

# Perimenopause and Menopause Master Class

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# Objectives:

1. Understand what Perimenopause and Menopause and when to expect it.
2. What makes it a volatile and erratic experience for some?
3. Learn to recognize symptoms.
4. Identify timing for educating and providing anticipatory guidance.
5. Evaluation and Treatment.

# Perimenopause

- Perimenopause can be a volatile and erratic rollercoaster.
- Patients need us during this pivotal hormonal change.
- Learn to recognize symptoms and discuss.
- Anticipatory guidance about the future and education is essential, for patients and clinicians.
- Women live on average 40% of their lives postmenopausal.  
Let's help them navigate it confidently!

# What is perimenopause?

Some definitions:

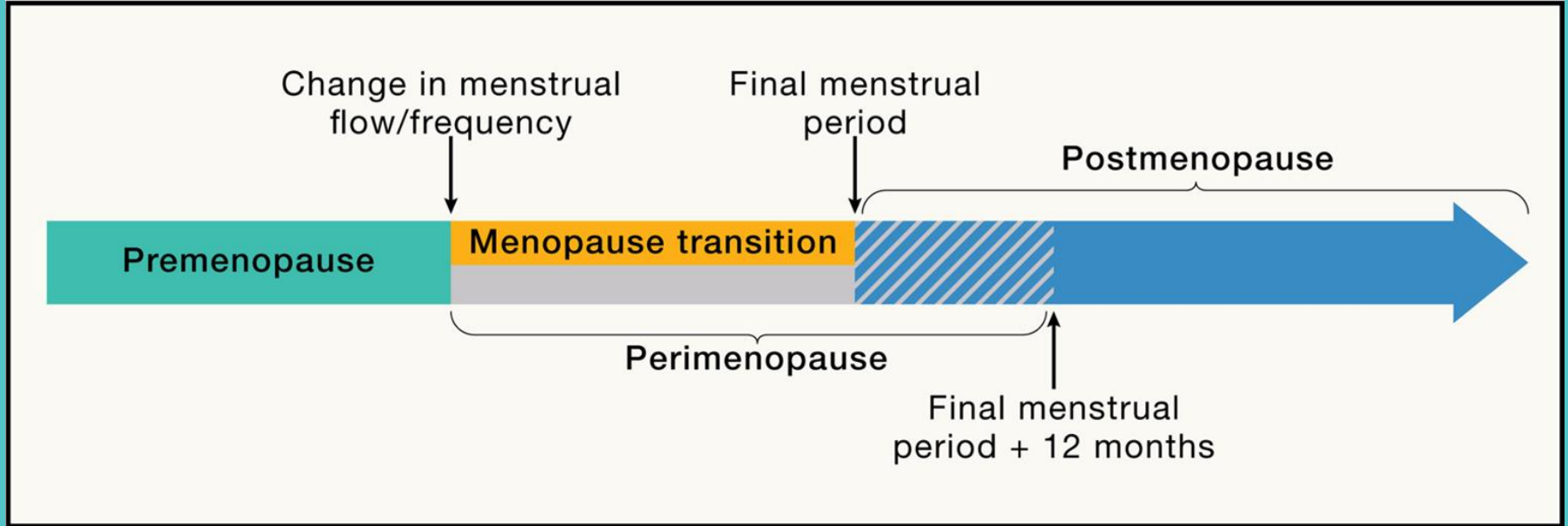
1. The midlife transition
2. Midlife puberty
3. The years leading up to the last menstrual cycle
4. Years prior to menopause when menstrual cycle begins to change, and one year after the final menstrual period and symptoms begin

# What is perimenopause?

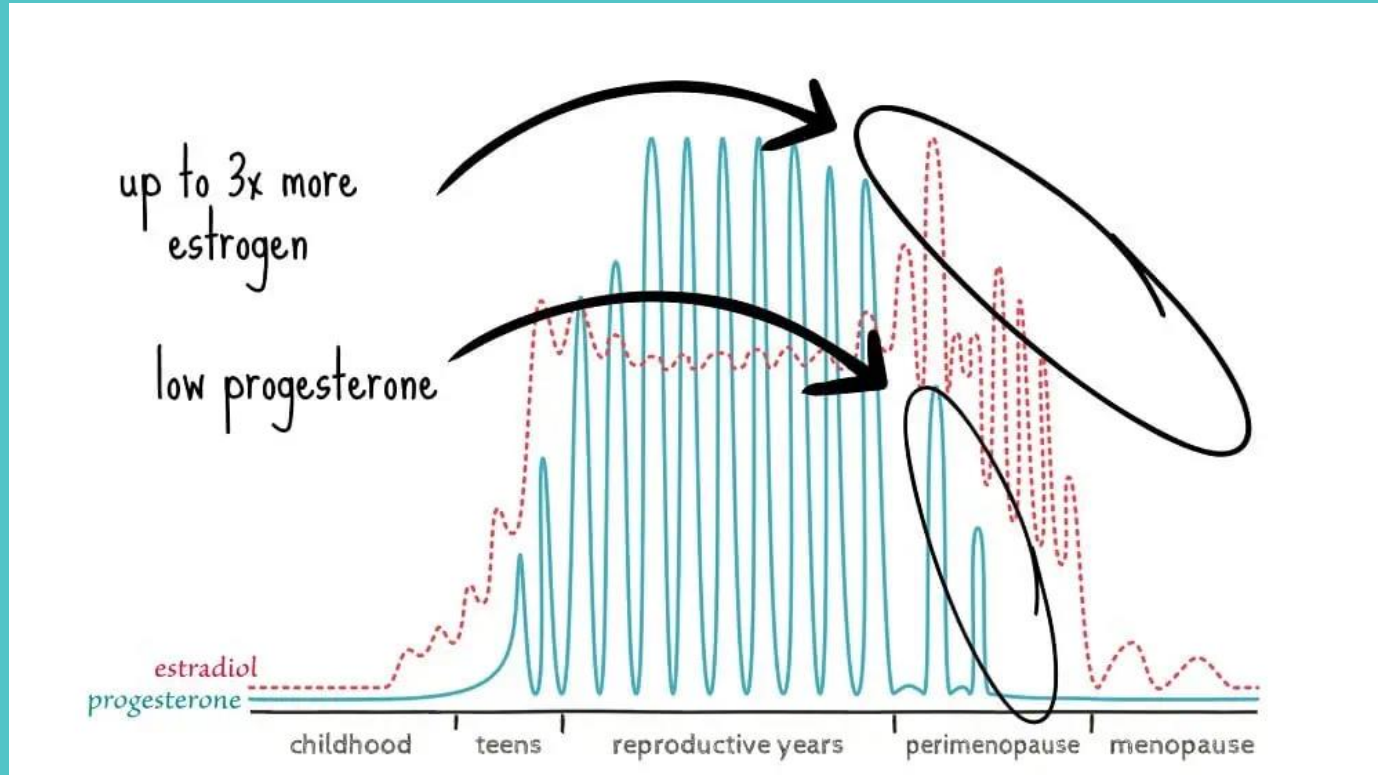
## The Menopause Society:

As a woman reaches perimenopause, she may start to notice changes in her menstrual flow and frequency. A change in menstrual periods is caused by the ovaries' erratic production of hormones and less-frequent release of an egg (ovulation). In the beginning of perimenopause, these changes are often subtle. It's common for cycles to become a little shorter than usual. The number of days of bleeding may be fewer or greater, and blood flow may be heavier or lighter. As perimenopause progresses, cycle length may vary by 7 days or more. In the beginning it may be an occasional skipped period, but in the late menopause transition women may skip 60 days or more.

# Perimenopause



# Perimenopause



# The Impact

1. 6,000 women experience menopause each day
2. Perimenopause can occur 7-10 yrs before the last menstrual cycle
3. Average age of LMP is 51.4
4. 1.3 million women experience their LMP each year
5. Women make up 50.5% of the population
6. Women can live 40% of their lives peri/postmenopausal

# SWAN: Study of Women's Health Across the Nation

1. Peak incidence of Vasomotor Symptoms VMS or Hot Flashes occurs during late perimenopause around age 49
2. Duration of VMS Symptoms: 7-10yrs on average
  - a. Black women 10yrs
  - b. Non-Hispanic White 9yrs
  - c. Chinese or Hispanic 5yrs
3. Factors with increased VMS frequency:
  - a. BMI >30 1.5 increase
  - b. Smoking >40 pack-yr 2.0 increase
  - c. Race

# Perimenopause Symptoms

1. Increased anxiety, more nervous
2. Fatigue
3. Low feelings
4. Overwhelmed, less able to cope
5. Difficulty concentrating
6. Irritation, agitation, anger
7. "Not Feeling Like Myself"

**While having regular menstrual cycles!**

# The STRAW +10 Framework

Updated staging system for classifying reproductive aging process in women

Stage	-5	-4	-3b	-3a	-2	-1	+1 a	+1b	+1c	+2
Terminology	<b>REPRODUCTIVE</b>				<b>MENOPAUSAL TRANSITION</b>		<b>POSTMENOPAUSE</b>			
	Early	Peak	Late		Early	Late	Early			Late
					<i>Perimenopause</i>					
Duration	<i>variable</i>				<i>variable</i>	1-3 years	2 years (1+1)	3-6 years	<i>Remaining lifespan</i>	
<b>PRINCIPAL CRITERIA</b>										
Menstrual Cycle	Variable to regular	Regular	Regular	Subtle changes in Flow/Length	<i>Variable Length</i> Persistent $\geq 7$ -day difference in length of consecutive cycles	Interval of amenorrhea of $\geq 60$ days				
<b>SUPPORTIVE CRITERIA</b>										
<i>Endocrine</i> 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		
<i>Antral Follicle Count</i>			Low	Low	Low	Low	Very Low	Very Low		
<b>DESCRIPTIVE CHARACTERISTICS</b>										
Symptoms							Vasomotor symptoms <i>Likely</i>	Vasomotor symptoms <i>Most Likely</i>		<i>Increasing</i> symptoms of urogenital atrophy

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

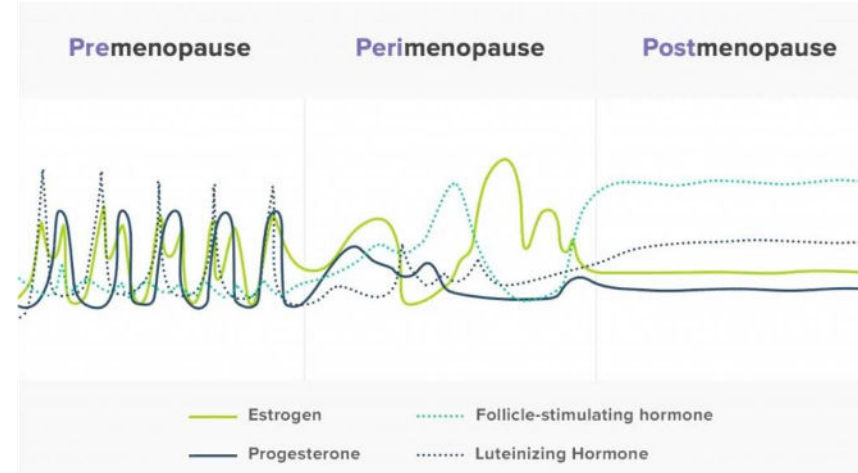
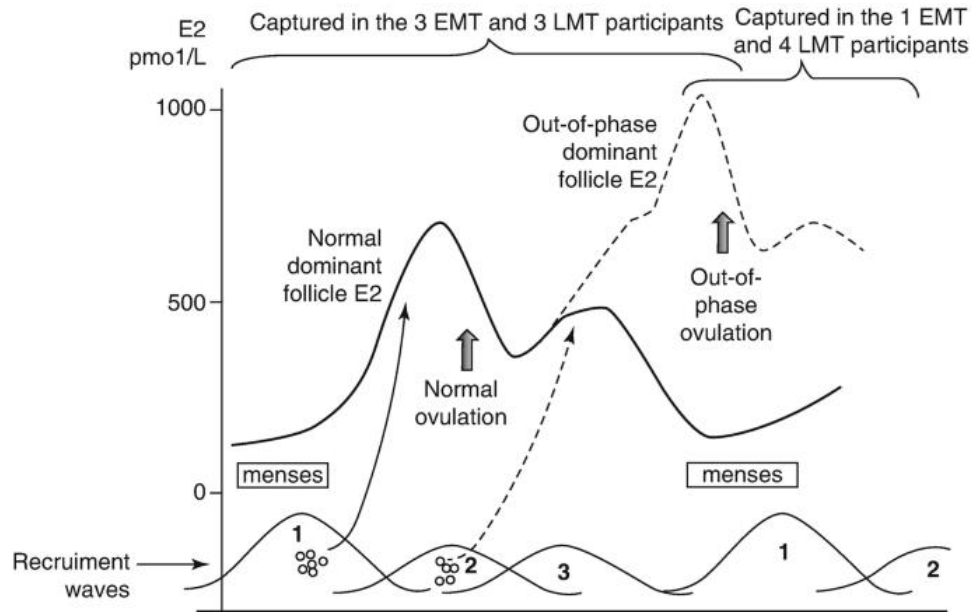
\*\*Approximate expected level based on assays using current international pituitary standard<sup>67-69</sup>



# Volatile and Erratic: what patients say

1. Pressure cooker feelings, short fuse
2. I rationalize that I'm not rational
3. The symptoms don't happen all of the time
4. It's like I'm going through puberty again
5. I just don't feel like/recognize myself anymore
6. My brain feels foggy and its scary
7. I can't sleep!

# LOOP Cycle: luteal out of phase follicular event



This is the rollercoaster

# How to identify Perimenopause

1. Listen to your patient!
2. Dynamic conversations are important and that takes time
3. Include perimenopause in the differential starting at age 35
4. There are no lab tests for perimenopause
5. Consider “Not feeling like myself” as a symptom
6. Recognize expected bleeding vs. bleeding that needs evaluation



# Menopause 12 months without a cycle

## Symptoms:

Hot flashes

Night sweats

Sleep disturbances

Fatigue

Brain Fog

Dry skin

Joint pain

Desire changes

# So is it all menopause?

No, people are whole people. It can be everything.

A person doesn't need blood work for puberty and they don't need it for perimenopause.

A clinician does need to listen and consider perimenopause/menopause as a possibility.

Labs can be helpful to rule in or rule out other causes of symptoms.

But you can have a thyroid disorder, low ferritin AND be perimenopausal.

Labs can also be helpful in risk stratification to assess for CVD, clotting disorders or hereditary cancer risk.

## Menopausal disorders and diseases



### Bone mass loss

- Vitamin D deficiency
- Osteopenia, osteoporosis
- Sarcopenia
- Loss of physical fitness



### Disorders of the mental sphere

- Memory deterioration
- Sudden changes in mood
- Poor concentration
- Depression
- Alzheimer's disease



### Cardiovascular disorders

- Vascular atherosclerosis, hypertension, thromboembolic disease
- Dyslipidemia
- Insulin resistance
- Type 2 diabetes
- Changing the distribution of body fat



### Changes in the genitourinary system

- Recurrent urinary tract infections
- Urinary incontinence
- Genital Decrease and Prolapse
- Cancer

## MENOPAUSE what are the symptoms?

Menopause occurs  
when you have not  
had a menstrual  
period for 12 months.

### Symptoms:



CHANGE IN  
MENSTRUAL  
PERIODS IS AN  
EARLY SYMPTOM



HOT FLASHES



NIGHT SWEATS



PROBLEMS  
SLEEPING



PAIN IN YOUR  
JOINTS



TIREDDNESS



ANXIETY OR  
MOOD CHANGES



DRY VAGINA



OVERACTIVE  
BLADDER OR  
DISCOMFORT

## MENOPAUSE AT A GLANCE

The average age of menopause is 51 years but you can enter menopause earlier.

Hormonal changes cause menopausal symptoms.

Most women will have some symptoms.

Most women have symptoms for 5 to 10 years.

Symptoms may vary during the menopause.

## WHAT CAN YOU DO ABOUT YOUR SYMPTOMS?

LIFESTYLE CHANGES IMPROVE OVERALL HEALTH AND MAY MAKE SYMPTOMS EASIER TO TOLERATE. SEE AMS FACT SHEET: LIFESTYLE AND BEHAVIOUR CHANGES FOR MENOPAUSAL SYMPTOMS.



IMPROVING  
DIET



REGULAR  
EXERCISE



STOP SMOKING



PSYCHOLOGICAL  
TREATMENTS  
(Including cognitive  
behavioral therapy  
and mindfulness)



**MENOPAUSAL HORMONE THERAPY (MHT)**

MHT is the most effective treatment for menopausal symptoms (see AMS fact sheet: What is MHT and is it safe?)



**NON-HORMONAL TREATMENT OPTIONS**

See AMS fact sheet: Non-hormonal treatment options for menopausal symptoms



**COMPLEMENTARY THERAPIES**

Some complementary therapies for hot flashes may be helpful. See AMS fact sheet: Complementary medicine options for menopausal symptoms.



**FIND  
AN AMS  
DOCTOR**

If your symptoms are bothering you, your doctor can help.

If you have any concerns or questions about your menopausal symptoms, visit your doctor or go to the Find an AMS Doctor service

[www.menopause.org.au/health-info/find-an-ams-doctor](http://www.menopause.org.au/health-info/find-an-ams-doctor) on our AMS website.

Australasian Menopause Society: [menopause.org.au](http://menopause.org.au)

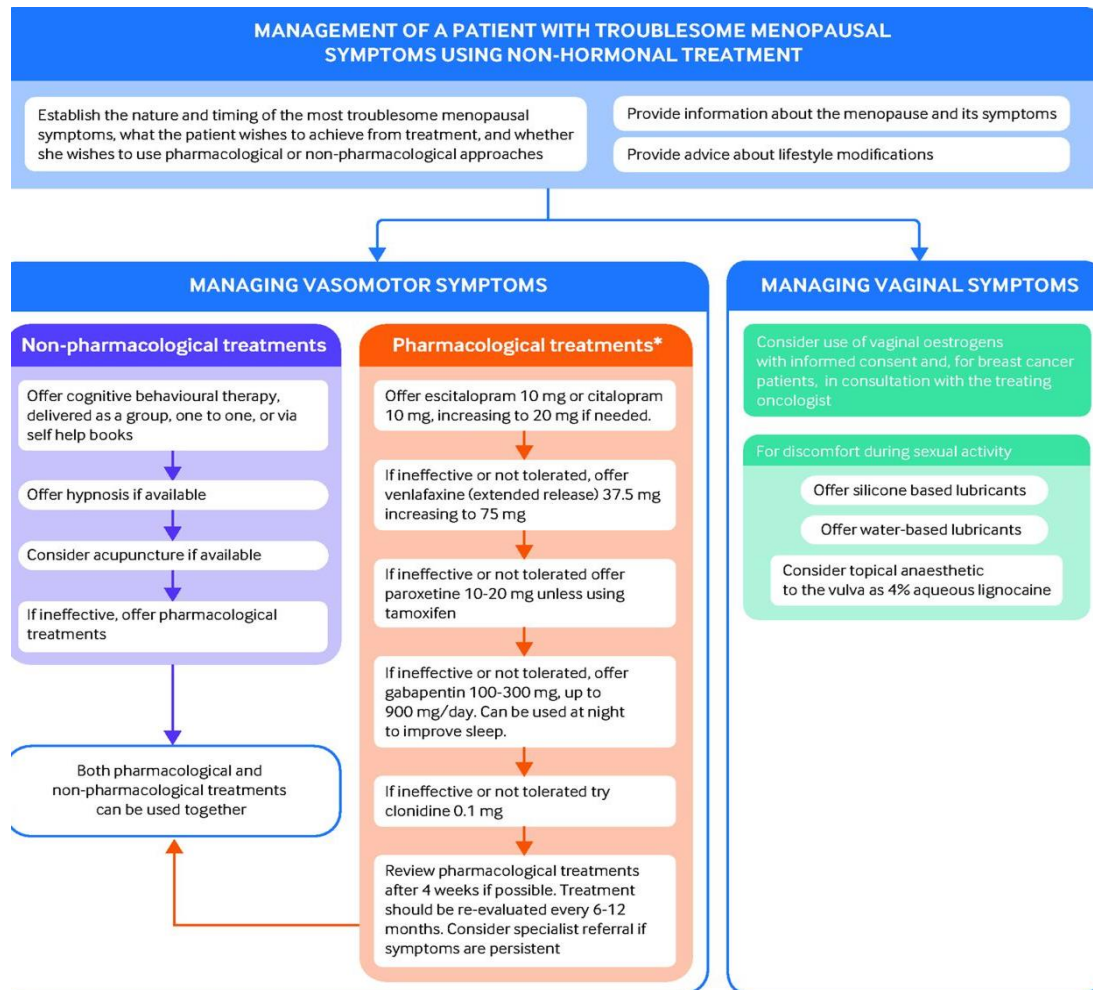


**AUSTRALASIAN  
MENOPAUSE  
SOCIETY**  
EMPOWERING MENOPAUSAL WOMEN

# Patients need you!

1. Use this as a time to provide anticipatory guidance for the future
2. Educate and empower
3. Perimenopausal and menopausal zest is real
4. Use this as an opportunity to dial habits in for a healthy life span
5. Normalize, validate and make a plan for the journey
6. Address contraceptive needs
7. Personalize treatment
8. Provide resources
9. Treat!

# Treatment



# Treatment

1. Fezolinetant is a non hormonal Rx used to treat moderate to severe hot flashes and night sweats.
  - a. Mechanism: blocks neurokinin 3 (NK3) receptor in brain. Requires liver function baseline and monitoring at 3mths, 6mths, 9mths
2. Elinzanetant is another non hormonal Rx used to treat moderate to severe hot flashes and night sweats.
  - a. Mechanism: blocks neurokinin 3 (NK3) receptor in brain. Does not require liver function monitoring

# A Contemporary View of Menopausal Hormone Therapy

Enthusiasm for the use of hormones to ameliorate symptoms of perimenopause and menopause has waxed and waned over the years. Both treatment for symptoms and training of women's health care practitioners in the management of menopause have sharply declined since publication of the Women's Health Initiative initial results in 2002. Findings from that trial, which treated a population of older, asymptomatic patients, have been extrapolated over the past 21 years to all estrogen products, all menopausal women, and all delivery mechanisms. Our patients deserve a more nuanced, individualized approach. Conjugated equine estrogens and medroxyprogesterone acetate are no longer the predominant medications or medications of choice available for management of menopausal symptoms. All hormones are not equivalent any more than all antiseizure medications or all antihypertensives are equivalent; they have different pharmacodynamics, duration of action, and affinity for receptors, among other things, all of which translate to different risks and benefits. Consideration of treatment with the right formulation, at the right dose and time, and for the right patient will allow us to recommend safe, effective, and appropriate treatment for people with menopausal symptoms.

# Treatment

Hormone Therapy vs. OCP (patch, ring)

OCP Considerations: higher dose than HT, VTE risk higher, if no risk can use until age 55.

Pearl: Use continuous, 15% experience libido decline as side effect, monitor for mood changes and hormonally mediated vestibulodynia which results in dyspareunia and GSM.

Combination options: estrogen and progestin vs. progestin only

Pearl: progestin only options (POP) can be used with estradiol patch. This can treat the intolerable bleeding while using the more body similar form of estrogen.

# Treatment

Hormone Therapy vs. OCP (patch, ring)

HT Considerations: many dosages and routes, lower dose estrogen, often better tolerated with less side effects. “Bioidentical” or body similar options. Bioidentical is a marketing term, body similar is more accurate.

HT Pearls:

1. Progestin IUD can improve intolerable bleeding and provide contraception without side effects from OCP.
2. Progestin only pills can be used in combination with estrogen used in HT.
3. Systemic estrogen and vaginal estrogen can and often should be used together about 50% of people DO NOT get adequate levels of estrogen at the tissue level with systemic treatment alone.

Oral Estrogen		
Formulation	Brand Name	Dose (mg/d)
Conjugated	Premarin	0.3, 0.45, 0.625, 0.9, 1.25
Synthetic conjugated	Cenestin	0.3, 0.45, 0.625, 0.9, 1.25
Esterified	Menest	0.3, 0.625, 1.25, 2.5
17 $\beta$ -Estradiol	Estrace, Gynodiol, Innofem, Generics	0.5, 1.0, 2.0
Estradiol Acetate	Femtrace	0.45, 0.9, 1.8
Estropipate	Ortho-Est, Ogen, Generics	0.625(0.75 estropipate), 1.25 (1.5), 2.5 (3.0), 5.0 (6.0)

Transdermal Estrogen		
Formulation	Brand Name	Dosage (mg)
17 $\beta$ -estradiol matrix patch	Alora	0.025, 0.05, 0.075, 0.1 twice/wk
	Climar	0.025,0.0375, 0.05, 0.075, 0.1 once/wk
	Esclim	0.025,0.0375 0.05, 0.075, 0.1 twice/wk
	Estradot	0.025,0.0375 0.05, 0.075, 0.1 twice/wk
	Fempatch	0.025 once/wk
	Menostar	0.014 once/wk
	Minivelle	0.025, 0.0375 0.05, 0.075, 0.1 twice/wk
	Vivelle	0.025,0.0375, 0.05, 0.075, 0.1 twice/wk
	Vivelle-Dot	0.025,0.0375, 0.05, 0.075, 0.1 twice/wk
	Generics	0.05, 0.1 once or twice/wk
	17 $\beta$ -estradiol reservoir patch	Estraderm
17 $\beta$ -estradiol transdermal gel	EstroGel	0.035/d
	Blestrin	0.0125/d
	Divigel	0.25, 0.5, 1.0 g/d
	Estrasorb	0.05/d (2 packets)
	Evamist	0.021/90 $\mu$ L/d (up to 1.5/90 $\mu$ L/d)

Combination Estrogen- Progestogen Therapy				
Regimen	Composition	Brand Name	Dosage (mg/d)	
Oral Continuous-Cyclic	CE (E)+ MPA (P)	Premphase	0.625 mg E+ 5.0 mg P	(E alone x days 1-14, E+P days 15-28)
			1 mg E +100 mg P	
Oral Continuous-Combined	17 $\beta$ -estradiol (E)+ progesterone (P)	Blijuva	0.625 mg E+ 2.5 or 5 mg P	
		Prempro	0.3 or 0.45 mg E + 1.5 mg P	
	Ethinyl Estradiol (E) + NETA (P)	Femhrt	2.5 $\mu$ g E + 0.5 mg P	
			5 $\mu$ g+ 1 mg P	
Oral Intermittent-Combined	17 $\beta$ -estradiol (E)+ NETA (P)	Activella	0.5 mg E + 0.1 mg P	
			1 mg E + 0.5 mg P	
	17 $\beta$ -estradiol (E)+ drospirenone (P)	Angeliq	0.5 mg E + 0.25 mg P	
			1 mg E + 0.09 mg P	
Transdermal Continuous-Combined	17 $\beta$ -estradiol (E)+ NETA (P)	Prefest	1 mg E + 0.09 mg P	
			E alone x 3 days, E+P x 3 days, repeat	
Transdermal Continuous-Combined	17 $\beta$ -estradiol (E)+ LNG (P)	CombiPatch	0.05 mg E + 0.14 mg P	(9 cm <sup>2</sup> patch, twice/wk)
		Climara Pro	0.045 mg E + 0.015 mg P	(22 cm <sup>2</sup> patch, once/wk)

Tissue Selective Estrogen Complex (TSEC)			
Component	Brand Name	Dose	
oCEE (E) + Bazedoxifene (SERM)	Duavee; Duavee	0.45 mg E + 20 mg SERM, once daily	

Vaginal Estrogen Therapy				
Formulation	Composition	Brand Name	Dosage	
Vaginal Creams	17 $\beta$ -estradiol	Estrace	Initial 2-4 g/day for 1- 2 wk	
			Maintenance: 1 g 1-3x/wk	
Vaginal Rings	Conjugated Estrogens	Premarin	0.5 – 2g/d x 21days, off x 7 days	
		Estring	2mg- releases 7.5 $\mu$ g/d for 90 days	
Vaginal Tablet/Insert	Estradiol acetate	Femring	12.4 mg of 24.8 mg- releases 0.05 mg/d or 0.10 mg/d x 90 days*	
		Imvexoy	4 $\mu$ g and 10 $\mu$ g	
	Estradiol hemihydrate	Vagifem	Initial: 1 insert/d x 2 wk	
			Maintenance: 1 tablet 2x/wk	
			Initial: 1 insert/d x 2 wk	
			Maintenance: 1 tablet 2x/wk	

E, Estrogen; P, Progestogen; CE, Conjugated estrogens; MPA, Medroxyprogesterone acetate; NETA, Norethindrone acetate; LVG, Levonorgestrel; oCEE, Oral conjugated equine estrogens.

a, Oral products of synthetic estrogen mixtures, contain 75%-85% sodium estrone sulfate.

b, Oral form of estrone sulfate- solubilized and stabilized by piperazine.

\*Leads to systemic levels – concomitant progestogen therapy recommended.

# Treatment

There are a lot of options!

# Treatment

## Estradiol "Standard" Dose

- Oral 1mg daily
- Transdermal 0.05mg/day
  - Rx: Estradiol Patch 0.05mg/twice weekly
  - Support your patient. Honor the rollercoaster. It is never a one size fits all approach.

Progestin: All people with an intact uterus need a progestin to prevent endometrial hyperplasia

- First choice is oral micronized progesterone
- Cyclic: 200mg/day for 12 days/month. \*More side effects. Miss it the other days.
- Daily: 100mg/day
  - Take in the evening. Associated with somnolence. Some feel it helps with hair loss.
  - Can be taken even if IUD in place or uterus absent.
  - Per vagina can avoid side effects.
- Progestin IUDs: treat bleeding, endometrial protection, no systemic side effects, contraception

# Treatment

Potential Side Effects:

Bloating and fluid retention

Breast tenderness and swelling

Bleeding

Mood swings

Stomach upset

Headaches

Rash from adhesive

Many side effects are Progesterone related

\*Switching to per vagina can resolve

Pelvic Ultrasound to assess bleeding and EMB if need

Consider other options for endometrial protection:

progestin only pills, IUD, other forms of progestin

# Treatment

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# Treatment

## More Hormone Therapy Pearls

THE CURB  
SIDERS  
INTERNAL  
MEDICINE

NO!

HT is NOT a cure-all for weight gain, aging, fatigue, thinning hair, or brain fog.

Bioidentical HT still confers risk. Compounded HT is not regulated for purity/efficacy.



For premature menopause: continue HT until natural age of menopause, approx. 52 yo

There's no age cutoff for stopping HT. Individualize based on risk & sx; utilize lower doses & transdermal HT w/aging.



Low dose vaginal estrogen may be used long-term for mod-severe GSM.

**Key:** HT = hormone therapy; Sx = symptoms; GSM = genitourinary symptoms of menopause; SERM = selective estrogen receptor modulator (agonist-antagonist)  
**Source:** The Curbsiders #409 HT & nonHT for VMS; (NAMS, 2022).

# Objectives revisited

1. Understand what Perimenopause is and when to expect it. ✓
2. What makes it a volatile and erratic experience for some? ✓
3. Learn to recognize symptoms. ✓
4. Identify timing for educating and providing anticipatory guidance. ✓
5. Evaluation and Treatment

# Resources

1. The Menopause Society
2. Harlow SD, et al. Menopause 2012;19:387-95
3. Coslov N, Richardson MK, Fugate Woods N. Menopause 2024 Mar 25
4. Crandall CJ, JAMA, 2023, Feb 7
5. Santoro N, et al. J Clin Endocrinol Metab 2021;106:1-15
6. Bastian et al. JAMA 2003;289:895-902
7. Stuenkel CA, et al. J Clin Endocrinol Metab 2015; 100:3975-4011