Sensitivity analyses were also performed restricting events to tumor grade 1-3 and hormone receptor status. Breast cancer is the second leading cause of cancer in women and the average lifetime risk for developing breast cancer is 10%.[1]

- About 8% of pregnancies are complicated by HDP including preeclampsia, eclampsia, and fetal morbidity and mortality in the perinatal period.

- Compare patient and tumor characteristics between women with and without HDP

- Index date was defined as the date when the woman first met criteria for HPD.

- Women with a liveborn or stillbirth pregnancy complicated by HDP between January 1, 1976 and December 31, 1982 were residents of Olmsted County and without a prior hypertensive disorders of pregnancy and subsequent breast cancer risk

- A total 1713 women were included in the cohort for analysis (571 women with HDP pregnancies and 1142 matched referent women with normotensive pregnancies)

- 63 women were identified as having breast cancer during the follow-up period (3.8% of referent pregnancies and 3.3% of HDP pregnancies)

- Average follow-up time was 26.7 vs 29.5 years for referent vs HDP women

- **Objectives**

  - To investigate the relationship between hypertensive disorders of pregnancy (HDP), including preeclampsia, and subsequent breast cancer risk.

  - To compare patient and tumor characteristics between women with and without HDP.

  - To estimate the hazard ratios (HRs) for breast cancer incidence associated with HDP.

- **Statistical Methods**

  - Univariate cox proportional hazards models were fit to estimate hazard ratios (HRs) for breast cancer incidence associated with HDP.

  - Multivariate cox proportional hazards models were fit to estimate hazard ratios (HRs) for breast cancer incidence associated with HDP, adjusting for other covariates.

  - The decreased, but nonsignificant association between HPD and breast cancer risk was consistent across all subgroups.

  - Recent meta-analysis showed similar results with decreased overall risk of breast cancer associated with HPD.

  - Limitation include small sample of patients with breast cancer.

- **Discussion**

  - Our study is the first to use a pre-defined definition of HPD as outlined in an international algorithm.

  - Also the first to analyze individual tumor types, grades and receptor status.

- **References**


