Drug Use Research & Management Oregon State University College of Pharmacy

Abbreviated Drug Review

Trade Name (generic)

Intrarosa (prasterone) Indication not funded

Indications

• Prasterone is indicated for treatment of moderate to severe postmenopausal dyspareunia

Dosage

One 6.5 mg suppository inserted vaginally once daily at bedtime

Background

- Prasterone (or dehydroepiandrosterone, DHEA) is an inactive endogenous steroid that is transformed to active androgens and estrogens. Its mechanism of action in postmenopausal women with vulvar and vaginal atrophy is still being elucidated.
- Postmenopausal decline of estrogen and DHEA leads to hormone deficiency-related signs and symptoms in the vagina, including vulvovaginal atrophy and dyspareunia.

Efficacy

FDA approval of intravaginal prasterone 6.5 mg once daily was based on two twelve-week, randomized, double-blind, placebo-controlled, phase 3 clinical trials in postmenopausal, women who self-identified as having moderate to severe dyspareunia as the most bothersome symptom of vulvovaginal atrophy and met criteria for vulvovaginal atrophy (i.e. superficial cells ≤5% on vaginal smear and a vaginal pH >5). Women included were predominantly white and 40 to 80 years of age. Co-primary endpoints in these trials are listed in the **Table**. Symptom improvement was evaluated on a 4-point scale (0 = none, 1 = mild, 2 = moderate, 3 = severe). Overall, prasterone improved symptoms by less than half a point compared to placebo. The clinical significance of a 0.35 to 0.4 point change has not been determined. Statistically significant differences were also documented for the percentage of parabasal cells, percentage of superficial cells, and vaginal pH, though the clinical significance of these differences remains unclear.

Table. Least square mean differences between prasterone and placebo for the co-primary outcomes for each trial

	Labrie et al (2016)	Archer et al (2015)	P-value
Co-primary endpoints	N=325 prasterone; 152 placebo	N=81 prasterone; 77 placebo	
Moderate to severe dyspareunia, as assessed by patients using a	-0.35	-0.40	P=0.0002 and 0.0132,
vaginal atrophy symptoms questionnaire			respectively
Percentage parabasal cells	-27.7	-45.8	P<0.0001 for both
Percentage superficial cells	8.44	4.7	P<0.0001 for both
Vaginal pH (units)	-0.66	-0.83	P<0.0001 for both

Safety

- Contraindications: Undiagnosed abnormal genital bleeding
- Warnings and precautions: History of breast cancer
- Common adverse reactions: Vaginal discharge and abnormal Pap smear

Evidence Gaps/Limitations

No studies found to support evidence for use in the treatment of Oregon Health Plan (OHP) funded conditions or co-morbidities.

Recommendation

Restrict use for OHP-funded conditions through Prior Authorization.

References

- 1. Intrarosa (prasterone) [prescribing information]. Quebec City, Canada: Endoceutics Inc; November 2016.
- 2. Archer DF, Labrie F, Bouchard C, et al. Treatment of pain at sexual activity (dyspareunia) with intravaginal dehydroepiandrosterone (prasterone). Menopause (New York, N.Y.). 2015;22(9):950-963.
- 3. Labrie F, Archer DF, Koltun W, et al. Efficacy of intravaginal dehydroepiandrosterone (DHEA) on moderate to severe dyspareunia and vaginal dryness, symptoms of vulvovaginal atrophy, and of the genitourinary syndrome of menopause. *Menopause (New York, N.Y.).* 2016;23(3):243-256.

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