Imvexxy (estradiol)

NEW PRODUCT SLIDESHOW

MPR
Introduction

- **Brand name:** Imvexxy
- **Generic name:** Estradiol
- **Pharmacological class:** Estrogen
- **Strength and Formulation:** 4mcg, 10mcg; vaginal inserts
- **Manufacturer:** TherapeuticsMD, Inc.
- **How supplied:** Vaginal inserts—8, 18
- **Legal Classification:** Rx
Indications

- Moderate-to-severe dyspareunia due to menopause
Dosage & Administration

- Use lowest effective dose for the shortest duration
- Initially one 4mcg insert intravaginally once daily for 2 weeks, then 1 insert twice weekly every 3–4 days
- Reevaluate periodically
Considerations for Special Populations

- **Pregnancy**: Not indicated
- **Nursing mothers**: Not indicated
- **Pediatric**: Not indicated
- **Elderly**: Insufficient number studied to determine difference in response
- **Hepatic impairment**: See Contraindications
Contraindications

- Undiagnosed abnormal genital bleeding
- Known, suspected, or history of breast cancer or estrogen-dependent neoplasia
- Active DVT, PE, or history of these conditions.
  Active arterial thromboembolic disease (eg, stroke, MI) or a history of these conditions
Contraindications

- Known protein C, protein S, or antithrombin deficiency, or other known thrombophilic disorders
- Hepatic impairment or disease
- Known anaphylactic reaction or angioedema
Warnings/Precautions

- Increased risk of **endometrial carcinoma** or **hyperplasia** in women with intact uterus (adding progestin is essential)
- **Not** for prevention of cardiovascular disease or dementia
- Increased risk of cardiovascular disorders (eg, stroke, DVT, VTE); discontinue if occurs or suspected
- Manage risk factors for cardiovascular disease and venous thromboembolism appropriately
Warnings/Precautions

- Discontinue at least 4–6 weeks before surgery type associated with increased risk of thromboembolism or during prolonged immobilization
- Increased risk of breast or ovarian cancer
- Risk of probable dementia in women ≥65yrs of age
- Gallbladder disease
- Bone disease associated with hypercalcemia
Warnings/Precautions

- Visual abnormalities
- History of hypertriglyceridemia
- Discontinue if cholestatic jaundice, pancreatitis, hypercalcemia, or retinal vascular lesions occur
- Monitor thyroid function
- Conditions aggravated by fluid retention
- Hypoparathyroidism
- Endometriosis
- Hereditary angioedema
Warnings/Precautions

- Asthma
- Diabetes
- Epilepsy
- Migraine
- Porphyria
- SLE
- Hepatic hemangiomas
- Do initial complete physical and repeat annually (include Pap smear, mammogram, BP)
- Reevaluate periodically
May be **antagonized** by CYP3A4 inducers (eg, St. John's wort, phenobarbital, carbamazepine, rifampin)

May be **potentiated** by CYP3A4 inhibitors (eg, erythromycin, clarithromycin, ketoconazole, itraconazole, ritonavir, grapefruit juice)
Interactions

- Concomitant thyroid replacement; may need to increase thyroid dose
- May interfere with lab tests (eg, thyroid, PT, coagulation factors, glucose tolerance, HDL/LDL, triglycerides, hormone concentrations, other binding or plasma proteins)
Adverse Reactions

- Headache
- Thromboembolism
- Neoplasms
Mechanism of Action

- Circulating estrogens modulate the pituitary secretion of the gonadotropins, luteinizing hormone (LH) and follicle stimulating hormone (FSH), through a negative feedback mechanism.

- Estrogens act to reduce the elevated levels of these hormones seen in postmenopausal women.
The safety and efficacy of Imvexxy on moderate to severe dyspareunia were examined in a 12-week, randomized, double-blind, placebo-controlled, parallel-group trial (N=574) of generally healthy postmenopausal women aged 40 to 75 years.
Clinical Studies

- Women were assigned to placebo, Imvexxy 4mcg or Imvexxy 10mcg
- All were assessed for improvement in the mean change from baseline to week 12 for:
  - Most bothersome moderate to severe symptom of dyspareunia
  - Percentage of vaginal superficial and percentage of vaginal parabasal cells on vaginal smear
  - Vaginal pH
Results showed Imvexxy 4mcg and 10mcg inserts were statistically superior vs placebo in reducing the severity of moderate to severe dyspareunia at week 12

- Imvexxy 4mcg: $-1.52 \ (P = .0149)$
- Imvexxy 10mcg: $-1.69 \ (P < .0001)$
- Placebo: $-1.28$
A statistically significant increase in the percentage of superficial cells and a corresponding statistically significant decrease in the percentage of parabasal cells on a vaginal smear were also seen for Imvexxy 4mcg and 10mcg ($P < .0001$)
Clinical Studies

- The mean reduction in vaginal pH between baseline and week 12 was also statistically significant for Imvexxy 4mcg and 10mcg ($P < .0001$)

- For more clinical trial data, see full labeling
For more information view the product monograph available at:

http://www.empr.com/imvexxy/drug/34845/