



## HORMONE THERAPY FOR POSTMENOPAUSAL WOMEN

New guidelines for the use of hormone therapy in postmenopausal women were released from the US Preventive Services Task Force (USPSTF). This new guideline provides information regarding the benefits and risks of hormone therapy for chronic conditions. This issue of *CLIPs* briefly summarizes topics related to the use of hormone replacement in chronic conditions (e.g., heart disease, osteoporosis, cognitive impairment, and some types of cancer). If you need further information, please contact the Center for Healthcare Innovation and Patient Outcomes Research (CHIPOR) at [chipor@samford.edu](mailto:chipor@samford.edu).

**Gartlehner G, Patel SV, Feltner C et al. Hormone therapy for the primary prevention of chronic conditions in postmenopausal women. Evidence report and systematic review for the US Preventive Services Task Force. JAMA. 2017;318(22):2234-2249.**

### Introduction

- The timing of menopause is associated with an increased risk of preventable diseases such as cardiovascular disease, osteoporosis (and fractures), cognitive impairment, and some types of cancer.
- Menopause typically occurs at a median age of 51.3 years.
- Lingering questions exist regarding whether initiation of hormone therapy earlier could result in a reduction in cardiovascular disease, dementia, and mortality.

### Benefits of menopausal hormone therapy for primary prevention of chronic disease

#### *Estrogen only*

- Risks for osteoporotic fractures (-53 fractures per 10,000 patient years), diabetes (-19 cases per 10,000 patient years), and long-term risk for breast cancer (-7 cases per 10,000 patient years) were statistically reduced for women taking estrogen only.
- No statistically significant reductions were observed for colorectal cancer, lung cancer, coronary heart disease, probable dementia, quality of life and all-cause mortality.

#### *Estrogen plus Progestin*

- Combination therapy resulted in statistically significant reduction in the risk for colorectal cancer (-6 cases per 10,000 patient years), osteoporotic fractures (-44 cases per 10,000 patient years), and diabetes (-14 cases per 10,000 patient years) compared to women in the placebo group.
- No statistically significant differences were observed for cervical cancer, endometrial cancer, lung cancer, ovarian cancer, quality of life and all-cause mortality.

### Harms of menopausal hormone therapy

#### *Estrogen only*

- Statistically significant increases in the risk for gallbladder disease (+30 more cases per 10,000 patient years), stroke (+11 more cases per 10,000 patient years), urinary incontinence (+1261 more cases per 10,000 patient years) and venous thromboembolism (+11 more cases per 10,000 patient years) were observed for patients receiving estrogen-only therapy.
- The increased risks were not evident after discontinuation of hormone therapy.

#### *Estrogen plus progestin*

- Combination therapy was associated with statistically significant increases in the risk for invasive breast cancer (+9 more cases per 10,000 patient years), probable dementia (+22 more cases per 10,000 patient years), gallbladder disease (+21 more cases per 10,000 patient years), stroke, urinary incontinence, and venous thromboembolism.

### **Subgroup analysis**

- Many trials did not report results from subgroup analyses.
- Younger (50 to 59 years) compared with older (70 to 79 years) using estrogen only therapy experienced an increased risk for myocardial infarction, colorectal cancer and all-cause mortality.
- Interpretations of subgroup analyses should be interpreted with caution.

### *Timing of hormone therapy*

- Patients who received combination therapy within 10 years of menopause did not experience an increased risk of myocardial infarction; however, women who began therapy 20 years after menopause experienced an increased risk of myocardial infarction.
- No statistically significant differences were found between women who received hormone therapy for probably dementia, breast cancer, colorectal cancer, lung cancer, coronary heart disease, quality of life, and all-cause mortality.

### **Summary**

- Although there appears to be some benefit with hormone therapy for postmenopausal women, the risks may outweigh the benefits in some patient populations.
- Since the evidence is inconclusive, hormone therapy should not be universally recommended for postmenopausal women.