

Postpartum Hemorrhage As a Marker of Cancer

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No competing interests to declare

Background

- The association between carcinogenesis and subsequent bleeding is established
- We investigated whether postpartum hemorrhage (PPH) may be a marker of clinically unrecognized cancer in women of reproductive age

Aim

To examine an association between PPH and cancer

CONCLUSION

This study found **no evidence** to support a hypothesis that postpartum hemorrhage may be a marker of a clinically unrecognized cancer in women of reproductive age.

Methods

- Nationwide registry-based cohort study
- Individual-level data
- Population of singleton deliveries, 1996-2011
- Excluded deliveries with a history of PPH and cancer
- Eligible women with a delivery without PPH comprised a comparison cohort
- Outcomes in women were any cancer, cancer by site, and by stage at diagnosis (local or regional)
- Death was treated as a competing event
- Main analyses: all included deliveries and separately analyzed deliveries of primiparous women
- Potential confounders: calendar period, age, chronic pulmonary disease, obesity, diabetes, sub-fertility, smoking, and parity
- Cox proportional hazards regression



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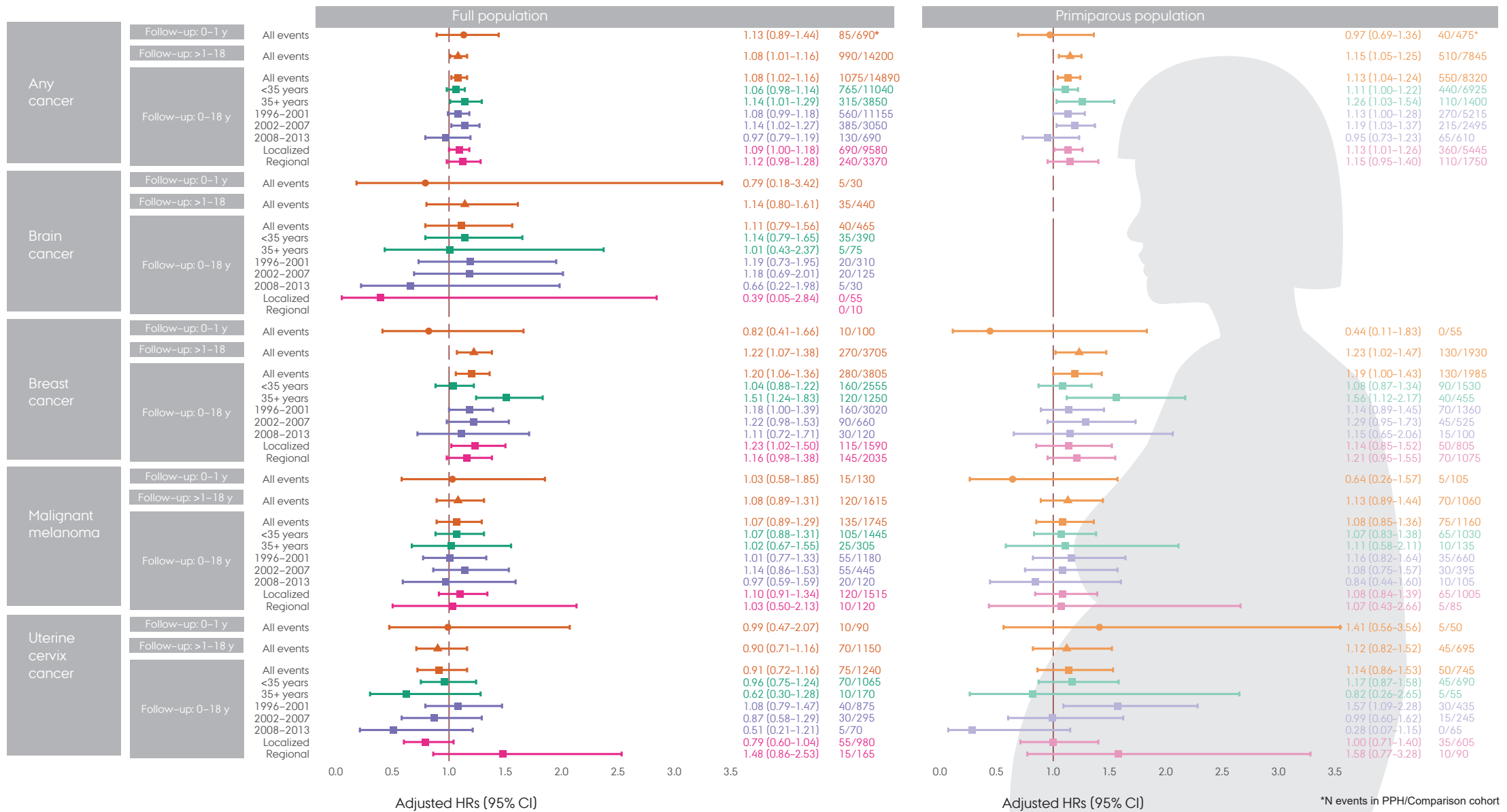


Results

- In the **full population**, 51 224 women comprised the **PPH cohort**, and 536 016 women comprised the comparison cohort. In the **primiparous population**, 27 885 women comprised the **PPH cohort**, and 378 730 women comprised the comparison cohort.
- During the first year of the follow-up, the hazard ratio (HR) of any cancer adjusted for women's morbidity, smoking, and parity, in the **full** and **primiparous** PPH populations was **1.13 (95% confidence interval [CI]: 0.89-1.44)** and **0.97 (95%CI: 0.69-1.36)**, respectively. At 18 years of follow-up, HR of any cancer was 1.08 (95% CI: 1.02-1.16) for the full PPH population and 1.13 (95% CI: 1.04-1.24) for the primiparous PPH population.

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FIGURE 1. Hazard ratios for any cancer and common site-specific cancers in the PPH cohort vs comparison cohort, Denmark



*N events in PPH/Comparison cohort