



Understanding Breast Cancer Treatments: A Comprehensive Guide



Types of Breast Cancer: Tailoring Treatment Approaches

Hormone Receptor-Positive

Cancers that are estrogen or progesterone receptor-positive often respond well to hormone therapy.

HER2-Positive

These cancers have excess HER2 protein and may be treated with targeted therapies.

Triple-Negative

Lacking hormone receptors and HER2, these cancers typically require more aggressive treatment.





Surgery: The Foundation of Breast Cancer Treatment

Lumpectomy

Removal of the tumor and surrounding tissue, preserving most of the breast.

Sentinel Node Biopsy

Removal of a few lymph nodes to check for cancer spread.

Mastectomy

Removal of the entire breast, sometimes with reconstruction options.

Axillary Lymph NodeDissection

Removal of multiple lymph nodes when cancer has spread beyond the breast.



Radiation Therapy: Targeting Cancer Cells

External Beam Radiation

High-energy beams from a machine outside the body target the tumor site.

Brachytherapy

Radioactive seeds or pellets are placed directly into the breast tissue.

Intraoperative Radiation

A single, high dose of radiation delivered during surgery.

Chemotherapy: Systemic Treatment

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Neoadjuvant

Given before surgery to shrink tumors and improve surgical outcomes.

Adjuvant

Administered after surgery to kill any remaining cancer cells.

Palliative

Used in advanced stages to control symptoms and improve quality of life.





Hormone Therapy: Blocking Cancer Growth





Blocks estrogen receptors in breast cancer cells.



Aromatase Inhibitors

Lowers estrogen levels in postmenopausal women.



Fulvestrant

Destroys estrogen receptors in cancer cells.





Targeted Therapies: Precision Medicine

