



Hormone Hotline: 228.365.6885

BI-EST (ESTRIOL/ESTRADIOL)

MEDICATION:

Bi-Est is short for Bi-Estrogen (2 estrogens). This medication contains two estrogens, Estriol (E3) & Estradiol (E2) as a cream to be administered topically or vaginally. *******DO NOT TAKE BY MOUTH*******

USES:

The Bi-Est formula serves to replace estrogens 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. Estrogens 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. It is known to be the 'pregnancy estrogen,' occurring in massive amounts while a woman is carrying her child to term. This estrogen is also known as the 'safest' out of the three estrogens in the body. In mice, it has been shown to actually prevent growth at the breast receptor site by blocking the proliferative effects estradiol and estrone induce on the breast tissue. 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.

Estradiol (E2) is the primary estrogen of the ovaries, and is the major form of estrogen before menopause. Estradiol is very potent and is good for reducing or eliminating *vasomotor symptoms* (hot flashes, night sweats), insomnia, irregular menses, mood swings, vaginal dryness, itching, and burning. When administered by mouth, it is largely converted to estrone in the small bowel.

POSSIBLE SIDE EFFECTS:

Some 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 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. Patients should consult their physician or pharmacist if they experience any of these symptoms or have any questions.

PRECAUTIONS:

If you have a history of **cancer**, do not take use estrogen without consultation and approval from your physician. 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, 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 because contact transfer can occur; care should be taken not to touch objects, humans, or animals to prevent harmful side effects for humans/pets who touch where medicine has been applied.**

DIRECTIONS:

Bi-Est is supplied in a transdermal cream to be applied topically or vaginally. ***BI-EST IS NOT TO BE TAKEN BY MOUTH*** Patients should always follow their provider's or pharmacist's instructions for administration. **Follow dosage directions exactly;** do not make dose adjustments to a dose unless instructed to do so by provider. **If a patient misses a dose**, she should take the dose as soon as remembered. 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.**

For any questions, either talk to your provider or your pharmacist.

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