Disclosures

Relevant Disclosures:

The Menopause Society Board of Directors

Consultant: Astellas

No conflicts of interest

References:

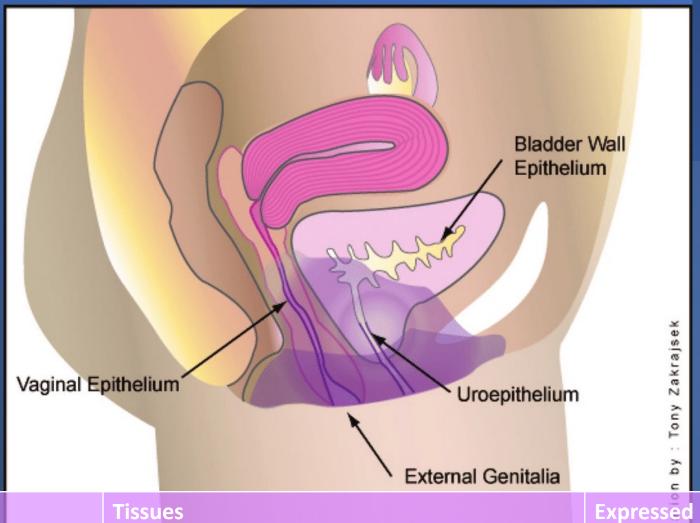
I will discuss clinical studies of off label use of pharmaceuticals for vasomotor symptoms.

This presentation references people born with ovaries. I may use the terms women, she, and her. These terms may not capture the diversity of all those experiencing menopause. We need more research to explore how diverse people experience menopause.



Objectives

- Discuss symptom presentation of the genitourinary syndrome of menopause in cancer survivors
- Review consensus recommendations for treating the genitourinary syndrome of menopause in cancer survivors



Donroductivo	Litorus Vagina	EDW EDØ CDED	
System	Tissues	Expressed Estrogen Receptors (ER)	
		External Contains	

Reproductive Uterus, Vagina $ER\alpha$, ERB, GPER

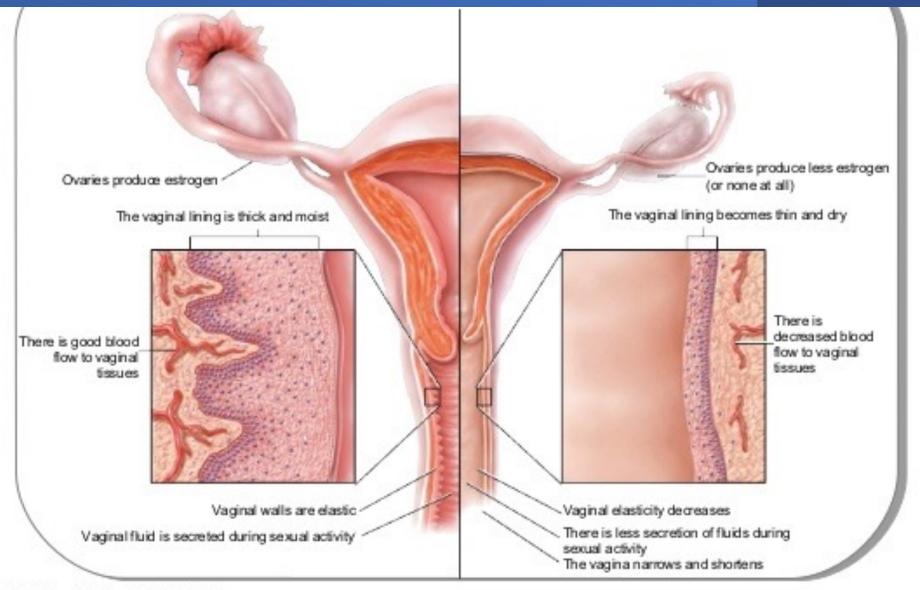
Bladder, Urethra ERβ Urinary

Bowel, External Anal Sphincter $ER\alpha$, $ER\beta$ Gastrointestinal

Musculoskeletal

Pelvic Floor Muscles, Uterosacral Ligaments

 $ER\alpha$, $ER\beta$



Johnston SL. Geriatrics & Aging. 2002;5(7):9-15.



Surgery: Oophorectomy, Vulvectomy, Hysterectomy



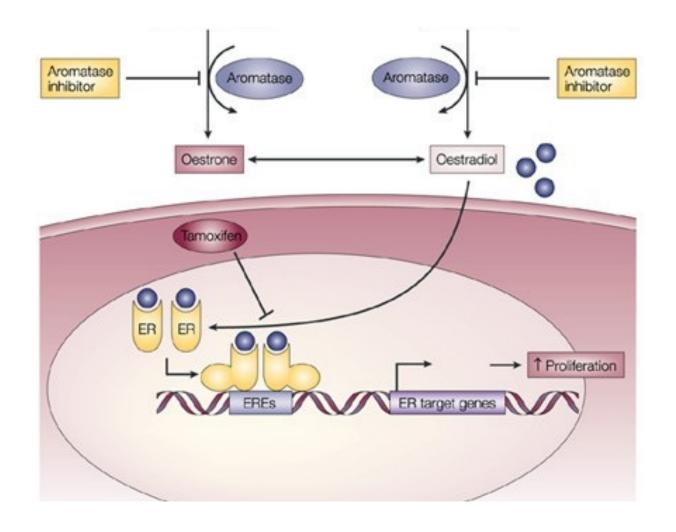
Chemotherapy: ovarian toxicity and dysfunction, neuropathy



Pelvic Radiation: direct tissue damage, radiation vaginitis, vaginal fibrosis, mucositis, shortening, stenosis



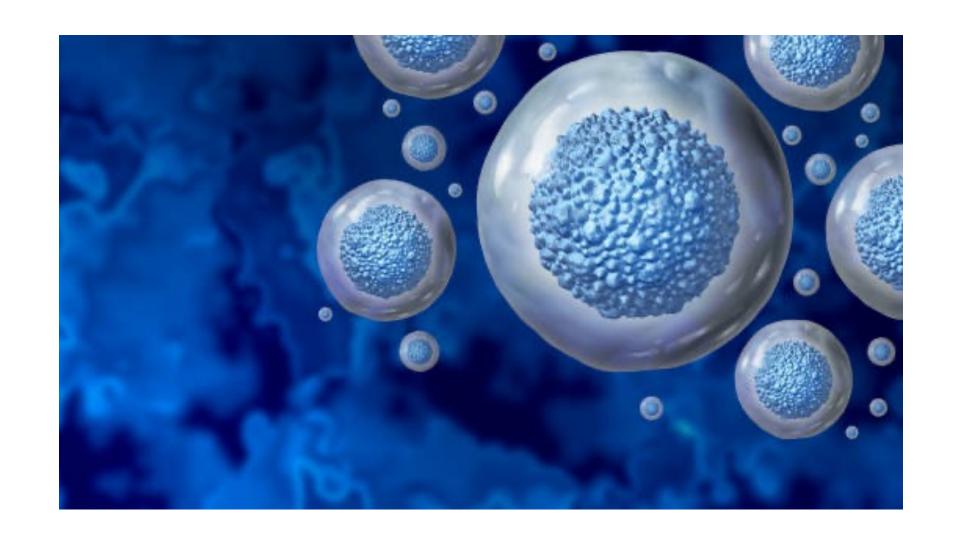
Tamoxifen: estrogenic effect, increased vaginal secretions



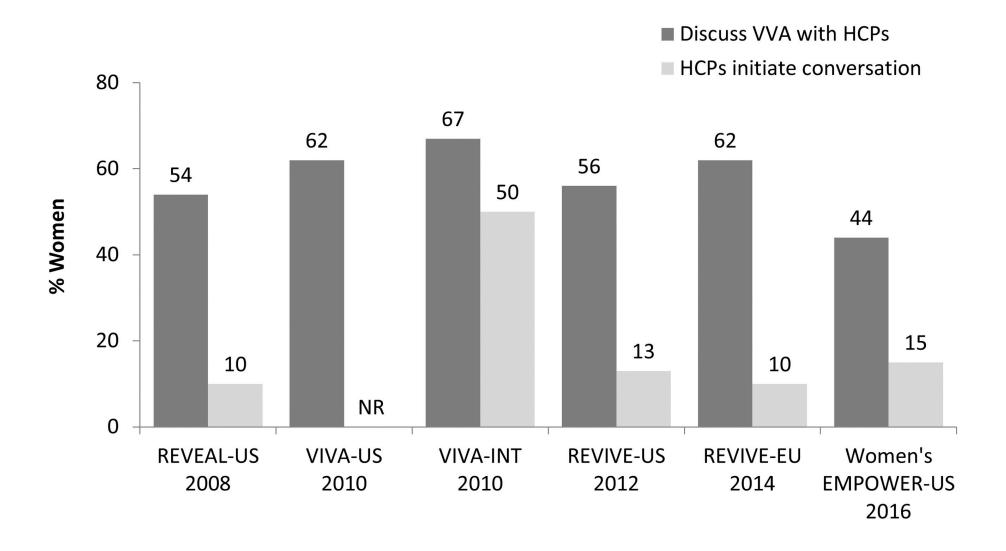
Aromatase Inhibitors: marked vaginal dryness, vulvar thinning, sexual discomfort



Immunotherapy: inflammation, GSM pain exacerbation



Stem Cell Transplant: GVHD: vulvovaginal dryness, pain, dyspareunia



The Journal of Sexual Medicine 2017 14, 425-433DOI: (10.1016/j.jsxm.2017.01.011)



Symptoms

- Genital dryness
- Decreased lubrication with sexual activity
- Discomfort or pain with sexual activity
- Post-coital bleeding
- Decreased arousal, orgasm, desire
- Irritation/Burning/Itching of vulva or vagina
- Dysuria
- Urinary frequency/urgency

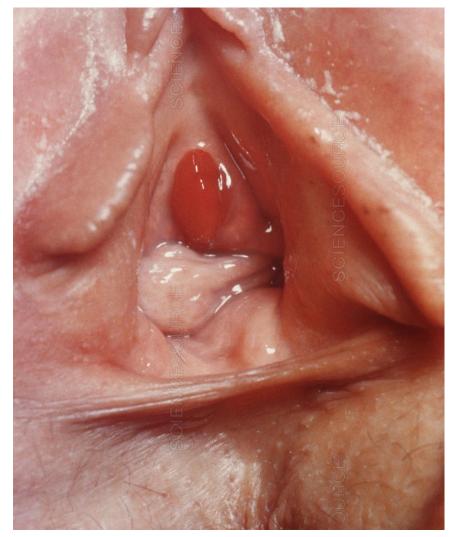


Signs

- Decreased moisture
- Decreased elasticity
- Labia minora resorption
- Pallor/Erythema
- Loss of vaginal rugae
- Tissue fragility/fissures/petechiae
- Urethral eversion or prolapse
- Loss of hymenal remnants
- Prominence of urethral meatus
- Introital retraction
- Recurrent urinary tract infections

Genitourinary Syndrome of Menopause





GSM in Cancer Survivors

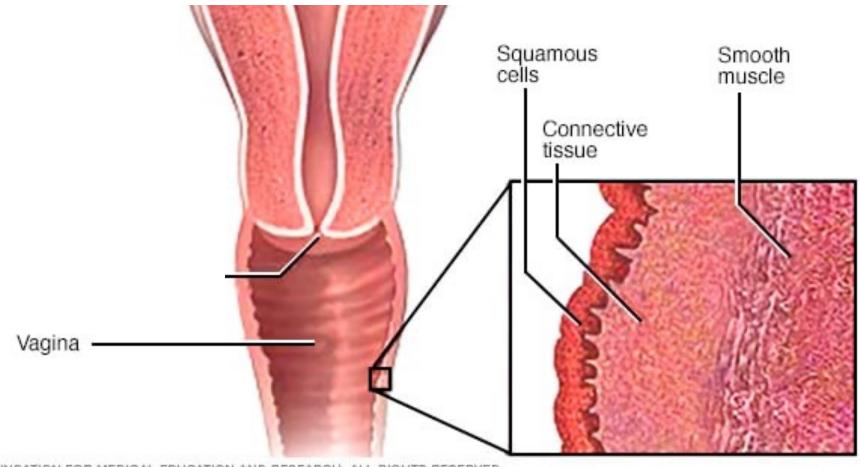
- Complete medical history
 - Symptom characterization, prior treatments
 - Review of vaginal irritants
- Sexual history
- Physical examination
 - Vaginal pH and wet prep as indicated
 - Vulvar/Vaginal cultures as appropriate
 - Biopsy white, pigmented, or thickened lesions
- > Any vulvar lesion that does not respond to treatment should be biopsied

GSM: History and Evaluation

- 41% of oncologists are refer patients with GSM to gynecologists
- Only 35% of oncologist manage symptoms independently
- Shared Decision making

GSM: Treatment





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Layers of Vaginal Tissue

Treatments for GSM: Lubricants

- Reduce friction
- Short term comfort
- One size does not fit all-encourage patients to try different formulations: water based vs. silicone
- Consider osmolality and pH
 - Ideal osmolality: of < 380 mOsm/kg,
 - Ideal pH>3.0
- Avoid additives irritating additives: parabens, glycerin, flavors, spermicides

Treatments for GSM: Moisturizers

- Retain moisture
- One size does not fit all-encourage patients to try different formulations
- More frequent use compared to naturally menopausal women:
 - Consider daily use
 - Titrate to patient preference/tolerance

Treatments for GSM: Lubricants and Moisturizers

Lubricants		Moisturizers
Water based Astroglide Liquid Astroglide Gel Liquid Astroglide Good Clean Love Just Like Me K-Y Jelly Pre-Seed Slippery Stuff Liquid Silk YES WB SYLK Sliquid	Silicone based Astroglide X ID Millennium K-Y Intrigue Pink Pjur Eros Uberlube Sliquid Oil based Elégance Women's Lubricants Olive oil YES OB	Replens Me Again Feminease K-Y SILK-Eluvena Revaree Silken Secret Hyalo-gyn

Treatments for GSM: Kitchen cabinet?

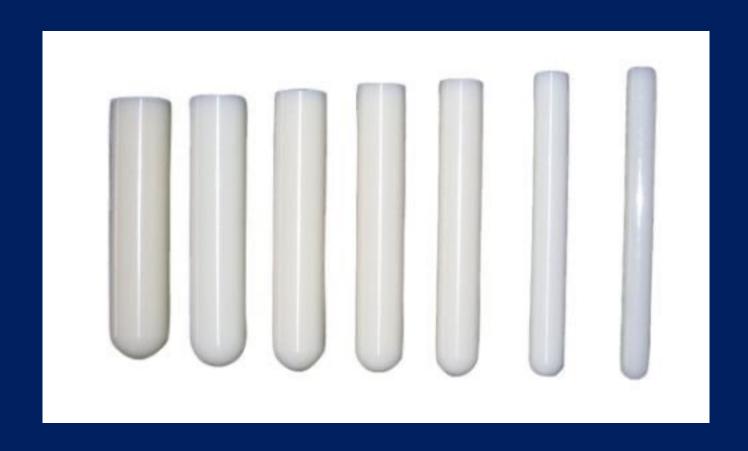
- Natural oils: olive, coconut may be associated with vaginal infections
- Probiotics: could be helpful to microbiome, need comprehensive trials

Treatments for GSM: Lidocaine

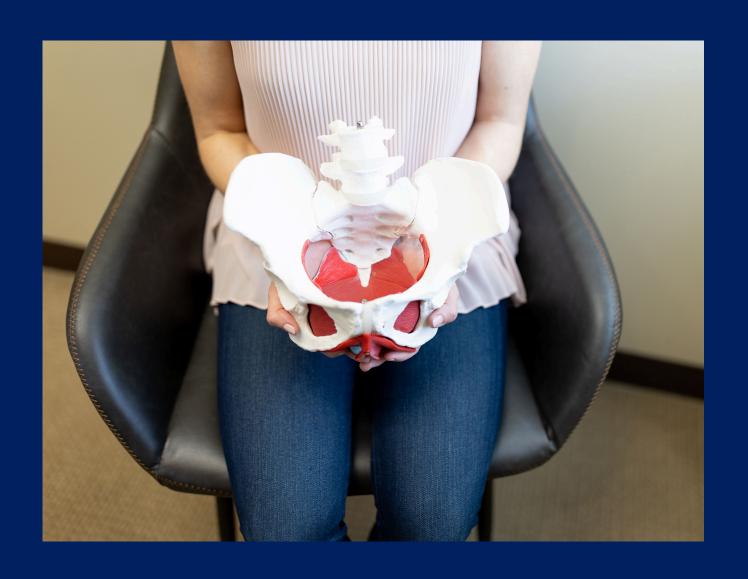
Apply with cotton swab ~3 minutes before penetration



Treatments for GSM: Vaginal Dilators



Treatments for GSM: PFPT



Treatments for GSM: Psychosocial Support

- Counseling
- Psychotherapy: CBT
- Support groups
- Group and individual education

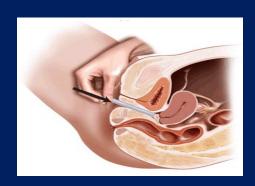


Treatment Options

GSM Treatment Options: Vaginal Estrogen



10 mcg Estradiol hemihydrate vaginal tablet



Estradiol or Conjugated Equine Estrogen Cream



17β Estradiol Vaginal ring



4 or 10 mcg Estradiol vaginal insert

Hormone Treatments: Low-dose Vaginal Estrogen

- Restores vaginal blood flow
- Decreases vaginal pH
- Improves thickness and elasticity of vulvovaginal tissues
- Many different formulations: vaginal ring, tablets, inserts, creams
- Improvements within a few weeks, full efficacy in 2-3 mo
- Serum levels typically in postmenopause range
- Large observational studies show no increased risk of endometrial cancer, breast cancer, or CVD
- Progestogen generally is not indicated
- Controversial data/guidance in hormone sensitive cancer survivors: Shared Decision-Making

Local Estrogen Therapy

Women at high risk for breast cancer

failed nonhormonal treatment

Women with ER positive breast cancers on tamoxifen

 persistent, severe symptoms with failed nonhormonal treatments and factors suggesting a low risk of recurrence

Women with ER positive breast cancers on Al

- persistent, severe symptoms with failed nonhormonal treatments and factors suggesting a low risk of recurrence
- consult with the oncologist to consider switching to tamoxifen

Women with triple negative breast cancers

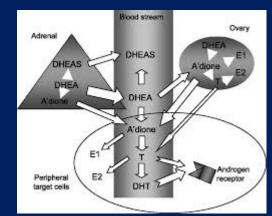
Theoretically reasonable data are lacking

Women with metastatic disease

 QoL, comfort, and intimacy may be a priority for many women with metastatic disease

Hormone Treatments: Dehydroepiandrosterone (DHEA)

- 0.5%/6.5 mg DHEA vaginal suppository: Prasterone
- Indication: FDA approved for moderate to severe dyspareunia secondary to VVA
- Directions: inserted once daily at bedtime
- Phase 3 RCT showed significantly improved
 - Vaginal maturation index (VMI)
 - Vaginal pH
 - Signs of atrophy
 - Vaginal dryness
 - Dyspareunia
- Serum steroid levels remained within the normal postmenopause range
- Only adverse event (AE): vaginal discharge because of melting of the vehicle
- Safety: endometrial safety confirmed at 1 y





Hormone Treatments: Ospemifene

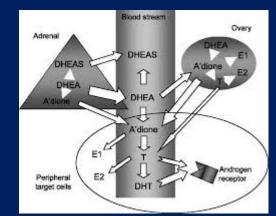
- Oral SERM: estrogen agonist/antagonist
- Indication: FDA approved for moderate to severe dyspareunia associated with VVA
- Dose: 60 mg/day
- Improves
 - VMI
 - Vaginal pH
 - Symptoms of VVA
 - May take 6 months to achieve full efficacy
- Safety
 - No endometrial hyperplasia or cancer (at 52 w)
 - Can increase VMS
 - May increase the risk of venous thromboembolism (VTE)
- Antiestrogenic effects on breast but not approved for women with breast cancer
- NOT RECOMMENDED IN BREAST CANCER PATIES



Portman DJ, et al. *Menopause*. 2013;20(6):623-630; Bachmann GA, et al. *Menopause*. 2010;17(3):480-486; Simon J, et al. *Maturitas*. 2014;77(3):274-281; Soe LH, et al. *Int J Womens Health*. 2013;5:605-611; The NAMS 2020 Genitourinary Syndrome of Menopause Position Statement Editorial Panel. *Menopause*. 2020;27(9):976-992.

Hormone Treatments: Dehydroepiandrosterone (DHEA)

- 6.5 mg DHEA vaginal suppository: Prasterone
- Indication: FDA approved for moderate to severe dyspareunia secondary to VVA
- Directions: inserted once daily at bedtime
- Phase 3 RCT showed significantly improved
 - Vaginal maturation index (VMI)
 - Vaginal pH
 - Signs of atrophy
 - Vaginal dryness
 - Dyspareunia
- Serum steroid levels remained within the normal postmenopause range
- Only adverse event (AE): vaginal discharge because of melting of the vehicle
- Safety: endometrial safety confirmed at 1 y
- CAN BE CONSIDERED IN BREAST CANCER PATIENTS





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- Indication: FDA approved for moderate to severe dyspareunia associated with VVA
- Directions: daily oral administration (60 mg)
- Improves
 - VMI
 - Vaginal pH
 - Symptoms of VVA
 - May take 6 months to achieve full efficacy
- Safety
 - No endometrial hyperplasia or cancer (at 52 w)
 - Can increase VMS
 - May increase the risk of venous thromboembolism (VTE)
- Antiestrogenic effects on breast but not approved for women with breast cancer
- Favorable effects on bone



Portman DJ, et al. *Menopause*. 2013;20(6):623-630; Bachmann GA, et al. *Menopause*. 2010;17(3):480-486; Simon J, et al. *Maturitas*. 2014;77(3):274-281; Soe LH, et al. *Int J Womens Health*. 2013;5:605-611; The NAMS 2020 Genitourinary Syndrome of Menopause Position Statement Editorial Panel. *Menopause*. 2020;27(9):976-992.

Treatments for GSM: Laser



Laser therapy may be considered in women who prefer a nonhormonal approach; women must be counseled regarding lack of long-term safety and efficacy data

Take Aways

- Load the Boat: Multidisciplinary Team Approach
- Reduce friction: Lubricants
- Retain moisture: Moisturizers
- Restore vaginal and urogenital tissues: Estrogen therapy
- Reduce pain: Lidocaine
- Maintain patency and caliber: Dilators
- Low threshold for PFPT
- Individualization and Shared Decision Making for all patients, especially those with hormone sensitive cancers using Ais:
 - Consult oncologic team
 - Evaluate patient preference, goals and concerns
 - Shared decision making with patient
 - Mitigate risk

Local Estrogen Therapy

Women at high risk for breast cancer

failed nonhormonal treatment

Women with ER positive breast cancers on tamoxifen

- persistent, severe symptoms with failed nonhormonal treatments and factors suggesting a low risk of recurrence
- Observational data do not suggest increased risk of breast cancer with systemic or local estrogen therapies beyond baseline risk

Women with ER positive breast cancers on AI

- persistent, severe symptoms with failed nonhormonal treatments and factors suggesting a low risk of recurrence
- consult with the oncologist to consider switching to tamoxifen

Women with triple negative breast cancers

Theoretically reasonable data are lacking

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