

## STANDARD TREATMENT WORKFLOW (STW)

### Breast Cancer

Sudeep Gupta<sup>1</sup>, Anurag Srivastava<sup>2</sup>, Ashish Singh<sup>3</sup>, Diptendra K Sarkar NH<sup>4</sup>, Geeta K<sup>5</sup>, Harit Chaturvedi<sup>6</sup>, Ravi Kannan<sup>7</sup>, Sandeep Mathur<sup>8</sup>, Sanjay Thulkar<sup>9</sup>, Sushmita Ghoshal<sup>10</sup>

<sup>1</sup>Tata Memorial Centre; <sup>2</sup>All India Institute of Medical Sciences, New Delhi (Retired); <sup>3</sup>Chettinad Hospital and Research Institution Medical College Vellore, Vellore; <sup>4</sup>Kolkata; <sup>5</sup>Max Healthcare, New Delhi; <sup>6</sup>Max Healthcare, New Delhi; <sup>7</sup>Cachar Cancer Hospital, Silchar; <sup>8</sup>All India Institute of Medical Sciences, New Delhi; <sup>9</sup>All India Institute of Medical Sciences, New Delhi; <sup>10</sup>Postgraduate Institute of Medical Education and Research, Chandigarh

#### CORRESPONDING AUTHOR

Sudeep Gupta, Tata Memorial Centre, Mumbai, Maharashtra

Email: [sudeep.gupta@actrec.gov.in](mailto:sudeep.gupta@actrec.gov.in)

#### CITATION

Gupta S, Srivastava A, Singh A, Sarkar DKNH, GK, Chaturvedi H, Kannan R, Mathur S, Thulkar S, Ghoshal S. Breast Cancer. Journal of the Epidemiology Foundation of India. 2024;2(1Suppl):S127-S128. DOI: <https://doi.org/10.56450/JEFI.2024.v2i1Suppl.064>

*This work is licensed under a Creative Commons Attribution 4.0 International License.*

*@The Author(s). 2024 Open Access*

#### DISCLAIMER

*This article/STW, was originally published by Indian Council of Medical Research (ICMR) under Standard Treatment Workflow. The reprinting of this article in Journal of the Epidemiology Foundation of India (JEFI) is done with the permission of ICMR. The content of this article is presented as it was published, with no modifications or alterations. The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of JEFI or its editorial board. This initiative of JEFI to reprint STW is to disseminate these workflows among Health Care Professionals for wider adoption and guiding path for Patient Care.*

**Standard Treatment Workflow (STW) for BREAST CANCER ICD-10-C 50**

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

**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

**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
- B Lymph node**
  - lymph node(s) in axilla or supra-clavicular fossa
- C Systemic changes**
  - Enlarged liver, ascites, bony tenderness, dyspnoea, pleural

**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




Department of Health Research  
Ministry of Health and Family Welfare, Government of India

## 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

