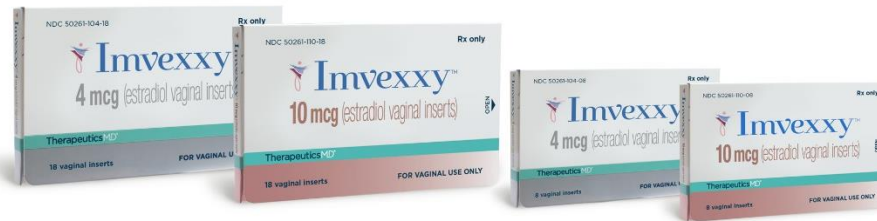


# Imvexxy (estradiol)



**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  $\geq 65$  yrs 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

# Interactions

- 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



# Clinical Studies

- 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

# Clinical Studies

- 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

# Clinical Studies

- 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

# New Product Monograph

- For more information view the product monograph available at:

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