

## CONJUGATED EQUINE ESTROGENS (systemic)

**Class:** Estrogen Derivative

**Indications:** Treatment of moderate-to-severe vasomotor symptoms associated with menopause; treatment of vulvar and vaginal atrophy due to menopause; hypoestrogenism (due to hypogonadism, castration, or primary ovarian failure); prostatic cancer (palliation); breast cancer (palliation); postmenopausal osteoporosis (prophylaxis); abnormal uterine bleeding

**Available dosage form in the hospital:**

CONJUGATED ESTROGENS 0.625MG CREAM

CONJUGATED ESTROGENS 0.625MG TAB

CONJUGATED ESTROGENS 1.25MG TAB

**Trade Names:**

**Dosage:**

**-Breast cancer palliation, metastatic disease in selected patients (males and females):** Oral: 10 mg 3 times/day for at least 3 months

**-Uremic bleeding (unlabeled use):** I.V.: 0.6 mg/kg/day for 5 days (Livio, 1986)

**-Androgen-dependent prostate cancer palliation (males):** Oral: 1.25-2.5 mg 3 times/day

**-Prevention of postmenopausal osteoporosis:** Oral:

-U.S. labeling: Initial: 0.3 mg/day cyclically\* or daily, depending on medical assessment of patient. Dose may be adjusted based on bone mineral density and clinical response. The lowest effective dose should be used.

-Canadian labeling: 0.625 mg once daily

**-Menopause (moderate-to-severe vasomotor symptoms):** Oral: Initial: 0.3 mg/day. May be given cyclically\* or daily, depending on medical assessment of patient. Adjust dose based on patient's response. The lowest dose that will control symptoms should be used.

**-Vulvar and vaginal atrophy:** Oral: Initial: 0.3 mg/day. The lowest dose that will control symptoms should be used. May be given cyclically\* or daily, depending on medical assessment of patient. Adjust dose based on patient's response.

**-Female hypogonadism:** Oral: 0.3-0.625 mg/day given cyclically\*; dose may be titrated in 6- to 12-month intervals; progestin treatment should be added to maintain bone mineral density once skeletal maturity is achieved.

**-Female castration, primary ovarian failure:** Oral: 1.25 mg/day given cyclically\*; adjust according to severity of symptoms and patient response. For maintenance, adjust to the lowest effective dose.

**-Abnormal uterine bleeding:** Acute/heavy bleeding:

-**Oral** (unlabeled route): 10-20 mg/day in 4 divided doses has been used in place of I.M./I.V. doses (ACOG, 2000)

-**I.M., I.V.:** 25 mg, may repeat in 6-12 hours if needed (manufacturer's labeling) **or** 25 mg I.V. repeated every 4 hours for 24 hours (ACOG, 2000). Patients who do not respond to 1-2 doses should be re-evaluated (ACOG, 2000).

**\*Note:** Treatment should be followed by a low-dose oral contraceptive; medroxyprogesterone acetate along with or following estrogen therapy can also be given

**\*Cyclic administration:** Either 3 weeks on, 1 week off **or** 25 days on, 5 days off

### **Geriatric**

Refer to adult dosing. A higher incidence of stroke and breast cancer was observed in women >75 years in a WHI substudy.

### **Renal Impairment:**

No dosage adjustment provided in manufacturer's labeling (has not been studied). Use with caution; may increase risk of fluid retention.

### **Hepatic Impairment:**

Use is contraindicated with hepatic dysfunction or disease.

### **Common side effect:**

Central nervous system: Headache, pain

Endocrine & metabolic: Breast pain

Gastrointestinal: Abdominal pain, diarrhea

Genitourinary: Vaginal hemorrhage

Neuromuscular & skeletal: Back pain, arthralgia

Respiratory: Pharyngitis, sinusitis

**Pregnancy Risk Factor:** Estrogens are not indicated for use during pregnancy or immediately postpartum. In general, the use of estrogen and progestin as in combination hormonal contraceptives have not been associated with teratogenic effects when inadvertently taken early in pregnancy. These products are contraindicated for use during pregnancy.