

# Sperm Banking

## SPERM CRYOPRESERVATION

### Process

Semen samples may be collected in a private inpatient facility at Connecticut Children's or at the Center for Advanced Reproductive Services (outpatient).

- Semen sample collected through self-stimulation
- 1-3 semen samples required
- Sperm analyzed and frozen

### Time Frame

Time required for banking may vary based on several factors, including time available prior to treatment, sample size, and quality and number of samples collected.

- 1-7 days

### Fertility Success Rate

- Sperm can be maintained frozen indefinitely (up to 20 years or longer)
- 4-10% live birth rate per cycle with intrauterine insemination
- About 30% live birth rate per embryo with in-vitro fertilization

### Procedural Risk

- May be unable to collect semen sample
- May be unable to freeze due to no sperm count

### Financial Cost

*Costs are variable based on medical coverage and are subject to change.*

#### Anticipated costs:

- Initial semen analysis & freezing
- Subsequent samples
- Storage fee
- Labs (generally covered by insurance)
- Uncertain future cost for use

### Long-Term Considerations

Given ever-changing scientific development, we are unable to fully describe the long-term implications or considerations for each patient. However, given where we are today, patients should consider and understand the possible future fertility interventions.

- Sperm analysis post-treatment may be normal, at which time you would not require use of your frozen sample
- Intrauterine Insemination (IUI)
- In Vitro Fertilization (IVF)
- Intracytoplasmic Sperm Injection (ICSI)

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*Fertility preservation is not the decision to use the preserved tissue, but to maintain a range of fertility options for the future.*

# Testicular Biopsy/Freezing

(experimental)

## TESTICULAR TISSUE CRYOPRESERVATION

### Process

This is the only available preservation option for pre-pubertal boys and is also available to post-pubertal men who cannot or choose not to pursue other preservation options. This procedure is experimental. We work closely with the study leader (University of Pittsburgh) for tissue processing and freezing.

- Small incision in the testicle under general anesthesia
- Remove a portion of the testicle or one entire testicle

### Time Frame

We prefer to perform this procedure in conjunction with another previously scheduled surgery, however, it can be completed independently in necessary cases.

- 2-3 days

### Fertility Success Rate

Due to the novel and experimental nature of this procedure, success rates are currently not available. Science is improving rapidly and success has been achieved in animal models.

- Unknown

### Procedural Risk

- Minimal pain and swelling
- Procedural related bleeding
- Post-operative infection

### Financial Cost

*Costs are variable based on medical coverage and are subject to change.*

#### Anticipated costs:

- Fertility consult fee (generally covered by insurance)
- Procedural cost (may be covered by insurance but patient may be responsible)
- Tissue processing & freezing (covered under experimental protocol)
- First year of tissue storage (covered under experimental protocol)
- Subsequent tissue storage
- Labs (generally covered by insurance)
- Uncertain future cost for use

### Long-Term Considerations

Given ever-changing scientific development, we are unable to fully describe the long-term implications or considerations for each patient. However, given where we are today, patients should consider and understand the possible future fertility interventions.

- Possible need for future tissue treatments or testicular surgery
- Possible Intrauterine Insemination (IUI)
- Possible In Vitro Fertilization (IVF)
- Possible Intracytoplasmic Sperm Injection (ICSI)

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# Testicular Sperm Extraction (TESE)

## Process

This procedure is for post-pubertal males who are not able to produce a semen sample. A surgical biopsy of the testicle can be performed to extract sperm from the tissue where they are produced.

- Small incision in the testicle under general anesthesia
- Sperm extracted from testicular tissue
- Sperm analysis and freezing

## Time Frame

We prefer to perform this procedure in conjunction with another previously scheduled surgery, however, it can be completed independently in necessary cases.

- 2-3 days

## Fertility Success Rate

- Sperm can be maintained frozen indefinitely (up to 20 years or longer)
- 4-10% live birth rate per cycle with intrauterine insemination
- About 30% live birth rate per embryo with in-vitro fertilization

## Procedural Risk

- Minimal pain and swelling
- Procedural related bleeding
- Post-operative infection
- May be unable to freeze due to low sperm count

## Financial Cost

*Costs are variable based on medical coverage and are subject to change.*

### Anticipated costs:

- Fertility consult fee (generally covered by insurance)
- Procedural cost (generally covered by insurance)
- Tissue processing & sperm freezing
- Storage fee
- Labs (generally covered by insurance)
- Uncertain future cost for use

## Long-Term Considerations

Given ever-changing scientific development, we are unable to fully describe the long-term implications or considerations for each patient. However, given where we are today, patients should consider and understand the possible future fertility interventions.

- Sperm analysis post-treatment may be normal, at which time you would not require use of your frozen sample
- Intrauterine Insemination (IUI)
- In Vitro Fertilization (IVF)
- Intracytoplasmic Sperm Injection (ICSI)

*Fertility preservation is not the decision to use the preserved tissue, but to maintain a range of fertility options for the future.*