Fertility preservation for women wishing to freeze egg/embryo for fertility preservation

The aim of this leaflet is to help answer some of the questions you may have about fertility preservation. It explains the benefits and risks of the different options, as well as what you can expect when you come to hospital. If you have any questions or concerns, please do not hesitate to speak to a doctor or nurse caring for you.

What is fertility preservation?
Recent advances in treatment mean a larger number of women can hope to recover or be cured of cancer. However, the chemotherapy and/or radiotherapy used to treat the disease can, in many cases, affect future fertility or permanently affect the ovaries.

We can offer fertility preservation before the chemo/radiotherapy, which may give you an opportunity to try for a baby when you have completely recovered. The likelihood of the ovaries being affected is different for each woman, and will depend upon your age and the type of treatment you have. Your doctor can refer you to the fertility clinic to discuss this further. We realise that the diagnosis of cancer and coping with the treatment can be a difficult time for you, and we will be happy to answer any queries you may have.

Will my chemotherapy have to be postponed in order to have fertility treatment?
Fertility treatment takes two to three weeks from the start of your period. If your chemotherapy can be deferred for this period of time, your doctor can refer you to discuss fertility preservation. However, there may not be enough time to complete fertility treatment before starting your cancer treatment. There are different treatment options available, and at your consultation, the fertility doctor will discuss which method is the most suitable for you.

What are the options for fertility preservation?
The options are listed below. Your doctor will be able to discuss each in more detail with you and will give you an information leaflet containing further information.

In vitro fertilisation (IVF) and embryo freezing
This option is suitable if you have a partner and are in a stable relationship. IVF is sometimes referred to as ‘test tube baby’ treatment. This process involves stimulating the ovaries with daily hormone injections to produce several eggs, which are then recovered by a minor operation. In our laboratory, the eggs are mixed with sperm provided by your partner. The resulting fertilised eggs (embryos) are then frozen using a special technique. These embryos can be stored for up
to 10 years in the first instance. Storage may then be extended depending upon individual circumstances.

When you have recovered completely after chemotherapy, and are ready to try for a family, the embryos can be thawed out and replaced into the womb after taking hormone therapy. On average, one in three women will become pregnant using this method.

**Freezing of oocytes (unfertilised eggs)**
This is suitable for women without a partner, or young girls who are sexually mature. It is different from embryo freezing because your eggs are recovered and stored without being fertilised. In the future, when you wish to try for a baby, the eggs will be thawed out and mixed with sperm from your partner to create embryos. The survival of frozen eggs is good, however occasionally they do not fertilise as well as fresh eggs, and so the chances of pregnancy following the use of frozen eggs might be slightly reduced compared to frozen embryos. However, these techniques are constantly improving, and the current pregnancy rate is about one in four.

**Ovarian tissue cryopreservation**
This is where the surgeon removes a small piece of ovarian tissue and freezes it. The operation is done under general anaesthetic, which means that you will be asleep for the entire procedure. During the procedure, the surgeon will insert a laparoscope (a small camera) into your abdomen to guide them in removing the tissue (for more information about this type of procedure, please ask for a copy of the leaflet, Having a laparoscopy). The tissue is then frozen, and at a later date, once you have recovered from your cancer therapy, the tissue can be transplanted back into your body.

This procedure is still at an experimental stage and is not currently offered in our unit, but your doctor may be able to provide information if this procedure is being offered elsewhere.

**Hormonal therapy**
If you are having chemo/radiotherapy, it is thought that the ovaries may be protected by temporarily switching them off. This is done by giving you injections of a drug. It does not have any serious risks or side effects, but you may experience some symptoms similar to the menopause, such as hot flushes and night sweats, which can last as long as you are having the injections. The injection is given every four weeks while you are undergoing chemotherapy, and as a result, your periods are likely to stop completely during that time. We don't have enough evidence to show that this method will definitely protect your ovaries.

**Do I need any tests before I can freeze eggs/embryos?**
There is a theoretical risk of viral (HIV, Hepatitis B & C) cross-contamination between samples that are stored in liquid nitrogen. Though there have been no reported incidences of such cross-contamination between frozen samples, you (and your partner) will be screened for HIV and Hepatitis B & C before we freeze embryos/eggs. Guy’s cannot offer storage for HIV or Hepatitis positive patients at the present time.

**Can I discuss fertility preservation before treatment?**
You can be referred to the fertility specialist to discuss the options of preserving fertility. In many cases, there may not be enough time to complete fertility treatment before starting the chemotherapy. If there is, the consultant will discuss and advise treatment that is appropriate for you. An ultrasound scan, screening blood tests, and all the relevant consent forms need to be completed by you/and your partner before treatment is commenced.
**Are there legal implications of storing eggs/embryos?**
Under the terms of the Human Fertilisation and Embryology Act (1990), you are required to give written consent regarding
1. storage of your eggs/embryos.
2. the length of time they may be stored for.
3. the purposes your eggs/embryos can be used for.
4. your wishes over any embryos created/eggs stored.
5. what should be done with your eggs/embryos in the event of your death, or if you become incapable of changing or cancelling your consent.

Your partner will also be required to complete the treatment and storage forms if embryos are to be stored.

If you have stored embryos, it is important to remember that in the future, both partners involved in the initial treatment, must provide written consent at the time when the embryos are replaced. If your partner withdraws his consent, it will not be possible for us to replace the embryos. If you have stored eggs, and wish to have fertility treatment in the future, you and your future partner can do so after signing new consent forms.

**Is this treatment available on the NHS?**
Funding is available for women who are having their cancer treatment with the NHS and meet specific eligibility criteria. This will be assessed when your doctor refers you for fertility preservation. If you are eligible, then funding will be provided for the fertility preservation of your eggs/embryos for a period of five years. Continued storage after this period may incur a charge.

**What is the cost of freezing eggs/embryos?**
If you are not eligible for NHS funding for fertility preservation, this can still be undertaken but there will be a charge for consultation, screening tests, treatment cycle, and storage of eggs/embryos. The fertility unit can provide the appropriate prices.

**Will future fertility treatment be available on the NHS?**
After your cancer therapy, if you require fertility treatment to achieve a pregnancy, your consultant/GP will have to refer you for assisted conception. At the moment, there is no special funding for fertility treatment for couples where either partner has previously had cancer. The eligibility criteria for funding are the same as for any other person seeking fertility treatment. If you do not meet these criteria, fertility treatment will have to be self-funded.

**What happens if I cannot have fertility treatment before my chemo/radiotherapy?**
It is possible that the ovaries will stop working permanently as a result of the cancer treatment. If it was not possible to store eggs/embryos before treatment, some couples may wish to consider using donated eggs. If you choose this option, you would need to have IVF treatment. The donated eggs would be fertilised with sperm from your partner, and the resulting embryos placed in your womb. If it is successful, the pregnancy should proceed as normal.

We provide written information about the different treatments that are available. Further helpful information is also available on the internet sites at the end of this leaflet.
How will I know if my ovaries recover their function?
In some young women, the ovaries may start functioning again after many months or years. You will have the option to be seen in the follow-up clinic to assess whether your ovarian function has resumed. If the ovaries recover, you may need to use contraception, which can be discussed at that time. We also advise using contraception during and after chemotherapy, even if periods stopped during that time.

What happens if my ovaries do not recover?
We offer long-term follow-up for patients after cancer therapy has been completed. You may find this helpful, as we work with your oncologist to provide help for various conditions that you may experience as a result of the chemo/radiotherapy.

For some women, the ovaries may never recover. This is known as premature ovarian failure (if you are under the age of 40). As a result, you may have hot flushes, night sweats and sleep disturbance. These symptoms can be relieved with hormone replacement therapy, if appropriate.

The diagnosis of cancer, and coping with the treatment, can be stressful, creating difficulties in physical and emotional relationships. Following premature ovarian failure, or after radiotherapy to the pelvis, you may have a low sex drive, or you may find that sex is uncomfortable for you. You may feel differently about yourself, and concerned about how your partner feels about you. Many young women and men are embarrassed, or feel it is not the most important thing to discuss with their doctor. We understand it is difficult to share these feelings with others or even with your partner, but please speak to the fertility nurse or doctor, as help and support is available.

Is a counselling service available?
We offer an experienced and confidential counselling service as well as medical treatment, and can arrange a counselling appointment for you if you wish.

Useful sources of information
Dimbleby Cancer Care is the cancer support service for Guy’s and St Thomas’. They have drop-in information centres, and also offer complementary therapies, psychological support and benefits advice.

HFEA – UK regulating authority of licensed conception and treatment centres.

Infertility Network UK – National charity providing information and counselling for people with fertility issues
**Contact us**

**Assisted Conception Unit**
If you have any questions or concerns about fertility preservation please contact
- Fertility preservation administrator  **t:** 020 7188 7188, extension 50426.
- Oncology fertility liaison nurse  **t:** 020 7188 7188, and ask them to bleep 0883.
- Fertility counsellor: 020 7188 7641 (Please leave a message)
- Administrative, referral and funding queries
  please email  **e:** IVFFertilityPreservation@gstt.nhs.uk
- Medical queries, please email  **e:** FertilityPreservationNurses@gstt.nhs.uk
- Fax: 02071880490

11th Floor, Tower Wing, Guy’s Hospital, Great Maze Pond, London, SE1 9RT  
**t:** 020 7188 2300  **fax:** 020 7188 0490  **w:** www.ivfdirect.com

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

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**Pharmacy Medicines Helpline**
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.  
**t:** 020 7188 8748 9am to 5pm, Monday to Friday

**Your comments and concerns**
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.  
**t:** 020 7188 8801 (PALS)  **e:** pals@gstt.nhs.uk
**t:** 020 7188 3514 (complaints)  **e:** complaints2@gstt.nhs.uk

**Language and accessible support services**
If you need an interpreter or information about your care in a different language or format, please get in touch.  
**t:** 020 7188 8815  **e:** languagesupport@gstt.nhs.uk

**NHS 111**
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.  
**t:** 111

**NHS Choices**
Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.  
**w:** [www.nhs.uk](http://www.nhs.uk)

**Get involved and have your say: become a member of the Trust**
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.  
**t:** 0800 731 0319  **e:** members@gstt.nhs.uk  **w:** [www.guysandstthomas.nhs.uk/membership](http://www.guysandstthomas.nhs.uk/membership)