Breast Cancer Medical Record Data Extraction Form

Clinical Characteristics, Disease Stage and Treatment Patterns of Breast Cancer Patients at Merowe and Dongola Oncology Centers, Northern State, Sudan

Study period: January 2025 – September 2026

Study center: ☐ Merowe Oncology Center ☐ Dongola Oncology Center	Record ID: _____ Date of data extraction: ___ / ___ / _____ Data collector ID: _____

Section 1. Cancer Registration

1.1 Date of registration at oncology center: ___ / ___ / _____

1.2 Primary cancer diagnosis:

- ☐ Breast cancer
- ☐ Other cancer: _____

1.3 Sex:

- ☐ Female
- ☐ Male

1.4 Age at diagnosis: _____ years

1.5 Residence:

- ☐ Northern State
- ☐ Other state: _____
- ☐ Not documented

1.6 Marital status:

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Widowed
- ☐ Not documented

Section 2. Breast Cancer Burden at the Center

2.1 Total number of cancer patients registered during the study period: _____ patients

2.2 Total number of breast cancer patients registered during the study period: _____ patients

2.3 Breast cancer as a proportion of all registered cancer cases:_____ %

Calculation: Breast cancer cases ÷ all cancer cases × 100.

Note: This should be reported as the proportion of breast cancer among registered cancer cases, rather than population prevalence, unless a population-based denominator is available.

Section 3. Clinical Presentation

3.1 Presenting symptoms/signs:

(multiple responses allowed)

- ☐ Breast lump/mass
- ☐ Breast pain
- ☐ Nipple discharge
- ☐ Nipple retraction
- ☐ Skin changes
- ☐ Breast ulceration
- ☐ Axillary swelling
- ☐ Incidental finding
- ☐ Other: _____
- ☐ Not documented

3.2 Duration of symptoms before first presentation:

- ☐ <1 month
- ☐ 1–3 months
- ☐ 4–6 months
- ☐ >6 months
- ☐ Not documented

3.3 Laterality:

- ☐ Right breast
- ☐ Left breast
- ☐ Bilateral
- ☐ Not documented

3.4 Tumor size: _____ cm ☐ Not documented

3.5 Lymph-node involvement at diagnosis:

- ☐ Yes
- ☐ No
- ☐ Not documented

3.6 Distant metastasis at diagnosis:

- ☐ Yes
- ☐ No
- ☐ Not documented

3.7 Site of distant metastasis:

(multiple responses allowed)

- ☐ Bone
- ☐ Lung
- ☐ Liver
- ☐ Brain
- ☐ Other: _____
- ☐ Not documented

Section 4. Stage at Diagnosis

4.1 Clinical/TNM stage at diagnosis:

- ☐ Stage I
- ☐ Stage II

- ☐ Stage III
- ☐ Stage IV
- ☐ Not documented

4.2 T classification:

- ☐ T1
- ☐ T2
- ☐ T3
- ☐ T4
- ☐ Not documented

4.3 N classification:

- ☐ N0
- ☐ N1
- ☐ N2
- ☐ N3
- ☐ Not documented

4.4 M classification:

- ☐ M0
- ☐ M1
- ☐ Not documented

4.5 Advanced-stage disease:

- ☐ Yes — Stage III or IV
- ☐ No — Stage I or II
- ☐ Cannot be determined

Section 5. Histopathological Characteristics

5.1 Histological type:

- ☐ Invasive ductal carcinoma
- ☐ Invasive lobular carcinoma
- ☐ Ductal carcinoma in situ
- ☐ Other: _____
- ☐ Not documented

5.2 Histological grade:

- ☐ Grade I
- ☐ Grade II
- ☐ Grade III
- ☐ Not documented

5.3 Estrogen receptor (ER):

- ☐ Positive
- ☐ Negative
- ☐ Equivocal
- ☐ Not done
- ☐ Not documented

5.4 Progesterone receptor (PR):

- ☐ Positive
- ☐ Negative
- ☐ Equivocal
- ☐ Not done
- ☐ Not documented

5.5 HER2 status:

- ☐ Positive
- ☐ Negative
- ☐ Equivocal
- ☐ Not done
- ☐ Not documented

Section 6. Diagnostic Methods

6.1 Diagnostic modalities used:

(multiple responses allowed)

- ☐ Clinical examination
- ☐ Mammography
- ☐ Breast ultrasound
- ☐ FNAC/cytology
- ☐ Core needle biopsy
- ☐ Histopathological examination
- ☐ Other: _____
- ☐ Not documented

6.2 Histopathological confirmation:

- ☐ Yes
- ☐ No
- ☐ Not documented

6.3 Date of histopathological diagnosis: ___ / ___ / _____

Section 7. Treatment Patterns

7.1 Surgery

Surgery received:

- ☐ Yes
- ☐ No
- ☐ Not documented

Type of surgery:

(multiple responses allowed)

- ☐ Mastectomy
- ☐ Breast-conserving surgery
- ☐ Axillary lymph-node surgery
- ☐ Other: _____
- ☐ Not documented

7.2 Chemotherapy

Chemotherapy received:

- ☐ Yes
- ☐ No
- ☐ Not documented

Chemotherapy setting:

- ☐ Neoadjuvant
- ☐ Adjuvant
- ☐ Palliative
- ☐ Other/unclear
- ☐ Not documented

7.3 Radiotherapy

Radiotherapy received:

- ☐ Yes
- ☐ No
- ☐ Not documented

Radiotherapy setting:

- ☐ Adjuvant
- ☐ Palliative
- ☐ Other
- ☐ Not documented

7.4 Endocrine (Hormonal) Therapy

Endocrine therapy received:

- ☐ Yes
- ☐ No
- ☐ Not documented

Type of endocrine therapy:

(multiple responses allowed)

- ☐ Tamoxifen
- ☐ Anastrozole
- ☐ Letrozole
- ☐ Exemestane
- ☐ Fulvestrant
- ☐ Other: _____
- ☐ Not documented

Endocrine therapy status:

- ☐ Started and ongoing
- ☐ Completed
- ☐ Interrupted
- ☐ Discontinued
- ☐ Not started
- ☐ Not documented

Duration, if documented: _____ months

7.5 Targeted Therapy

Targeted therapy received:

- ☐ Yes
- ☐ No
- ☐ Not documented

Type:

- ☐ Trastuzumab
- ☐ Other: _____
- ☐ Not documented

Section 8. Overall Treatment Status

8.1 Overall treatment status:

- ☐ Treatment completed
- ☐ Treatment ongoing
- ☐ Treatment interrupted
- ☐ Treatment not started
- ☐ Referred to another center
- ☐ Not documented

8.2 If treatment was not started, interrupted, or discontinued, documented reason:

- ☐ Treatment unavailable
- ☐ Medication unavailable
- ☐ Financial reasons
- ☐ Patient refusal
- ☐ Clinical condition
- ☐ Referral
- ☐ Loss to follow-up
- ☐ Other: _____
- ☐ Not documented

Section 9. Treatment Timeline

9.1 Date of first definitive treatment: ___ / ___ / _____

9.2 Interval between histopathological diagnosis and first definitive treatment: _____ days

- ☐ Not calculable
- ☐ Not documented

9.3 Was the patient referred elsewhere for treatment?

- ☐ Yes
- ☐ No
- ☐ Not documented

9.4 If yes, reason for referral: _____

Section 10. Medical Record Documentation Completeness

For each variable, indicate whether the information was available in the medical record.

Variable	Documented	Not documented
Age	☐	☐
Sex	☐	☐

Variable	Documented	Not documented
Residence	☐	☐
Marital status	☐	☐
Presenting symptoms	☐	☐
Symptom duration	☐	☐
Laterality	☐	☐
Tumor size	☐	☐
Lymph-node status	☐	☐
Distant metastasis	☐	☐
Clinical/TNM stage	☐	☐
Histological type	☐	☐
Histological grade	☐	☐
ER status	☐	☐
PR status	☐	☐
HER2 status	☐	☐
Diagnostic method	☐	☐
Surgery	☐	☐
Chemotherapy	☐	☐
Radiotherapy	☐	☐
Endocrine therapy	☐	☐
Targeted therapy	☐	☐
Treatment status	☐	☐

Section 11. Research Classification Variables

These variables do not need to be asked from the record as independent items; they can be generated by Kobo/SPSS during analysis.

Advanced-stage breast cancer

- ☐ Stage I/II = 0 (No)
- ☐ Stage III/IV = 1 (Yes)

Age group (to be categorized per analysis plan, e.g.)

- ☐ < 40 years
- ☐ 40–49 years
- ☐ 50–59 years
- ☐ ≥ 60 years

Treatment completion

- ☐ Completed = 1
- ☐ Not completed / interrupted / not started = 0
- ☐ Unknown / not documented = Missing

Important note: Do not enter patient names, phone numbers, or detailed addresses into Kobo. Use Study ID/Record ID only, and keep any identity-linking key outside the research database.

This form serves as the master questionnaire for both centers; only the Study Center variable changes (Merowe / Dongola), allowing the two databases to be merged and compared directly.