

## EURO BIOPHARMA 2021: The net effect of menopausal hormone therapy on the risk of cancer: A Swedish population based cohort study - Johanna Simin- University of Oslo, Norway

Johanna Simin

### Abstract

**Statement of the Problem:** Menopausal hormone therapy (MHT) appears to influence carcinogenesis. Whereas studies of individual cancer sites are crucial for causal inference, the net effect of MHT on the total cancer risk remains unknown, and can provide valuable insights for clinical management and guidance of women with menopause related symptoms. **Methodology and Theoretical Orientation:** This nationwide Swedish population-based cohort study was based on the Swedish Prescribed Drug Registry. All 290,186 women aged  $\geq 40$  years having received dispensed prescriptions of systemic MHT during 2005-2012 were included. The risk of cancer was presented as standardized incidence ratios (SIRs) and 95% confidence intervals (95%CI), comparing MHT ever-users to the entire Swedish female background population. **Findings:** The risk of any incident cancer following MHT ever-use was slightly increased (SIR=1.09, 95%CI 1.07-1.11). The risk was lower among oestrogen only (E-MHT) users (SIR=1.04, 95%CI 1.01-1.06) than oestrogen combined progestin (EP-MHT) users (SIR=1.14, 95%CI 1.12-1.17). Of the oestrogen formulations, tibolone increased the risk (SIR=1.14, 95%CI 1.08-1.21). Of the EP-MHT regimens, continuous progesterone (SIR=1.12, 95%CI 1.07-1.17) and testosterone derived (SIR=1.24, 95%CI 1.20-1.28) regimens increased the cancer risk, whereas no apparent association was found for sequential regimens. The risk of main female reproductive organ cancers was increased, notably among women  $\geq 70$  (SIR=2.25, 95%CI 2.08-2.42).

In contrast, an inverse association was observed for combined gastrointestinal tract cancers (SIR=0.90, 95%CI 0.86-0.94). **Conclusion and significance:** MHT, notably EP-MHT use, was associated with a limited increase in overall cancer risk.

**Bottom Note:** This work is partly presented at 7th European Biopharma Congress; Webinar- April 27-28, 2020.

Johanna Simin

University of Oslo, Norway

[7<sup>th</sup> European Biopharma Congress](#)