Breast cancer survival by age and clinical subtype (ER/PR/HER2) in a nationwide cohort from Norway

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Conclusions

- **Young women** have worse BC-specific survival compared to screen-aged women, in particular among luminal tumours (Fig 1).
- **Elderly women** have worse BC-specific survival compared to screen-aged women within all BC subtypes (Fig 1).
- Although there are some subtype-specific effects of age, **age and subtype also contribute independently** to BC-specific survival (Fig 2).
- Differences over age could be due to **tumour biology, screening effects, or differences in comorbidities and treatment intensity**.

Aims

To elucidate the role of tumor biology for differences in breast cancer survival across age.

We assessed the effect of clinical subtype based on IHC surrogates (ER/PR/HER2) on breast cancer survival among young (20-39y), middle-aged (40-49y), screen-aged (50-69y) and elderly (70-89y) women.

We used population-based cancer registry data from Norway with national coverage and of high quality.

Methods

Clinical subtype of BC was defined by estrogen receptor (ER), progesterone receptor (PR) and human epidermal growth factor receptor 2 (HER2) status.


Cause-specific hazard ratios (deaths due to BC up to 7 years after diagnosis) among patients were estimated with Cox regression, adjusting for year, grade and TNM stage.

My research area is **cancer epidemiology**, in particular breast cancer. I also perform research on cancer in young women in relation to pregnancy and reproductive factors.