This form explains the use of estrogen and androgen blockers for someone who wishes to feminize as part of a gender transitioning process. Estrogen and anti-androgen usage will cause both permanent and reversible changes in your body. Before you start taking estrogen or anti-androgens, it is important for you to have a good understanding of these effects as well as the risks involved.

If you have any questions or concerns about the information, please take all the time you need to read, research, and talk with your provider about this important aspect of your treatment.

**What is estrogen?**
Estrogen is the sex hormone that can make certain physical features develop that are typically female. Estrogen’s effects include softening of the skin, development of breasts, and typically redistribution of fat away from the abdomen and to the thighs and hips.

**How is estrogen administered?**
People can take estrogen by pill, patch, or gel. Estrogen is typically administered in pill form as it can deliver some of the desired effects more quickly. Some people have reported that when a patch or gel is used they experience less extreme side effects and/or emotional swings. Cost varies depending on insurance coverage and dosage.

**What are androgen antagonists, anti-androgens, and androgen blockers?**
Medications that block the production or effects of testosterone are called androgen blockers or anti-androgens. Androgen is another term for male sex hormones, e.g. testosterone. Spironolactone effectively blocks testosterone and is relatively safe and inexpensive. It is the primary androgen blocker used by transfeminine people.

It is important for you to understand that estrogen is not the only way that male-to-female patients choose to be treated. Just as chromosomes and genitals do not define your gender identity, neither do hormones in your body or the surgeries you may have. It is important that you decide what goals you would like to achieve with your treatment and discuss these with your healthcare provider. Gender identity can only be determined by you and how you feel inside, not the choices you make about your health care. We want you to move at your body’s pace, not someone else’s.

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**Important Health Considerations**
If any of the following conditions pertain to you, please make sure to talk with you health care provider(s) about the condition, possible concerns and/or side effects, implications, and alternatives.

- a family or personal history of heart disease
- a family or personal history of breast cancer
- a personal history of liver disease
- a personal history of a high blood pressure
- personal history of migraines and/or seizures
- hepatitis
- obesity
- tobacco use

Periodic blood tests to check on the effects of estrogen will be needed. Routine breast exams and mammograms are recommended, as are periodic checkups for diabetes, cholesterol, and liver function.
Please initial and date each statement on this form to show that you understand the benefits, risks, and changes that may occur from taking estrogen.

**Transfeminine Identity and Health Needs**

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I identify as having a female/feminine and/or a gender expansive identity and therefore wish to be treated with estrogen and/or androgen blockers.

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I understand the long term effects are not well studied or fully understood. There may be important health risks or benefits, which are not listed, that medical science does not yet know.

**Feminizing Effects**

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I have been informed that the feminizing effects of estrogen may take several months to several years to become noticeable, and up to five or more years to be complete. Some of these changes will be permanent, including:

- breast growth, although there is extreme variation in size
- up to a 40% shrinkage in the size of my testicles

These additional changes will not be permanent if I stop estrogen:

- decreased acne
- slowing of hair loss, especially at my temples and crown of my head
- softer skin
- less noticeable body hair growth, although hair will not go away
- less noticeable body odor and a change in the quality of the sweat from my armpits
- decreased fat in my abdomen
- increased fat in my buttocks and thighs
- decreased or loss of morning and spontaneous erections and inability to obtain an erection hard enough for intercourse
- decreased sex drive

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I know that some aspects of my body will not be changed:

- the presence of my Adam’s apple
- the tone and pitch of my voice
- facial and body hair growth will slow but not stop
I know that there are other treatments that may be helpful to make my breasts larger and my voice more feminine. If I have concerns, I know my provider can give me referrals to help me explore treatment options.

I know that if I am taking estrogen I will probably develop breasts and understand the following about my potential breast development:

- It can take several years for breasts to get to their full size.
- Breasts will remain, even if I stop taking estrogen.
- I should examine my breasts as soon as they start growing and see a clinician to examine them every year.
- I know I might have a milky discharge from my nipples (galactorrhea). If I do, I know I should check it out with my clinician because it could be caused by the estrogen or by something else.

My height or foot size may change based on whether my ligaments shift in size.

**Sexual and Reproductive Health**

I understand that being transgender does not necessarily prevent future reproduction and/or parenting, but that it is not known exactly what the effects of estrogen are on fertility. I understand that pursuing hormonal therapy may make it more difficult or even impossible for me to have genetic offspring in the future. I have discussed my desires and choices with my provider and feel comfortable that I have made an informed decision about my future reproductive status.

I understand the effects of estrogen will not protect me from sexually transmitted diseases or from HIV.

I understand the effects of estrogen will not protect me from testicular cancer or prostate cancer. I understand that even if I have my testicles surgically removed (orchiectomy) and/or have a surgical construction of a vagina (vaginoplasty), I must still continue periodic exams and screenings either with my provider or another provider who is aware of my transgender status.

I understand that estrogen use is medically contraindicated for anyone who has had any hormone receptive positive cancer.

I understand my body will make less testosterone.
I know that my testicles may shrink down to half their size. Even so, I know that I will need regular checkups for them.

I know it is likely that I won’t be hard in the morning as often as before, and it is likely that I will have fewer spontaneous erections. This also means I may not be able to get hard enough for penetrative sex.

I know that I may have less sex drive.

I understand that the amount and quality of my ejaculation may decrease or stop entirely. My sperm will still be present in my testicles but will probably stop maturing, so ultimately, I may become infertile.

I have been informed that I may still be able to make someone pregnant and that if I am having sex with someone who can become pregnant, some form of birth control should be used.

The options for sperm banking have been explained to me. If I think that there might be any chance that I may in the future want to parent a child using my own sperm, I should speak to the doctor about preserving my sperm in a sperm bank. This process generally takes 2-4 weeks and costs between roughly $2000-$3000. I understand I should store my sperm before beginning any hormone therapy.

**General Health Risks Related to Estrogen Use**

I know the medical effects and the safety of estrogen are not completely known. There may be long-term risks that are not yet known.

I understand there are medical conditions that could make taking estrogen either dangerous or damaging. Several of these are listed in the next bullet point.

I understand I am more likely to have potentially dangerous side effects if...

- I smoke.
- I am overweight.
- I am over 40 years old.
- I have a history of blood clots.
- I have a history of high blood pressure.
- My family has a history of breast cancer.
I understand that estrogen can increase the risk of, or worsen, certain diseases (e.g., type 2 diabetes, heart disease, migraine headaches, blood clots, cancer). If I think I have or am developing these diseases, it is important to tell my healthcare provider. These problems can be treated and generally do not require me to stop taking estrogen. I agree if my health care provider suspects that I may have one of these conditions, I will be evaluated for these conditions before a decision is made to start or continue estrogen therapy.

I have been informed that estrogen increases red blood cell counts which rarely, if severe and untreated, can increase my risk of strokes, heart disease, and blood clots.

I have been informed that estrogen may increase migraine headaches. If migraines are severe or prolonged, I agree to discuss this with my health care provider.

I have been informed that estrogen may increase nausea and vomiting, similar to morning sickness during pregnancy. If nausea and vomiting are severe or prolonged, I agree to discuss this with my health care provider.

I understand that taking estrogen does not make me immune to, and may possibly increase, my risk to develop certain medical problems including pituitary tumors and breast cancer. My provider may recommend periodic screenings and/or mammograms.

I understand that estrogen can increase the risk of blood clots resulting in significant medical problems (i.e., chronic leg vein problems, pulmonary embolism, and stroke), brain damage and/or death. This risk is increased if I smoke tobacco and am over age 35. I have been advised to not smoke tobacco and have been offered smoking cessation resources if I am currently a smoker.

I have been informed that if I take estrogen, my good cholesterol (HDL) may go up and my bad cholesterol (LDL) will may go down. This may decrease my risk of heart attack and/or stroke in the future.

I have been advised that estrogen can cause increased blood pressure. If I have high blood pressure, I may be able to take estrogen once my blood pressure is controlled (through diet, lifestyle changes and/or medications). My health care provider will help me address this problem.
I have been informed that estrogen puts a stress on the liver that may lead to inflammation, a back-up of liver products in the bile ducts, or even an increase in gallstones. I agree to be monitored, e.g., periodic blood tests, for liver problems before starting estrogen and periodically during therapy. I will talk to my provider if I experience severe or long-lasting pain in my abdomen.

I know taking estrogen can increase the deposits of fat around my internal organs. This can increase my risk for diabetes and heart disease.

I know that it is not yet known if taking estrogen increases the risk of prolactinomas. These are non-cancerous tumors of the pituitary gland. I know they are not usually life-threatening, but they can damage vision and cause headaches. I know this needs to be monitored via blood tests and consistent doctor appointments for at least three years after I start taking estrogen.

**Risks of Androgen Blockers**

I have been informed that spironolactone affects the balance of water and salts in the kidneys. This may
- increase the amount of urine I produce, making it necessary to urinate more frequently
- increase thirst
- rarely, cause high levels of potassium in the blood, which can cause changes in heart rhythms that may be life-threatening
- reduce blood pressure

I know some androgen antagonists make it more difficult to evaluate test results for cancer of the prostate. This can make it more difficult to check up on prostate problems. I know that if I am over 50, I should have my prostate evaluated every year with a prostate-specific antigen test, as applicable.

I understand I need to have my potassium levels and kidney functions routinely checked with the use of blood and/or urine tests.
Emotional Wellness and Health

I understand that there are emotional changes, both good and bad, that I may experience as a result of estrogen therapy. Additionally, if I develop mood changes, increased depression, anxiety, or suicidal feelings, I agree to inform my healthcare provider so clinic staff can assist me in finding resources to explore these changes if needed.

I know that estrogen causes changes that other people will notice. Some transgender people have experienced harassment, discrimination, and violence because of this. Others have lost the support of loved ones. I know my healthcare provider(s) can help me find advocacy and support resources.

General Acknowledgments and Responsibilities

I understand that everyone’s body is different and that there is no way to predict what my response to hormones will be. I understand that the right dosage for me may not be the same as for someone else.

I know estrogen can interact with other drugs and medicines. These include alcohol, dietary supplements, herbs, other hormones, and street drugs. This kind of interaction can cause complications. I know that I need to prevent complications because they can be life threatening. That’s why I need to be honest with my healthcare provider(s) about whatever else I take. I also know that I can continue to get medical care here no matter what I share about what I take.

I agree to take medications as prescribed. I agree to tell my provider if I have any problems or if I am unhappy with the treatment.

I know that I should stop taking estrogen two weeks before any surgery or when I may be immobile for a long time. This will lower the risk of getting blood clots. I know I can start taking it again a week after I’m back to normal or when my clinician says it’s okay.

I understand that estrogen treatment may make it necessary to have more, and different, healthcare screening tests than other male-bodied people my age. I will have physical examinations and blood tests periodically to make sure my body is healthy while on estrogen. I understand this is required to continue receiving estrogen therapy through the CSU Health Network.
I understand that an open and honest relationship with my healthcare provider is essential to keeping me healthy and safe. I agree that I will share with my provider any physical problems or side effects that I may develop especially if I think they are caused by estrogen. I understand and expect that I will never be penalized for my honesty about my body.

I agree to take hormones as prescribed and to inform my provider of any problems or dissatisfaction I may have with the treatment. I have been informed that if I take too much estrogen, my body may convert it into testosterone. This may slow or stop the desired effects of estrogen.

If I choose an injectable form of estrogen, I understand that once injected, if I have any adverse reactions to estrogen, I must wait for them to wear off. I also understand that sharing needles with anyone can place me at risk for blood borne diseases like HIV/AIDS and hepatitis.

I know that using these medicines to appear more feminine is an off-label use. I know this means it is not approved by the Food & Drug Administration (FDA). I understand the medicine and dosage amount recommended for me are based on the judgment and experience of the clinician.

I know I can choose to stop taking these medications at any time. I know that if I decide to stop, I need to do this with my provider’s guidance. This will help ensure any negative reactions will be reduced. I also know my provider may suggest I cut the dose, stop taking the medicine, or stop prescribing the medication if certain conditions develop. This may happen if side effects are severe or if there are health risks that cannot be controlled.
My signature below confirms that

- My provider has talked with me about:
  - the benefits and risks of taking estrogen and androgen blockers
  - the possible or likely consequences of hormone therapy
  - alternative treatment options
- I understand the risks that may be involved.
- I know that the information in this form includes the known effects and risks. I also know that there may be unknown long-term effects or risks.
- I have had enough opportunity to discuss treatment options with my healthcare provider(s).
- All of my questions have been answered to my satisfaction.
- I believe I know enough to give informed consent to take, refuse, or postpone estrogen and/or androgen blocker therapy.
- I am 18 years old or older.

Based on all this information:
- I want to begin taking estrogen.
- I do not want to take estrogen at this time.
- I want to begin taking androgen blockers.
- I do not want to begin androgen blockers at this time.

Your health is important to us. If you have any questions or concerns, please call us at the CSU Health Network at (970) 491-7121 or the Women’s Clinic at (970) 491-1754 to set up an appointment.

We look forward to talking with you and assisting you on your journey.
ESTROGEN THERAPY INFORMATION

Estrogen is one of the ways transfeminine clients choose to address gender identity and expression. Just as chromosomes and genitals do not define your gender identity, neither do hormones in your body or surgeries you choose to have. Consider and decide for yourself what goals you would like to achieve in your treatment and discuss these with your healthcare provider(s). Gender identity can only be determined by you and how you feel inside, not the choices you make about your medical care. We want you to move at your pace not someone else’s. We hope this information sheet will provide you with some additional information and resources.

What is estrogen?
Estrogen is the sex hormone that makes certain physical features appear typically female. Estrogen’s effects include decreased muscle mass, increased skin softness, redistribution of fat, and breast development.

How is estrogen administered?
People can take estrogen by pills, injection, patch, or cream. Pill form is the most common and least expensive form of estrogen. Cost varies depending on insurance coverage and dosage.

<table>
<thead>
<tr>
<th>BENEFITS</th>
<th>RISKS</th>
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<tr>
<td>• appearing more like a woman</td>
<td>• blood clots (thrombophlebitis)</td>
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<tr>
<td>• 40 – 50% reduction in testicle size*</td>
<td>• emotional changes</td>
</tr>
<tr>
<td>• Smaller pores and softer skin</td>
<td>• migraines</td>
</tr>
<tr>
<td>• Breast development *</td>
<td>• nausea</td>
</tr>
<tr>
<td>• Slowing rate of body hair growth</td>
<td>• high blood pressure (hypertension)</td>
</tr>
<tr>
<td>• more physical energy</td>
<td>• increased red-blood-cell count</td>
</tr>
<tr>
<td>• slowing of male pattern baldness</td>
<td>• infertility</td>
</tr>
<tr>
<td>• fat redistribution to make body look more feminine</td>
<td>• inflamed liver</td>
</tr>
<tr>
<td>• decrease in acne</td>
<td>• interaction with drugs for diabetes and blood thinning</td>
</tr>
<tr>
<td>*These are permanent changes.</td>
<td>• increased risk of heart disease</td>
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<tr>
<td></td>
<td>• swelling of hands, feet, and legs</td>
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<tr>
<td></td>
<td>• decrease in muscle mass</td>
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<tr>
<td></td>
<td>• decrease in libido</td>
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*These are permanent changes.
WEB AND PRINT RESOURCES FOR TRANSFEMININE CLIENTS

Center of excellence for transgender health: http://transhealth.ucsf.edu/trans?page=ab-00-00. The mission of the Center of Excellence for Transgender Health is to increase access to comprehensive, effective, and affirming health care services for trans and gender-variant communities.

Gay, Lesbian, Bisexual, & Transgender Resource Center @ Colorado State: www.glbtrc.colostate.edu. The GLBT Resource Center seeks to foster a campus free of prejudice, bigotry, harassment, and violence by providing a space for all members of CSU communities to explore and increase their understanding of aspects related to sexual orientation, gender identity and expression in an open and non-judgmental environment.

Gender Identity Center of Colorado: http://www.gicofcolo.org/ The Gender Identity Center of Colorado, Inc. is a non-profit corporation organized in 1978 and incorporated in June 1980. The organization was formed to provide support to anyone gender variant in their gender identity and expression. Also is an informational and educational resource to the community at large and available to anyone, male / female / other, who can benefit from its services or resources, including spouses, significant others, parents, and siblings.

Dr. Anne Lawrence: http://www.annelawrence.com/index.html. Provides information on topics of interest to male-to-female transgender women, and their friends and loved ones.

I Am Trans: http://www.transpeoplespeak.org/. I AM: Trans People Speak is a project to raise awareness about the diversity that exists within transgender communities. It gives a voice to transgender individuals, as well as their families, friends, and allies.

National Center for Transgender Equality: http://transequality.org/. The National Center for Transgender Equality is a national social justice organization devoted to ending discrimination and violence against transgender people through education and advocacy on national issues of importance to transgender people.

World Professional Association for Transgender Health: http://wpath.org/. The World Professional Association for Transgender Health (WPATH), formerly known as the (Harry Benjamin International Gender Dysphoria Association, HBIGDA), is a professional organization devoted to the understanding and treatment of gender identity disorders. As an international multidisciplinary professional association the mission of WPATH is to promote evidence based care, education, research, advocacy, public policy and respect in transgender health.

The Lives of Transgender People by Genny Beemyn and Susan Rankin (2012): Genny Beemyn and Susan [Sue] Rankin apply their extensive expertise to a groundbreaking survey—one of the largest ever conducted in the U.S.—on gender development and identity-making among transsexual women, transsexual men, crossdressers, and genderqueer individuals. With nearly 3,500 participants, the survey is remarkably diverse, and with more than 400 follow-up interviews, the data offers limitless opportunities for research and interpretation. Beemyn and Rankin track the formation of gender identity across individuals and groups, beginning in childhood and marking the “touchstones” that led participants to identify as transgender. They explore when and how participants noted a feeling of difference … the issues that caused them to feel uncertain … the factors that encouraged them to embrace a transgender identity.

Transgender History by Susan Stryker (2008): Transgender History takes a chronological approach to the subject of transgender history, ... covering major movements, writings, and events. Chapters cover the transsexual and transvestite communities in the years following World War II; trans radicalism and social change, which spanned from 1966 with the publication of The Transsexual Phenomenon, ...through the early 1970s; the mid-'70s to 1990—... identity politics and the changes witnessed in trans circles ...; and the gender issues witnessed through the '90s and '00s.

Gender Outlaws: The Next Generation by Kate Bornstein & S. Bear Bergman (2010): In Gender Outlaws, Bornstein ... and Bergman, collect and contextualize the work of this generation's trans and genderqueer forward thinkers — new voices from the stage, on the streets, in the workplace, in the bedroom, and on the pages and websites of the world's most respected mainstream news sources. Gender Outlaws includes essays, commentary, comic art, and conversations from a diverse group of trans-spectrum people who live and believe in barrier-breaking lives.