

BREAST CANCER

1. Patient Demographics

- **Age** (Range: Unknown, but observed values: 47 - 68)
 - Represents the patient's age in years.
- **Race** (Range 1 - 3)*
 - Indicates the racial background of the patient
 - 1 = White
 - 2 = Black
 - 3 = Others
- **Marital Status** (Range 1 - 5)
 - The patient's marital status at the time of diagnosis
 - 1 = Married
 - 2 = Divorced
 - 3 = Widowed
 - 4 = Single
 - 5 = Separated

2. Cancer Staging Info

- **T Stage (Tumor Stage)** (Range 1 - 4)
 - Defines the size and extent of the main tumor
 - 1 = T1: Small tumor (≤ 2 cm)
 - 2 = T2: Medium-sized tumor (2–5 cm)
 - 3 = T3: Large tumor (> 5 cm)
 - 4 = T4: Tumor has spread to chest wall or skin
- **N Stage (Lymph Node Involvement)** (Range 1 - 4)
 - Indicates whether cancer has spread to lymph nodes
 - 1 = N0: No lymph node involvement
 - 2 = N1: Few lymph nodes affected
 - 3 = N2: Moderate lymph node involvement
 - 4 = N3: Extensive lymph node involvement
- **6th Stage (AJCC 6th Edition Staging System)** (Range 1 - 3)
 - Represents the overall cancer stage
 - 1 = I: Early-stage, localized
 - 2 = IIA & IIB: Larger tumor, may involve nearby lymph nodes
 - 3 = IIIA, IIIB, IIIC: More advanced regional spread
- **Differentiate (Tumor Differentiation Level)** (Range 1 - 4)
 - Indicates how abnormal the cancer cells look under a microscope
 - 1 = Well Differentiated: cells look more normal
 - 2 = Moderately Differentiated: cells are somewhat abnormal
 - 3 = Poorly Differentiated: cells look very abnormal and aggressive
 - 4 = Undifferentiated: anaplastic, cells no longer resemble normal breast tissue
- **Grade (Range: 1 - 4)**
 - Measures how aggressive the tumor cells appear
 - 1 = Slow-growing, less aggressive

- 2 = Moderately aggressive
- 3 = Highly aggressive, fast-growing
- 4 = Anaplastic. Highly aggressive and low chances of recovery, cancer cells no longer resemble normal breast tissue.
- **A Stage (Anatomic Stage Grouping)** (Range 1 - 3)
 - Describes how far the cancer has spread
 - 1 = Localized: Cancer is confined to the breast
 - 2 = Regional: Spread to nearby lymph nodes or tissues
 - 3 = Distant: Spread to other organs (metastasis)

3. Tumor Characteristics

- **Tumor Size** (Range: 4 - 63 mm)
 - Represents the size of the tumor in millimeters.
- **Estrogen Status** (1 or 2)
 - Indicates whether the cancer cells have estrogen receptors
 - 1 = Positive: Cancer cells grow in response to estrogen.
 - 2 = Negative: Cancer does not respond to estrogen.
- **Progesterone Status** (1 or 2)
 - Indicates whether the cancer cells have progesterone receptors
 - 1 = Positive: Cancer cells grow in response to progesterone.
 - 2 = Negative: Cancer does not respond to progesterone.

4. Lymph Node Involvement

- **Regional Node Examined** (Range: Unknown, but observed values: 2 - 24) -
The number of lymph nodes examined during surgery.
- **Regional Node Positive** (Range: Unknown, but observed values: 1 - 7) -
The number of lymph nodes that tested positive for cancer.

5. Survival Outcome

- **Survival Months** (Range: Unknown, but observed values: 50 - 84 months) -
The number of months the patient survived after diagnosis.
- **Status** (1 or 2)
 - Indicates whether the patient is still alive at the time of follow-up
 - 1 = Alive
 - 2 = Dead