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Quantification of changes in breast cancer incidence and mortality since 1990 in 35 countries with Caucasian-majority populations.

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BACKGROUND: Since 1985 considerable changes have taken place in the early detection and treatment of breast cancer. We quantified breast cancer trends for 35 countries with populations mainly of European ancestry.

METHODS: Incidence data were extracted from cancer registries and mortality data from World Health Organization database. Overall percentage change from 1990 to 2002 was quantified for all ages and for three different age-groups (35-49, 50-69 and >/=70 years of age).

RESULTS: The incidence percent change in women of all ages varied from 2.1% in Canada to 54.2% in Lithuania. Main increases in incidence were observed for women 50-69 years old, from 12.4% in Canada until 105.3% in Norway. Decreases in mortality of >20% were observed in nine countries. Mortality decreases were highest in women 35-49 years old and lowest in women >/=70 years. The magnitude of mortality decrease from 1990 to 2002 was not related to the mortality rate observed in 1990.

CONCLUSIONS: While increases in breast cancer incidence mainly concerned women >/=50 years, decreases in mortality were more marked in women 35-49 years old. Large disparities in changes in mortality rates probably reflect differences in detection of and management of breast cancer.