

Breast Cancer Treatment Guidelines

Treatment Option Overview for Early/Localized/Operable Breast Cancer

1. Surgery

- Breast-conserving surgery (lumpectomy) and sentinel lymph node (SLN) biopsy with or without axillary lymph node dissection for positive SLNs.
- Modified radical mastectomy (removal of the entire breast with axillary dissection of levels I and II) with or without breast reconstruction and sentinel node biopsy with or without axillary lymph node dissection for positive SLNs.

2. Postoperative Radiation Therapy

Axillary node–negative breast cancer (postmastectomy)

- No additional therapy
- Radiation therapy

Axillary node–positive breast cancer (postmastectomy)

- For one to three nodes, the role of regional radiation therapy to the infra/supraclavicular nodes, internal mammary nodes, axillary nodes, and chest wall is unclear.
- For four or more nodes or extranodal involvement, regional radiation therapy is advised.

Axillary node–negative or positive breast cancer (post–breast-conserving therapy)

Whole-breast radiation therapy

3. Postoperative Systemic Therapy

Therapy depends on many factors including stage, grade, molecular status of the tumor (e.g., estrogen receptor [ER], progesterone receptor [PR], human epidermal growth factor receptor 2 [HER2/neu], or triple-negative [ER-negative, PR-negative, and HER2/neu-negative] status).

Adjuvant treatment options may include the following:

- Tamoxifen
- Aromatase inhibitor (AI) therapy
- Ovarian function suppression
- Chemotherapy

Preoperative systemic therapy:

- Chemotherapy.
- HER2-targeted therapy.
- Endocrine therapy.

Treatment Option Overview for Locally Advanced or Inflammatory Breast Cancer

On the basis of the available evidence, multimodality therapy delivered with curative intent is the standard of care for patients with locally advanced or inflammatory breast cancer.

Treatment options for locally advanced or inflammatory breast cancer may include the following:

- Breast-conserving surgery or total mastectomy with axillary lymph node dissection.
- Chemotherapy
- Radiation therapy
- Hormone therapy

Treatment Options for Locoregional Recurrent Breast Cancer

Treatment options for locoregional recurrent breast cancer include the following:

- Chemotherapy
- Hormone therapy
- Radiation therapy
- Surgery
- Targeted therapy (e.g., trastuzumab)

Treatment Option Overview for Metastatic Breast Cancer

Treatment options for metastatic breast cancer include the following:

- Hormone therapy (tamoxifen, aromatase inhibitors, selective estrogen receptor [ER] degraders)
- HER2-targeted therapy
- CDK4/6 inhibitors
- mTOR inhibitors
- PIK3CA inhibitors
- Chemotherapy
- Immunotherapy
- Surgery for patients with limited symptomatic metastases
- Radiation therapy for patients with limited symptomatic metastases
- Bone-modifying therapy for patients with bone metastases

In many cases, these therapies are given in sequence and used in various combinations.

Treatment Options for Patients With DCIS

Treatment options for DCIS include the following:

- Breast-conserving surgery or mastectomy plus radiation therapy with or without tamoxifen.
- Total mastectomy with or without tamoxifen.

Reference

National Cancer Institute. (2024). Breast cancer treatment (PDQ®) - NCI. National Cancer Institute. https://www.cancer.gov/types/breast/hp/breast-treatment-pdq#_1699