

Patient information:

Position	Age	Gender	Pathology diagnosis	TNM	Grade	Type of tumour
A1	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A2	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A3	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A4	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A5	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A6	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A7	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A8	N/A	N/A	Adjacent normal	N/A	N/A	N/A
A9						
A10						
B1	48	F	Invasive ductal carcinoma	T1c	3	Malignant
B2	57	F	Invasive ductal carcinoma	N/A	3	Malignant
B3	62	F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
B4	51	F	Invasive ductal carcinoma	N/A	2	Malignant
B5	46	F	Invasive ductal carcinoma	T1c N3a MX	3	Malignant
B6	41	F	Invasive ductal carcinoma	T2 N3a MX	N/A	Malignant
B7	42	F	Invasive ductal carcinoma	T4b N2A MX	3	Malignant
B8	83	F	Invasive ductal carcinoma	T2 N1a MX	2	Malignant
B9	58	F	Invasive ductal carcinoma	T2	N/A	Malignant
B10	74	F	Invasive ductal carcinoma	T1c	2	Malignant
C1	71	F	Invasive ductal carcinoma	T1c N2a MX	2	Malignant
C2	62	F	Invasive ductal carcinoma	T4b N3a MX	3	Malignant
C3	53	F	Invasive ductal carcinoma	T3 N2a MX	3	Malignant
C4	62	F	Invasive ductal carcinoma	T2	2	Malignant
C5	41	F	Invasive ductal carcinoma	T2	2	Malignant
C6	48	F	Invasive ductal carcinoma	T1c	2	Malignant
C7	68	F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
C8	37	F	Invasive ductal carcinoma	T1c	2	Malignant
C9	47	F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
C10	83	F	Invasive ductal carcinoma	T2 N1a MX	2	Malignant
D1	61	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
D2	69	F	Invasive ductal carcinoma	T2 N3 MX	3	Malignant
D3	48	F	Invasive ductal carcinoma	T2	3	Malignant
D4	53	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
D5	71	F	Invasive ductal carcinoma	T1c N0 MX	2	Malignant
D6	65	F	Invasive ductal carcinoma	T2 N1 MX	3	Malignant
D7	51	F	Invasive ductal carcinoma	T1c	2	Malignant
D8	52	F	Invasive ductal carcinoma	N/A	2	Malignant
D9	41	F	Invasive ductal carcinoma	T2 N3a MX	N/A	Malignant
D10	53	F	Invasive ductal carcinoma	T2 N0 MX	2	Malignant
E1	66	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
E2	55	F	Invasive ductal carcinoma	T2 N0 MX	1:2	Malignant
E3	63	F	Invasive ductal carcinoma	T2 N3 MX	3	Malignant
E4	56	F	Invasive lobular carcinoma	T3 N3a MX	2	Malignant
E5	48	F	Invasive ductal carcinoma	T2 N2 MX	2	Malignant
E6	33	F	Invasive ductal carcinoma	T4b N3a MX	3	Malignant
E7	59	F	Invasive ductal carcinoma	T3 N3 MX	2	Malignant
E8	58	F	Invasive ductal carcinoma	T2	N/A	Malignant
E9	56	F	Invasive ductal carcinoma	T2 N1a MX	3	Malignant
E10	43	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
F1	42	F	Invasive ductal carcinoma	T4b N2a MX	3	Malignant

F2	50	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
F3	52	F	Invasive ductal carcinoma	T1c N1 MX	2	Malignant
F4	54	F	Invasive lobular carcinoma	T2 N2a MX	2	Malignant
F5	49	F	Invasive ductal carcinoma	T2	2	Malignant
F6	44	F	Invasive ductal carcinoma	T2 N0 MX	3	Malignant
F7	59	F	Invasive ductal carcinoma	T2 N2a MX	3	Malignant
F8	74	F	Invasive ductal carcinoma	T1c	2	Malignant
F9	56	F	Invasive ductal carcinoma	N/A	2	Malignant
F10	50	F	Invasive ductal carcinoma	T1c N0 MX	3	Malignant

Stage description

The American Joint Committee on Cancer (AJCC) TNM system is the frequently employed breast cancer staging system, and it is based on seven important elements:

- **The extent (size) of the tumor (T):** How large is the cancer? Has it grown into nearby areas?
- **The spread to nearby lymph nodes (N):** Has the cancer spread to nearby lymph nodes? If so, how many?
- **The spread (metastasis) to distant sites (M):** Has the cancer spread to distant organs such as the lungs or liver?
- **Grade of the cancer (G):** How much do the cancer cells look like normal cells?
- **Estrogen Receptor (ER) status:** Does the cancer have the protein called an estrogen receptor?
- **Progesterone Receptor (PR) status:** Does the cancer have the protein called a progesterone receptor?
- **HER2 status:** Does the cancer make too much of a protein called HER2?

Tumor (T)

T1: Tumour \leq 20 mm in greatest dimension.

T1a: Tumor $>$ 1 mm but \leq 5 mm in greatest dimension (round any measurement $>$ 1.0-1.9 mm to 2 mm).

T1b: Tumor $>$ 5 mm but \leq 10 mm in greatest dimension

T1c: Tumor $>$ 10 mm but \leq 20 mm in greatest dimension

T2: Tumour $>$ 20 mm but \leq 50 mm in greatest dimension.

T3: Tumour $>$ 50 mm in greatest dimension.

T4: Tumor of any size growing into the chest wall or skin. This includes inflammatory breast cancer.

T4a: Extension to chest wall, not including only pectoralis muscle adherence/invasion

T4b: Ulceration and/or ipsilateral satellite nodules and/or edema (including peau d'orange) of the skin, which do not meet the criteria for inflammatory carcinoma.

T4c: Both T4a and T4b.

T4d: Inflammatory carcinoma.

Nodes (N)

NX: Nearby lymph nodes cannot be assessed.

N0: No regional lymph node metastasis identified histologically.

N1: Micrometastases; or metastases in 1-3 axillary lymph nodes and/or in internal mammary nodes; and/or in clinically negative internal mammary nodes with micrometastases or macrometastases by sentinel lymph node biopsy.

N1a: Metastases in 1-3 axillary lymph nodes (at least 1 metastasis $>$ 2.0 mm).

N1b: Metastases in ipsilateral internal mammary lymph nodes, excluding ITCs, detected by sentinel lymph node biopsy

N1c: Combination of N1a and N1b

N2: Metastases in 4-9 axillary lymph nodes; or positive ipsilateral internal mammary lymph nodes by imaging in the absence of axillary lymph node metastases.

N2a: Metastases in 4-9 axillary lymph nodes (at least 1 tumor deposit > 2.0 mm).

N2b: Metastases in one or more internal mammary lymph nodes, causing them to become enlarged.

N3: Any of the following:

N3a: Metastases in ≥ 10 axillary lymph nodes (at least 1 tumor deposit > 2.0 mm); or metastases to the infraclavicular (level III axillary lymph) nodes.

N3b: Metastases in at least one axillary lymph nodes (at least 1 tumor deposit > 2.0 mm) and has enlarged the internal mammary lymph nodes; or metastases in 4 or more axillary lymph nodes (at least 1 tumor deposit > 2.0 mm) and in the internal mammary lymph nodes on sentinel lymph node biopsy.

N3c: Cancer has spread to the lymph nodes above the collarbone (supraclavicular nodes) on the same side of the cancer with at least one area of cancer spread greater than 2 mm.

Metastasis (M)

M0: No clinical or radiographic evidence of distant metastasis .

M1: Any histologically proven metastases in distant organs; or if in non-regional nodes, metastases > 0.2 mm.

Mx: Distant metastasis cannot be assessed.