

# Standard Treatment Workflow (STW) for BREAST CANCER

## ICD-10-C 50

### SYMPTOMS

- A. **Asymmetry** of breast or nipple areola or axilla
- B. **Breast lump, bulge, blood vessels prominent**
- C. **Colour change** of skin or nipple areola
- D. **Deformed breast / nipple areola** (nipple retraction), dimpling of skin, **Discharge from nipple**, **Direct spread-skin** (satellite nodule, ulcer, skin oedema), chest wall **Distant spread** - headache, jaundice, dyspnoea, bone pains, ascites



### Evaluation and management by multidisciplinary team (MDT) of oncology experts

#### SIGNS

- A Breast changes**
- Asymmetry in shape/size of breast or nipple areola complex
  - Breast lump
  - Nipple retraction/ulcer
  - Change in skin - puckering, dimpling, thickening, ulcer, redness, edema & satellite nodules
  - Fixity to underlying muscles or chest wall
- B Lymph node**
- lymph node(s) in axilla or supra-clavicular fossa
- C Systemic changes**
- Enlarged liver, ascites, bony tenderness, dyspnoea, pleural effusion

#### WORK UP OF A PATIENT WITH SUSPECTED BREAST CANCER- TRIPLE ASSESSMENT

##### CLINICAL BREAST EXAMINATION

##### IMAGING

- Bilateral mammogram: for women >30 years
  - Ultrasound: breast and axilla
  - MRI breast in selected cases
- STAGING- T1, T2 N0 N1**
- Upto Stage 2A no metastatic work up  
Stage 2B upwards
- Chest radiograph
  - Ultrasound whole abdomen
  - Bone scan
  - CECT chest and abdomen
  - PET-CT (optional)

##### PATHOLOGY

- Core needle biopsy (preferred) for type, grade, ER, PR, HER2/neu, Ki-67
- FISH test if HER-2/neu on IHC-2+/ equivocal

#### DO NOT

- Ignore any lump or changes in breast & nipple areola complex
- Perform excision biopsy for diagnosis
- Perform FNAC or core needle biopsy before imaging.

### MULTIDISCIPLINARY CARE

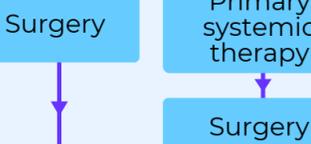
#### MANAGEMENT OF BREAST CANCER

Triple assessment (CBE, USG breast and axilla, mammography and core biopsy)

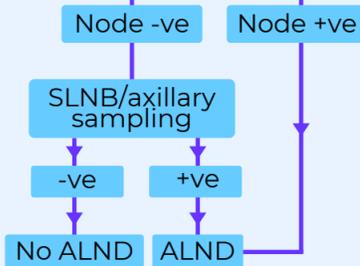
#### EARLY BREAST CANCER

- T1, T2, N0, N1, M0
- Surgery followed by adjuvant therapy
  - Metastatic work-up usually not indicated

#### For breast



#### For axilla (clinico-radiological assessment)



#### ADJUVANT THERAPY (AT)

##### Chemotherapy

- Consider for all patients with pT >1 cm or node positive disease based on ER/PR/HER2/Ki-67

##### Radiotherapy

- After breast conservation surgery
- After mastectomy with node-positive disease or pathological T3/T4

##### Targeted therapy

- All HER-2/neu positive (3+) or FISH HER-2 amplified patients should receive trastuzumab for 12 months
- Shorter schedules: 9 weeks to 6 months acceptable in some patients

##### Hormone therapy

- All ER and/or PR positive cases
- For premenopausal women tamoxifen and for post menopausal women tamoxifen or aromatase inhibitors are appropriate
- Minimum for 5 years, if high risk of recurrence like node positive, consider for up to 10 years
- If AT is used zoledronic acid or other bisphosphonates can be added

#### ADVANCED BREAST CANCER

T3, T4, any N Any T, N2, N3

Metastatic work up: Chest X-ray, ultrasound abdomen, bone scan

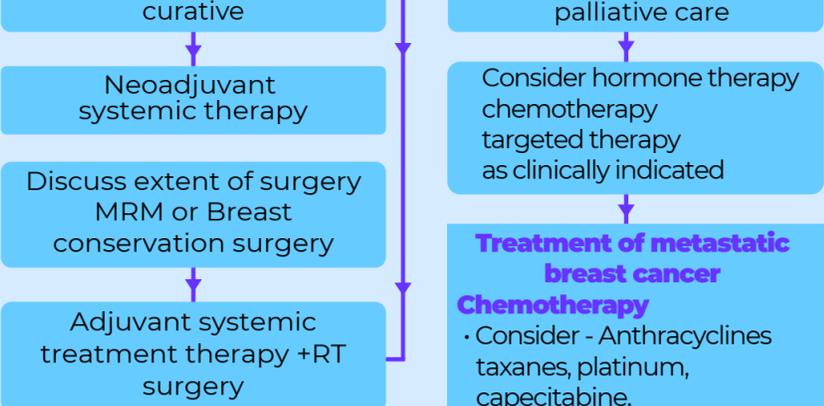
OR

CECT thorax abdomen, bone scan OR PET-CECT whole body

##### No metastasis

#### Locally Advanced Breast Cancer

Intent of treatment: curative



##### Yes metastasis

#### Metastatic Breast Cancer

Intent of treatment: palliative care



#### Treatment of metastatic breast cancer

##### Chemotherapy

- Consider - Anthracyclines, taxanes, platinum, capecitabine, cyclophosphamide, methotrexate, etc.

- Sequential single agents preferred over combinations when possible

##### Hormonal therapy

- Consider - tamoxifen, aromatase inhibitors, fulvestrant, megestrol acetate, CDK 4/6 inhibitors, everolimus
- Ovarian suppression indicated in premenopausal MBC patients, which can be surgical (bilateral oophorectomy) or radiotherapeutic (ovarian radiation) or medical (GnRH analogues)

##### HER2 targeted therapy

- Consider - trastuzumab, lapatinib, pertuzumab, add trastuzumab-emtansine

##### Bone targeted therapy

- All patients with bone metastases should receive a bone modifying agent (e.g zoledronic acid) 4-12 weekly

##### Role of surgery

- It is indicated only for palliation of local tumour symptoms: bleeding, fungation, etc
- Insert intercostal drainage tube for malignant pleural effusion and chemical pleurodesis with talcum powder or bleomycin

##### Role of radiotherapy

- Most effective method for pain relief in bone metastasis
- Is routinely used for brain metastasis: Hemostatic RT used for bleeding ulcer

##### Pain control and palliative care

### ABBREVIATIONS

**ALND:** Axillary lymph node dissection  
**CECT:** Contrast-enhanced computed tomography  
**ER/PR:** Estrogen receptor/Progesterone receptor  
**FISH:** Fluorescence in situ hybridization

**HER2:** Human epidermal growth factor receptor 2  
**IHC:** Immunohistochemistry  
**MBC:** Metastatic breast cancer

**PET-CT:** Positron emission tomography-computed tomography scan  
**RT:** Radiotherapy  
**SLNB:** Sentinel lymph node biopsy

### ENHANCE AWARENESS AND EARLY DETECTION OF BREAST CANCER BY SCREENING AS PER NATIONAL PROGRAMME

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: ([stw.icmr.org.in](http://stw.icmr.org.in)) for more information.  
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