Differences in stage and treatment of breast cancer across Italy point to inequalities in access to and availability of proper care

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ABSTRACT

Aims and background. Population-based cancer registry studies of patterns of care can help elucidate reasons for differences in breast cancer survival across Italy documented by previous studies. The aims of the present study were to investigate across-country variation in stage at presentation and standard care for breast cancer cases diagnosed in Italy in the early 2000s.

Methods. Samples of adult (≥15 years) women with breast cancer diagnosed in 2003-2005 were randomly selected in 9 Italian cancer registries. Logistic regression models were used to estimate the odds of receiving breast-conserving surgery plus radiotherapy (BCS + RT) in each cancer registry, age group, and disease stage category compared with the entire sample (reference); the z test was used to evaluate differences in proportions of stage at diagnosis, employment of chemotherapy in node-positive (N+) disease, and use of endocrine treatment in estrogen-receptor positive (ER+) and negative (ER-) tumors across Italy.

Results. Stage at diagnosis was earlier in northern/central registries than in southern areas. Compared with the reference, the odds of receiving BCS + RT was significantly lower in Trapani, Sassari and Naples (southern Italy) after adjusting for age and stage at diagnosis. Among N+ patients, 73% received adjuvant chemotherapy (range, 51% [Biella, northern Italy] to 87% [Ragusa, southern Italy]). Eighty percent of ER+ cancers (range, 50% [Biella, northern Italy] to 97% [Ragusa, southern Italy]) and 18% of ER- cancers (range, 6% [Modena, northern Italy] to 28% [Umbria, central Italy]) were treated with hormonal therapy.

Conclusions. Disparities in stage distributions and conservative surgery in breast cancer persist across Italy. On a positive note, we found lower variations in the use of systemic treatment between Italian regions.

Key words: breast cancer, standard care, Italy, EUROCASE.

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