

## PROSTAGLANDIN E2

**Class:** Abortifacient; Prostaglandin

### Indications:

**1.Endocervical gel :** Promote cervical ripening in patients at or near term in whom there is a medical or obstetrical indication for the induction of labor

**2.Suppositories :** Terminate pregnancy from 12th through 20th week of gestation; evacuate uterus in cases of missed abortion or intrauterine fetal death up to 28 weeks of gestation; manage benign hydatidiform mole (nonmetastatic gestational trophoblastic disease)

**3.Tablet (oral) :** Elective induction of labor; when indications for induction of labor exist (eg, premature rupture of amniotic membranes, toxemia of pregnancy, Rh incompatibility, diabetes mellitus, hypertension, postmaturity, intrauterine death or fetal growth retardation)

**4.Vaginal gel :** Induction of labor in patients at or near term with singleton pregnancy, vertex presentation, and favorable induction features

**5.Vaginal insert :** Initiation and/or continuation of cervical ripening in patients at or near term in whom there is a medical or obstetrical indication for the induction of labor

### Available dosage form in the hospital:

PROSTAGLANDIN E2 3MG V. TAB

### Dosage:

**-Abortifacient:** *Vaginal suppository:* Insert 20 mg (1 suppository) high in vagina, repeat at 3- to 5-hour intervals until abortion occurs; continued administration for longer than 2 days is not advisable

### -Cervical ripening:

**1.Endocervical gel:** Using catheter supplied with gel, insert 0.5 mg into the cervical canal. May repeat every 6 hours if needed. Maximum cumulative dose: 1.5 mg/24 hours

### 2.Tablet (oral) :

-Induction: Initial: 0.5 mg and then repeat 0.5 mg dose 1 hour later; may give additional 0.5 mg dose on an hourly basis as needed for satisfactory uterine response. Maintain patient at the lowest effective dose. **Note:** Failure to induce regular contractions after 8 hours indicates failed induction and alternative management of patient should be considered. If patient vomits an intact tablet during therapy repeat dose. If patient vomits intact tablets following 2 successive doses, withhold therapy until next scheduled dose. If patient vomits a partial tablet or if no tablet is visible, continue at next regularly scheduled dose.

-Parity  $\geq 2$  times or Bishop Score of  $\geq 6$ : Administer 0.5 mg hourly throughout induction (discontinue hourly dose for excessive uterine activity)

-Nulliparous or multiparous and resistant to induction (Bishop Score  $< 6$ ): If inadequate response after 2 hours of therapy may increase dose in 0.5 mg increments at hourly intervals up to a maximum single dose of 1.5 mg.

-Maintenance of labor: 0.5 mg dose hourly; may occasionally withhold hourly dose to assess need for further dosing

**3. Vaginal gel (Canadian labeling):** Initial: Using prefilled syringe, insert 1 mg into the posterior fornix of the vaginal canal; may give 1 additional dose of 1-2 mg 6 hours later if needed.

**4. Vaginal insert:** Insert 10 mg transversely into the posterior fornix of the vagina (to be removed at the onset of active labor or after 12 hours)

#### Common side effect:

##### **\*Endocervical gel:**

1. Central nervous system: Fever
2. Gastrointestinal: GI upset
3. Genitourinary: Abnormal uterine contractions , warm feeling in vagina
4. Neuromuscular & skeletal: Back pain

##### **\*suppository:**

1. Cardiovascular: Arrhythmia, chest pain, chest tightness, hypotension, syncope
2. Central nervous system: Chills, dizziness, fever, headache, shivering, tension
3. Dermatologic: Rash, skin discoloration
4. Endocrine & metabolic: Breast tenderness, endometritis, hot flashes
5. Gastrointestinal: Dehydration, diarrhea, nausea, vomiting
6. Genitourinary: Uterine rupture, urinary retention, vaginal pain, vaginismus, vaginitis, vulvitis
7. Neuromuscular & skeletal: Arthralgia, backache, joint inflammation/pain (new or exacerbated), leg cramps (nocturnal), muscle cramp/pain, myalgia, paresthesia, stiff neck, tremor, weakness
8. Ocular: Blurred vision, eye pain
9. Otic: Hearing impairment
10. Respiratory: Cough, dyspnea, laryngitis, pharyngitis, wheezing
11. Miscellaneous: Diaphoresis

##### **\*Tablets (oral) :**

Gastrointestinal: Vomiting (with or without nausea/diarrhea): (dose dependent)

##### **\*Vaginal gel :**

Genitourinary: Uterine hypercontractility , failed induction

**Pregnancy Risk Factor: C**