BIGOSA POSITION STATEMENT

BREAST CANCER AND RADIATION THERAPY

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Radiation therapy is a cornerstone of breast cancer treatment. It plays a central role after breast-conserving surgery and in selected post-mastectomy settings.

THE ROLE OF RADIATION THERAPY

Radiation therapy (RT) is a cornerstone of treatment in the post-lumpectomy breast and post-mastectomy settings. RT reduces the risk of local and regional recurrence and, albeit to a lesser degree, distant recurrence and mortality.

The Early Breast Cancer Trialists' Collaborative Group (EBCTCG) meta-analyses of prospective randomised trials demonstrated that postoperative RT improves local control, disease-free survival and overall survival for patients with early-stage breast cancer in the setting of lymph node involvement and/or breast-conserving therapy.

TIMING AFTER BREAST-CONSERVING SURGERY

The optimal timing of RT after breast-conserving surgery has not been well defined, but there is a fair amount of data to guide us. Clinical trials reporting the benefit of postoperative radiation after breast-conserving surgery typically restricted the maximum interval between surgery and the start of RT to 6-8 weeks, in the absence of adjuvant pre-RT chemotherapy.

In settings where access to RT is limited, the resulting longer waiting times may lessen the utility of post-lumpectomy RT and hinder breast conservation. While there is limited data regarding the minimum acceptable interval from surgery to the beginning of external beam radiation, initiating RT 3-4 weeks after surgery should allow adequate healing of the breast and axillary area, as well as adequate arm mobility to facilitate treatment planning.

AT A GLANCE

KEY MESSAGES

01	**A wide local excision or lumpectomy should only be offered if there is access to RT.**
02	**Postoperative RT decreases local-regional recurrence in both the post-lumpectomy and post-mastectomy settings by 75-85%; patients at higher risk of local recurrence experience a greater absolute benefit.**
03	**Postoperative RT in the post-lumpectomy and post-mastectomy settings decreases recurrence at any site, breast cancer-related mortality and overall mortality.**
04	**Generally, postoperative RT is recommended in the post-lumpectomy setting for axillary node-negative and node-positive patients to decrease all forms of recurrence, breast cancer-related mortality and overall mortality.**
05	**Generally, postoperative RT is recommended in the post-mastectomy setting for axillary node-positive patients—and for node-negative patients with large primary tumours or other high-risk features—to decrease all forms of recurrence, breast cancer-related mortality and overall mortality.**

SOURCE NOTE

Excerpts from the radiation therapy chapter in ***Breast Cancer: Global Quality Care, 2nd edition***.

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