You should receive information about:
1) impact of age on reproductive function;
2) impact of age on fertility,
3) fertility preservation options;
4) cryopreservation related issues after FP,
5) infertility and fertility treatments;
6) pregnancy at later age; and
7) other childbearing and parenting options.

You should be referred for a detailed discussion with a fertility doctor.

Deciding on fertility preservation
For women who want to delay having children, egg freezing is the recommended intervention.

To decide whether to proceed with egg freezing, 3 factors need to be considered:

Your preference
You should be fully informed regarding the success rates, risks, benefits, costs and the possible long-term consequences, both in terms of physical and psychological health. In making this decision, the advice of your doctor should be a key factor. Ask your doctor to explain the options and her/his advice.

Your doctors’ advice
Your doctor will make an assessment of the indications and risks of egg freezing. Your doctor will take into consideration:
- Your general health
- Your age and ovarian reserve (assessed by a blood test or ultrasound)

Egg freezing for women without any medical condition is usually not reimbursed, and it may not even be allowed in your country.

Your doctor should be able to provide you with the correct information for your country and an estimation of the costs for the egg freezing procedure, ongoing storage and later use of their oocytes.

Egg freezing (or oocyte cryopreservation):
You will receive medication for hormonal stimulation of the ovary (which can take 8-12 days) followed by egg aspiration. Once the eggs have been collected, they are frozen in the laboratory and stored at a very low temperature in liquid nitrogen. They can then remain frozen for many years, not affected by the length of time they are frozen.

Even though egg freezing probably increases your chances of achieving pregnancy at later age, the procedure should not be considered an insurance, or a reason to postpone pregnancy.

Getting pregnant using stored eggs
Whenever you decide you want to get pregnant, your options will depend on whether you will be still able to reach pregnancy spontaneously and whether or not you have a (male) partner. (see the table below).
Your doctor may consider a fertility work-up to assess whether you are still fertile and whether you can achieve spontaneous pregnancy. If necessary, stored eggs can be used to achieve pregnancy.

Before the use of stored material, physical fitness for pregnancy should be thoroughly assessed, taking into account your age.

Studies have shown that there are risks for pregnancy complications due to older age at pregnancy. These risks increase after the age of 45 years.

This overview of the options of achieving pregnancy for each scenario of fertility preservation can help in discussion your options for pregnancy with your doctor.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Reproductive planning without partner</th>
<th>Reproductive planning with a male partner</th>
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<tbody>
<tr>
<td>When you are still fertile</td>
<td>IUI or IVF with donor sperm</td>
<td>Spontaneous pregnancy</td>
</tr>
<tr>
<td>No fertility preservation (and infertile)</td>
<td>IVF with donor eggs and donor sperm</td>
<td>IVF with donor eggs and partners’ sperm</td>
</tr>
<tr>
<td>Frozen eggs (and infertile)</td>
<td>IVF with frozen eggs and donor sperm</td>
<td>IVF with frozen eggs and partners’ sperm</td>
</tr>
</tbody>
</table>

*Abbreviations: IUI, intra-uterine insemination; IVF, in vitro fertilization.*
Where can I find more information or support?

More detailed information on each of the topics in this booklet can be found in the clinicians’ edition of the guideline on the ESHRE website (www.eshre.eu/guidelines).

For more detailed information or support, you can contact your doctor or a patient organisation.

For contact details of national patient organisations for infertility, you can ask your doctor, or contact Fertility Europe (www.fertilityeurope.eu)

About this booklet

This booklet aims to involve patients in healthcare improvement by informing them about current standards of care, and by enabling them to make informed decisions on their health, supported by the best available evidence.

How this booklet was developed

This booklet was written by Dr Nathalie Vermeulen (methodological expert) and revised by the members of the guideline group. All the information provided is based on the recommendations in the ESHRE guideline on Female Fertility Preservation.

Who developed the ESHRE guideline?

The ESHRE guideline on Female Fertility Preservation, was developed by a multidisciplinary guideline development group including gynaecologists, oncologists, embryologists, a psychologist, an ethicist, a research specialist and 2 patient representatives.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution and City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard Anderson</td>
<td>University of Edinburgh, Edinburgh (UK)</td>
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<td>Academic Medical Centre Amsterdam, Amsterdam (The Netherlands)</td>
</tr>
<tr>
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<td>Catholic University Leuven, Leuven (Belgium)</td>
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<td>Radboud university medical center, Nijmegen (The Netherlands)</td>
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<td>Sandra Dwek</td>
<td>(patient representative)</td>
</tr>
<tr>
<td>Caroline Maslin</td>
<td>(patient representative)</td>
</tr>
<tr>
<td>Nathalie Vermeulen</td>
<td>European Society of Human Reproduction and Embryology (Belgium)</td>
</tr>
</tbody>
</table>
Glossary (explanation of medical or research terms)

**Embryo**: A fertilised egg.

**Genetic**: Anything related to the genes. (e.g. a genetic error is an error in the genes)

**Hormone**: A molecule that is produced by one tissue and carried in the bloodstream to another tissue to cause a biological effect.

**In vitro fertilization (IVF)**: A technique by which eggs are collected from a woman and fertilised with a man’s sperm outside the body. Usually one or two resulting embryos are then transferred to the womb. If one of them attaches successfully, it results in a pregnancy.

**Infertility**: The state of being not fertile and unable to become pregnant, usually defined as not becoming pregnant after 12 months or more of regular unprotected sexual intercourse.

**Intra-uterine insemination (IUI)**: A technique where sperm is placed into a woman’s womb through the cervix.

**Ultrasound**: High frequency sound waves used to provide images of the body, tissues and internal organs.
Disclaimer

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