

## Selección de Resúmenes de Menopausia

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**JAMA. 2025 Sep 19. doi: 10.1001/jama.2025.14187. Epub ahead of print. PMID: 40971177.**

### **New Analysis of Women's Health Initiative Data Aims to "Clear the Air" Over Menopausal Hormone Therapy.**

Schweitzer K.

No hay abstract. El texto va en archivo adjunto.

**J Gynecol Obstet Hum Reprod. 2025 Sep 17;54(9):103031. doi: 10.1016/j.jogoh.2025.103031. Online ahead**

### **The potential and mechanism of mesenchymal stem cells in the treatment of premature ovarian failure**

Wei-Ran Jin 1, Shu-Yang He 2, Xian-Xian Mao 3, Jing-Yuan Li 4, Xiang-Cheng Zhang 5, Quan-Wen Liu 6.

Premature ovarian failure (POF), a common endocrine disorder, pertains to the loss of ovarian function in women under the age of 40 years. It is clinically characterized by estrogen deficiency with increased gonadotropin level and amenorrhea, which can lead to loss of fertility and increase the risk of other diseases, including cardiovascular disorders, osteoporosis, and mood disorders. Currently, the most common treatment is hormone replacement therapy (HRT), it relieves menopausal symptoms but does not improve the function of the ovary. Mesenchymal stem cells (MSCs) share the ability of self-renewal and differentiation, playing an important role in the regeneration of injured tissues. Notably, accumulating evidence indicates that MSCs primarily exert their effects through paracrine interactions with the ovarian cortex, rather than contributing to de novo oocyte generation. This suggests that ovarian exhaustion is not complete in POF, leaving a residual ovarian environment that allows MSCs to act. So far, many reports have demonstrated that transplantation of MSCs can improve ovarian structure and function, promote follicular development, and restore hormone levels by anti-apoptosis, promoting angiogenesis, immunomodulation, and anti-oxidation, suggesting the potential of MSCs as alternative therapeutics for POF. Therefore, this study aims to summarize the latest findings on the mechanism and application of MSCs in POF treatment, providing directions for continued research and clinical therapy.

**Reprod Biol. 2025 Sep 17;25(4):101075. doi: 10.1016/j.repbio.2025.101075. Online ahead of print.**

### **Decoding ovarian aging in women: Cellular damage, signaling networks, and treatment frontiers**

Shivani Ingole 1, Kanchan Khare 1, Veepin Dwivedi 1, Brijesh Taksande 1, Milind Umekar 1, Shubhada Mangrulkar  
Ovarian aging is a significant biological process characterized by the gradual decline of ovarian function and fertility in women as they age. It is a multifaceted process that involves various molecular mechanisms. This review article delves into the complex nature of ovarian aging, marked by reductions in both the quantity and quality of oocytes, hormonal imbalances, and heightened risks of infertility and pregnancy complications. It consolidates current understanding of the physiological, cellular, and molecular mechanisms driving ovarian aging, such as mitochondrial dysfunction, oxidative stress, telomere shortening, DNA (Deoxyribonucleic Acid) damage, inflammation, and apoptosis. This review primarily focuses on human ovarian aging, while also integrating relevant insights from animal models particularly rodent studies that have contributed to our understanding of underlying mechanisms. It explores key signaling pathways involved in aging, including AMPK (AMP-Activated Protein Kinase), mTOR (mammalian target of rapamycin), Nrf2 (Nuclear Factor Erythroid 2-Related Factor 2), SIRT1 (Sirtuin 1), and FOXO3 (Forkhead Box O Transcription Factor) pathways. The review also discusses emerging therapeutic strategies designed to delay or reverse ovarian aging, which include antioxidants, hormone replacement therapy, stem cell-based treatments, CRMs (CR mimetics), gene therapy, and traditional medicines. Additionally, the article examines the potential role of polyamines in ovarian function and aging. By thoroughly analyzing the current research landscape and identifying

future research directions, this review offers valuable insights for researchers and clinicians dedicated to improving reproductive health and quality of life for aging women.

**Obstet Gynecol . 2025 Sep 19. doi: 10.1097/AOG.0000000000006081. Online ahead of print.**

## **Platelet-Rich Plasma for Genitourinary Syndrome of Menopause in Breast Cancer Survivors**

Anita H Chen 1, Emanuel C Trabuco, Saranya Chumsri, Jacqueline M Thielen, Jeffrey L Cornella, et al.

**Objective:** To assess the safety and feasibility of injection of autologous platelet-rich plasma (PRP) into the vagina and posterior fourchette and to evaluate 6-month efficacy for treatment of genitourinary syndrome of menopause (GSM) in breast cancer survivors. **Methods:** We conducted a prospective, single-arm pilot study of breast cancer survivors (stage 0-III) who reported vaginal dryness with or without dyspareunia. Participants underwent a one-time treatment with 7 mL autologous PRP injected throughout the vaginal canal and posterior fourchette into 35 sites. The primary outcome was to assess safety and feasibility. Secondary outcomes included VMI (Vaginal Maturation Index), VHI (Vaginal Health Index), VAS/VuAS (Vaginal and Vulvar Assessment Scales), DIVA (Day-to-Day Impact of Vaginal Aging questionnaire), FSFI (Female Sexual Function Index), and UDI-6 (Urogenital Distress Inventory-Short Form) scores. Vaginal caliber was measured with silicone dilators. Patient Global Impression of Improvement (PGI-I) was assessed with a 7-point Likert scale. **Results:** Twenty participants were treated; mean±SD age and body mass index (BMI) were 53.6±7.5 years and 27.2±4.6, respectively. Most had hormone receptor-positive breast cancer (85.0%), and of those, 65.0% were taking an aromatase inhibitor. All participants completed the planned protocol. Treatment adverse events included vaginal spotting, irritation, discharge, burning, cramping, and mild pain, all resolving within 24 hours. No serious adverse events occurred. VAS/VuAS, FSFI, UDI-6, DIVA, VHI, and total scores showed significant improvement from baseline to 6 months; the VMI change was nonsignificant. At 6 months, 90.0% of patients had an increase in vaginal caliber as measured by change in dilator size, and 95.0% noted improvement of symptoms on PGI-I. **Conclusion:** A single treatment of autologous PRP injected diffusely through the vaginal canal and posterior fourchette is safe and feasible. In this uncontrolled pilot trial, at 6 months, treatment significantly improved GSM symptoms, sexual function, urinary symptoms, and quality of life in breast cancer survivors, including those on aromatase inhibitors.

**Cancer Epidemiol Biomarkers Prev. 2025 Sep 18. doi: 10.1158/1055-9965.EPI-25-0724. Online ahead of print.**

## **Metabolic syndrome and the risk of breast, endometrial and ovarian cancer among postmenopausal women in the UK Biobank**

Lauren McVicker 1, Kahandhawa Appuhamillage Madhavi Priyangika Gunathilake, Christopher R Cardwell, et al.

**Background** There is some evidence that metabolic syndrome (MetS) is associated with postmenopausal breast and gynaecological cancer. However, results from previous studies have been inconsistent and varied by definition of MetS used. **Methods** Using data from the UK Biobank, the association between MetS, according to three definitions, and the risk of breast, endometrial and ovarian cancer was assessed among postmenopausal women with serological biomarker data. Cox proportional hazards regression was used to calculate hazard ratios (HRs) with 95% confidence intervals (CIs), adjusting for a range of confounders. **Results** In total, 4,791 breast, 820 endometrial and 582 ovarian cancers were diagnosed. For all definitions, MetS was associated with a higher risk of breast (harmonized definition; HR 1.11, 95% CI: 1.04-1.19), and endometrial cancer (harmonized definition; HR 2.18, 95% CI: 1.86-2.55) but not ovarian cancer (harmonized definition; HR 1.08, 95% CI: 0.88-1.31). Assessment of the individual MetS components revealed that only abdominal obesity was consistently associated with breast cancer, whilst all components were associated with a higher risk of endometrial cancer. **Conclusions** In this cohort, MetS and all MetS components were individually associated with a higher risk of endometrial cancer, but only abdominal obesity was consistently associated with an increased risk of breast cancer. No associations were observed between MetS and ovarian cancer risk. **Impact** These findings underline the need for further mechanistic research to clarify potential causal relationships and to better inform public health strategies to address the rising obesity-related cancer burden, particularly endometrial in postmenopausal women.

**Menopause. 2025 Sep 16. doi: 10.1097/GME.0000000000002672. Online ahead of print.**

## Use of progestin-containing intrauterine systems in hormone therapy regimens: what are the data?

Amy J Voedisch 1

The levonorgestrel intrauterine system (IUS) is frequently used in perimenopause for contraception and bleeding control and in both perimenopause and menopause for endometrial protection while using estrogen therapy to control bothersome menopause symptoms. The use of an IUS for endometrial protection as part of hormone therapy is off label in the United States but is approved for use in more than 100 countries for up to 5 years. Some IUSs have been approved for contraceptive use for 8 years, and questions remain whether they provide adequate endometrial protection when combined with estrogen therapy beyond 5 years of use.

**JAMA Intern Med. 2025 Sep 15:e254510. doi: 10.1001/jamainternmed.2025.4510. Online ahead of print.**

## Menopausal Hormone Therapy and Cardiovascular Diseases in Women With Vasomotor Symptoms: A Secondary Analysis of the Women's Health Initiative Randomized Clinical Trials

Jacques E Rossouw 1, Aaron K Aragaki 2, JoAnn E Manson 3, Emily D Szmulowicz 4, Laura B Harrington 5, et al. Importance: Identification of appropriate patients for treatment of vasomotor symptoms (VMS) with menopausal hormone therapy (HT) is challenging. Objective: To assess risk of cardiovascular disease (CVD) due to HT in women with VMS. Design, setting, and participants: In this secondary analysis of 2 randomized clinical trials of HT, postmenopausal women aged 50 to 79 years from 40 US clinical centers were included. Data were collected from November 1993 to September 2012, and data were analyzed from December 2024 to May 2025. Interventions: Conjugated equine estrogens (CEE), 0.625 mg per day, or CEE with medroxyprogesterone acetate (MPA), 2.5 mg per day, vs placebo. Main outcomes and measures: Atherosclerotic CVD (ASCVD; defined as composite of nonfatal myocardial infarction, hospitalization for angina, coronary revascularization, ischemic stroke, peripheral arterial disease, carotid artery disease, or CVD death). Results: Of 27 347 included postmenopausal women, the mean (SD) age was 63.4 (7.2) years; a total of 10 739 (39.3%) had a hysterectomy, and 16 608 (60.7%) had an intact uterus. The median (IQR) follow-up was 7.2 (6.4-8.1) years and 5.6 (4.8-6.5) years for those in the CEE alone trial and the CEE plus MPA trial, respectively. In the CEE alone trial, moderate or severe VMS were present at baseline in 905 (27.6%), 705 (14.7%), and 220 (8.7%) women aged 50 to 59 years, 60 to 69 years, and 70 to 79 years, respectively; in the CEE plus MPA trial, moderate or severe VMS was present in 1225 (22.4%), 649 (8.7%), and 172 (4.8%), respectively. Among women with moderate or severe VMS at enrollment, 3382 (96.7%) recalled having symptoms near menopause onset. CEE alone reduced VMS by 41% across all age groups (overall relative risk [RR], 0.59; 95% CI, 0.53-0.66). However, in the CEE plus MPA trial, VMS reduction was attenuated with age (age 50-59 years: RR, 0.41; 95% CI, 0.35-0.48; age 60-69 years: RR, 0.72; 95% CI, 0.61-0.85; age 70-79 years: RR, 1.20; 95% CI, 0.91-1.59; interaction P for trend < .001). Both CEE alone and CEE plus MPA appeared to have neutral effects on ASCVD in women with moderate or severe VMS aged 50 to 59 years (CEE alone: hazard ratio [HR], 0.85; 95% CI, 0.53-1.35; CEE plus MPA: HR, 0.84; 95% CI, 0.44-1.57). While the estimated risk was higher for CEE alone in women with VMS aged 60 to 69 years, there was no clear signal of harm (CEE alone: HR, 1.31; 95% CI, 0.90-1.90; CEE plus MPA: HR, 0.84; 95% CI, 0.51-1.39). However, women with VMS 70 years and older had increased risks of ASCVD (CEE alone: HR, 1.95; 95% CI, 1.06-3.59; 217 excess events per 10 000 person-years; interaction P for trend = .03; CEE plus MPA: HR, 3.22; 95% CI, 1.36-7.63; 382 excess events per 10 000 person-years; interaction P for trend = .02). Conclusions and relevance: In this secondary analysis of 2 randomized clinical trials, among younger postmenopausal women aged 50 to 59 years, both CEE alone and CEE plus MPA reduced VMS without significantly affecting ASCVD risk. In women with VMS 70 years and older, risks for ASCVD were increased in both trials. The findings support guideline recommendations for treatment of VMS with HT in women aged 50 to 59 years, caution if initiating HT in women aged 60 to 69 years, and avoidance of HT in women 70 years and older.