



July 14th 2014

Dear Ms. [REDACTED],

Thank you for reaching out to Tata Memorial Centre for an expert opinion in regard to assessing your treatment options. Navya Network is pleased to offer this online consultation service for Tata Memorial Centre.

We converted your case reports into a structured summary to be reviewed by a professor in medical oncology in the Breast Disease Management Group at Tata Memorial Centre. We asked the following question(s) on your behalf:

1. Is surgery for left breast necessary?
2. Are any additional diagnostic tests necessary?
3. What are the next therapeutic steps?

Tata Memorial Centre's opinion is summarized as follows:

Surgery for the left breast followed by radiation therapy is recommended, if the tumor in the left breast is non metastatic and operable.

We hope that the expert opinion is helpful in determining the course of your treatment.

Through this online consultation service, Navya Network and Tata Memorial Centre cannot provide direct responses on curability of a disease or life span of a patient.

If you are interested in an in-person consultation with an oncologist at Tata Memorial Centre, please register online <https://tmc.gov.in/> or call +91 22 24177000 for assistance.

Please do not hesitate to write to us or call us with any questions.

Sincerely,

Gitika Srivastava



CASE SUMMARY Navya ID [REDACTED] Expert Opinion ID [REDACTED], Ms. [REDACTED]

Age: 29 Years Old

Clinical Diagnosis: Metachronous Bilateral Breast Cancer vs. Metastatic Breast Cancer (MBC)

Menopausal Status: Pre-Menopausal

Functional Status- ECOG Score: 0-1

Note: Has 3 kids, desires aggressive therapy to maximize life

Breast Cancer Laterality: Right

Initial Mammo Size Date: March 12th 2013

Initial Mammo Size (cm) Dimension: 6.00*6.00

Initial Mammo Size Text: Left breast normal

Initial Ultrasound Size Date: March 12th 2013

Initial Ultrasound Size (cm): 6.80*3.40

FDG-PET Date: March 18th 2013

FDG-PET Text: Infiltrating mass lesion in supero-lateral quadrant

FDG-PET Text: Right axillary and pectoral lymph node metastasis

Prior Chemotherapy:

Timing	Chemotherapy SubCategory	Response	Treatment Start Date	Treatment End Date
Neoadjuvant	AC- A(60)C(600)q3w*4	Partial response	March 22nd 2013	May 24th 2013

Prior Surgery:

Timing	Surgery	Surgery Date
Primary	Mast- Modified Radical Mastectomy (MRM)	June 21st 2013

Pathological Tumor Size (cm) Dimension 1 : 6.00

Pathological Tumor Size (cm) Dimension 2 : 5.00

Pathological Tumor Size (cm) Dimension 3 : 3.00

Number of Positive Axillary Pathological Lymph Nodes: 7

Number of Axillary Pathological Lymph Nodes Resected: 18

Note: 3 apical nodes positive with perinodal spread

Malignant Breast Disease: Invasive Ductal Carcinoma (IDC)

Cancer Grade: II

Modified Richardson Bloom Score : 6

Lymphovascular Invasion: Positive

Margins: Negative (>10mm)

Estrogen Receptors ER - Status: Positive (70%)

Progesterone Receptors PR - Status: Negative (7%)

HER 2 NEU Receptors - Status: Negative

HER 2 NEU Receptors - IHC: 1+

Prior Chemotherapy:

Timing	Chemotherapy SubCategory	Response	Treatment Start Date	Treatment End Date	Date of Progression
Adjuvant	D- D(70)q3w*4	Disease Progression	July 10th 2013	September 13th 2013	October 7th 2013

US Guided FNAC Date: October 7th 2013

US Guided FNAC Text: Recurrence in right chest wall, ductal carcinoma

FDG-PET Date: October 17th 2013

FDG-PET Text: Two small ill defined nodular lesions in central and upper quadrant of left breast

FDG-PET Text: Hypermetabolic nodular lesions in right medial chest wall.

Prior Radiation therapy:

Timing	Site of Radiation	Type of Radiation	Dosage	Treatment Date	Fraction	Length of Treatment
Adjuvant	Chest- Right Chest Wall + Axilla + Paraclavicular	EBRT- 2DXRT	50	October 7th 2013	25	36 Day(s)

Prior Hormone therapy:

Timing	Hormone Therapy Subcategory	Treatment Start Date	Treatment End Date
Adjuvant	Tam- Tam(20)*5m	November 20th 2013	March 2014

Breast Cancer Laterality: Left

Biopsy date: February 21st 2014

Note: Poorly differentiated carcinoma- Primary vs. Metastatic

Estrogen Receptors ER - Status: Negative (0%)

Progesterone Receptors PR - Status: Negative (0%)

HER 2 NEU Receptors - Status: Negative

HER 2 NEU Receptors - IHC: 1+

Prior Chemotherapy:

Timing	Chemotherapy SubCategory	Response	Treatment Start Date	Treatment End Date	Date of Progression
Palliative / Metastatic	PCa- P(135)Ca(6)q3w*3	Disease Progression	March 10th 2014	April 23rd 2014	May 17th 2014

FDG-PET Date: May 17th 2014

FDG-PET Text: Two small ill defined nodular lesions in central quadrant of left breast, ? metastatic, slightly larger compared to October 17th 2013

FDG-PET Text: Metastatic left axillary node

FDG-PET Text: Complete resolution of the right chest wall recurrence

Prior Chemotherapy:

Timing	Chemotherapy SubCategory	Treatment Start Date
Palliative / Metastatic	IX- I(60)/X(2000)d1-d14_q3w-	June 2nd 2014

29 year old premenopausal patient, ECOG 0-1, with metachronous bilateral breast cancer (vs. metastatic breast cancer). In March 2013, she was initially diagnosed with a lump (mammo size 6*6 cm) in her right breast. She underwent NACT with AC*4 followed by MRM. The pathological tumor size was 6*5*3cm; 7 out of 18 resected nodes were positive, including 3 positive apical nodes with perinodal spread. In September 2013, she completed ACT with Docetaxel*4.

Immediately following ACT, on Oct 7th 2013, a recurrence of the tumor on the right chest wall was detected by FNAC. PET scan (Oct 17th 2013) showed also two small ill-defined nodular lesions in the left breast. From Oct 17th 2013 to November 2013, she underwent radiation therapy to the right chest wall, axilla, and supraclavicular regions for the recurrence. From Nov 20th 2013 to March 2014, she also received Tamoxifen. On Feb 21st, 2014, a biopsy of the left breast revealed poorly differentiated carcinoma (primary vs. metastatic) that was triple negative.

In light of the left breast disease, from March 10th 2014 to April 23rd 2014, she received pacli/carbo*3. However, her disease progressed on this chemotherapy. A repeat PET scan on May 17th 2014 revealed the two lesions in the left breast to be slightly larger than on the Oct 17th 2013 PET scan. A complete resolution of the right chest wall recurrence was seen.

Since June 2nd 2014, the patient has been on chemotherapy with Ixabepilone and Capecitabine. She has three kids and desires aggressive therapy to maximize her lifespan.



Navya Network is a Cambridge, MA based company with offices in Bangalore, India. Navya Network is founded by graduates of Harvard University, MIT Sloan School of Management, and the Stanford School of Medicine. Navya's innovative and scalable decision making system is a technology powered solution for complex medical questions. Navya's software solutions are efficient engines to gather and synthesize individual goals of care, evidence specific to an individual medical case, and expert opinion, for evaluating treatment alternatives. Navya's goal is to assist in bringing clarity to the complexity of evaluating treatment alternatives. Navya's system collects the best available information and expertise from several worldwide sources relevant to a specific previously diagnosed medical case and assesses treatment decisions. For more information, please visit www.navyanetwork.com

If you have any questions, please call +91 9845423460 or email gitika@navyatech.in

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