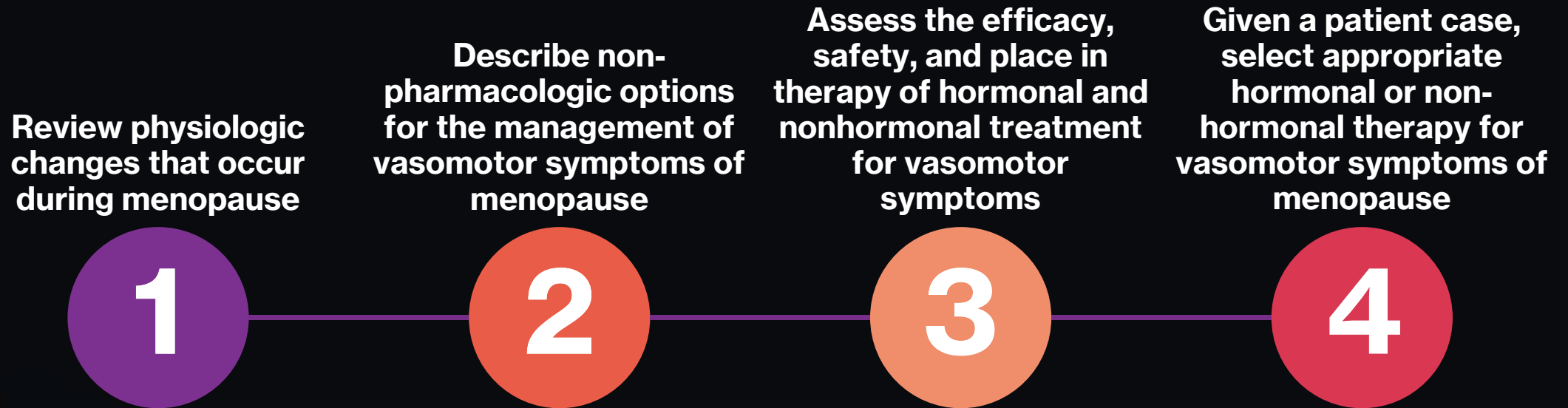


Can't take the heat: Updates in Menopause

Alexa Carlson, PharmD, MEd, BCPS

Objectives



Abbreviations

- ADE: Adverse drug event
- CAM Complementary and alternative medicine
- CBT: Cognitive behavioral therapy
- CE: Conjugated estrogens
- CE/ BZA: Conjugated estrogens with bazedoxifene
- DDI: Drug-drug interactions
- EPT: Estrogen/progesterone therapy
- ET: Estrogen therapy
- FMP: Final menstrual period
- FSH: Follicle-stimulating hormone
- HCP: Healthcare provider
- HFRDIS: Hot flash related daily interference scale
- HT: Hormonal therapy
- LH: Luteinizing hormone
- LMIC: Low- and middle-income countries
- MENQOL: Menopause quality of life
- MHT: Menopausal hormone therapy
- NAMS: North American Menopause Society
- NK: Neurokinin
- PROMIS SDSF-8b: Patient-Reported Outcomes Measurement Information System Sleep Disturbance Short Form
- SERM: Selective estrogen receptor modulator
- SNRI: Selective norepinephrine reuptake inhibitor
- SSRI: Selective serotonin reuptake inhibitor
- STRAW: Stages of Reproductive Aging Workshop
- VMS: Vasomotor symptoms
- VTE: Venous thromboembolism

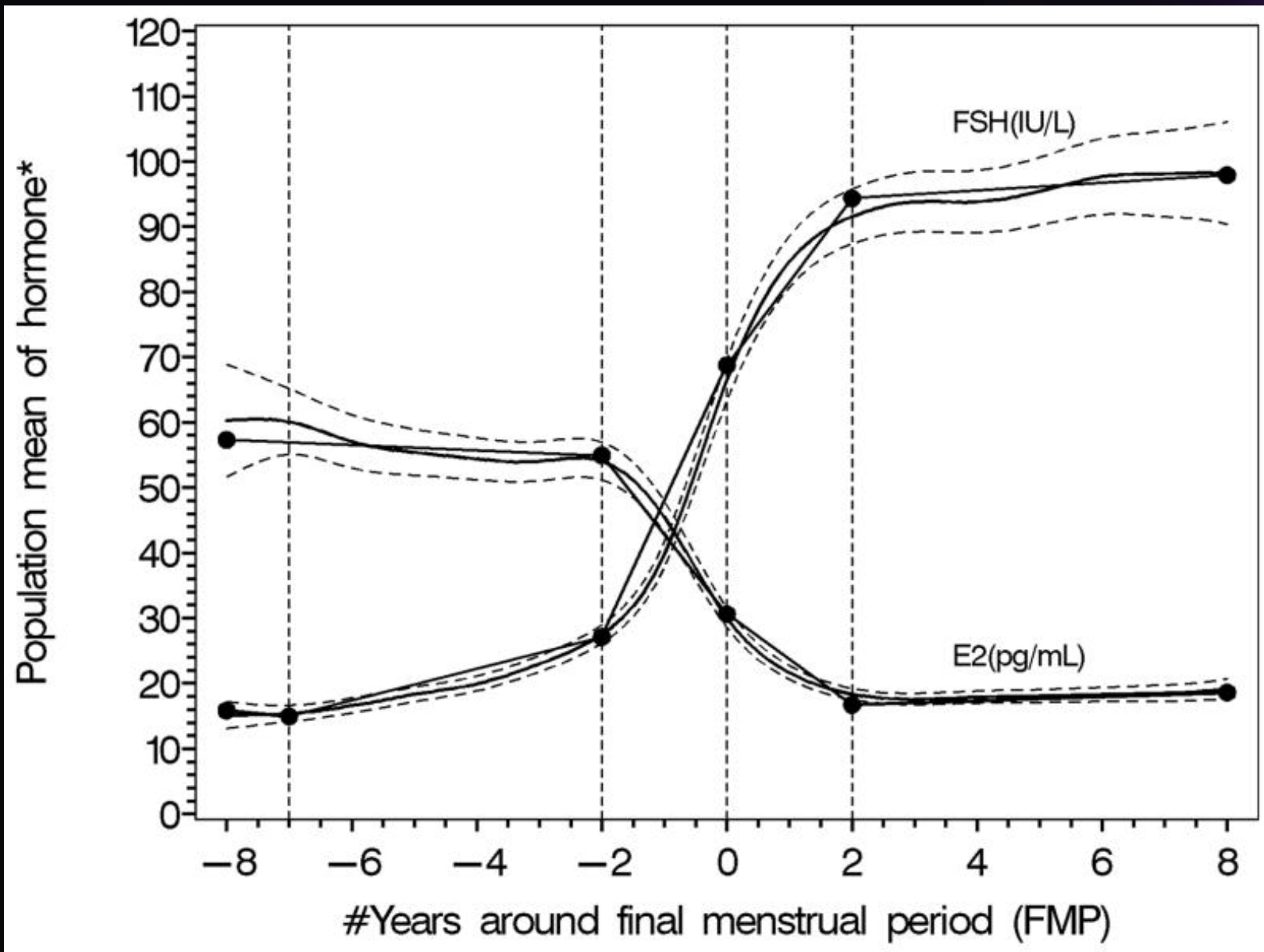
Menarche					FMP (0)					
Stage	-5	-4	-3b	-3a	-2	-1	+1 a	+1b	+1c	+2
Terminology	REPRODUCTIVE				MENOPAUSAL TRANSITION		POSTMENOPAUSE			
	Early	Peak	Late		Early	Late	Early			Late
					Perimenopause					
Duration	variable				variable	1-3 years	2 years (1+1)	3-6 years	Remaining lifespan	
PRINCIPAL CRITERIA										
Menstrual Cycle	Variable to regular	Regular	Regular	Subtle changes in Flow/ Length	Variable Length Persistent ≥7- day difference in length of consecutive cycles	Interval of amenorrhea of ≥60 days				
SUPPORTIVE CRITERIA										
Endocrine FSH AMH Inhibin B			Low Low	Variable* Low Low	↑ Variable* Low Low	↑ >25 IU/L** Low Low	↑ Variable Low Low	Stabilizes Very Low Very Low		
Antral Follicle Count			Low	Low	Low	Low	Very Low	Very Low		
DESCRIPTIVE CHARACTERISTICS										
Symptoms						Vasomotor symptoms Likely	Vasomotor symptoms Most Likely		Increasing symptoms of urogenital atrophy	

* Blood draw on cycle days 2-5 ↑ = elevated

**Approximate expected level based on assays using current international pituitary standard

STRAW + 10

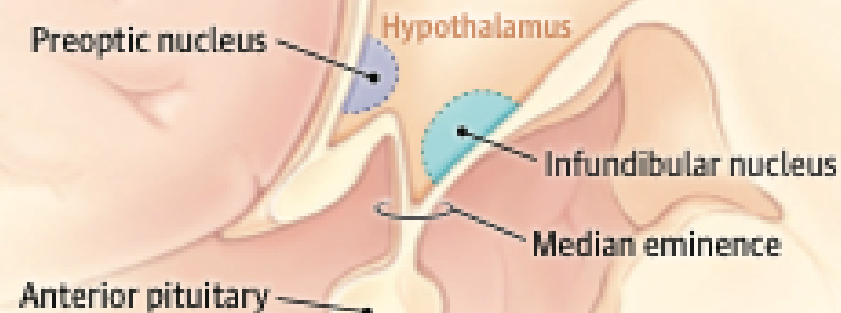
Hormonal Changes



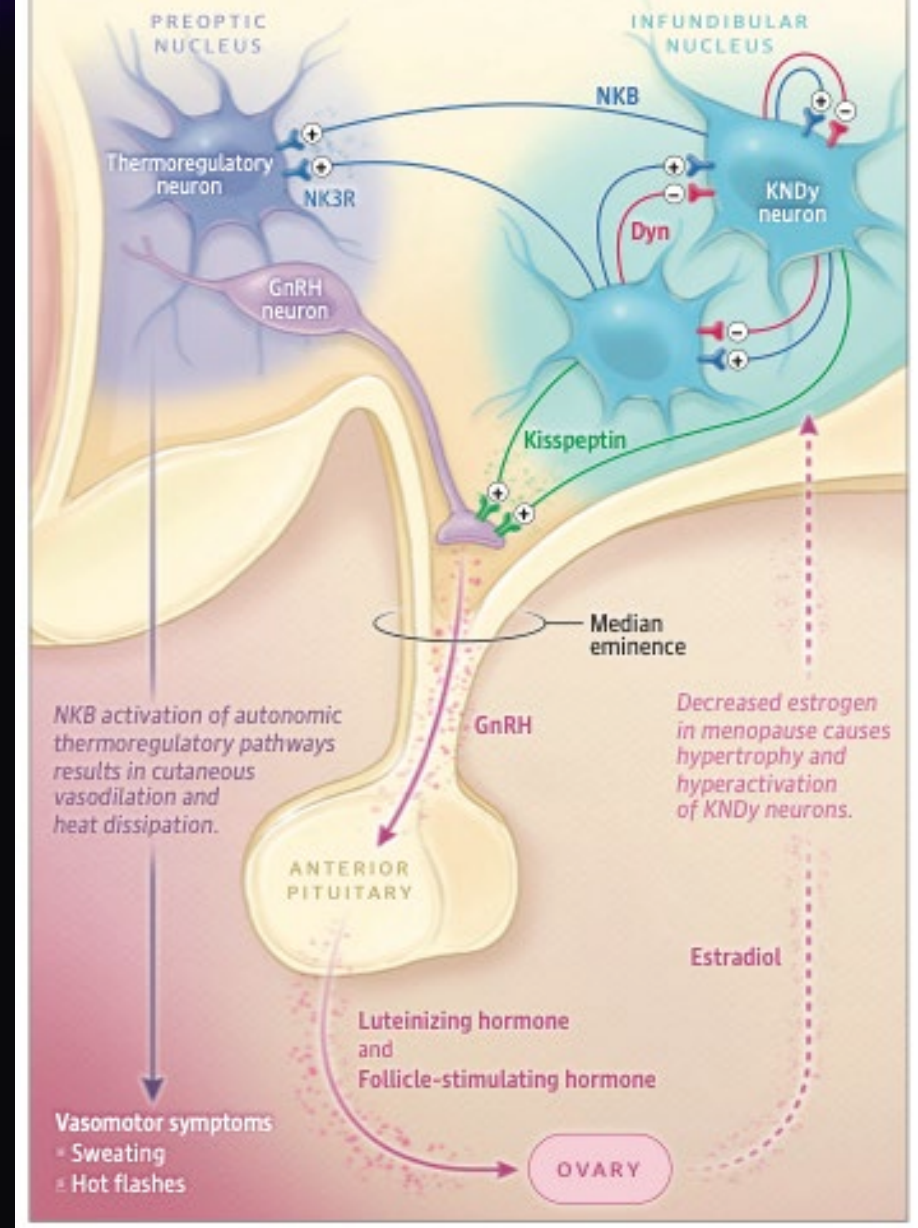
KNDY Neurons

Figure. Mediation of Gonadotropin Release and Thermoregulatory Control Through Hypothetical Neuroendocrine Mechanisms

Neuroendocrine mechanisms regulating gonadotropin-releasing hormone (GnRH) and thermoregulatory control begin in the hypothalamus.



Estrogen-responsive KNDy neurons in the infundibular nucleus coexpress **kisspeptin**, **neurokinin B (NKB)**, and **dynorphin (Dyn)**.



Symptoms of Menopause



Irregular periods



Vaginal dryness



Hot flashes



Sore or tender
breasts



Chills



Night sweats



Sleep problems



Headaches



Weight gain and
slowed metabolism



Mood changes



Thinning hair and
dry skin



Memory problems

Symptoms
of Menopause

Vasomotor Symptoms (VMS)

- 80% of women experience VMS during menopause
- Most common symptoms: Feeling tired/worn out (74-75%), hot flushes (62-68%), aching muscles/joints (61-69%), difficulty sleeping (60-69%), sweating (56-72%) & night sweats (52-68%)
- Most bothersome symptoms: Weight gain, & difficulty sleeping
- Largest impact on daily activities: Night sweats & hot flushes

Management of VMS

Menopausal Hormone Therapy (MHT)

Conjugated Estrogens/ Bazedoxifene

Estrogen (oral, transdermal)

Progestin

Non-hormonal

Pharmacologic therapy:

- Gabapentinoids
- NK receptor antagonists
- SSRI/SNRI (paroxetine)
- Other therapies (clonidine, oxybutynin, suvorexant)
- CAM (black cohosh, soy)

Non-pharmacologic therapy

Oral Estrogen

Formulations and Dosing

- Conjugated equine estrogens (CEE): 0.3, 0.45, 0.625, 0.9, 1.25 mg
- 17 β -estradiol: 0.5, 1.2 mg
- Synthetic conjugated estrogens

DDI

- CYP3A4 inducers, thyroid medications

ADE

- Breast tenderness, nausea, headache, breakthrough bleeding
- VTE, stroke, breast cancer

Contraindications

- Breast cancer, VTE, liver disease, migraine with aura

Efficacy: Most studied formulations

- Well-established efficacy for VMS

Transdermal Estrogen

Formulations and Dosing:

- Patches: once or twice weekly
- Gels: daily application
- Ring: every 3 months
- Sprays: daily application

DDI:

- Reduced impact
- Avoids first-pass metabolism

ADE: Same ADE profile as oral!

- Common: application site reactions, breast tenderness, headache
- Serious: VTE risk lower than oral, stroke risk

Contraindications: Same as oral

Efficacy: Identical therapeutic outcomes, different safety profile

Change to FDA Labeling

Old Label (2003-2025)

- Boxed warning cited stroke, MI, VTE, breast cancer, and probable dementia
- Risk framed as a uniform class warning, regardless of dose, formulation, or route (oral, transdermal, vaginal)
- Based on oral conjugated equine estrogen ± synthetic progestin in women aged 50–79 (WHI, stopped early)
- Recommended lowest effective dose for shortest duration

New Label (11/2025 – Present)

- Boxed warning language on stroke/cardiovascular disease, breast cancer, and dementia removed
- Risk reframed as route- and formulation-specific – transdermal/vaginal estrogen carry lower stroke and VTE risk than oral
- “Lowest dose, shortest duration” language removed
- Favorable framing added for starting therapy <60 years or within 10 years of menopause onset
- Endometrial cancer warning retained for estrogen-alone (unopposed) products

Estrogen – Position Statements on VTE Risk

Oral vs transdermal

- “Limited observational data suggest less risk with transdermal versus oral ET, but comparative RCT data again are lacking”

Choosing dose and formulation

- “Different hormone therapy doses, formulations, and routes of administration may have different effects on target organs, potentially allowing options to minimize risk” (Level II)

Overall risk

- “Overall, the increased absolute risks associated with EPT and ET are rare (<10/10,000/y) and include increased risk for VTE...” (Level I)

VTE Risk With Estrogen Therapy

STUDY DESIGN

- Type: Nationwide registry-based trial, 138 nested monthly trials
- Population: 919,614 Swedish women aged 50-58
- Time: 2007-2020
- Follow-up: 2 years

OUTCOMES

- Composite cardiovascular outcomes
- Ischemic heart disease
- Myocardial infarction
- Cerebral infarction
- VTE

VTE Risk With Estrogen Therapy

MHT Type	IHD	Cerebral Infarction	MI	VTE
Oral Combined Continuous (EPT)	HR 1.21 (1.00–1.46)	No effect	No effect	HR 1.61 (1.35–1.92)
Oral Combined Sequential (EPT)	No effect	No effect	No effect	HR 2.00 (1.61–2.49)
Transdermal Combined (EPT)	HR 0.62 (0.41–0.96)	No effect	HR 0.44 (0.21–0.94)	HR 1.46 (1.09–1.95)
Transdermal Unopposed (ET)	No effect	No effect	No effect	No effect
Oral Unopposed (ET)	No effect	No effect	No effect	HR 1.57 (1.02–2.44)

Key Takeaways from the Study

Transdermal estrogen preferred for cardiovascular safety

- Transdermal unopposed estrogen does NOT increase cardiovascular risk
- Bypasses hepatic first-pass metabolism – minimal effect on coagulation factors
- Consider first line for patients with cardiovascular risk factors

Oral MHT carries VTE risk

- 1.7-2.5 additional VTE cases per 1000 women per year with oral MHT
- Highest risk with oral sequential therapy (HR 2.00)
- Screen for VTE risk factors; consider alternatives in high-risk patients

Conjugated Estrogens With Bazedoxifene (CE/BZA)

MOA: First FDA-approved estrogen + SERM combination

- Estrogen agonist in bone, antagonist in breast/uterus
- Progestin-free option for women with intact uterus

Formulations and Dosing:

- Conjugated estrogens 0.45 mg + bazedoxifene 20 mg daily

ADE:

- Same estrogen-related risks as oral estrogen
- Increased risk of breast cancer
- Oral formulation shares oral estrogen VTE risk profile

Efficacy/Primary indication:

- Prevention of postmenopausal osteoporosis / treatment of moderate to severe vasomotor symptoms in women with intact uterus (who cannot tolerate progestins)

MHT Considerations for Use

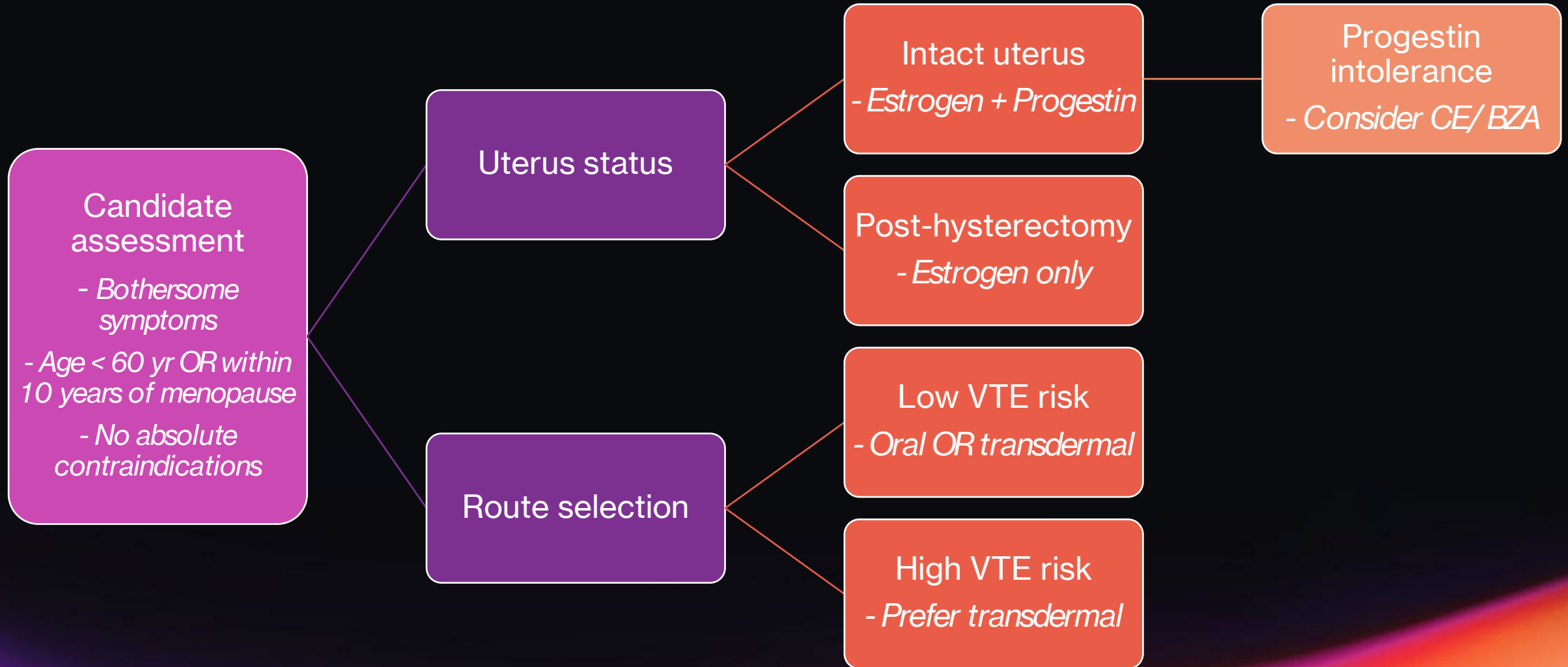
MHT THERAPY

- Should include progestin if intact uterus
- Favors Oral:
 - No VTE risk factors
 - Patient preference
 - Lipid benefits priority
 - Convenient dosing
- Favors Transdermal:
 - History of VTE
 - Migraines with aura
 - Gallbladder disease history
 - High cardiac risk

CE/BZA THERAPY

- Progestin intolerance
 - Mood effects
 - Bleeding
- Patient preference
- Need for low VTE risk profile
- Need for osteoporosis prevention + VMS treatment

Menopausal Hormone Therapy (MHT)



Question 1

You are seeing a 52-year-old female for the management of her VMS (last known period 3 years ago; has an intact uterus).

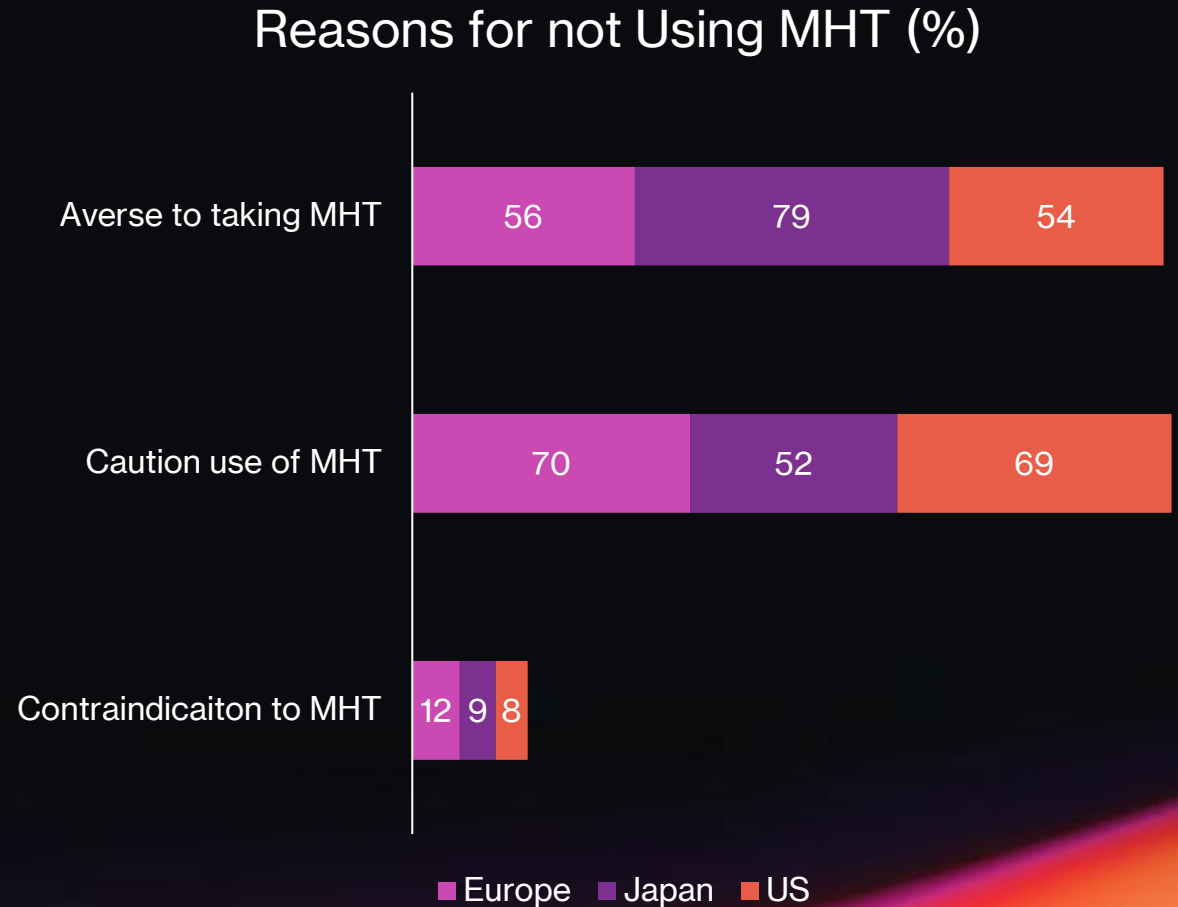
PMHx is significant for diabetes and hypertension managed with metformin 1000mg PO BID and lisinopril 40mg PO daily

She has heard that estrogen can cause blood clots and was worried about it. Which of the following would be an appropriate response to her about the most recent data?

- A. All hormone therapies have equal risk of blood clots, and all should be avoided.
- B. Oral estrogen may have a lower blood clot risk than oral therapy, so we could consider that option for you.
- C. Transdermal estrogen may have a lower blood clot risk than oral therapy, so we could consider that option for you.

Low Rates of MHT Utilization

- Design: Global cross-sectional study of 25,161 women
- Results:
 - 81-91% of women have never received MHT
 - 53-75% of women adopted lifestyle changes & 27-45% of women used OTC products



SSRI & SNRI

MOA:

- Selective serotonin $\pm$ norepinephrine reuptake inhibitors

Formulations & Dosing: From NAMS 2023

- Citalopram 10-20 mg/day
- Escitalopram 10-20 mg/day
- Paroxetine 7.5 mg/day
- Paroxetine 10-20 mg/day
- Desvenlafaxine 100-150 mg/day in divided doses
- Venlafaxine 37.5-150 mg/day in divided doses

DDI: Depends on agent

- Other serotonergic agents
- QTc interval prolongation
- CYP interactions
- Reduced efficacy of tamoxifen due to CYP2D6 inhibition by paroxetine

ADE: Depends on agent

- QTc prolongation
- Hyponatremia
- Sexual dysfunction
- Serotonin syndrome
- GI ADE
- Bleeding risk

SNRI vs Estrogen

Study Design:

- Type: Placebo controlled, randomized trial
- Location:
- Time: 2011-2012
- Follow-up: 8 weeks
- Population: Peri- and post-menopausal people with ≥ 2 bothersome VMS/day

Intervention:

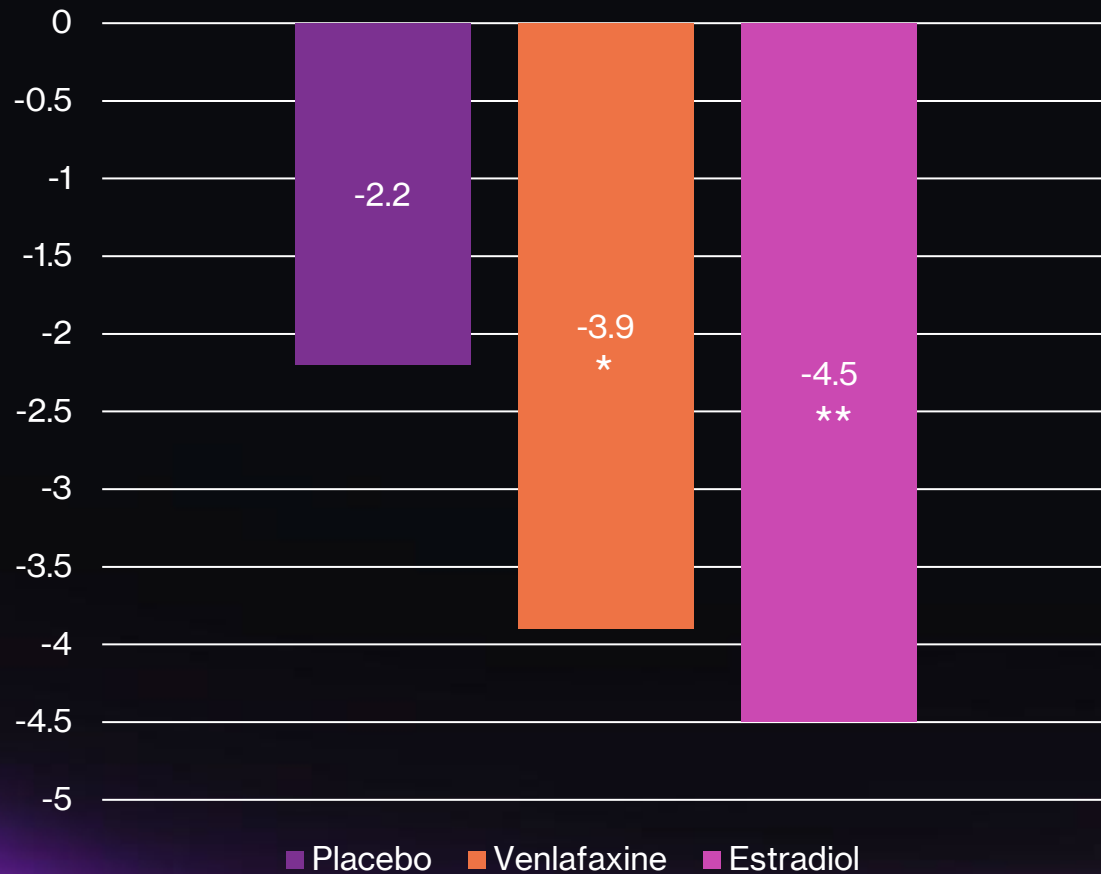
- 17β -estradiol 0.5mg/day (ET; n=97)
- Venlafaxine 75mg/day (V; n=96)
- Placebo (P; n=146)

Outcomes:

- Primary Mean daily frequency in VMS at week 8
- Secondary: VMS severity, bother, and interference with daily life

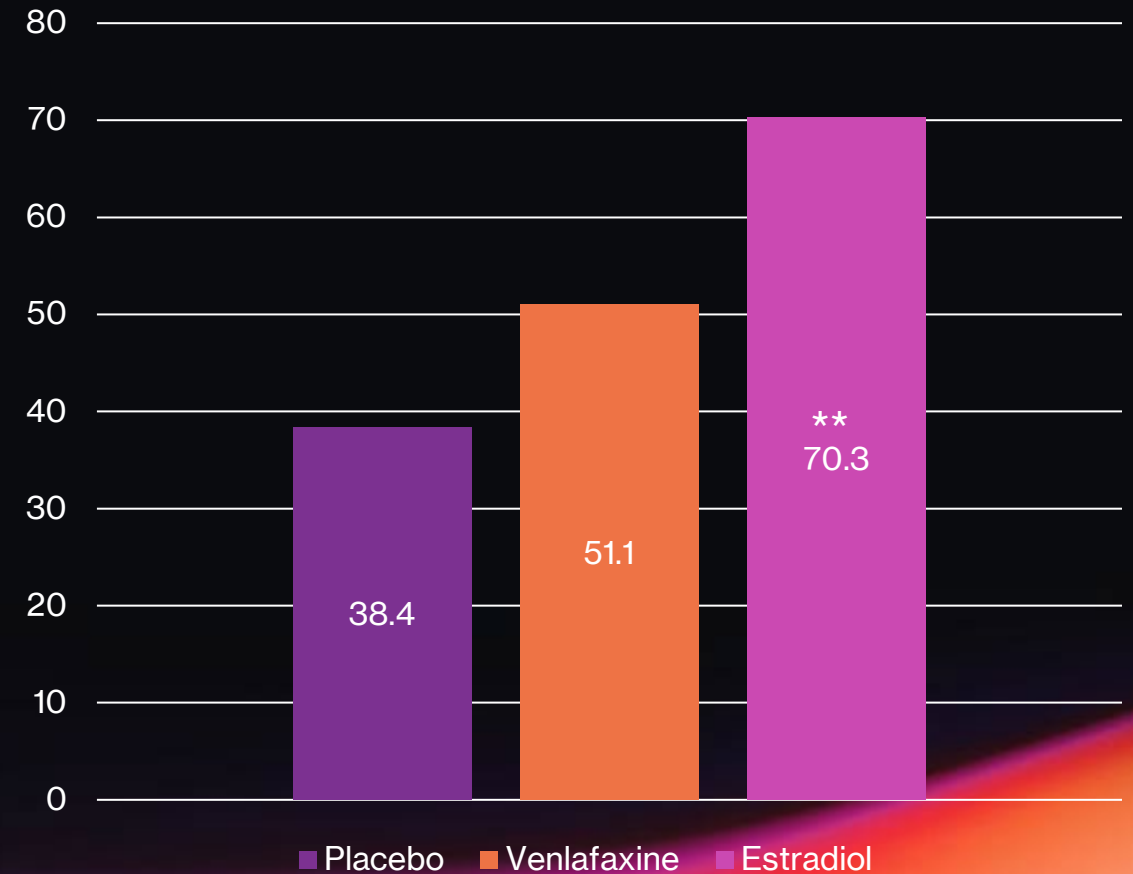
SNRI vs Estrogen – Primary Outcome

REDUCTION IN VMS DAILY FREQUENCY AT WEEK 8



**P < 0.001 compared to placebo; *P < 0.05 compared to placebo

PATIENT SATISFACTION (%)



Joffe H, Guthrie KA, LaCroix AZ, et al. JAMA Intern Med. 2014;174(7):1058-1066

SNRI vs Estrogen – Other Outcomes

Improvements in VMS Severity at 8 weeks compared to placebo:		
ET: -0.3 (95% CI 0.4 to -0.1), p=0.02	V: -0.2 (95% CI -0.3 to 0), p=0.02	
Improvements in VMS bother at 8 weeks compared to placebo:		
ET: -0.03 (95% CI -0.5 to -0.1), p=0.01	V: -0.02 (95% CI -0.3 to 0), p=0.07	
Improvements in HFRDIS at 8 weeks compared to placebo:		
ET: -9.3 (95% CI -15.3 to -3.4), p<0.001	V: -6.4 (95% CI -12.7 to -0.1), p=0.03	
Adverse Effects:		
ET: 56.4%	V: 69.2%	P: 62.0%

Gabapentinoids

MOA: Binds to calcium channels in the CNS and inhibits excitatory neurotransmitter release

Dose: Gabapentin: 600-2400mg/day in divided doses or Pregabalin 50-300mg/day in divided doses

DDI: CNS depressants

ADE: Dizziness, sedation

Precautions: Renal impairment, substance use disorder

Gabapentin vs Estrogen

Study Design:

- Type: Placebo controlled, randomized trial
- Location: Single center in New York
- Time: 2002-2004
- Follow-up: 12 weeks
- Population: Menopausal women 35-60 YOA with moderate-to-severe VMS

Intervention:

- Conjugated estrogens (n=20)
- Gabapentin titrated to 2400mg/day (n=20)
- Placebo (n=20)

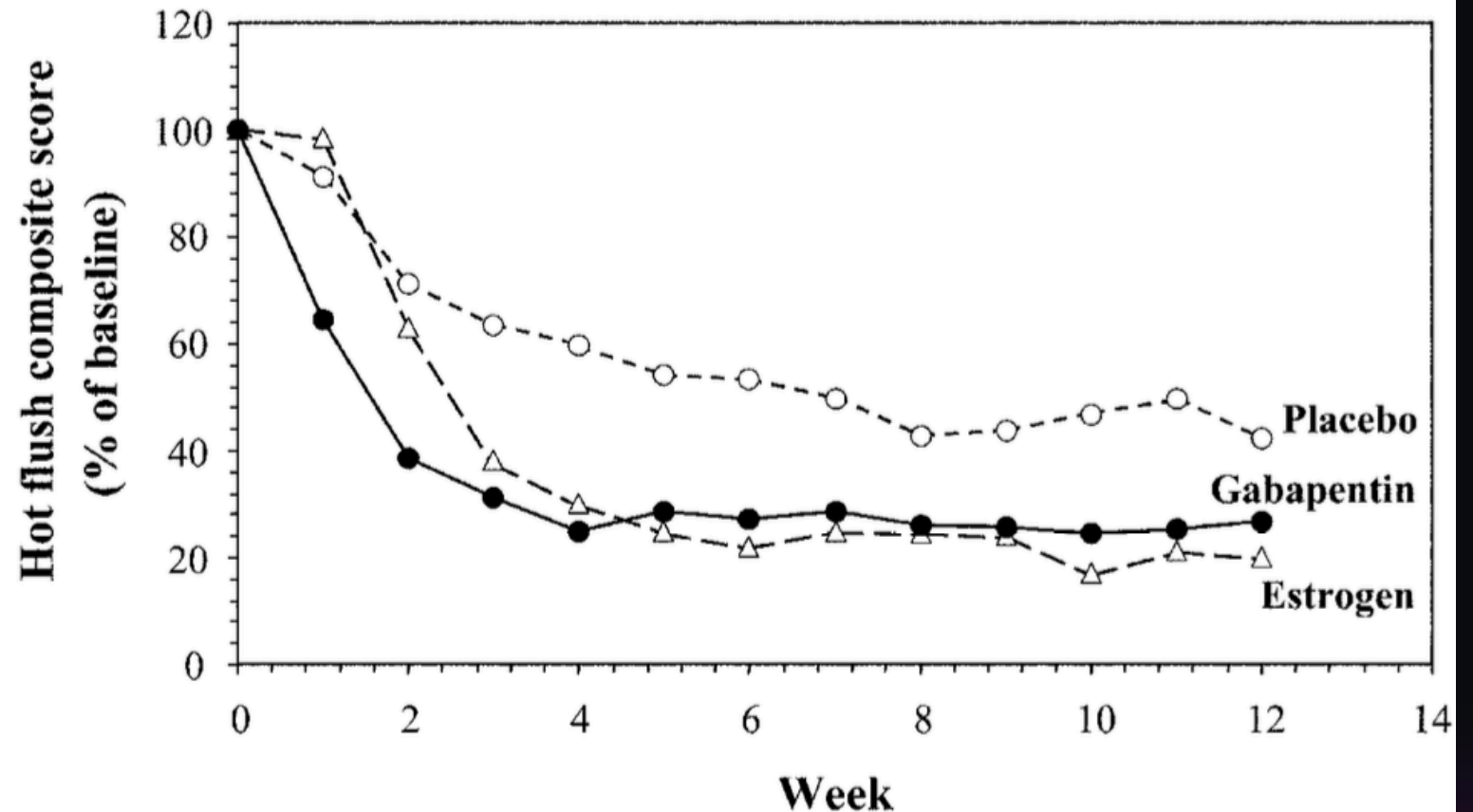
Outcomes:

- Primary: Change in the weekly Hot flush composite score
- Secondary: Change in Zung depression scale and Greene Climacteric Scale

Gabapentin vs Estrogen

Fig. 3. Hot flush composite score. $P < .016$ for estrogen versus placebo, $P < .004$ for gabapentin versus placebo, and $P < .63$ for gabapentin versus estrogen at all time points. *Open circles, placebo; filled circles, gabapentin; triangles, estrogen.*

Reddy. Gabapentin for Hot Flushes.
Obstet Gynecol 2006.



Fezolinetant (FDA Approved 2023)

MOA: Neurokinin 3
(NK3) receptor
antagonist

Dose: 45mg PO daily

DDI: CYP1A2 inhibitors

ADE: Insomnia, back
pain, diarrhea, nausea,
abdominal pain, hot
flush, hepatic
transaminase elevations

Box warning:
Hepatotoxicity

Contraindications:
Cirrhosis, CKD (stage
IV-V), concomitant
CYP1A2 inhibitors

SKYLIGHT 1 Trial

Design:

- Type: Randomized (1:1:1), double-blind, placebo-controlled trial
- Location: 97 facilities in Canada, Czech Republic, Hungary, Poland, Spain, UK, & United States
- Time: 2019-2021
- Follow-up: 12-weeks with a 40-week active extension
- Population: Postmenopausal women 40-65 YOA with moderate-to-severe VMS

Interventions:

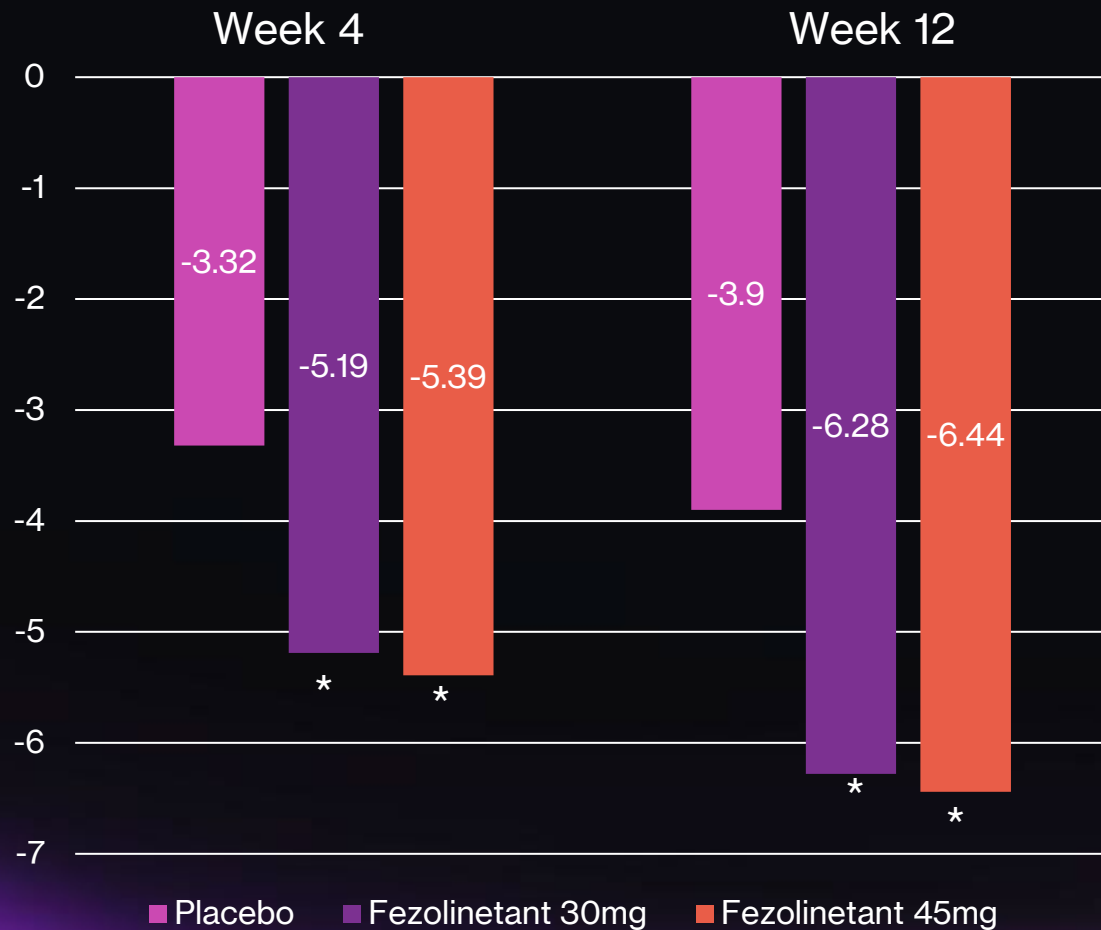
- Placebo (n=175)
- Fezolinetant 30mg (n=176)
- Fezolinetant 45mg (n=176)

Outcomes:

- Primary: Mean change in frequency and severity of VMS from baseline to weeks 4 and 12
- Secondary: Mean change in the total score for PROMIS SD SF 8b, PGI-C SD, MENQOL at 12 weeks

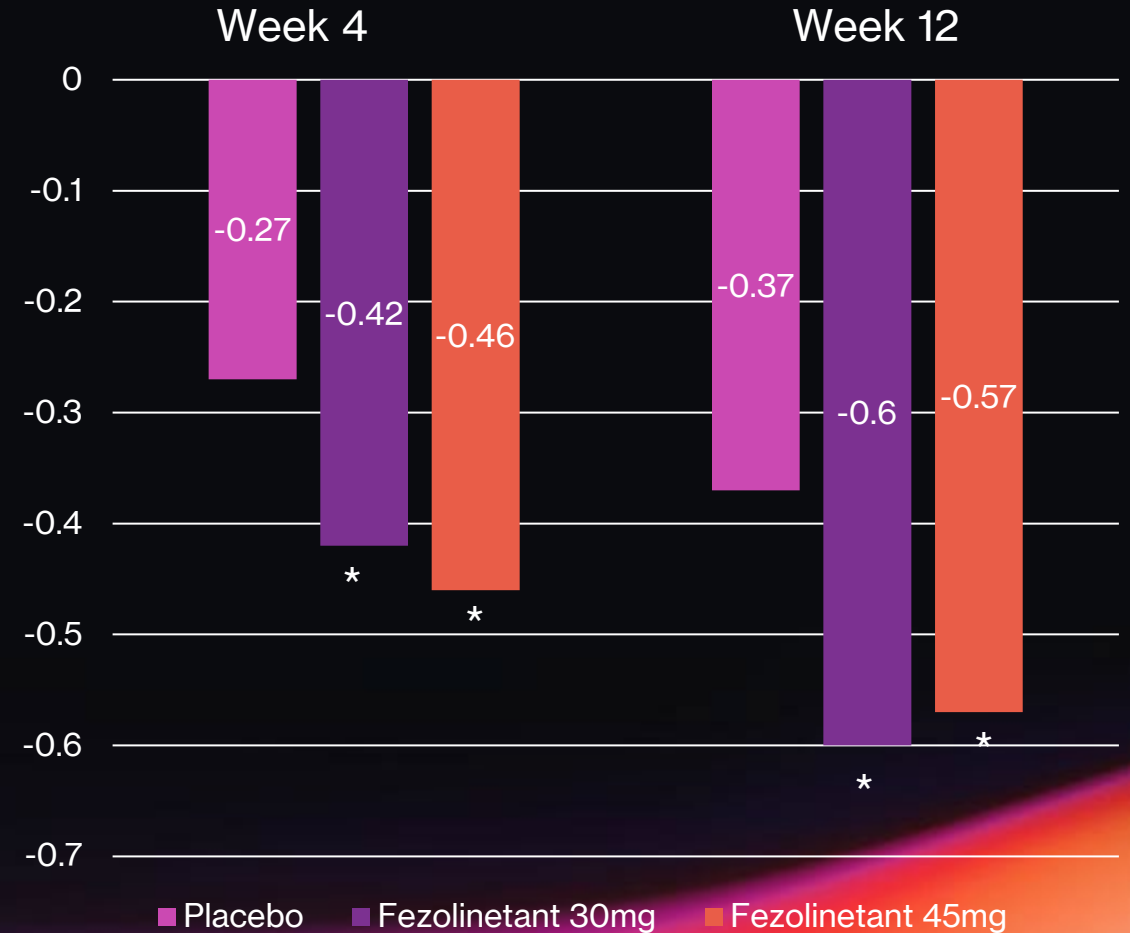
SKYLIGHT 1 Trial: Efficacy Outcomes

LMS CHANGE IN FREQUENCY OF MODERATE-TO-SEVERE VMS FROM BASELINE



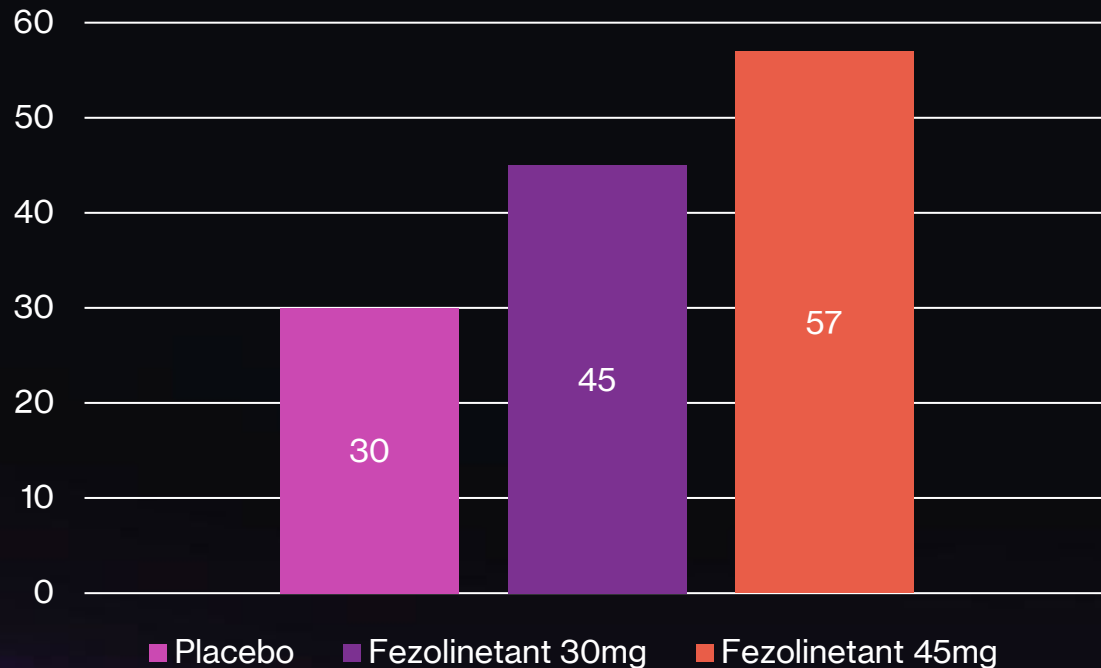
* p<0.0001 versus placebo

LMS CHANGE IN SEVERITY OF MODERATE-TO-SEVERE VMS FROM BASELINE



SKYLIGHT 1: Other Outcomes

Percentage of Patients experiencing
≥50% Reduction in VMS Frequency at
Week 12



- Secondary Outcomes: Both doses of fezolinetant showed significant improvements in sleep disturbances and menopause-specific quality of life (MENQOL) compared to placebo
- Adverse effects: 37% fezolinetant 30 mg, 43% fezolinetant 45 mg, and 45% placebo
 - Headache was the most common adverse effect
 - Low rates of liver function test elevations (3% fezolinetant 30 mg, 4% fezolinetant 45 mg, and 3% placebo)

Fezolinetant vs Other Therapy

- Design: Systematic review and meta-analysis compared efficacy of Fezolinetant to hormone and non-hormone therapy for VMS in postmenopausal women with ≥ 7 moderate-severe VMS/day or ≥ 50 VMS/week
- Results:
 - Frequency of moderate-severe VMS at week 12:
 - Fezolinetant improved VMS frequency similarly to MHT
 - Fezolinetant reduced frequency more than all non-MHT (mean difference):
desvenlafaxine 50-200mg (1.12-2.16), gabapentin 1800mg (1.63), paroxetine 7.5mg (1.66)
 - Severity at week 12: Significantly improved VMS severity compared to desvenlafaxine 50mg and placebo

Elinzanetant (FDA Approved 2025)

MOA: NK1 & 3
antagonist

Dose: 120mg daily

DDI: CYP3A4

ADE: Headache,
fatigue, diarrhea

Contraindications
: Strong CYP3A4
inhibitors

OASIS 1 & 2 Trials

Study Design:

- Type: Two double-blind, randomized, phase III trials
- Location: US, Europe, Canada and Israel
- Time: 2021-2023
- Follow-up: 12-weeks followed by a 14-week active extension
- Population: Postmenopausal women 40-65 YOA with moderate-to-severe VMS

Interventions:

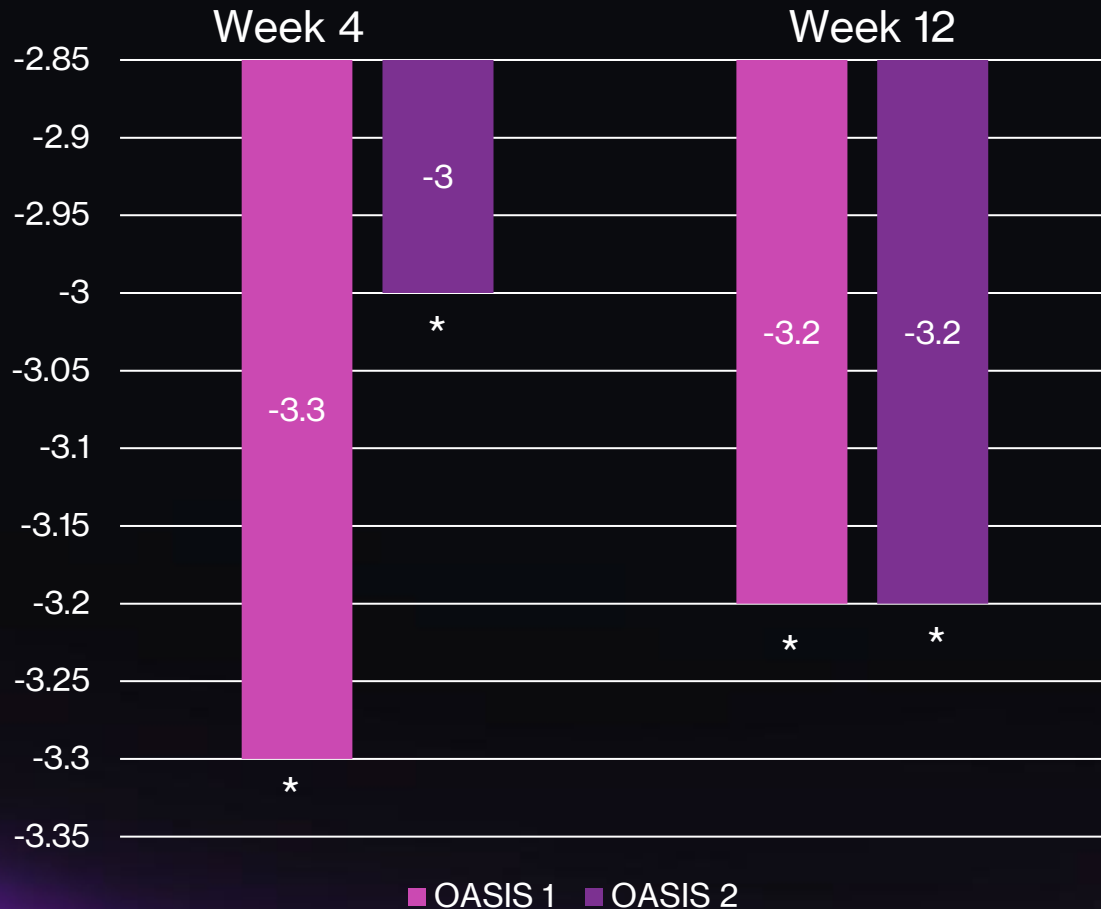
- Elinzanetant 120 mg orally daily x 26 weeks (n=199 OASIS 1, n=200 OASIS 2)
- Placebo orally x 12 weeks followed by elinzanetant 120 mg orally x 14 weeks (n=197 OASIS 1, n=200 OASIS 2)

Outcomes:

- Primary: Mean change in frequency and severity of VMS from baseline to weeks 4 and 12
- Secondary: Changes PROMIS SD SF-8b, MENQOL from baseline to week 12

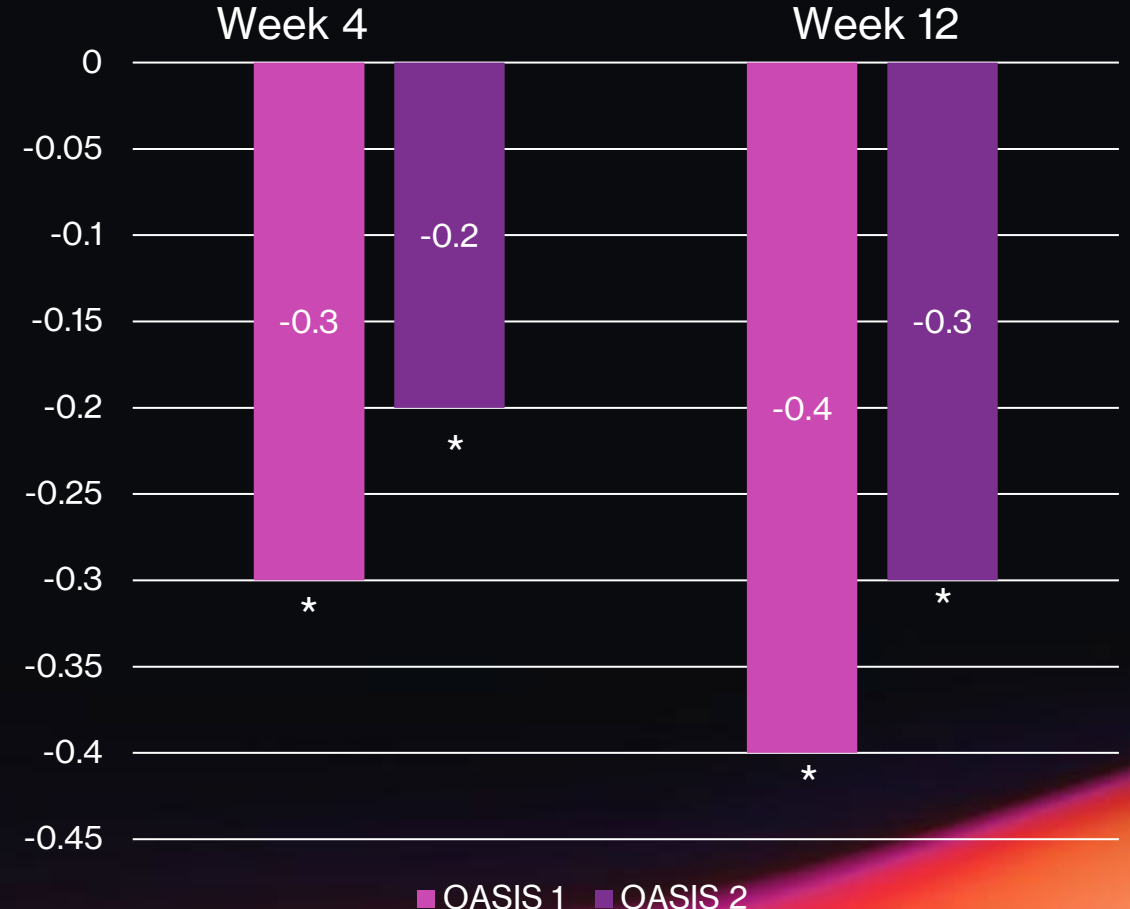
OASIS 1 & 2: Efficacy Outcomes

LMS CHANGE IN DAILY FREQUENCY OF VMS VS PLACEBO

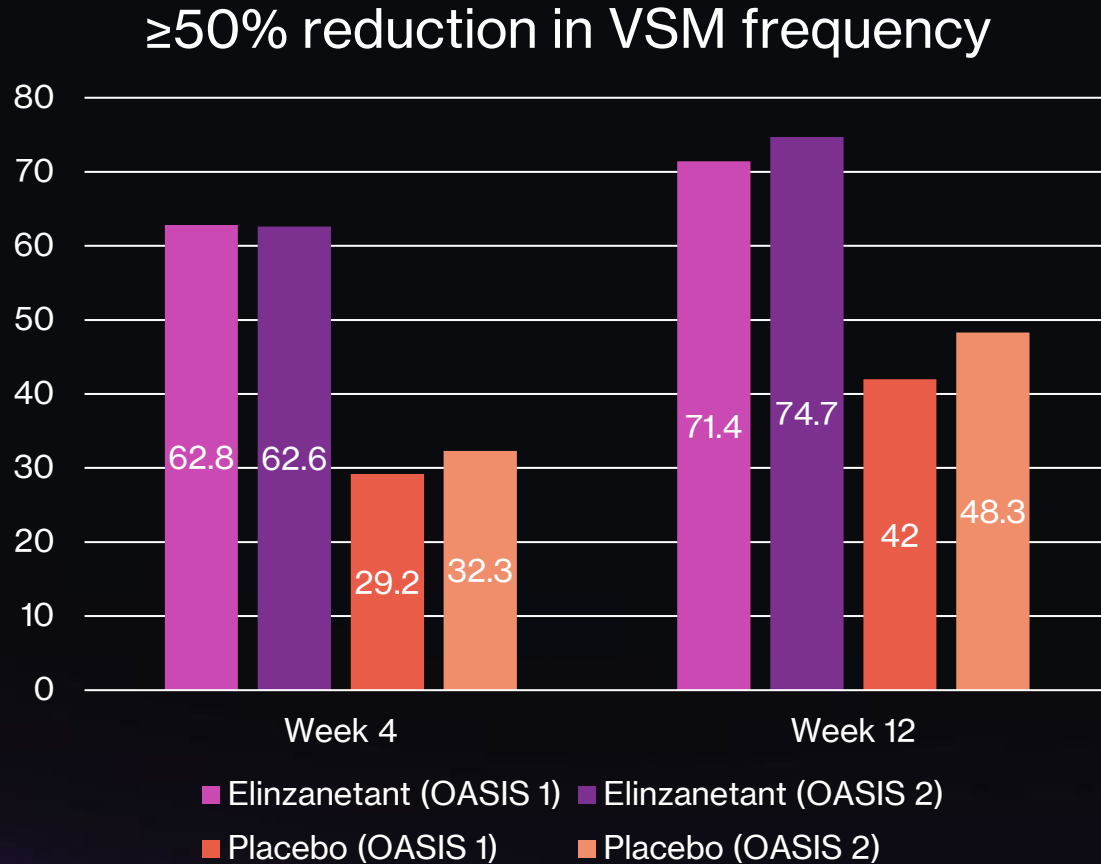


* p<0.001 versus placebo

IMPROVEMENTS IN VMS SEVERITY VS PLACEBO



OASIS 1 & 2: Other Results



- Secondary Outcomes: Elinzanetant showed significant improvements in sleep disturbances and MENQOL vs. placebo in both OASIS 1 & 2
- Adverse effects: similar rates of adverse effects
 - Headache and fatigue more common with elinzanetant
 - No hepatotoxicity noted

OASIS-3 Trial

Design:

- Type: Phase 3, randomized, double-blind, placebo-controlled trial
- Location: 83 sites in North America and Europe
- Time: 2021-2024
- Follow-up: 52 weeks
- Population: Postmenopausal women 40-65 years of age seeking treatment for moderate-to-severe VMS

Intervention:

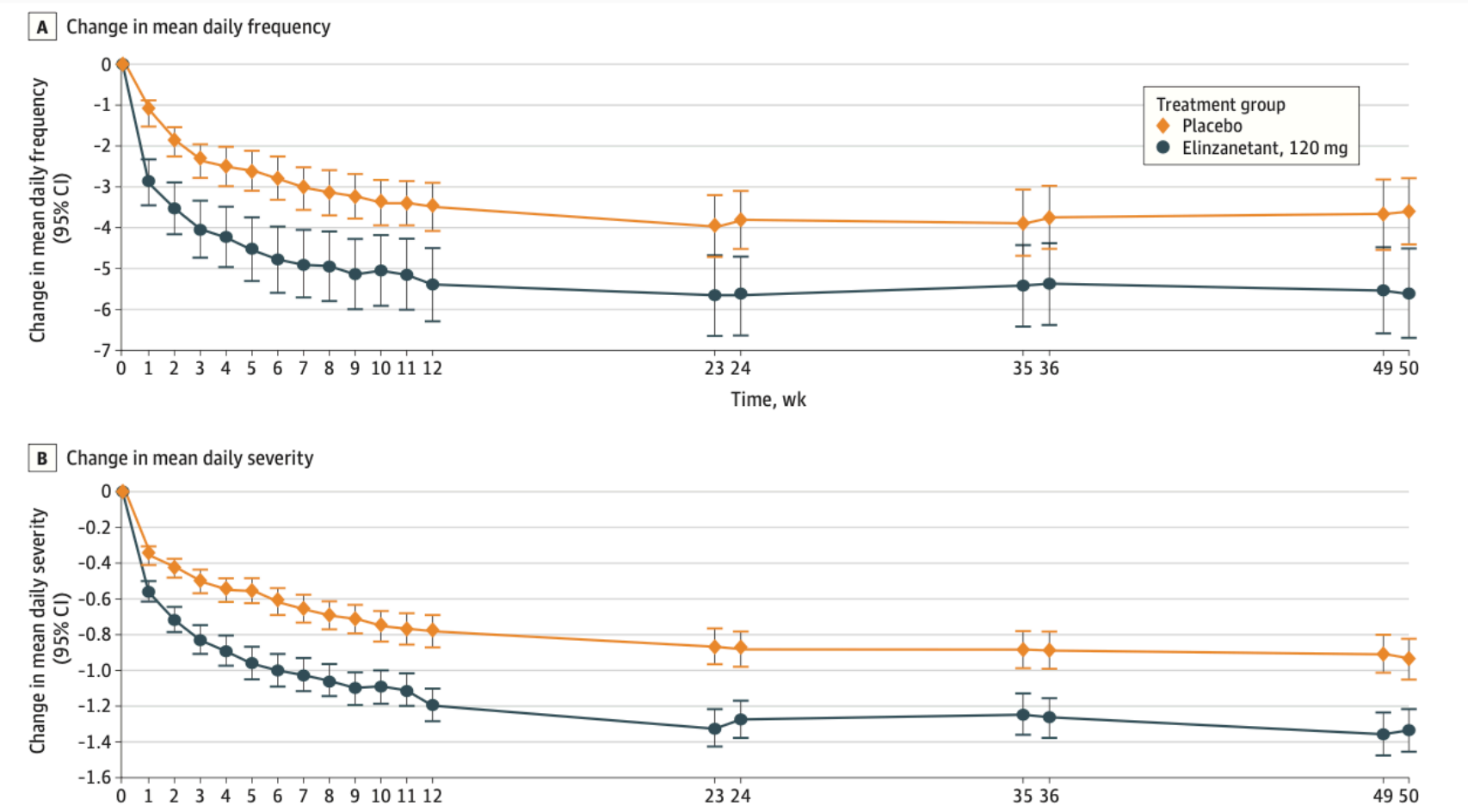
- Elinzanetant 120mg PO daily (n=313)
- Placebo (n=315)

Outcomes:

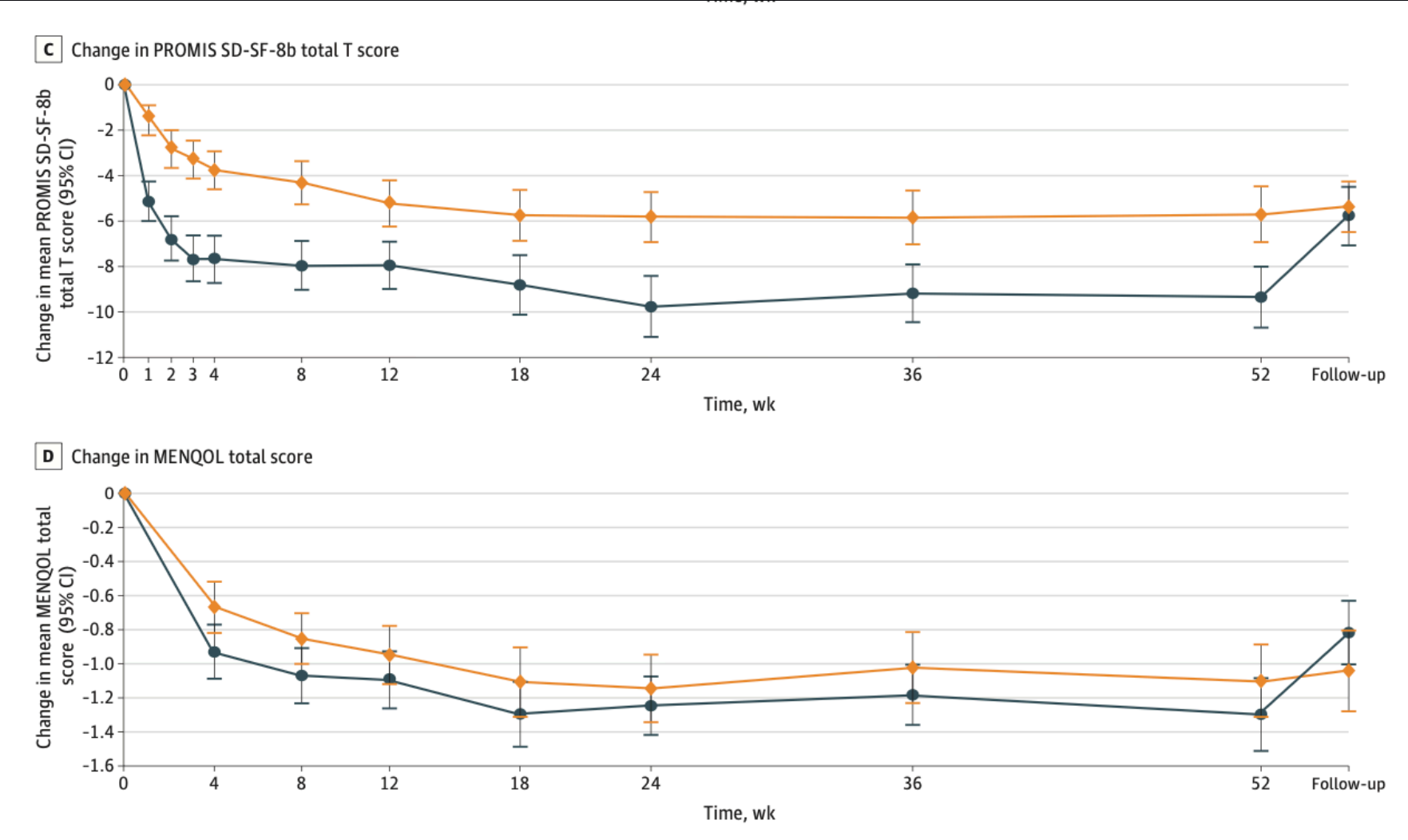
- Primary: Mean change from baseline to week 12 in frequency of daily moderate-to-severe VMS
- Secondary: Change in PROMIS SD SF-8b, MENQOL at 52 weeks

OASIS 3: Outcomes

Figure 2. Mean Changes From Baseline in the Full Analysis Set



OASIS 3: Outcomes



Advantages & Limitations of Nonhormonal Pharmacologic Therapy

Medication Class	Advantages	Limitations
SSRI/SNRI	• Reduce VMS frequency/severity • May help menopause-related depression/anxiety • Effective for menopausal symptoms associated with cancer	• Less effective than hormone therapy • Risk of sexual dysfunction • DDI: • QTc interval prolongation • Reduced efficacy of tamoxifen due to CYP2D6 inhibition by paroxetine
Gabapentinoids	• Gabapentin • Reduces VMS frequency/severity • Similar efficacy to SSRIs/SNRIs • Effective for menopausal symptoms associated with cancer	• Less data supporting use of pregabalin than gabapentin • Risk of CNS side effects • Suicide risk warning • Pregabalin (sometimes gabapentin) classified as Schedule V controlled substance
Neurokinin B Antagonists	• Reduced VMS frequency/severity • Sleep improvement • Improved quality of life • Data supporting benefit in patients with (OASIS 4) and without cancer	• Hepatotoxicity with fezolinetant • DDI: mediated by CYP1A2 with fezolinetant, CYP3A4 with elinzanetant • High cost of therapy

Other Pharmacologic Options

Clonidine:

- Evidence: Improved VMS in placebo-controlled studies; less effective than other hormonal options
- Recommendation: Recommended (2015), Not recommended (2023)

Nelson HD, et al. *JAMA*. 2006;295:2057-2071.
Leon-Ferre RA, et al. *JNCI Cancer Spectr*. 2019;21:pkz088.
Stuenkel CA, et al. *J Clin Endocrinol Metab*. 2015;100(11):3975-4011.

Oxybutynin:

- Evidence: Improved moderate-to-severe VMS in placebo-controlled studies
- Recommendation: Recommended (2023)

Rada G, et al. *Cochrane Database Syst Rev*. 2010;8:CD004923.
Rahman SA, et al. *Sleep*. 2022;45(3):zsac007.
Menopause. 2023;30(6):573-590.

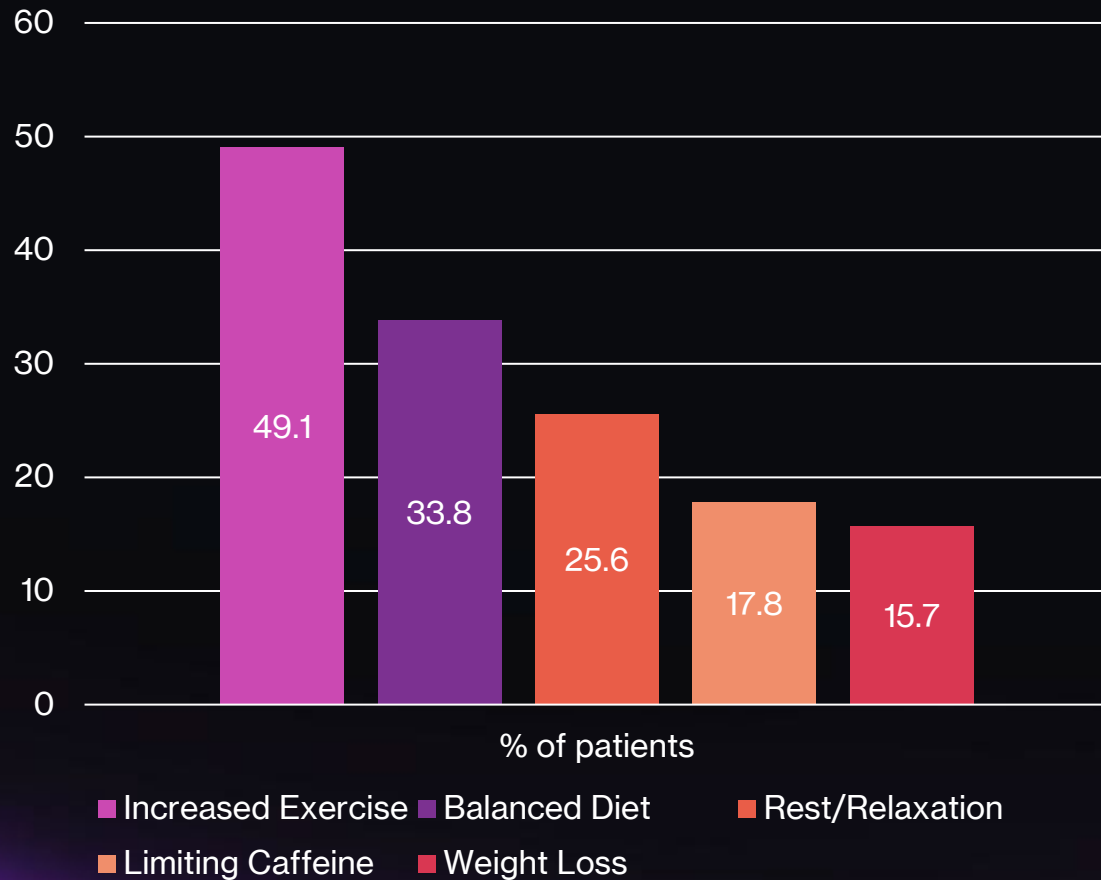
Suvorexant

- Evidence: Improved nighttime VMS frequency, improved insomnia
- Recommendation: Not recommended (2023)

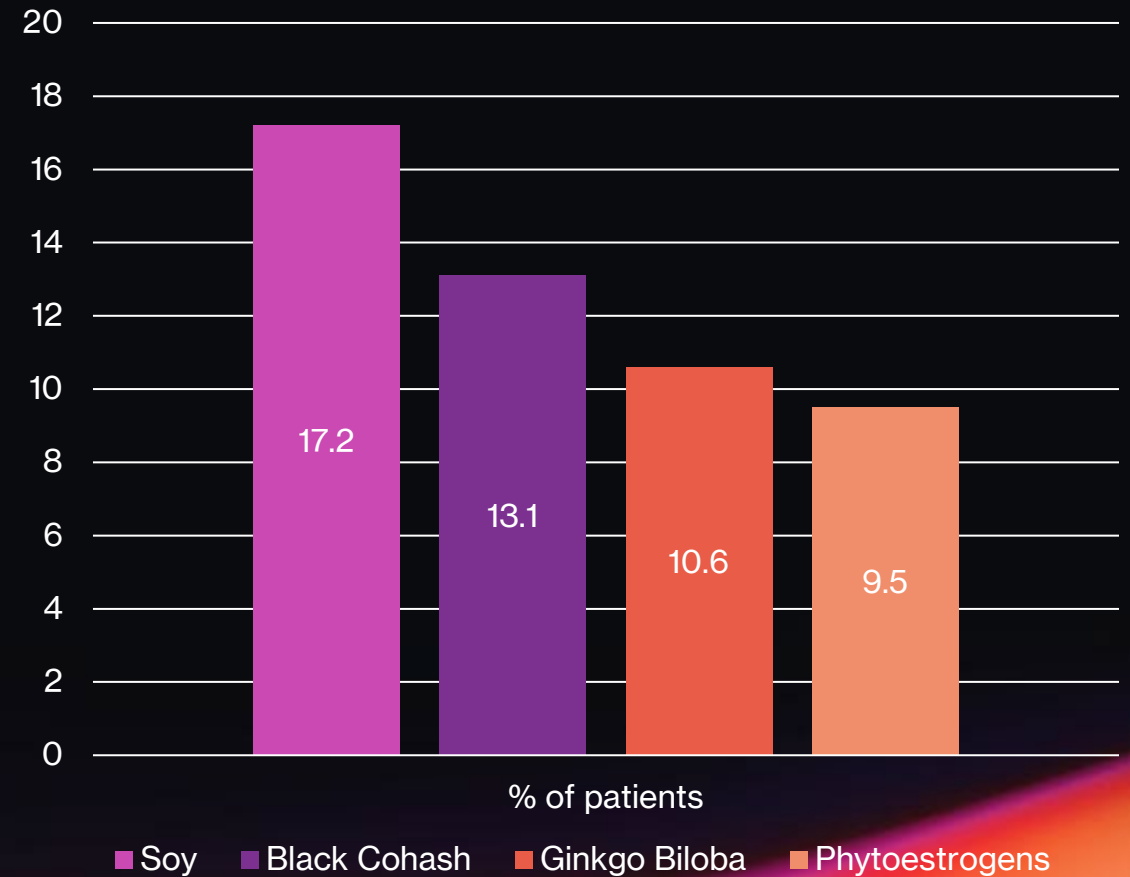
Simon JA, et al. *Menopause*. 2016;23:1214-1221.

REALISE Trial

73.8% OF PATIENTS USED LIFESTYLE CHANGES



57.6% OF PATIENTS USED OTC PRODUCTS



Cannabinoids

MOA: Agonist of CB1 and CB2 receptors in the brain

Formulations and Dosage: Varies in studies

DDI: CYP450

ADE: Depends on product, dose, formulation; dry mouth, increased appetite, impaired memory, slowed reaction time

Cannabinoids for VMS

- Design: Online self-report questionnaires
 - Recruitment: Online posting on social media platforms, and the hospital online recruitment platform
 - Time: 2020-2021
 - Population: 131 peri- and 127 post-menopausal women
- Results:
 - Cannabis use:
 - 86.1% of patients currently used cannabis
 - 78.7% using cannabis for menopausal symptoms at some point
 - Sleep (64.7%) Libido (30.4%) Hot flashes (13%)
 - Anxiety/mood (46.1%) Sexual pleasure (18.7%) Night sweats (12.6%)
 - Interest in exploring medical cannabis for menopause: 78.5% were interested and 21.5% not interested
 - Things that would increase comfort using cannabis for menopause included: data supporting use (54.7%), online/mail order options (54.2%), or education about risks & benefits (35.5%)

Cannabinoids in VMS

- Design: Cross-sectional, web-based survey
 - Recruitment: Social Media
 - Time: 2020
 - Location: Online (location of participants in Alberta, Canada)
 - Population: ≥ 35 years of age; median age 49; 33% peri- and 35% post-menopausal
- Results:
 - Cannabis use: 34% current cannabis use, 66% ever use cannabis
 - Of the 34% currently using cannabis, >75% used for medical purposes
 - Sleep (65.1%) Pain (33.3%) Depression, (24.8%) Low libido (10.4%)
 - Anxiety (45.3%) Irritability (28.5%) Mood (19.4%)
 - 73.5% of patients found cannabis helpful for menopause symptoms
 - 38.7% of patients interested in using cannabis for menopause symptoms and 51.4% interested in learning more about cannabis for menopause

Herbal Products for VMS

With limited evidence of benefit

Soy foods/extracts

Rhubarb

Lactobacillus acidophilus

Pollen extract

Ammonium succinate

Without evidence of benefit

Vitamin E

Cannabinoids

Black cohosh

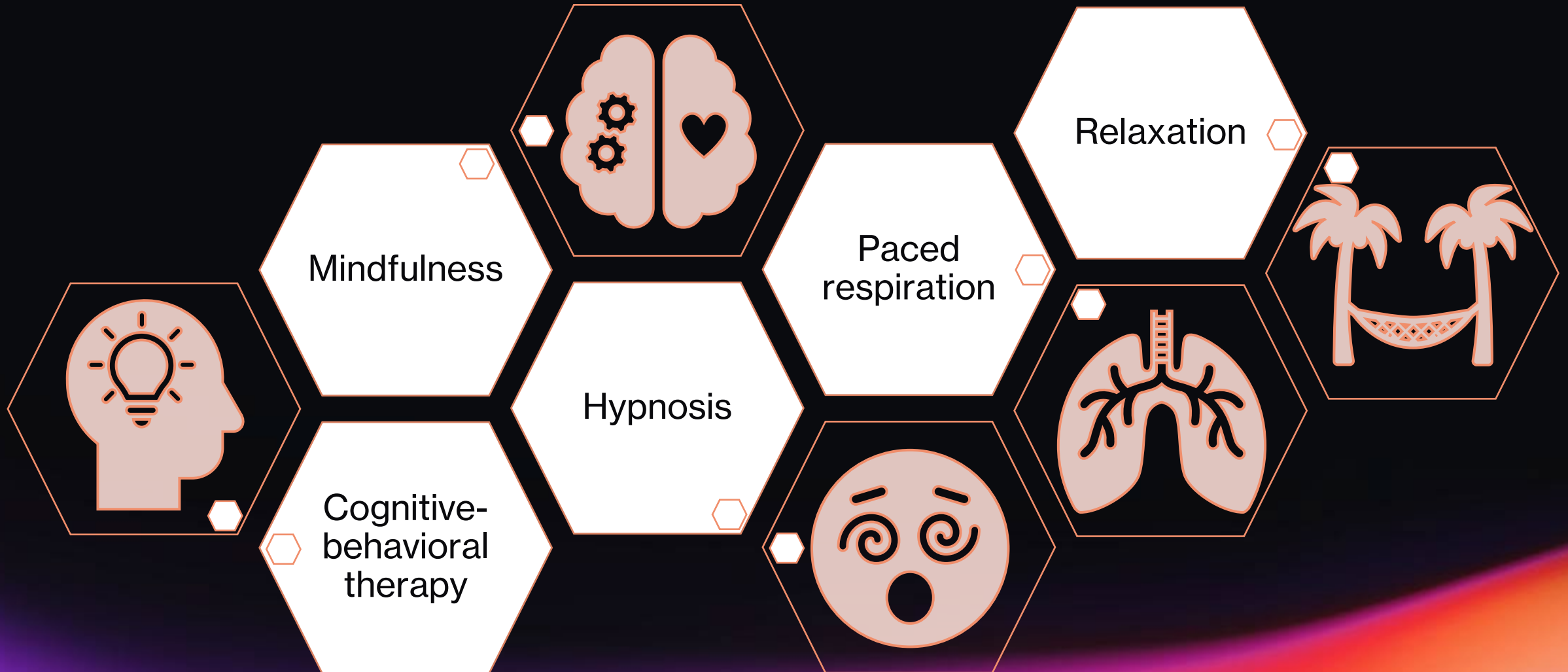
Other supplements (i.e., chasteberry, dong quai, evening primrose, ginseng, maca, milk thistle, omega-3 fatty acids, wild yam, etc.)

None of these are recommended by NAMS due to mixed evidence (e.g., soy), or lack of evidence

Lifestyle Interventions



Mind-Body Interventions



Cognitive Behavioral Therapy (CBT) for VMS

- CBT for Menopause: Cognitive and behavioral strategies for anxiety, depression, sexual concerns, sleep and VMS as well as psychoeducation
- CBT-Meno trial compared CBT-Meno for 12-weeks compared to patients on a waitlist (placebo):
 - Efficacy: At 12 weeks CBT-Meno improved significantly improved:
 - Depressive symptoms
 - Sleep difficulties
 - Sexual concerns
 - VMS symptom interference
 - “Bothersomeness” of symptoms
 - Satisfaction: All patients said they were very satisfied (88.5%) or mostly satisfied (11.5%) with treatment
 - Recommendation: All of patients reported they would recommend CBT-Meno to others

Hypnosis for VMS

- Hypnosis works via relaxation:
 - Relaxation, feelings of comfort & safety
 - Stress reduction
 - Cooling imagery
- Hypnosis has been shown to:
 - Reduce VMS hot flash scores
 - Improve anxiety
 - Improve sleep outcome

Hypnosis ± Venlafaxine for VMS

Design:

- Type: Prospective, randomized, single-blind pilot study
- Time: January 2010 to December 2011
- Follow-up: 8 weeks
- Population: 71 post-menopausal women who could not or did not want to use MHT

Intervention:

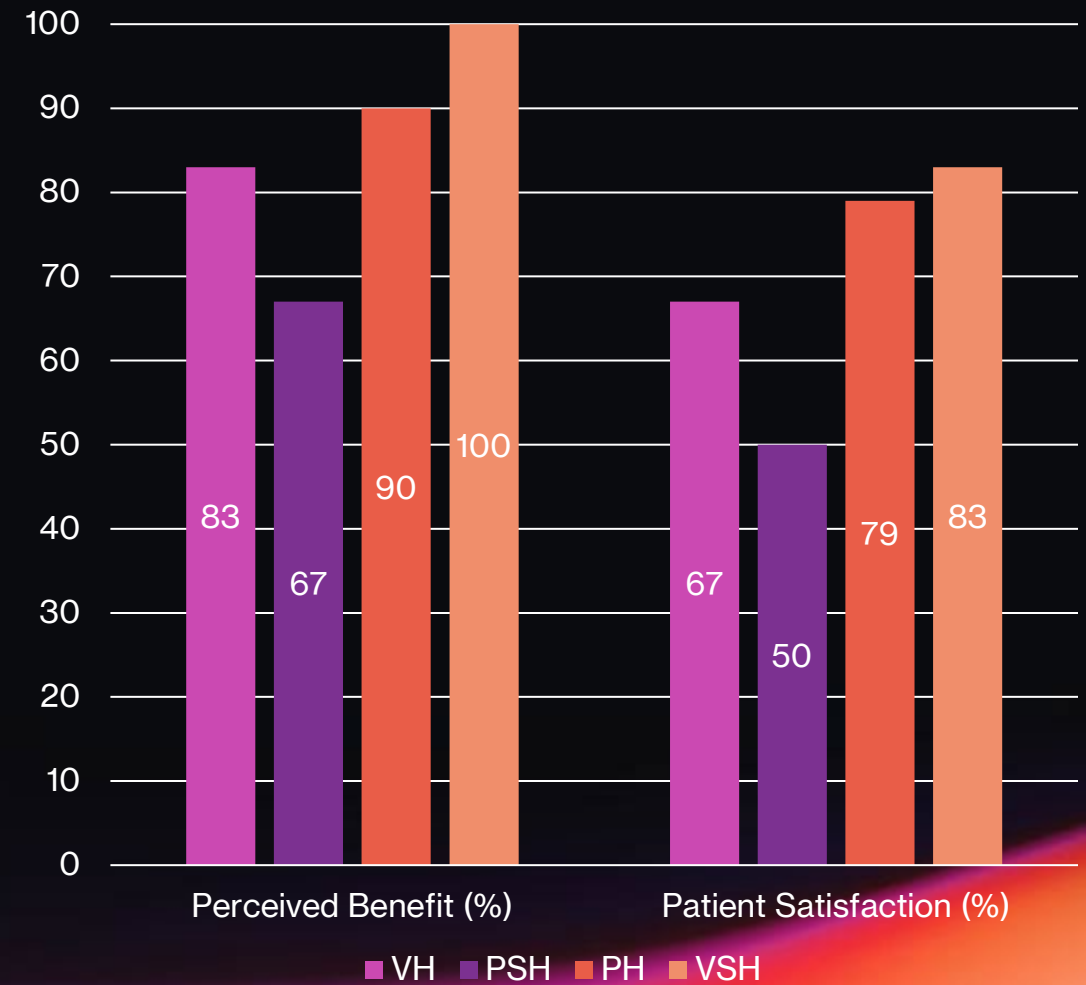
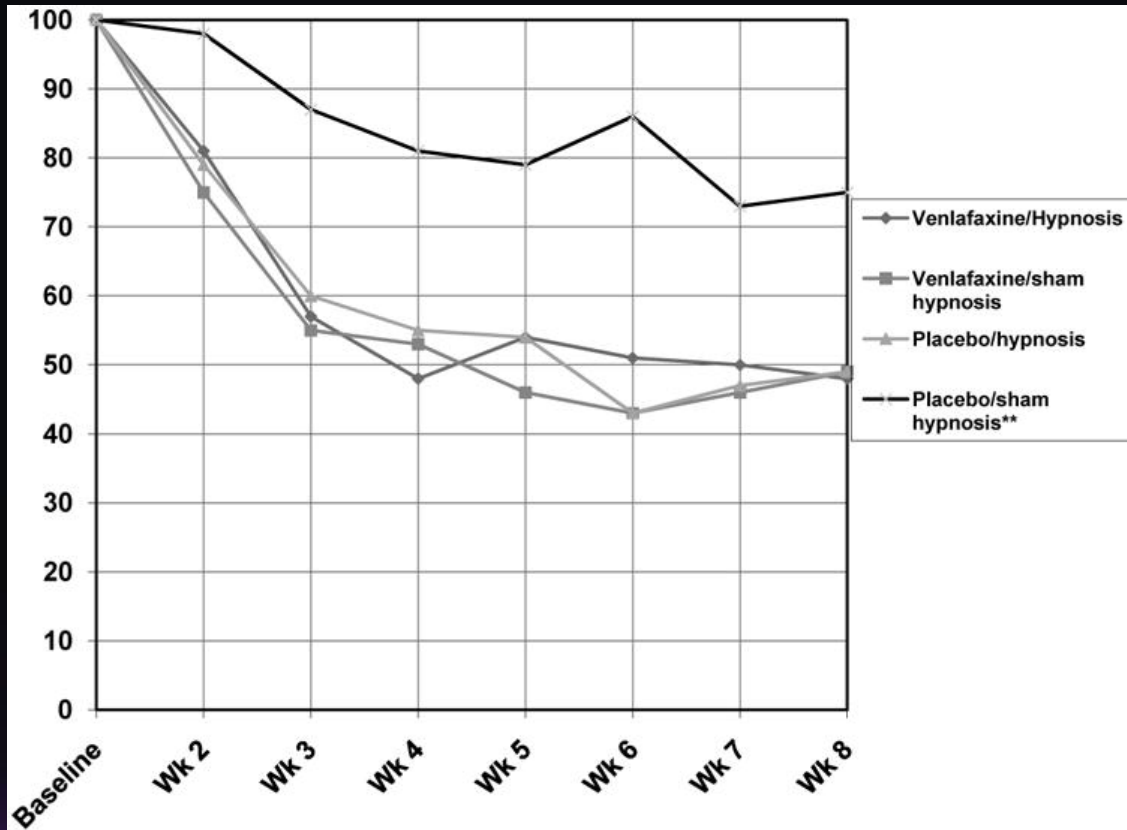
- Placebo + hypnosis (PH; n=22)
- Placebo + sham hypnosis (PSH; n=15)
- Venlafaxine 75mg + hypnosis (VH; n=15)
- Venlafaxine 75mg + sham hypnosis (VSH; n=19)

Outcomes:

- Primary: Hotflash score
- Secondary: Side effects, MENQOL, SGIC, satisfaction

Hypnosis ± Venlafaxine for VMS – Results

Figure 2. Graph of hot flash scores depicted as percent of baseline for all arms over 8 weeks



2015 Endocrine Society Guidelines for Menopause

- Lifestyle interventions (e.g. cooling techniques, trigger avoidance, avoiding obesity stress avoidance) for mild or less bothersome symptoms
- Prescription therapies: Moderate-severe symptoms unable or unwilling to take hormone therapy:
 - SNRI, SSRI, gabapentin or pregabalin
 - If not responsive to therapies above, try clonidine
- Dietary supplements, mind-body techniques, and other therapies: Lack of consensus of benefit for CAM (e.g., black cohosh, red clover) and mind-body techniques (e.g., acupuncture, hypnosis, paced breathing)

2023 NAMS Recommendations for Non-Hormonal Therapy

Intervention Type	Recommended	Not Recommended
Medication	Fezolinetant, gabapentin, SSRI/SNRI	Clonidine, oxybutynin, pregabalin, suvorexant
Dietary		Cannabinoids, herbal products, soy
Lifestyle	Weight loss	Cooling techniques, dietary adjustments, exercise, trigger avoidance, yoga
Mind-body techniques	Cognitive-behavioral therapy, hypnosis	Mindfulness, paced respiration, relaxation
Other technologies	Stellate ganglion block	Acupuncture, chiropractic intervention

Summary

- FDA removed warning for estrogen
- Many patients are eligible for MHT and are not currently using it
- There are more options for non-hormonal pharmacologic therapy, including the new NK antagonists
- There continues to be a paucity of high quality data for many of the non-pharmacologic options for VMS

Patient Case

- A 48year-old female who has been experiencing irregular menstrual periods (last period 7 months ago) presents to clinic with complaints of hot flashes impairing her work.
- SH: Married, works as a librarian. Drinks alcohol socially (1-2 drinks/month), maintains a vegetarian diet
- PMHx: hypertension, migraine with aura (7-8 monthly migraine days), depression
- Home medications: amlodipine 10mg PO daily
- VS: BP 114/62 mm Hg, HR 72 beats/min, RR 15/min, Ht 67 inches, weight 204 lb, BMI 31.9

Question 2

Which of the following would be most appropriate for management of her VMS?

- Suvorexant 10mg PO daily
- Fezolinetant 45mg PO daily
- Pregabalin 50mg PO TID
- Venlafaxine 37.5mg PO daily
- Oral conjugated estrogens 0.625 mg + medroxyprogesterone acetate 2.5 mg daily

Question 3

She would also like some non-pharmacologic recommendations to help her menopausal symptoms. Which of the following would you recommend at this time?

- A. Trigger avoidance
- B. Cognitive behavioral therapy
- C. Acupuncture
- D. Dietary changes

CE Code: MENOPAUSE



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Thank you!