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**P22: SURVIVAL AFTER BREAST CANCER IN YOUNGER SWISS WOMEN**

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**Background**

In developed countries breast cancer (BC) is the most frequent cancer in women aged less than 40 years. It accounts for 30-40% of all female cancers and is the leading cause of cancer death for young women. This study examines the survival experience of younger women diagnosed with BC in Switzerland.

**Methods**

Data on BC cases diagnosed before the age of 50 years were obtained from 11 Swiss cancer registries for the incidence years 1996-2009 (N=7,973). SEER summary stage was calculated based on the TNM classification system.

Relative survival (RS) was estimated by dividing the observed survival (OS) after diagnosis by the survival as expected in the general female population based on all cases diagnosed between 1996-2009 (complete analyses). OS and RS probabilities were calculated for 1-, 3-, 5- and 10-year survival (age groups 20-39, 40-49 and 20-49 years).

**Results**

For all stages combined, RS in women aged 20-49 years was 98.8% (95% CI 98.5-99.0) after one year, 93.2% (95% CI 92.5-93.8) after three years, 87.7% (95% CI 86.8-88.5) after five years and 75.8% (95% CI 74.3-77.3) after ten years since diagnosis. Overall, RS was lower among women aged 20-39 years 70.8% (95% CI 67.4-73.8) than women aged 40-49 years 77.3% (95% CI 75.6-79.0).

Ten years after diagnosis, RS by stage was 89.8% (95% CI 87.9-91.4) for the localized stage, 70.6% (95% CI 67.8-72.2) for the regional stage and 19.6% (95% CI 12.7-27.5) for the distant stage. Cases with unknown stage had showed a 10-year RS of 60.3% (95% CI 50.4-68.8).

Analyses by age-group and stage revealed lower survival for women aged 20-39 years than women aged 40-49 years for all stages. Respectively, 10-year RS by stage was 86.1% (95% CI 83.9-88.1) versus 90.7% (95% CI 88.8-92.3) local, 65.1% (95% CI 62.1-68.0) versus 72.7% (95% CI 69.8-75.4), regional and 5.0% (95% CI 1.4-12.2) versus 17.3% (95% CI 10.6-25.4) distant. However, cases without stage information showed reversed results with RS of 73.1% (95% CI 66.7-78.4) in women aged 20-39 years versus 56.1% (95% CI 44.8-66.0) in women aged 40-49 years.

**Conclusion**

Our study found a lower survival in women with BC aged 20-39 years at time of diagnosis compared to women aged 40-49 years. However, whether or not age is an independent risk factor remains unclear. Further investigations are needed to study the impact of age and other prognostic factors on BC survival in younger women.