

## Radiotherapy in Italy after conservative treatment of early breast cancer. A survey by the Italian Society of Radiation Oncology (AIRO)

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### ABSTRACT

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**Aims and background.** The aim of surveys on clinical practice is to stimulate discussion and optimize practice. In this paper the current Italian radiotherapy practice after breast-conserving surgery for early breast cancer is described and adherence to national and international guidelines is assessed. Furthermore, results are compared with an earlier survey in northern Italy and international reports.

**Study design.** A multiple-choice questionnaire sent to all 138 Italian radiation oncology centers.

**Results.** 48% of centers responded. Most performed breast-conserving surgery when tumor size was  $\leq 3$  cm. All centers routinely performed axillary dissection; 45 carried out sentinel node biopsy followed by axillary dissection when the sentinel node was positive. Most centers re-excised when resection margins were positive. The median interval between surgery and radiotherapy, when chemotherapy was not administered, was 60 days. Adjuvant chemotherapy was preferably administered before radiotherapy. Regional lymph nodes were never irradiated in 10 centers; in all others irradiation depended on the number of positive lymph nodes and/or involvement of axillary fat and/or tumor location in medial quadrants. All centers used standard fractionation; hypofractionated schemes were available in 6. Most centers used 4-6 MV photons. In 59 centers the boost dose of 10 Gy could be increased if margins were not negative. All centers ensured patient setup reproducibility. Treatment planning was computerized in 59 centers. The irradiation dose was prescribed at the ICRU point in 56 centers and portal films were made in 54 centers. Intraoperative radiotherapy was used in 4 centers: for partial breast irradiation in 1 and for boost administration in 3 centers.

**Conclusions.** Although the quality of radiotherapy delivery has improved in Italy in recent years, approaches that do not conform to international standards persist.

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**Key words:** radiotherapy, early breast cancer, survey.

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