



Consent Form for Estrogen and/or Testosterone Blocking Therapy

Name: _____ Date of Birth: _____

Manitoba Health PHIN # : _____

Estrogen and androgen antagonists (testosterone blockers) may be used by people who were assigned male at birth to reduce gender dysphoria and experience physical changes that are often labeled as feminine.

Our goal is to ensure you understand the benefits, risks, and changes that may occur when taking these medications. Please review every page and ask one of our doctors or nurse practitioners any questions or concerns that you have. You may also seek another opinion, or more information on your care.

Effects of estrogen/testosterone blockers

- Estrogen and/or testosterone blockers may be prescribed to reduce masculine physical characteristics.
- Changes caused by estrogen and testosterone blockers can take months to become noticeable, and years to see the final effects. How fast and how much change you will see is different for each person.
- Some changes **may** be partially reversible if you stop taking the estrogen/testosterone blockers:
 - Softer skin.
 - Muscle mass decrease as well as a decrease in upper body strength.
 - Slower body hair growth (but will not likely stop).
 - Hair loss (baldness) may slow down; but hair that is gone will likely not regrow.
 - Fat pattern changes - more on buttocks/hips/thighs, less on the abdomen (going from "apple shape" to "pear shape").
- Chest/breast growth will likely develop when taking estrogen:
 - Breasts may take several years to develop their full size.
 - If estrogen is stopped, breast tissue that has developed will remain.
 - Milky nipple discharge (galactorrhea) can occur. If this occurs, please discuss it with your doctor or nurse practitioner as it can be caused by taking estrogen or another medical condition.
 - Your risk of breast cancer may increase. Check your chest/breast tissue regularly, and have an annual breast exam by a health care provider.
- Estrogen/testosterone blockers make testicles produce less testosterone; this may affect overall sexual function. Potential changes are:
 - Decrease in morning and spontaneous erections.
 - Erections may not be firm enough for penetrative sex.
 - Libido (sex drive) may decrease.
 - Testicles may shrink by 25-50%; regular testicular examinations are still recommended.
 - The amount of fluid ejaculated may be reduced.

- Sperm quality may be greatly reduced, leading to reduced fertility. This change can occur quickly and may be permanent; and may not return to normal even after stopping estrogen and/or testosterone blocking medication. Storing sperm for future fertility treatments may be an option.
- Birth control, to prevent pregnancies, if applicable, is still needed for people with testicles.
- Some aspects of your body are not significantly changed by estrogen and testosterone blockers, but there are other procedures or treatments that can help:
 - Facial hair may grow slower, but will not go away or stop growing.
 - Voice pitch will not rise.
 - The laryngeal prominence (“Adam’s apple”) will not shrink.

Risks with Estrogen and Testosterone Blocking Medications

- The medical effects and safety of estrogen and testosterone blocking medications are not fully understood, and there may be long-term risks that are not yet known.
- Estrogen and testosterone blocking medications should be taken as prescribed.
- Taking extra medication increases health risks.
- Estrogen and testosterone blocking medications can damage the liver, possibly leading to liver disease. You should be monitored for possible liver damage while taking estrogen and testosterone blocking medications.
- Estrogen and testosterone blocking medications will likely result in changes that will be noticeable by other people. If you are worried about harassment, discrimination, and violence, or loss of support of family and/or friends. Please ask any of our team members about support and advocacy resources.

Risks with Estrogen

- Taking estrogen increases the risk of blood clots, which can result in:
 - Pulmonary embolism (blood clot in the lungs), which may cause permanent lung damage or death.
 - Stroke, which may cause permanent brain damage or death.
 - Heart attack.
 - Chronic leg vein problems.
 - The risk of blood clots is a lot higher if you smoke or vape nicotine, especially for those over 40. Please let us know if you smoke or vape.
- Taking estrogen can increase fat around your internal organs, which is associated with increased risk for diabetes and heart disease.
- Taking estrogen can cause high blood pressure. This may be treated with diet, lifestyle changes, and/or medication.
- Taking estrogen increases the risk of gallstones. If you have abdominal pain that is severe or prolonged, seek urgent medical attention.
- Estrogen can cause nausea and vomiting. Follow up with your health care provider if this occurs.
- Estrogen can cause headaches or migraines. Caution should be used in those who get migraines with aura. If you have a headache that is severe or prolonged, seek urgent medical attention.
- It is not known if taking estrogen increases the risk of non-cancerous tumours of the pituitary gland (called a prolactinoma). Although prolactinoma is typically not life-threatening, it can damage vision and cause headaches. Your prolactin levels should be checked when starting estrogen. If you develop loss of vision, see your health care provider.
- In addition to these side effects and risk factors, you are more at risk for the side effects if you have a history of blood clots, high blood pressure, or a family history of breast cancer.

Risks with Testosterone Blockers (Androgen antagonists)

- Spironolactone affects blood pressure, water/electrolyte balance in the kidneys. You may notice:
 - Increased urination, as your body produces more urine (pee).
 - Lower blood pressure, you may feel dizzy or off balance when you stand up quickly.
 - Increased thirst.
 - Rarely, it can cause high levels of potassium in the blood. High potassium can cause dangerous heart rhythms.
- Cyproterone may cause temporary liver inflammation and a fast drop in hemoglobin to normal assigned female at birth levels. This may cause a temporary depressive effect. It is important to be mindful of this and reach out to those who care about you if this occurs, and if needed, access crisis mental health resources including our Trans Health team.
- Some testosterone blockers make it more difficult to monitor prostate problems. Please discuss prostate health with your primary health care provider.

Prevention of Complications

- Ensure your health care providers are aware of your medication use and talk to them if you are not happy with the treatment or are experiencing any problems.
- The right dose or type of medication prescribed for you may not be the same as for someone else.
- Physical examinations and blood tests are needed on a regular basis to check for negative side effects of feminizing medications.
- Feminizing medications can interact with other medications, dietary supplements, herbs, alcohol, and recreational drugs. Discuss this with your health care provider.
- Some medical conditions make it dangerous to take estrogen or androgen blockers. Further assessments may be necessary before starting or continuing feminizing medications.
- You can choose to stop taking feminizing medications at any time. It is advised that you do this with the help of your health care provider to make sure there are no negative reactions to stopping. Problems such as low bone density or hot flashes may arise if your testes have been removed.

Your signature below confirms that:

- Your health care provider has talked with you about the benefits and risks of estrogen and testosterone blocking medication, possible or likely consequences of hormone therapy, and potential alternative treatment options.
- You understand the risks that may be involved and have asked any questions that you may have had.
- You understand that this form covers known effects and risks and that there may be long-term effects or risks that are not yet known.
- You have had the time that you need to discuss treatment options with our health care team and all questions have been answered to your satisfaction.
- You feel that you have adequate knowledge to base informed consent to the provision of feminizing medication.
- **You wish to begin taking estrogen and/or testosterone blockers.**

Patient Signature

Date

Prescribing Clinician Signature

Date

Effects of Estrogen/Testosterone suppressing hormones	Expected Onset	Expected Maximum Effect
Body fat redistribution	3-6 months	2-5 years
Decreased muscle mass/strength	3-6 months	1-2 years
Softening of skin/decreased oiliness	3-6 months	Unknown
Decreased libido	1-3 months	1-2 years
Decreased spontaneous erections	1-3 months	3-6 months
Erectile dysfunction	Variable	Variable
Breast growth	3-6 months	2-3 years
Decreased testicular volume	3-6 months	2-3 years
Decreased sperm production	Variable	Variable
Thinned/slowed growth of body/facial hair	6-12 months	>3 years
MPB (no regrowth, loss stops)	1-3 months	1-2 years

Potential risk factors related to Estrogen	
Likely increased risk	Weight gain Elevated liver enzymes Elevated triglycerides Gallstones Blood clots
Likely increased risk with presence of additional risk factors	Cardiovascular disease Heart attack Pancreatitis Stroke Liver inflammation Nausea Headaches
Possible increased risk with presence of additional risk factors	Type 2 diabetes Kidney function (with Spirolactone) Heart arrhythmia Possible prolactin increase or risk of benign pituitary tumors
Inconclusive or no increased risk	Breast cancer

Tables are based on:

WPATH Standards of Care Guidelines: <https://wpath.org/publications/soc>

Sherbourne Health Guidelines: <https://www.rainbowhealthontario.ca/wp-content/uploads/2021/06/Guidelines-FINAL-4TH-EDITION-c.pdf>

Trans Care BC: <http://www.phsa.ca/transcarebc/hormones/estrogen>

Client handout