



## ESTRIOL

### **MEDICATION:**

This medication contains Estriol (E3) as a cream to be administered topically or vaginally.

### **USE:**

Estriol serves to replace estrogen in peri-menopausal, menopausal, and post-menopausal women for the treatment of symptoms of low estrogen levels. Estrogens are also used in the treatment of a variety of other conditions associated with deficiency of estrogen hormones, including female hypogonadism, ovarian failure, or ovariectomy (removal of the ovary). Estrogen may also aid in decreasing the risk of developing osteoporosis, ischemic heart disease, Alzheimer's disease, improving blood lipid profile, and maintaining bladder as well as urinary tract function. Estrogen can also be used for treatment of prostate cancer in males. Topical estrogen therapy has been used for reduction of wrinkles and skin softening effects. **Estriol (E3)** is the least potent estrogen, and thus the weakest estrogen at the receptor sites. This estrogen is also known as the "safest" out of the three estrogens in the body. It also does not cause the uterine lining to thicken, which means that the risk for uterine cancer is reduced. It has also been shown to protect the bones against osteoporosis.

### **SIDE EFFECTS:**

Possible side effects of estrogen therapy include **nausea, stomach upset, bloating, headache, dizziness, and light headedness**. These effects may be temporary and self-limiting. Other adverse reactions may include **breakthrough bleeding, breast swelling, breast pain, fluid retention, weight gain, mood swings, depression, decreased libido, increased risk of gall bladder disease, increased risk of thromboembolic disorder, and increased risk of breast or uterine cancer**. Patients **should not** use bio-identical estrogens during **pregnancy**. Adverse reactions to bio-identical estrogens may be related to dose or composition of the prescription. The increased risk of cancer may be reduced or eliminated by the use of estriol alone or in combination with progesterone therapy. Side effects of topical estriol also include **rash or redness** at the application site. Patients should consult their provider or pharmacist if they experience any of these symptoms or have any questions.

### **PRECAUTIONS:**

If you have a history of **cancer**, do not use estrogen without consultation and approval from your provider. If you have any history of **blood clots or embolism**, you should not take this drug until fully evaluated for risk of clot formation from estrogen. Sometimes breakthrough bleeding or irregular periods can occur, as well as depression. When using creams, **be precise about measuring the dose**. Do not "estimate" the dose. Inconsistent dosing can affect hormone levels and lead to unfavorable outcomes. Skipping doses of estrogen can cause breakthrough bleeding. If you are menstruating, please note that dosages administered for hormone replacement are not intended to provide contraception protections and should not be used for that purpose, as they may be an insufficient dosage to suppress ovulation. **Wash hands well after application or use an exam glove for application because contact transfer can occur**. Care should be taken not to touch objects, humans, or animals where medicine has been applied as to prevent harmful side effects.

### **DIRECTIONS:**

**\*ESTRIOL IS NOT TO BE TAKEN BY MOUTH\*** Patients should always follow their provider's or pharmacist's instructions for administration. Patients should not exceed the dosage prescribed. **Follow dosage directions exactly**. Do not make dose adjustments unless instructed to do so by the provider. **If you miss a dose**, take the dose as soon as you remember. Patients should not take the dose if it is almost time for the next dose. Instead, patients should skip the missed dose and resume the usual dosing schedule. **DO NOT DOUBLE THE DOSE**. This medication should be stored as directed by your pharmacist.

**For any questions, please talk with your provider or pharmacist.**

Bio-identical hormone specialist: **Tanya Harmon, PharmD & Courtney Zitterkopf, PharmD**

5/2016