NHS
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Embryo Storage

Please read alongside our In-Vitro Fertilisation Treatment Leaflet (F/PI/6)

Fertility Exeter

When/why are embryos stored?

During the course of IVF treatment, embryos that are not transferred but are considered 'useable' can be stored for use at a later date. Embryo storage can also be considered for those seeking fertility preservation or if transfer during treatment is not clinically advised.

What embryos are suitable for storage?

Not all embryos that result from IVF treatment can be considered for storage. Good quality embryos are more likely to be able to withstand the processes of freezing and warming. Embryos are typically kept for up to day 5 or 6 of development (blastocyst stage) before a clinical decision is made regarding their suitability for storage. Not all embryos will develop to this stage or be considered viable for storage and as such, this is not always an option within a cycle of treatment.

Is there a charge for the freezing and storage of embryos?

Embryo freezing and storage do come at an additional cost. For those undergoing NHS funded treatment, the initial costs to freeze and store embryos are likely to be met. For those undergoing self-funded treatment or who are no longer eligible for ongoing NHS funded storage, any additional costs involved are detailed on the Fertility Exeter price list.

How are embryos stored?

Embryos are 'frozen' using a technique called vitrification. During this process, the embryos are carefully put through a series of solutions to prepare and protect them from being exposed to ultra-low storage temperatures. They are then placed inside specially designed devices which are labelled, sealed, and stored under liquid nitrogen at -196°C. They can remain in this 'paused' state until required at a later date. Typically, embryos are stored individually to allow patients the option to warm one embryo at a time.

Embryos stored at the blastocyst stage may require shrinking or 'collapsing' prior to exposure to the solutions. This is an additional measure aimed to protect them during the vitrification process and is thought to improve survival rates. Blastocysts can naturally pulse during normal development so this process does not cause harm or damage to them.

How are stored embryos prepared for use in treatment?

When required for use in treatment, the required storage device is removed from the liquid nitrogen, immediately warmed to body temperature (37°C), and the embryo is recovered from the device. The embryo is carefully taken through a series of solutions to aid its recovery before being placed in an incubator where it is kept and monitored before confirming its survival and suitability for transfer. It can take up to 2 hours to fully assess the survival and viability of blastocysts after the warming process.

Do all embryos survive the freezing and warming process?

Where good quality embryos are stored, the majority go on to survive this process and are suitable for transfer. However, this is not always the case and even good quality embryos sometimes do not survive the process of freezing & warming. Survival rates for good quality blastocysts are typically above 95% but this may be slightly lower for those stored as borderline quality. Embryos are most often stored at the blastocyst stage but embryos have been stored historically at an earlier (cleavage) stage.

In addition to survival, warmed blastocysts are assessed for their ability to re-expand after warming, a process that can take up to 2 hours. Blastocysts that have shown no re-expansion may remain viable and can be considered for transfer, however, the chances of conception are likely to be lower. Where no re-expansion is observed after warming and there are other embryos in storage, you may wish to consider warming an additional embryo before transfer.

Can embryos be re-frozen?

Yes, embryos that have been warmed can be re-frozen and stored providing they have survived the initial freezing and warming process as expected. The chances of survival after a second warming event may be slightly lower. There is an additional cost for the re-freeze of embryos; please refer to the Fertility Exeter price list for the current fee.

What should be considered when storing embryos?

Having embryos in storage can be a positive outcome for patients, creating options for the future, but it can also involve making difficult decisions that may not be apparent at the time of storage. You will have to consider the following: -

- **How long you may wish to store embryos for**
- **Who can have access to the use of your stored embryos and for what purposes**
- **What should happen to the embryos in the event of your death or mental incapacity**
- **What would happen if your relationship breaks down**

It is also useful to consider what options may be available if you no longer want to use embryos in the future for your own treatment.

Please speak to a member of the clinical team if you have any questions or queries regarding your options. Our counselling team are also available to provide independent support.

If your embryos are created using donor eggs or donor sperm, it is important to understand that the donor's consent will influence the extent to which embryos can be used and stored. Please check with the clinic if you are unsure of how this may affect any future considerations.

How long can embryos remain in storage?

Embryos can remain in storage with appropriate consent for up to 10 years in the first instance. You will have to provide consent prospectively before the embryos are created and will be given the opportunity to seek information relating to the implications of this before indicating your wishes. Embryos can be stored for up to a maximum of 55 years but this will require you to legally renew your consent to use in treatment every 10 years.

Consent from both the sperm and egg providers must be in place for embryos to remain in storage and can be changed or withdrawn by an individual at any time. When considering the renewal of consent, this must be provided by both parties for embryos to continue in storage for use in treatment.

In addition to giving consent, we will require you to complete and sign Fertility Exeter's Terms & Conditions for storage. Regardless of how long you consent to your embryos being stored, you must comply with these Terms and Conditions as we cannot continue with storage where these are not adhered to. Embryos may be disposed of after reasonable efforts to facilitate your compliance have been made or where annual storage payments are not maintained.

When storing embryos, there is an annual storage fee that has to be met when embryos remain in storage after the initial year and continue for the duration of their time in storage. Please refer to our price list for more details of the costs involved in embryo storage.

How will I know when the storage period is going to lapse?

Once you have embryos in storage with us, we will endeavour to contact you annually, usually with the intention to update your storage contract. It is important that you notify the Centre of any changes to your contact details or circumstances.

As the end of the given consent period approaches, we are legally required to issue you with a 'Statutory Notice' from the Human Fertilisation & Embryology Authority (HFEA). This will be 12 months in advance of the consent end date, providing sufficient notice for you to consider and put into effect your ongoing wishes.

Where it is your intention to continue with storage for potential use in treatment, you must legally renew your consent within the 18-month period starting 12 months before and ending 6 months after the end of consent. This 18-month time frame is known as the 'renewal period'.

What happens when the storage period lapses?

You are required to consent to a period of years for which the embryos can remain in storage; once this period comes to an end and the renewal period has lapsed, renewal of consent and use in treatment is no longer legally possible. Embryos can remain lawfully in storage for a further 6 months but cannot legally be used nor can consent be renewed. After this period, embryos must be removed from storage and disposed of.

Consent can only be supported by the clinic where a valid contract is in place. Failure to maintain a valid contract or payment for storage will result in the disposal of samples, regardless of how long consent is in place for.

Together we can achieve so much

Feedback

Here at Fertility Exeter, we care about getting things right for our patients. As such we would welcome any feedback that you may have, to help us continually improve the services we provide. You can do this in a number of ways:

Patient Advice & Liaison Service (PALS)
Royal Devon and Exeter Hospital (Wonford)
Barrack Road
Exeter
EX2 5DW

Direct Dial: (01392) 40 2093

rduh.pals-eastern@nhs.net

"What went well could go better if ....."
Please complete a yellow card, located in our waiting room, and put it in the box provided. The box is sorted weekly and suggestions are acted on accordingly.

Alternatively:

- Complete our Patient Surveys on our website **www.fertilityexeter.co.uk**
- See our Patient Survey links in our emails.

You can also provide feedback about Fertility Exeter directly to the HFEA by using their online feedback tool:
https://www.hfea.gov.uk/choose-a-clinic/rate-your-clinic/

Royal Devon & Exeter Hospital (Heavitree)
Gladstone Road
Exeter
EX1 2ED

(01392) 40 5051

rduh.fertilityexeter@nhs.net

www.fertilityexeter.co.uk

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