

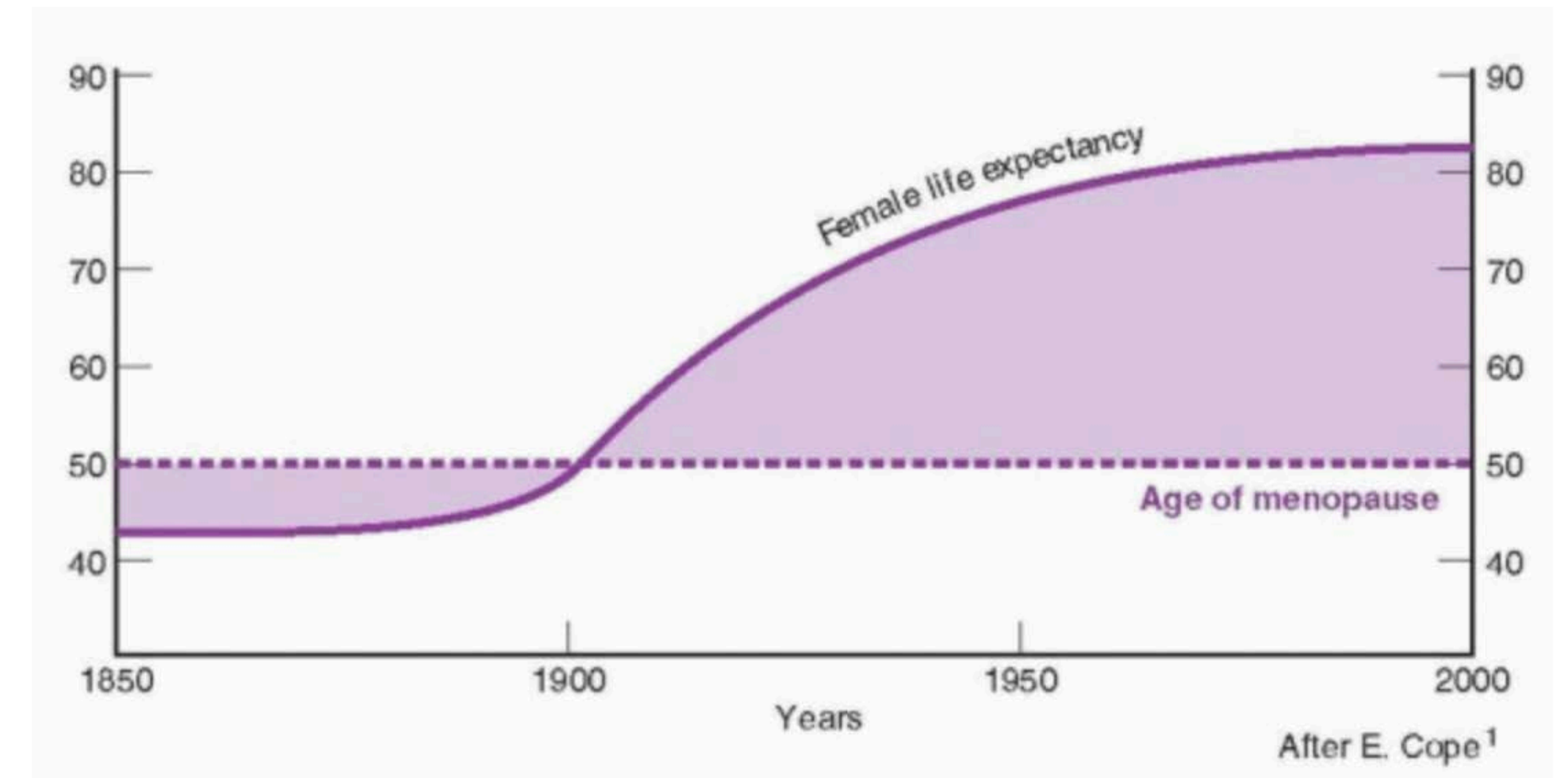
**AOIFE O'SULLIVAN, MD MSCP**

# **HOW TO PRESCRIBE HORMONE TREATMENT**

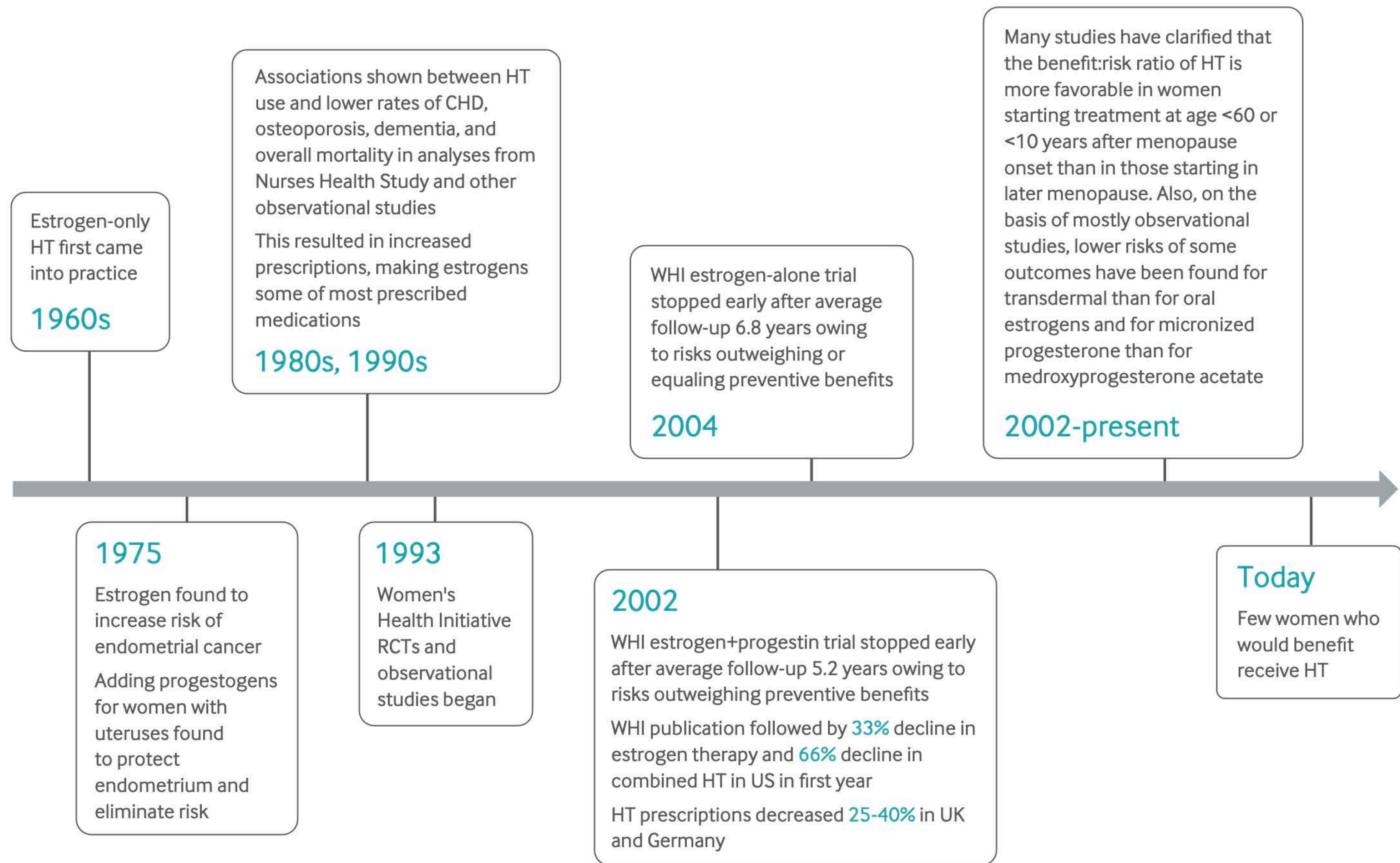
**(AND make your job easier & more fun, and your patients happier & healthier)**

# WHY DO WE PRESCRIBE HORMONE TREATMENT?

- To replace what is supposed to be there
- The Menopause Transition:
  - Around 75% women experience symptoms
  - Around 25% are serious symptoms
- This information has been kept from us, which in turn has:
  - Made our work more difficult
  - Caused pain and suffering to women
  - Singlehandedly kept nursing homes in business
  - Created billions in income for the drug companies



<https://obgynkey.com/menopause-and-the-perimenopausal-transition/>



**Fig 1 | Hormone therapy history timeline<sup>24 25</sup>; CHD=coronary heart disease; HT=hormone therapy; RCT=randomized controlled trial; WHI=women's health initiative**

# WHERE DID WE GO WRONG?

- **Women's Health Initiative (WHI)**
- **Randomized Controlled Primary Prevention Trial for CHD**
- **Was NOT a RTC for breast cancer, so at best - an observational study**
- **27,347 Women. Aged 50-79**
- **Two arms: Uterus present (16,608) and Uterus absent (10,739)**
- **Combined Equine Estrogen (CEE) + MedroxyProgesterone Acetate (MPA)**
- **Average age 63**
- **35% overweight, another 34% obese**
- **35% hypertensive**
- **>45% past or current smokers**

# WHERE DID WE GO WRONG?

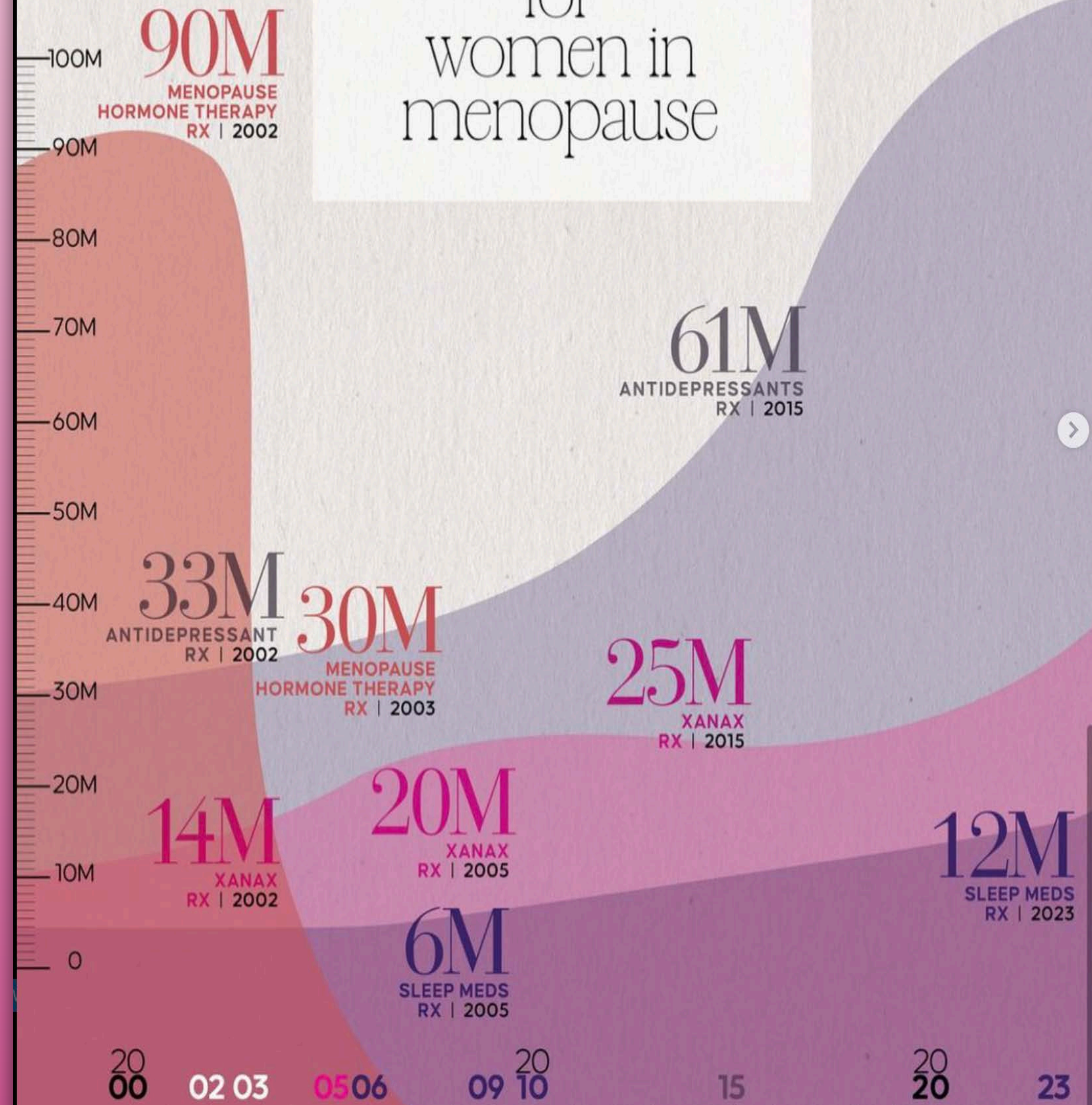
- **7/7/2002 NIH press conference announced preliminary findings**
- **Headlines were terrifying**
- **Focused on the harms identified with CEE + MPA**
- **Didn't mention significant benefits in reduction in Osteoporosis & fractures & Colon cancer**
- **HT prescriptions plummeted by 80%**
- **2/29/2004 stopped the CEE only arm - increased stroke risk**
- **All profession society and government agency guidelines still based on WHI**

**WRONG DRUG**

**WRONG ROUTE**

**WRONG WOMEN**

the generational  
fall out  
for  
women in  
menopause



# WHAT DID WE ACTUALLY LEARN?

- **97.5% women on HT had no problems**
- **I repeat - 97.5% of women on HT had NO problems**
  
- **For every 10,000 women/yr taking CEE + MPA in their 50's**
  - **5 additional MI's**
  - **8 additional strokes**
  - **8 additional breast cancers**
  - **8 additional PE's**
  - **6 fewer colorectal cancers**
  - **5 fewer hip fractures**
  - **0 additional deaths**





# HHS Public Access

Author manuscript

*Cancer J.* Author manuscript; available in PMC 2023 January 01.

Published in final edited form as:

*Cancer J.* 2022 ; 28(3): 208–223. doi:10.1097/PPO.0000000000000591.

## **Menopausal Hormone Replacement Therapy and Reduction of All-Cause Mortality and Cardiovascular Disease: It's About Time and Timing**

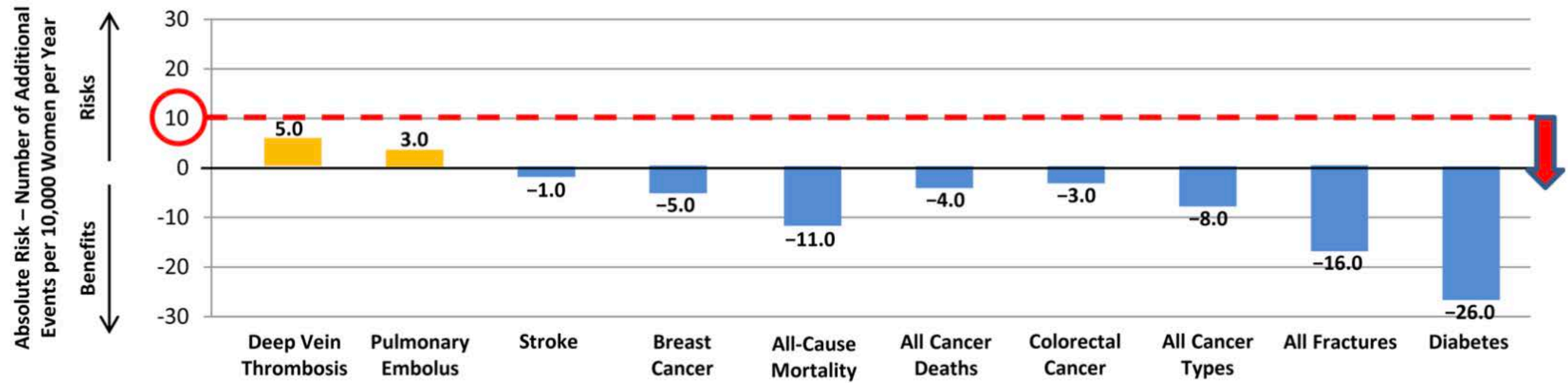
**Howard N. Hodis, MD,**

Harry J. Bauer and Dorothy Bauer Rawlins Professor of Cardiology, Professor of Medicine and Preventive Medicine, Professor of Molecular Pharmacology and Toxicology, Director, Atherosclerosis Research Unit, Keck School of Medicine, University of Southern California, 2250 Alcazar Street, CSC 132, Los Angeles, CA 90033

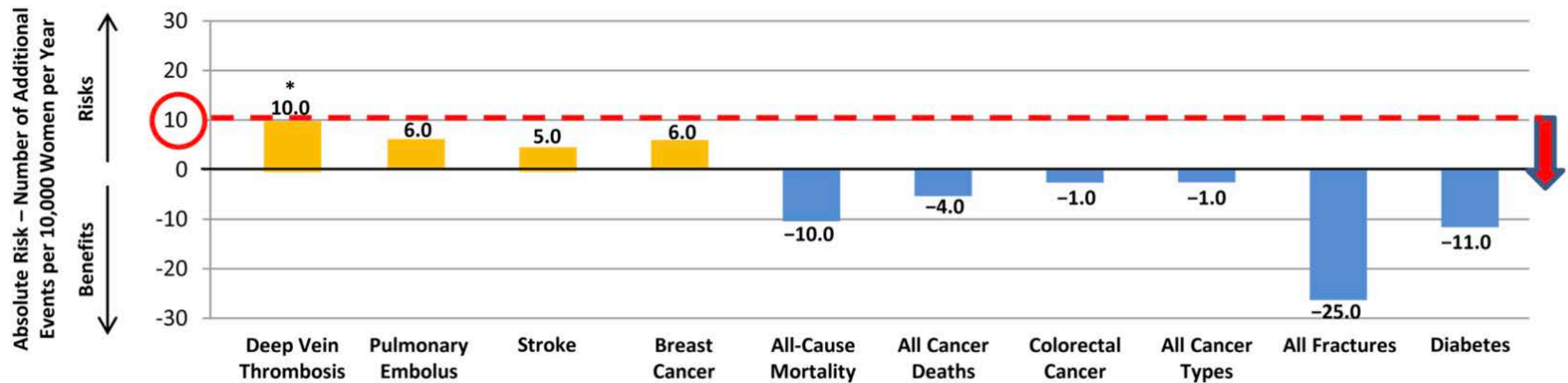
**Wendy J Mack, PhD**

Professor of Preventive Medicine, Keck School of Medicine, University of Southern California, 2001 North Soto Street, SSB 202Y, Los Angeles, CA 90033

## CEE Alone Trial



## CEE+MPA Trial



# WHAT DID WE ACTUALLY LEARN?

- **Women 50-59 who took Estrogen alone**
  - **40% reduction in CHD**
  - **12% reduction in DM**
  - **18% reduction in Breast cancer**
  - **33% reduction in hip fractures**
  - **30% reduction in overall mortality**
  
- **Any increased risk of breast cancer with HT is related to the progestogen**

# THE TIMING HYPOTHESIS

- Age 50-59: 30% reduction in all cause mortality
  - Age 60-69: Null benefit
  - Age 70-79: Increased all-cause mortality
- 
- Say something about all the things E does like nitric oxide, RAT system etc.



# You Are Not Broken

with KELLY CASPERSON MD

EPISODE 225

**Boomers Should Be Pissed:  
Menopause & Hormones in the  
Modern Era**

<https://kellycaspersonmd.com/boomers-should-be-pissed/>



## 097 - Trying to right 20 years of misinformation and hysteria about HRT - Professor Rob Langer and Dr Louise Newson

The Dr Louise Newson Podcast

Medicine

[Listen on Apple Podcasts ↗](#)



Dr Newson speaks with Professor Robert Langer in this episode. Robert Langer is Professor Emeritus in Family and Preventive Medicine at the University of California in San Diego. He was also an investigator of the Women's Health Initiative (WHI) Study. Together, they discuss how the WHI Study from 2002 turned the world upside down for women and how they have both been trying to right it ever since.

<https://www.balance-menopause.com/menopause-library/097-trying-to-right-20-years-of-misinformation-and-hysteria-about-hrt-professor-rob-langer-and-dr-louise-newson/>

**Episode 31**  
**The TRUTH about**  
**ESTROGEN THERAPY and**  
**BREAST CANCER**



**Dr. Streicher's Inside Information**

**THE Menopause Podcast**



Lauren Streicher, MD is a clinical professor of obstetrics and gynecology at Northwestern University's Feinberg School of Medicine, and the medical director of the Northwestern Medicine Center for Sexual Medicine and menopause.

She is a certified menopause practitioner of the North American Menopause Society.

*Clinical Expert Series*



# A Contemporary View of Menopausal Hormone Therapy

*Barbara Levy, MD, MSCP, and James A. Simon, MD, MSCP*

---

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.

*(Obstet Gynecol 2024;00:1–12)*

DOI: 10.1097/AOG.0000000000005553



A 3D animated character, Elsa from the movie Frozen, is shown from the waist up. She has long, wavy blonde hair and is wearing a light blue, long-sleeved dress with intricate patterns. She is looking towards the viewer with a slight smile, her right arm raised and her left hand extended forward. The background is a solid, deep blue color. The text "Let it go!" is written in a stylized, white, slightly jagged font with a yellow glow, positioned in the lower-left quadrant of the image. There are some faint, white, snowflake-like patterns scattered around the text.

Let it go!

# SYMPTOMS OF PERIMENOPAUSE

## ■ Brain

- Anxiety
- Low mood
- Irritability, Rage
- Decreased focus and concentration
- Poor memory
- Hot flushes
- Night sweats
- Headaches, Migraines

## ■ Cardiac

- Palpitations

## ■ Musculoskeletal Syndrome of Menopause

- Loss of Libido

## ■ Genitourinary Syndrome of Menopause

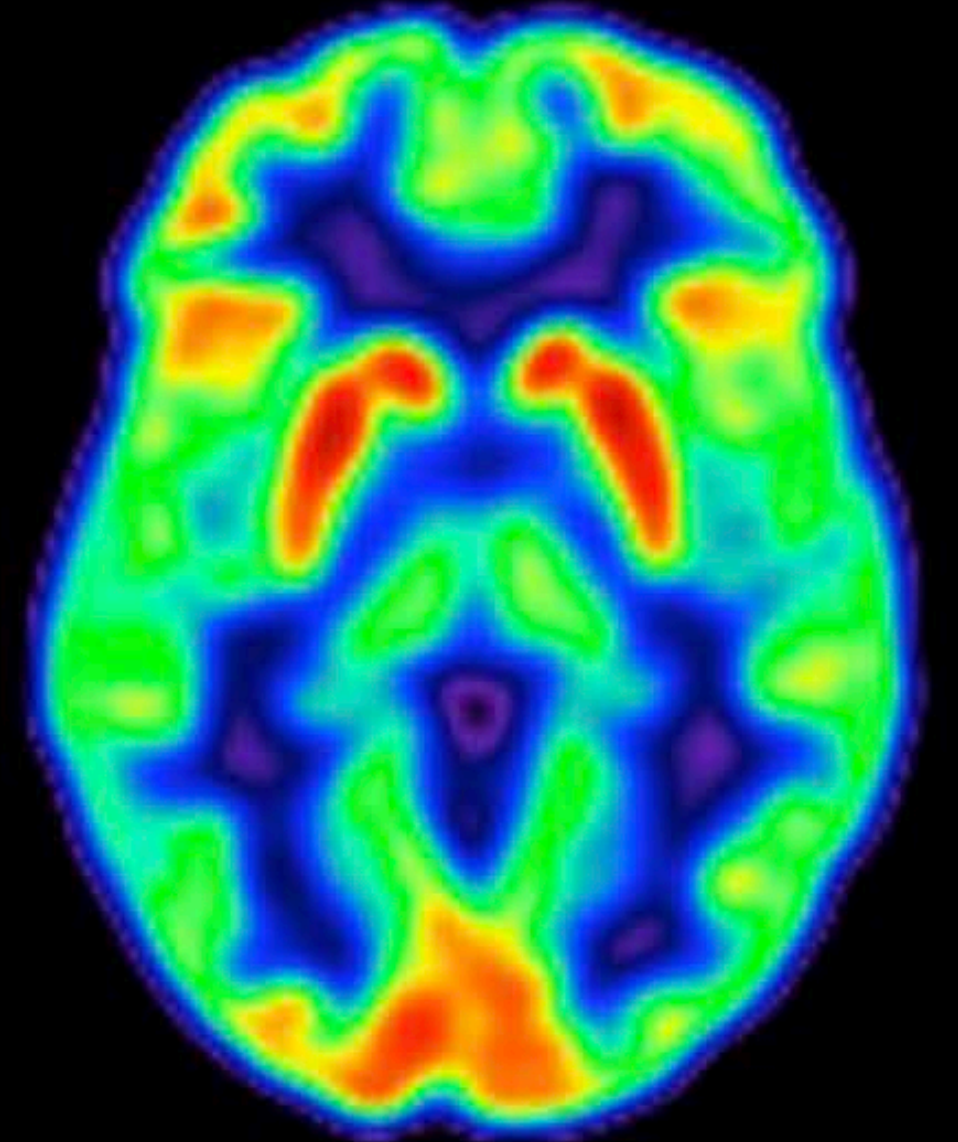
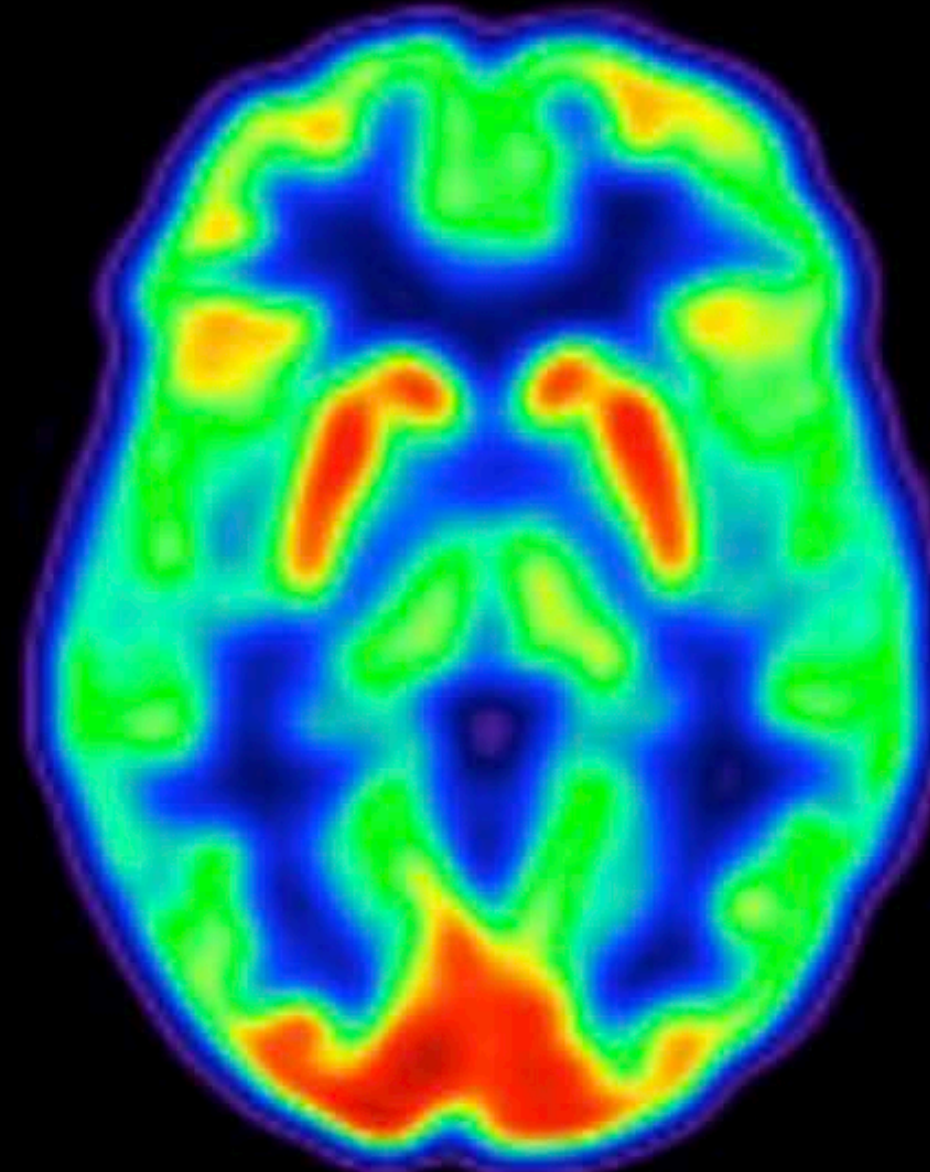
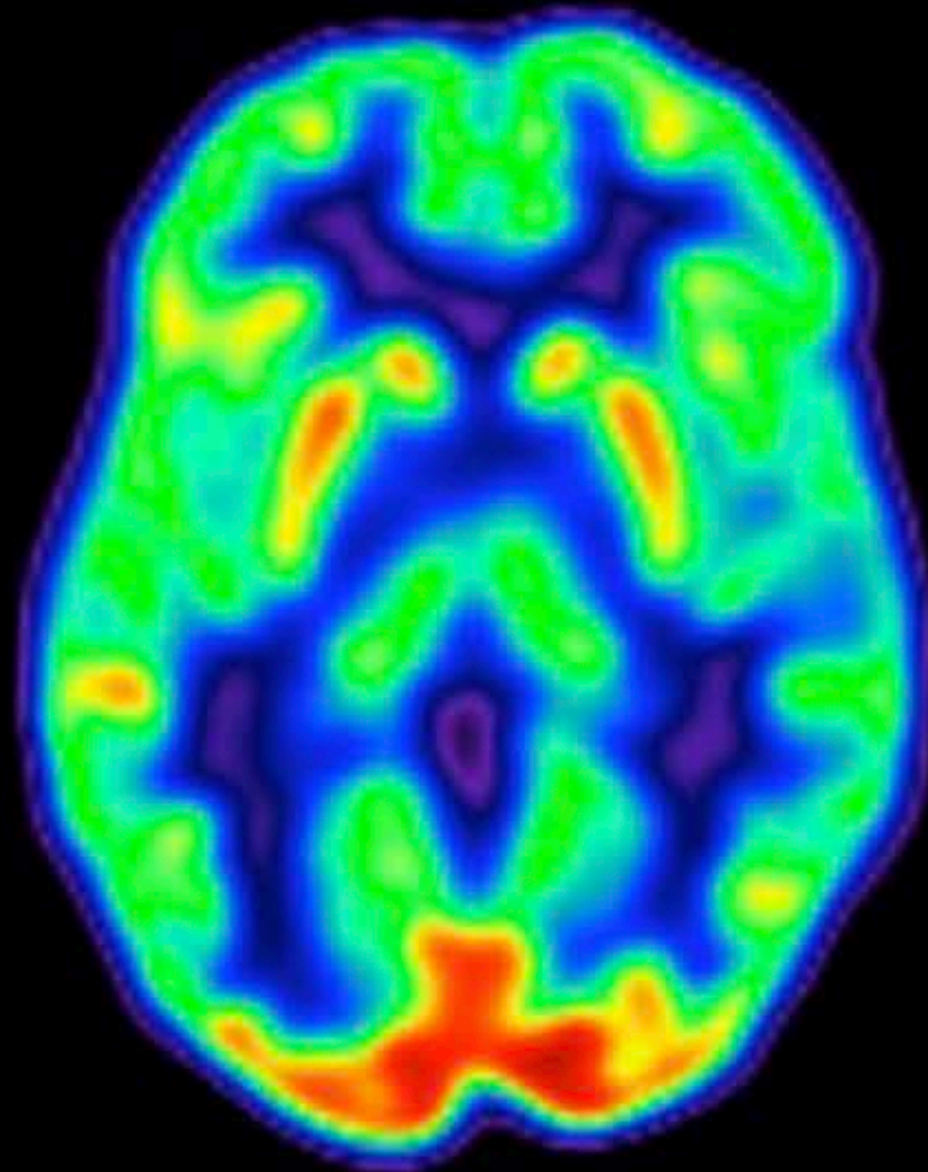
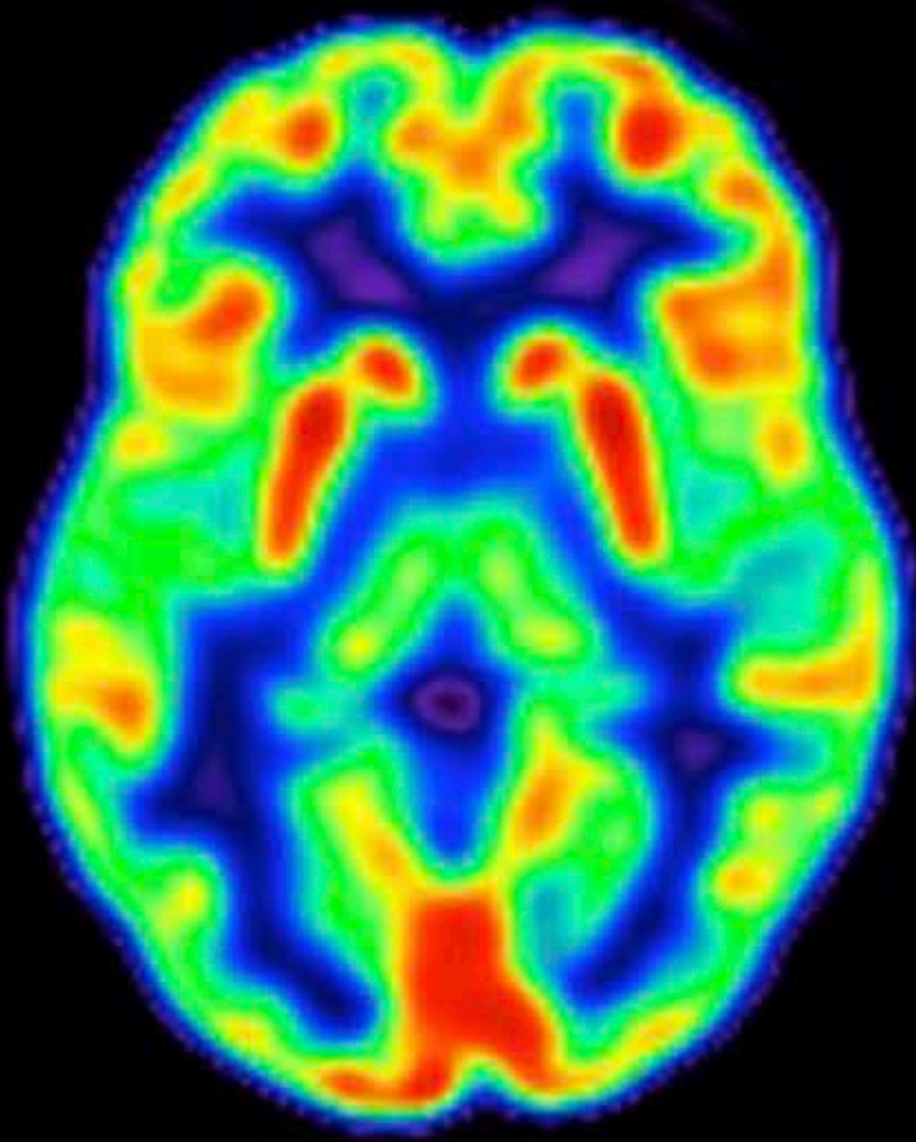
- Vaginal discomfort, dryness
- Dyspareunia
- Recurrent urinary symptoms

PRE-MENOPAUSE

PERI-MENOPAUSE

EARLY MENOPAUSE

LATE MENOPAUSE





## Neuroscience & Women's Health

At the intersection of neuroscience and women's health, my research is focused on how our genetics, hormones, environment, and lifestyle shape the brain — the female brain, in particular. Right now, tomorrow, and over the course of a lifetime.

<https://www.lisamosconi.com/>

# FDA APPROVED INDICATIONS

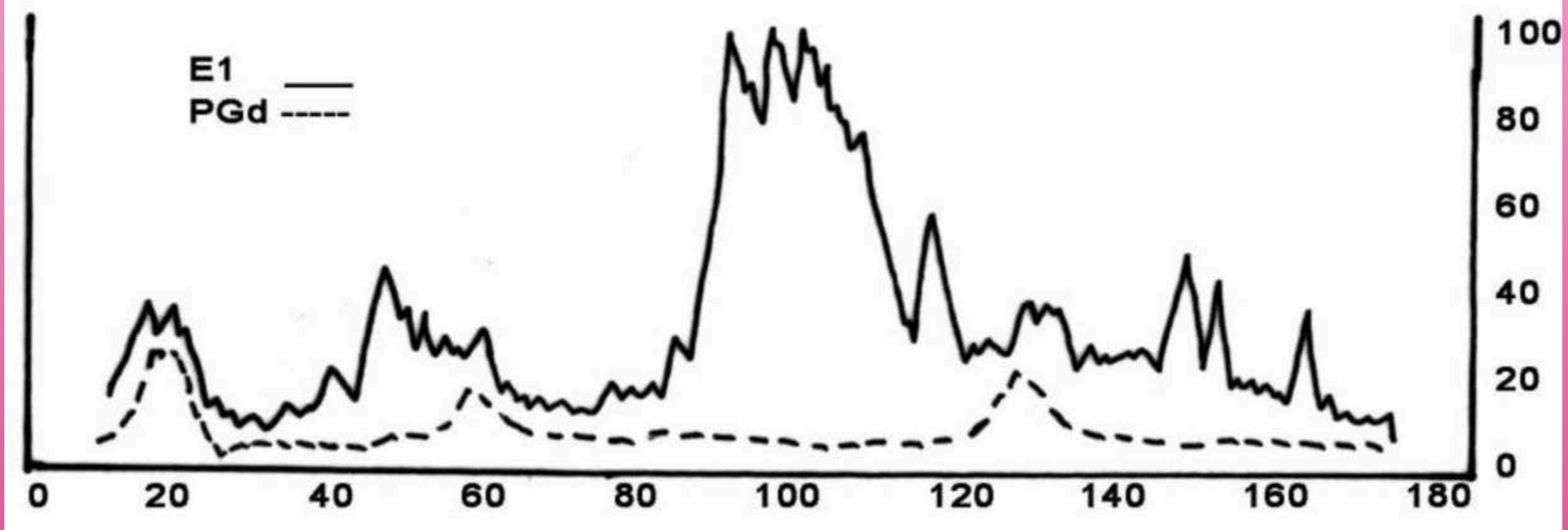
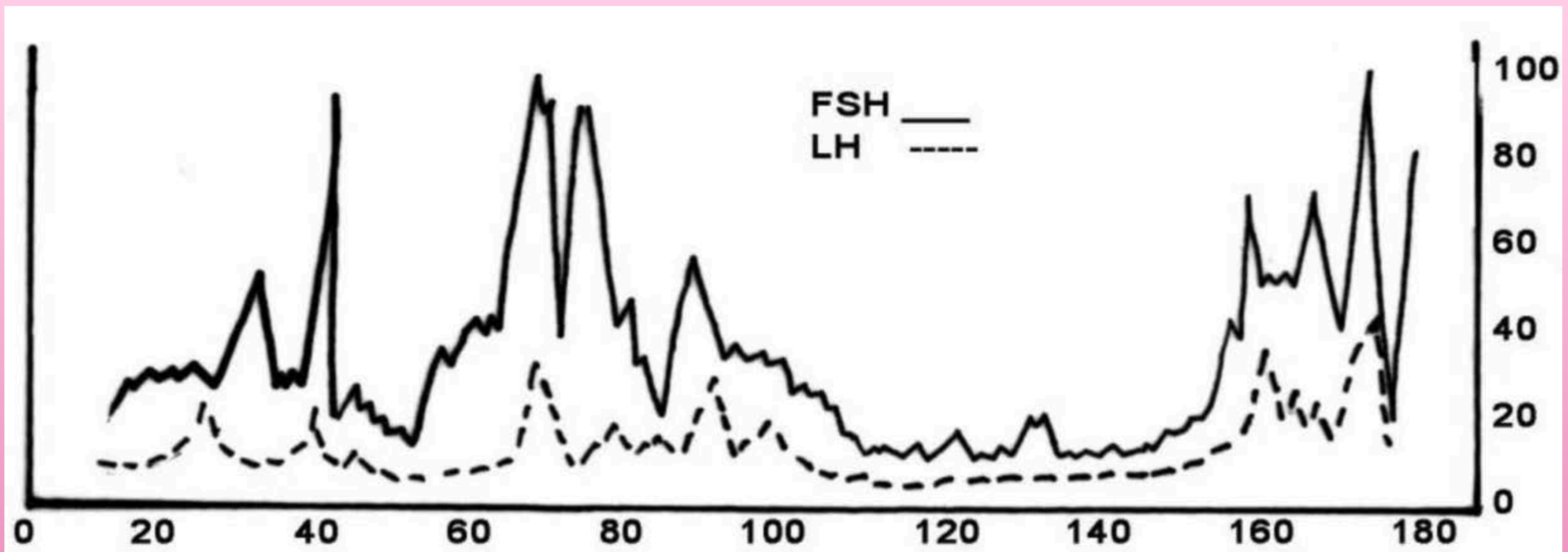
- Vasomotor symptoms
  - Hot flashes
  - Night sweats
- Genitourinary syndrome of menopause
  - Urinary symptoms
  - UTI's
  - Vaginal discomfort or dryness
  - Dyspareunia
- Osteopenia

**NO MENTION OF THE MOST COMMON BRAIN SYMPTOMS THAT THOSE OF US WHO TAKE CARE OF MENOPAUSAL WOMEN SEE IN MOST PATIENTS:**

- BRAIN FOG
- DISTURBED SLEEP
- POOR MEMORY
- POOR CONCENTRATION

# PATIENT WITH SYMPTOMS

- **Age <45:**
  - **Work up for Premature Ovarian insufficiency and early menopause**
  - **FSH (>35 IU/L at least 6 weeks apart), Estradiol <20 pg/ml), Testosterone, SHBG and Anti-Mullerian Hormone (AMH) - undetectable after menopause**
  
- **Age 45 and above:**
  - **Symptoms +/- change in menstrual pattern**
  - **Labwork not necessary but can be helpful to have a baseline down the road**
  - **Estradiol, Testosterone, SHBG, TSH, B12, Ferritin, Lipids, CMP, TSH**



SYMPTOMS	Not at all 0	A little 1	Quite a bit 2	Extremely 3	Comment
Heart beating quickly or strongly					
Feeling tense or nervous					
Difficulty in sleeping					
Memory problems					
Attacks of anxiety, panic					
Difficulty in concentrating					
Feeling tired or lacking in energy					
Loss of interest in most things					
Feeling unhappy or depressed					
Crying spells					
Irritability					
Feeling dizzy or faint					
Pressure or tightness in head					
Tinnitus (ringing or buzzing in the ear)					
Headaches					
Muscle and joint pains					
Pins and needles in any part of the body					
Breathing difficulties					
Hot flushes					
Sweating at night					
Loss of interest in sex					
Urinary symptoms					
Symptoms due to vaginal dryness					
SCORE					



# RED FLAGS

- **New persistent unexplained vaginal bleeding**
- **Heavy bleeding with large clots**
- **Post coital bleeding**
- **Breast lump**
- **Palpable abdominal mass**
- **Unexplained bloating**
- **Unexplained weight loss**
- **Unexplained labial lesion**

# CONTRAINDICATIONS

- **Pregnancy**
- **Active thromboembolic disease or acute MI**
- **Undiagnosed vaginal bleeding**
- **Untreated endometrial hyperplasia**
- **Suspected endometrial, ovarian or breast cancer while awaiting diagnosis**

# START HERE...

- Older or younger than 45?
- Does she need contraception?
- Any labs helpful?
- Preventative care up to date?
- Reproductive history, any PPD or PMDD?
- Menopause Questionnaire
- GSM on it's own or any systemic symptoms?
- Any red flags?
- Any contraindications?
- Does she have a uterus, a progestin IUD or endometriosis? (?needs oral progesterone?)
- Still having periods? (Sequential v's Continuous HT)

# HRT Starting Treatment Guide

HYSTERECTOMY OR L-IUD IN SITU < 5 YEARS

Yes

No

ESTROGEN ONLY

COMBINED ESTROGEN AND PROGESTOGEN

ORAL

OR

TRANSDERMAL

ESTRADIOL

PATCH

GEL

SPRAY

LMP < 1 year

Yes

No

Follow this arm  
for patients with  
endometriosis

Combined Sequential HT  
(monthly bleed)

Combined Continuous HT  
(no bleed)

Estradiol as a patch, gel, spray or tablet

Plus

Micronized progesterone 200mg QHS  
12-14/28 days

Estradiol as a patch, gel, spray or tablet

Plus

Micronized progesterone 100mg every day

## Indications for Transdermal Therapy

- Increased risk of VTE/ stroke
- Migraine with aura
- BMI >30
- Patient preference

	Form	Hormone	Brand Name
Oral Estradiol	Tablet	17B-Estradiol	Estrace
Transdermal Estradiol	Patch	17B-Estradiol	Climara, Estradot, Dotti, Vivelle dot
	Gel	17B-Estradiol	Divigel, Estrogel
	Spray	17B-Estradiol	Evamist
Transdermal Estradiol + Synthetic Progestin	Patch	17B-Estradiol + Levonorgestrel	Climara Pro
	Patch	17B-Estradiol + Norethindrone Acetate	Combipatch
Oral Progesterone	Capsule	Micronized Progesterone in Peanut Oil	Prometrium

HORMONE THERAPY	ACTIVE INGREDIENT	DOSAGE FORM
Estrogen - Vaginal Application	<del>XXXXXX</del>	Cream
	17β-estradiol Femring	Silicone elastomer ring
	Conjugated estrogens (mixtures of estrogens) Premarin	Cream
	Estradiol Estrace	Tablet
Estrogen - Oral Application	17β-estradiol (micronized, which means the particle size has been reduced making it easier to absorb into the body)	Tablet
	Conjugated estrogens (mixtures of estrogens) CEE	Tablet
Estrogen - Transdermal	17β-estradiol	Patch (product name is Climara)
	17β-estradiol	Gel (product name is Divigel)
	17β-estradiol	Patch (product name is Estradot)
	17β-estradiol	Gel (product name is Estrogel)
	17β-estradiol	Patch (product names is Oesclim)
Estrogen and Selective Estrogen-Receptor Modulator (SERM)	Conjugated estrogens + bazedoxifene Duavee	Tablet
Progestogens - Oral	Norethindrone acetate Aygestin	Tablet
	Micronized progesterone (micronized means the particle size has been reduced making it easier to absorb into the body)	Tablet
	Medroxyprogesterone acetate Provera	Tablet
Progestogens - Intrauterine	Levonorgestrel	Intrauterine (IUD)
Combined Estrogens and Progestogens - Oral*	17β-estradiol + norethindrone acetate (NETA) Activella Mimvey	Tablet
	17β-estradiol + drospirenone (DRSP) Angeliq	Tablet
Combined Estrogens and Progestogens - Transdermal*	17β-estradiol + levonorgestrel (LNG) Climara Pro	Patch
	17β-estradiol + norethindrone acetate (NETA) Combipatch	Patch

# CASE STUDY - INITIAL VISIT

- **3/8/24**
- **Lisa, 42 year old G3 P3**
- **Mother, wife, high-pressure job**
- **Years of symptoms**
- **Multiple primary care & specialist visits, nobody joining the dots**
- **Recently diagnosed with Anxiety and Chron's**
- **Self-diagnosed with perimenopause, found me**
- **IUD in-situ, occasional spotting, unsure of LMP**
- **Current Meds: Xanax, Budesonide, Vitamin B12**

# CASE STUDY - INITIAL VISIT

- BP 118/66, HR 108, Temp 36.7, Wt 136lbs, BMI 23.5
- Menopause Questionnaire

Feeling tense Anxiety Loss of joy Anhedonia Tearful Irritability Rage  Dizzy Tinnitus Pressure in head Paresthesias	Palpitations  Insomnia  Memory Concentration Fatigue  Joint aches Muscle aches	Headaches Loss of libido  Night sweats Hot flushes  Urinary frequency Urinary urgency Nocturia x 2-3 Vaginal dryness Dyspareunia
--	---	--



SYMPTOMS	Not at all 0	A little 1	Quite a bit 2	Extremely 3	Comment
Heart beating quickly or strongly			X		
Feeling tense or nervous			X		
Difficulty in sleeping			X		
Memory problems				X	
Attacks of anxiety, panic			X		
Difficulty in concentrating				X	
Feeling tired or lacking in energy				X	
Loss of interest in most things			X		
Feeling unhappy or depressed			X		
Crying spells				X	
Irritability			X		
Feeling dizzy or faint				X	
Pressure or tightness in head		X			
Tinnitus (ringing or buzzing in the ear)				X	
Headaches				X	
Muscle and joint pains				X	
Pins and needles in any part of the body				X	
Breathing difficulties		X			
Hot flushes				X	
Sweating at night				X	
Loss of interest in sex				X	
Urinary symptoms				X	
Symptoms due to vaginal dryness			X		
SCORE					

2 16 39 57

57/69

# CASE STUDY - INITIAL VISIT

- Labs: CBC, CMP, Lipids, TSH, Ferritin, B12, 17B-Estradiol, Testosterone, SHBG, FSH
- Informed discussion
- Shared decision-making
- New meds:
  - Estradiol vaginal cream
  - Estradiol 0.025mg patch
  - Micronized progesterone 100mg qhs

# CASE STUDY - LAB RESULTS

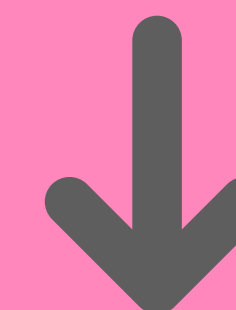
- CBC, CMP, TSH, Vit B12
- TC 225, LDL 132, HDL 77, Trig 70
- Estradiol 100
- Testosterone 6
- SHBG 94
- FAI 0.2 (2-5)
- FSH 8.1
- Ferritin 44
- B12 1720
  
- Free Androgen Index (FAI) = Total T x 0.0347 /SHBG x 100

# CASE STUDY - 6 WEEKS INTO TREATMENT

- **4/19/24 - 6 weeks later**
- **She had decided to use a layered approach**
- **Had started the vaginal estrogen and oral progesterone**
- **Anxiety and sleep much improved**
- **Vaginal dryness and dyspareunia much improved**
- **Discussion re. Testosterone risks v's benefits**
- **Decided to start the Estrogen first and then layer the Testosterone**
- **Menopause questionnaire repeated**

SYMPTOMS	Not at all 0	A little 1	Quite a bit 2	Extremely 3	Comment
Heart beating quickly or strongly		✓			
Feeling tense or nervous			✓		
Difficulty in sleeping	✓				
Memory problems			✓		
Attacks of anxiety, panic	✓				
Difficulty in concentrating			✓		
Feeling tired or lacking in energy			✓		
Loss of interest in most things	✓				
Feeling unhappy or depressed			✓		
Crying spells				✓	
Irritability			✓		
Feeling dizzy or faint		✓			
Pressure or tightness in head	✓				
Tinnitus (ringing or buzzing in the ear)			✓		
Headaches			✓		
Muscle and joint pains			✓		
Pins and needles in any part of the body		✓			
Breathing difficulties	✓				
Hot flushes		✓			
Sweating at night		✓			
Loss of interest in sex				✓	
Urinary symptoms			✓		
Symptoms due to vaginal dryness	✓				
SCORE					

57/69



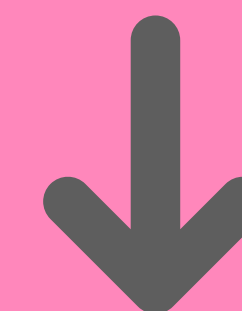
31/69

# CASE STUDY - SECOND FOLLOW UP VISIT

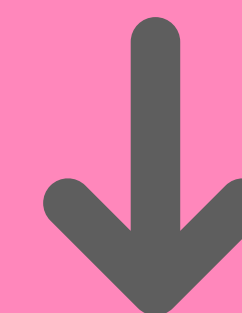
- **5/15/24, 4 weeks later**
- **Massive positive changes**
- **Dizziness, light-headedness, fatigue - resolved**
- **Sleeping throughout the night, 8-10 hours**
- **Brain fog resolved**
- **Anxiety and low mood resolved**
- **She feels fantastic and almost back to herself**

SYMPTOMS	Not at all 0	A little 1	Quite a bit 2	Extremely 3	Comment
Heart beating quickly or strongly	✓				
Feeling tense or nervous	✓				
Difficulty in sleeping	✓				
Memory problems	✓				
Attacks of anxiety, panic	✓				
Difficulty in concentrating	✓				
Feeling tired or lacking in energy	✓				
Loss of interest in most things	✓				
Feeling unhappy or depressed	✓				
Crying spells	✓				
Irritability	✓				
Feeling dizzy or faint	✓				
Pressure or tightness in head	✓				
Tinnitus (ringing or buzzing in the ear)	✓				
Headaches	✓				
Muscle and joint pains		✓			
Pins and needles in any part of the body	✓				
Breathing difficulties	✓				
Hot flushes	✓				
Sweating at night	✓				
Loss of interest in sex		✓			
Urinary symptoms	✓				
Symptoms due to vaginal dryness	✓				
SCORE					

57/69



31/69



2/69

# CASE STUDY

- 3/08/24: 57/69
- 4/19/24: 31/69
- 5/15/24: 2/69
  
- Happy patient, deliriously happy and relieved doctor





# Confidence in the Menopause

Improve your knowledge of the perimenopause and menopause at a pace to suit you

For far too long, the menopause has been undervalued and underfunded with a lack of information, research, and access to treatment.

Confidence in the Menopause is a CPD-accredited course designed to increase your knowledge of, and confidence in, managing all aspects of the perimenopause and menopause.

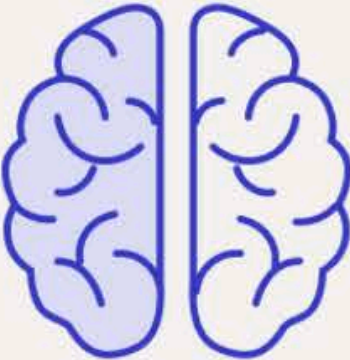
<https://newson-health.teachable.com/p/confidence-in-the-menopause>

Get the support you need – Download the balance app today!



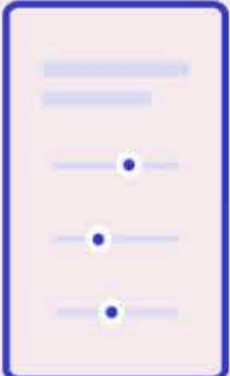
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# Menopause is inevitable — how you handle it isn't



### Learn

Dive into hundreds of evidence based resources



### Track

Use the balance app to monitor your symptoms



### Receive treatment

Book a consultation with a health care professional

# Understanding the risks of HRT



## Breast cancer

23 cases of breast cancer in women aged 50-59 per 1,000 women over five years<sup>1</sup>



An additional 4 cases in women who use combined HRT consisting of oral oestrogen with a synthetic progestogen<sup>1</sup>



4 fewer cases in women who use oral oestrogen alone<sup>1</sup>



No additional cases in women who use oestrogen with body-identical progesterone for up to 5 years<sup>2,3\*</sup>



\*It is not currently possible to quantify breast cancer risk in women who use body-identical progesterone for more than 5 years due to a lack of long-term safety data.

## Venous thrombo-embolism (VTE) Women aged 50-59

5 cases of VTE per 1000 women aged 50-59 over 5 years<sup>4</sup>



An additional 1.5 cases in women who use oral oestrogen only for 5 years<sup>4</sup>



An additional 7 cases who use combined HRT consisting of an oral oestrogen with a synthetic progestogen for 5 years<sup>4</sup>



No evidence of increased risk in women aged 50-59 who use transdermal oestrogen with or without body-identical progesterone or dydrogesterone<sup>5-7</sup>



## Venous thrombo-embolism (VTE) Women aged 60-69

8 cases of VTE per 1000 women aged 60-69 over 5 years<sup>4</sup>



An additional 2.5 cases in women who use oral oestrogen only for 5 years<sup>4</sup>



An additional 10 cases who use combined HRT consisting of an oral oestrogen with a synthetic progestogen for 5 years<sup>4</sup>



No evidence of increased risk in women aged 60-69 who use transdermal oestrogen with or without body-identical progesterone or dydrogesterone<sup>5-7</sup>



## Stroke

Women aged 50-59

4 cases of stroke per 1000 women aged 50-59 each year<sup>4</sup>



No additional cases in women aged 50-59 who initiate HRT within 10 years of the menopause<sup>8-10\*</sup>



\*This is true for all types and combinations of HRT. In the Women's Health Initiative (WHI) study there was no increased risk of stroke in women aged 50-59 who used an oral oestrogen combined with a synthetic progestogen<sup>8</sup>. Observational studies have reported no increased risk of stroke in women aged 50-59 using transdermal oestrogen with or without a progestogen<sup>10</sup>. The event rate in women aged 50-59 in clinical studies is low. Stroke risk in younger women is linked to thromboembolic risk<sup>9</sup>. Transdermal oestrogen and body-identical progesterone are not associated with an increased risk of thrombosis and are the safest options<sup>7</sup>.

## Stroke

Women aged 60-69

9 cases of stroke per 1000 women aged 60-69 each year<sup>4</sup>



4.5 additional cases per 1000 women aged 60-69 who start HRT more than 10 years after the menopause and use an oral oestrogen alongside a progestogen<sup>8</sup>



No additional cases in women aged 60-69 using transdermal oestrogen +/- progestogen<sup>10,12\*</sup>



\*A single observational study has reported a small increased risk of stroke in older women who used higher doses of transdermal oestrogen (> 50mcg patch twice weekly; +2 additional cases per 1000 women per year)<sup>12</sup>. The event rate was very low - just 103 of 15,710 cases of stroke occurred in women using transdermal oestrogen, and the authors did not report the duration of use, age of initiation or type of progestogen. More research is needed to explore stroke risk associated with body-identical hormones in older women.

Document produced by Dr Sarah Glynn, GP Menopause Specialist.

These figures are based on the best currently available evidence. Mounting observational study data suggests that body-identical hormones are safer and associated with fewer risks, but randomised clinical trials are needed to confirm and quantify these findings. For more information and evidence-based support for your perimenopause and menopause, download the free balance app available on the App Store or Google Play.



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# Understanding the major long-term benefits of HRT



### All-cause mortality

#### Women aged 50-59

7 deaths per 1000 women aged 50-59 each year in the UK <sup>1</sup>

2 fewer deaths in women who initiate oral oestrogen and a synthetic progestogen within 10 years of the menopause <sup>2</sup>

2.5 fewer deaths in women who initiate body-identical oestradiol (oral or transdermal) and a progestogen within 10 years of the menopause <sup>3\*</sup>

#### Women aged 60-69

16.5 deaths per 1000 women aged 60-69 each year in the UK <sup>1</sup>

No reduction in all-cause mortality is seen when older women start oral oestrogen and a synthetic progestogen more than 10 years after menopause <sup>2</sup>

6.5 fewer deaths in older women who start body-identical oestrogen (oral or transdermal) with a progestogen more than 10 years after menopause <sup>3\*</sup>

\*Very few studies have assessed all-cause mortality in women using transdermal oestrogen. To our knowledge, this is the only study that has stratified all-cause mortality in women using transdermal oestrogen by age. No studies, including this one, have evaluated all-cause mortality in women using transdermal oestrogen with body-identical progesterone, which has greater cardiovascular benefits. Randomised clinical trials are needed to quantify the effects of body-identical hormones on all-cause mortality in women.

### Coronary heart disease (CHD)

#### Women aged 50-59

9 cases of CHD per 1000 women aged 50-59 over 5 years <sup>4</sup>

4 fewer cases of CHD (cardiovascular death or non-fatal MI) in women who start HRT within 10 years of the menopause <sup>2</sup>

**Transdermal oestradiol and body-identical progesterone have a superior cardiovascular safety profile and may further reduce cardiovascular mortality in women aged 50-59 <sup>5</sup>**

**Statins don't prevent CHD or reduce mortality in women when used for primary prevention <sup>6</sup>**

### Coronary heart disease (CHD)

#### Women aged 60-69

18 cases per 1000 women aged 60-69 over 5 years <sup>4</sup>

No change in CHD incidence in women who start HRT more than 10 years after the menopause <sup>2</sup>

9 fewer deaths in women who start body-identical oestrogen (oestradiol) +/- a progestogen more than 10 years after menopause <sup>3\*</sup>

\*Very few studies have assessed CHD risk in women using transdermal oestrogen. To our knowledge, this is the only study that has stratified CHD risk in women using transdermal oestrogen by age. No studies, including this one, have evaluated CHD risk in women using transdermal oestrogen with body-identical progesterone, which has greater cardiovascular benefits. Randomised clinical trials are needed to quantify the effects of body-identical hormones on CHD risk in women.

**Statins don't prevent CHD or reduce mortality in women when used for primary prevention <sup>6</sup>. Some older women may benefit if they have subclinical disease - ie early signs of cardiovascular disease in their arteries, but are not yet experiencing symptoms (secondary prevention).**

### Diabetes

8 cases per 1000 women aged 50-79 per year <sup>7</sup>

2.5 fewer cases in women who take HRT <sup>8</sup>

Up to 5.5 fewer cases in women who start HRT using body-identical oestrogen with a synthetic progestogen within 10 years of the menopause <sup>9</sup>

**HRT also has beneficial effects on glycaemic control in women with established diabetes (reduced insulin resistance, reduced HbA1c) <sup>10</sup>**

### Osteoporosis

#### Women aged 50-59

There are 15 fractures per 1000 women aged 50-59 each year <sup>7</sup>

7 fewer fractures in women aged 50-59 who use HRT <sup>11</sup>

#### Women aged 60-69

There are 21 fractures per 1000 women aged 60-69 each year <sup>7</sup>

5 fewer fractures in women aged 60-69 who take HRT <sup>11</sup>

### Papers on Hormone Treatment

A Contemporary View of Hormone Therapy Article



'Tis but a Scratch Article



The Evidence Base for HRT: What Can We Believe Article



Menopause and HRT in the 21st Century Article



Why does hormonal contraception and menopausal hormonal treatment have such a small effect on breast cancer risk



Hormone therapy beyond age 65 Article



### HRT and Cardiovascular Disease

It's About Time and Timing - HT and Reduction of All-Cause Mortality Article



Back to the Future Article



### Hormones and Venous Thromboembolism

ESTHER Study Article



BMJ HRT and VTE



### Educational Resources



Menopause Google Doc Education Resources



YouTube Educational Menopause Playlist



## NAMS Position Statements

NAMS Hormone Therapy Position Statement



NAMS Non-Hormonal Menopausal Treatment Position Statement



NAMS GSM Position Statement



NAMS Perimenopausal Depression Position Statement



## Hormone Therapy after Breast Cancer

Randomized Trials of Estrogen alone and Breast Cancer Incidence



Hormone Replacement After Breast Cancer - It Is Time Article



MHT and Breast Cancer - What is the Evidence?



Eligibility Criteria for using HT in Breast Cancer Survivors Article





Google document for menopause resources

# IN SUMMARY

- Estradiol, especially transdermal estradiol is safe and effective
- Micronized progesterone is safe and effective
- Reframe the old “Risks v’s Benefits” of HT to the more appropriate -

**benefits of taking HT and the risks of NOT taking it.**

- Let go of the WHI misinformation, it was a RTC for CHD, not for Breast Cancer, the results are not better than an observational study
- They used the wrong drugs, in the wrong route in the wrong women
- Let it go





# IN SUMMARY

- “We have a high cultural tolerance for women’s suffering” - Dr. Rebecca Thurston
- Women are suffering needlessly, we can prevent that
- Don’t miss out on the joy and connection this practice of medicine will bring you
- Email: [PortlandMenopauseDoc@gmail.com](mailto:PortlandMenopauseDoc@gmail.com)

*Le Fin*