

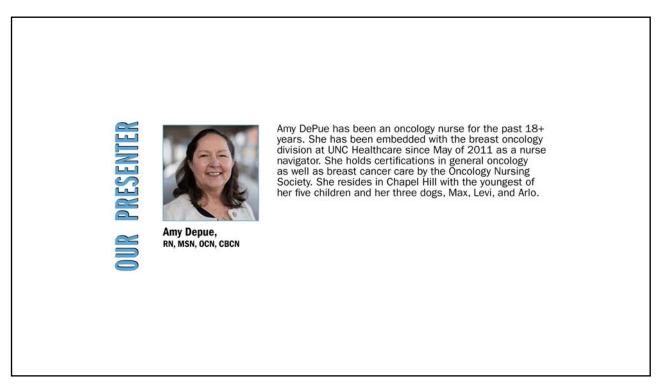
UNC Lineberger Cancer Network
NORTH CAROLINA
COMMUNITY COLLEGE
ONCOLOGY WEBINARS

October 25, 2022

Caring for the Patient with Breast Cancer

Amy Depue, RN, MSN, OCN, CBCN







BREAST CANCER

Caring for the Patient with Breast Cancer
Amy DePue, MSN RN BSN OCN CBCN
UNC Breast Oncology
October 25, 2022

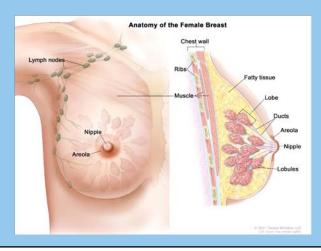
Objectives

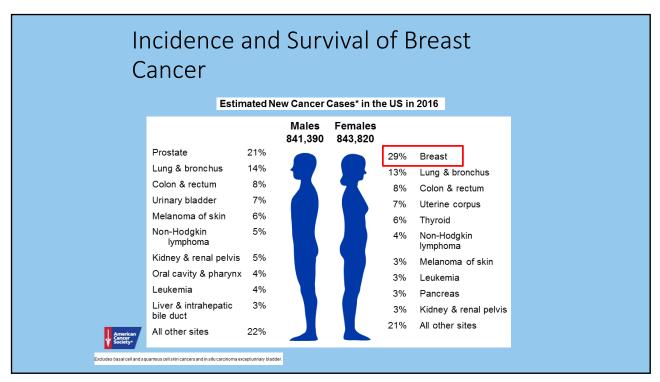
- Describe the types, stages, and diagnostic test available for treating the patient with breast cancer
- Discuss the treatment options, side effect management, emotional needs of the patient with breast cancer
- Discuss the importance of collaboration and teamwork to enhance the quality of care and patient outcomes

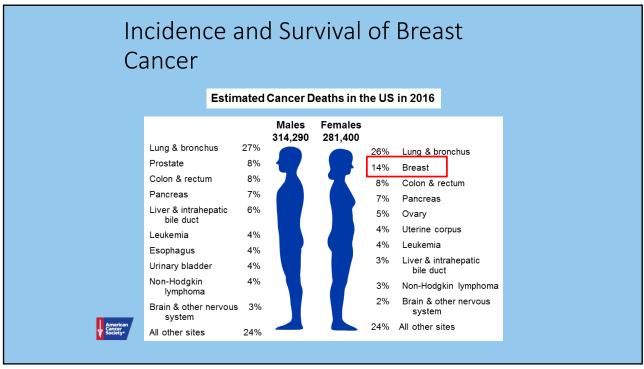
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Definition

Breast cancer is a disease in which malignant (cancer) cells form in the tissues of the breast.







American Cancer Society

• https://www.cancer.org/research/cancer-facts-statistics.html

In this report, note the changes in individual cancer disease process.

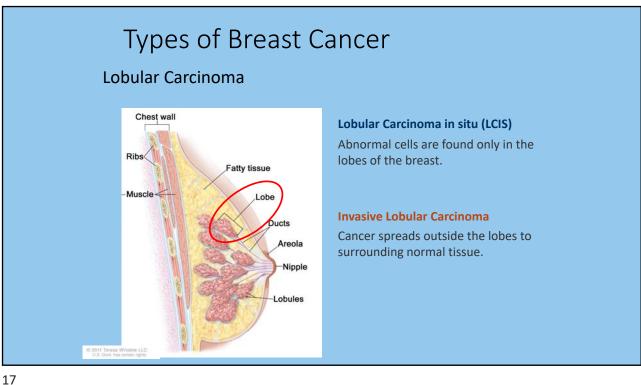
• Table 1, page 6 Estimated # of new diagnoses/deaths as result

Men: 2710 new cases Women: 287,850 Men: 530 deaths BC Women: 43,250

American Cancer Society, 2022

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Types of Breast Cancer Ductal Carcinoma Chest wall Patty tissue Fatty tissue Ducts Carcinoma in situ (DCIS) Abnormal cells are found only in the lining of the breast duct. Invasive Ductal Carcinoma Cancer spreads outside the breast duct to surrounding normal tissue.



Types of Breast Cancer

Inflammatory Breast Cancer

- · Uncommon.
- Breast is warm, red, and swollen
- · Skin of breast may also show a pitted appearance.



Symptoms and Signs of Breast Cancer

- Lump or change in the breast.
- Swelling (even if no distinct lump is felt)
- Skin irritation or dimpling
- Breast or nipple pain
- Nipple retraction (turning inward)
- Redness, scaliness, or thickening of the nipple or breast skin
- Nipple discharge (other than breast milk)

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Risk Factor Models for predictive information

- Gail model
- www.bcrisktool.cancer.gov/calculator.html
- Age
- Race
- Gender
- Age at first menstrual cycle
- Biopsy
- Atypia
- First degree relative

National Cancer Institute

Gail model results

7.9%

5-year breast cancer risk

Compared with 1.8% for the average 60 year old woman

34.3%

Lifetime breast cancer risk

Compared with 9.1% for the average 60 year old woman

Next Steps

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RISK FACTORS

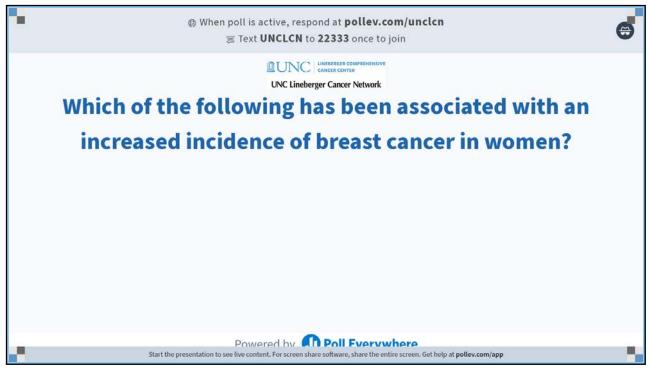
Modifiable Non-modifiable

Weight Age
Exercise Gender
Diet Genetics

Hormonal use Family History

Tobacco use Previous radiation treatments

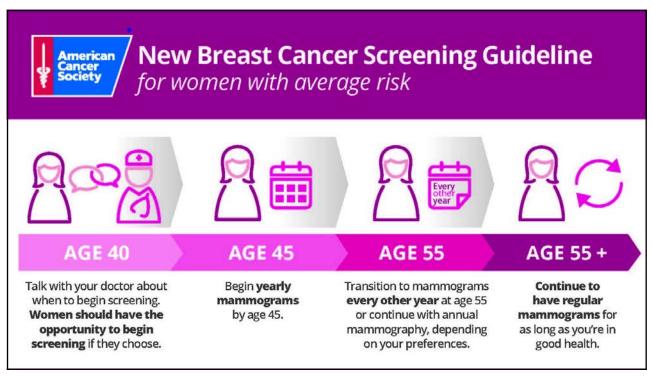
Alcohol consumption



So, who needs mammograms and when?

- American Cancer Society recommends:
- Average risk: annual screening mammogram starting age 45
- Average risk: biennial screening mammogram age 55-64
- Any woman, any age, with life expectancy of > 10 years
- Strong family history of breast cancer, begin at age 40
- Anyone with a male family member, begin age 40





Screening Options Mammogram

Mammogram, an x-ray of the breast, is the most common screening test for breast cancer.



BI-RADS

- Bi-rads indicates a finding on mammogram imaging
- Breast Imaging Reporting and Database System score
- Ranges from 0 to 6:
 - 0 = incomplete exam
 - 1= normal results, breast density
 - 2 = Normal result, probably cyst
 - 3 = Probably normal but small risk of cancer, 6 month follow up
 - 4 = Suspicious finding, biopsy needed
 - 5 = Highly suspicious, biopsy needed with clinical correlation
 - 6 = Have breast cancer diagnosis, imaging done for treatment effect

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Screening Options

Magnetic Resonance Imaging (MRI)

Procedure that uses magnets, radio waves, and computers to make a series of pictures of areas inside the body.

Used with women who have one or more of the following:

- Gene changes (BRCA1 or BRCA2)
- Family history of breast cancer
- Genetic Syndromes (*Li-Fraumeni, Cowden Syndrome*)



Screening Option: Clinical Breast Exam

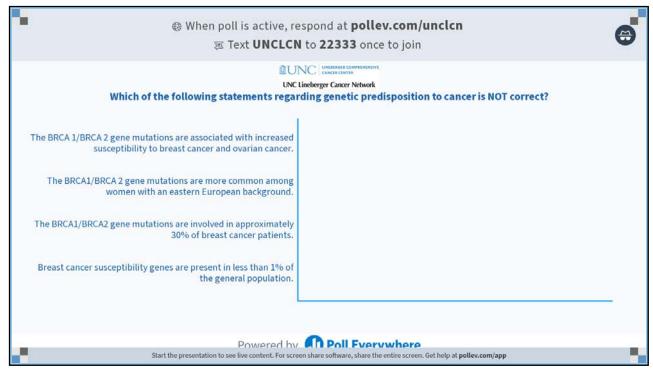


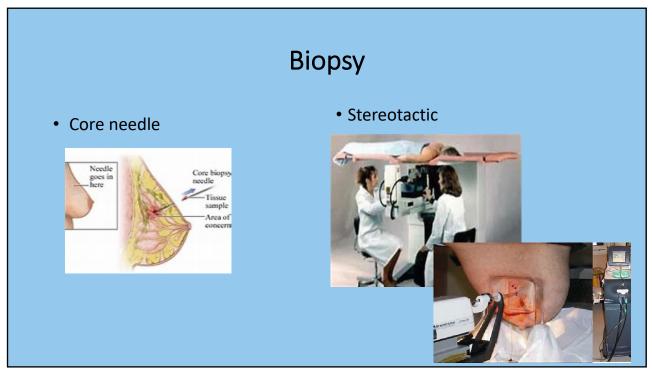
Checking for masses to confirm imaging or given prior to imaging. Goal is early detection of malignancy. Performed by doctor or NP/PA

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GENETICS

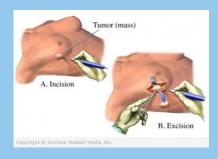
- Genetic mutations indicate increased risk for breast cancer BRCA1 and BRCA2
- Family history important
- First degree relatives
- Male in the family with breast cancer diagnosis
- Ashkenazi Jewish heritage





BIOPSY

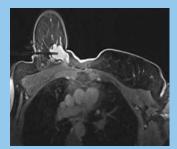
• Surgical (open)



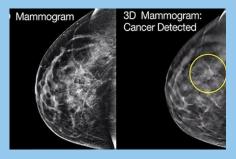
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BIOPSY

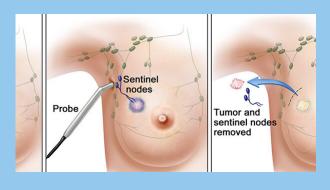
• MRI guided



• Tomosynthesis guided



Axillary Node



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PATHOLOGY

- INFORMATION THAT HELPS GUIDE TREATMENT
- GIVES PHENOTYPE

 ER +/PR+/HER2neu OR Triple negative
- SIZE

Yes, size does matter

- GRADE
 - 1, 2, 3 = higher the grade the more proliferative the tumor
- Information about axillary lymph node status

STAGING

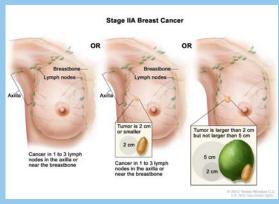
- Staging often confused with pathological staging
- Pathological staging in the T(umor), N(ode), M(etastatic)
- Disease state staging is gathered to determine cancer <u>growth other</u> <u>than the breast itself</u>

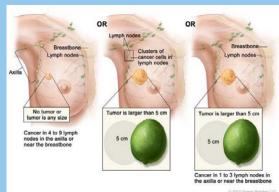
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PATHOLOGICAL STAGING

- New staging levels since 2017
- Based on the T N M system
- Based on size, number of lymph nodes positive, and presence of metastatic disease
- Tumor size at or less 2cm is stage I
- Tumor size at or less than 5 cm is stage II
- Tumor size and greater than 5 cm is stage III
- Tumor of any size that is found outside of the breast tissue and is a cellular similarity to breast tissue is STAGE IV

SIZE DOES MATTER





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PHENOTYPE

- Identifies treatments
- Hormone positive = Estrogen (ER)
 Progesterone (PR)
- HER2 Neu positive
- Other markers that are becoming more useful in treatment and clinical trials: Ki67, Ar (androgen receptor), HER3, etc
- Triple negative meaning no receptor's are positive and so limits the types of treatments for these patients. Triple negative are often more aggressive tumors.

Disease State Staging

- Positive lymph nodes
- Symptoms of pain, inflammation, body function decrease
- For initial staging, when appropriate:

CT chest/abdomen/pelvis with contrast

Bone Scan

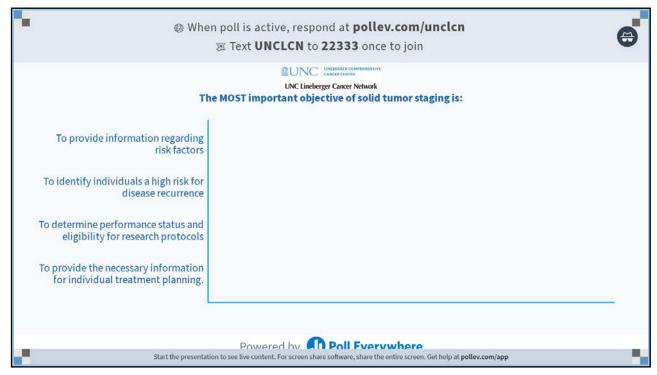
For subsequent staging, metastatic disease or local recurrence

Repeat CT and /or bone scan as indicated

For CNS and brain staging

MRI with and without contrast

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TREATMENT MODALITIES

- MEDICAL ONCOLOGY chemotherapy neo-adjuvant or adjuvant, curative or palliative
- SURGICAL ONCOLOGY
 mastectomy, lumpectomy, ax node dissection, palliative
- RADIATION ONCOLOGY post surgical and systemic therapy, palliative for symptom management

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MEDICAL ONCOLOGY

- Responsible for systemic therapy such as chemotherapy
- Responsible for medical management of side effects from chemotherapy
- Responsible for follow up care, including aromatase inhibitors or Tamoxifen for risk reduction
- Will follow the patient for 5 years minimum
- Will care for metastatic patients

Predictive testing for Hormone positive breast cancer patients

Oncotype Dx

Genomic testing concerning benefit of chemotherapy and recurrence

• Prosigna/Pam 50

Genomic testing for post menopausal women on AI/Tamoxifen

Mammaprint

Genomic testing for continued use of AI/Tamoxifen

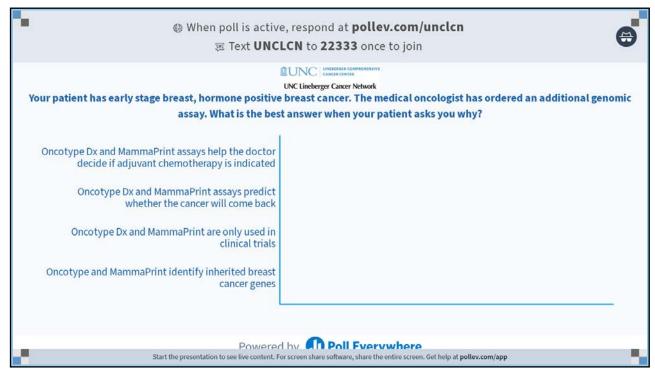
Breast Cancer Index

Benefit for continued use of AI/Tamoxifen

Foundation Medicine

Genomic testing for other actionable mutations

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CHEMOTHERAPY

- Systemic therapy
- Neo adjuvant, before surgery
- Adjuvant, post surgical
- Depends on phenotype
- Significant side effect management
- Understanding of oncological emergencies key to adherence

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CHEMOTHERAPY

- Cytotoxic drug: lab checks for myelosuppression
- Side effects, think rapidly reproducing cells: GI, Hair follicles
- Alopecia: Cryotherapy ?
- Nausea/vomiting
- Neuropathy
- Constipation
- Cardiotoxicity in some drugs: follow with echocardiogram
- Most fatal side effect: Myelosuppression

Specific Chemo for Specific Phenotype

• Anthracyclines for triple negative:

Doxorubicin

• Taxanes for Hormone receptor positive and triple negative:

Paclitaxel, Docetaxel

• Targeted agents for HER2 positive :

Trastuzumab, Pertuzumab

COMBINATION REGIMIN DEPENDS ON PHENOTYPE AND NODE STATUS

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SUPPORTIVE DRUGS

- Ondansetron for nausea
- Prochlorperazine for nausea, but is sedating
- Olanzapine but only at night
- Neulasta for myelosuppression
- Dexamethasone for anthracycline
- Lorazepam for extreme nausea but also for sleep if taking dexamethasone

BIOSIMILARS

- NOT chemotherapy
- Utilizes body systems to fight the cancer
- Can alter specific cascades to reduce hormones
- Receptors important for cancer growth
- More research needed
- Neulasta biosimilar is on the market, lower cost: UDENYCA
- PARPi for BRCA carriers: Olaparib for one...

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TARGETED THERAPY

- Monoclonal antibodies for HER2 positive breast cancer
- Cardiotoxic drugs

Trastuzumab

Pertuzumab

Chemo combination drug:

Kadcyla: chemotherapy + monoclonal antibody

Metastatic Disease

- Many drugs for disease control and symptomology
- Oral and IV
- Ibrance
- Xeloda
- Use of radiation therapy for palliative treatment for pain

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METASTATIC BREAST CANCER

- Bone, Liver, Lung, Brain
- About 6% of metastatic patients present with metastatic disease
- Imaging useful for diagnosis, CT C/A/P, MRI, US
- Biopsy proven for treatment
- Symptoms most often show as pain, nausea, vision changes
- Palliative care to be introduced early

Cancer. net

Treatment Options Hormone Therapy

- Cancer treatment that removes hormones or blocks their action and stops cancer cells from growing.
- Tamoxifen is often given to patients with early localized breast cancer that can be removed by surgery and those with metastatic breast cancer



Image Source: The Irish Times

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Treatment side effects: systemic therapy

- Comorbidity plays a part
- Must check renal function, liver function, baseline labs
- Heart failure
- Blood clots
- Early menopausal symptoms
- Secondary malignancy possible, such as leukemia
- Know oncological emergency

SURGICAL ONCOLOGY

Often leads the way for treatment

If adjuvant, reason is often due to size of tumor

Consists of lumpectomy

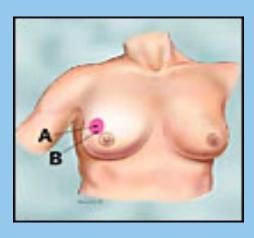
mastectomy

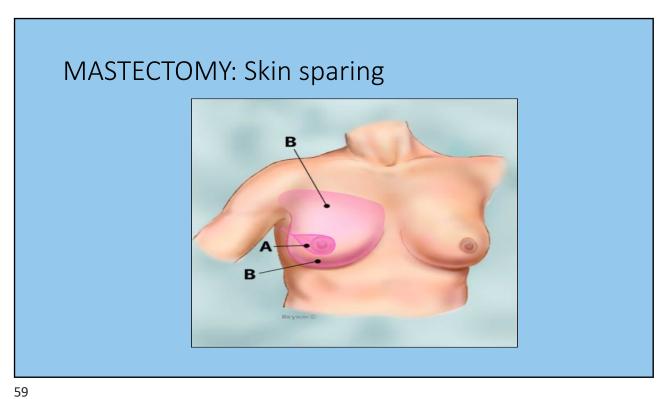
node dissection

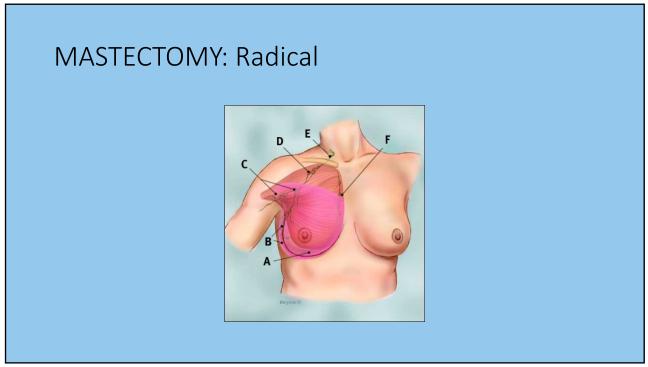
Sentinel node

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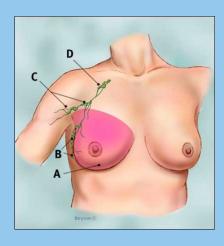
Lumpectomy

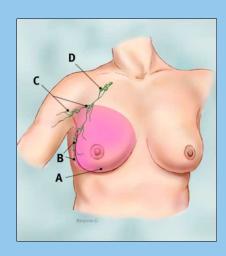






MASTECTOMY: Simple and Modified Radical





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Lymphedema

- Results from axillary node dissection
- May happen after breast surgery
- Requires PT for management
- Lymphedema specialist
- Lifetime problem
- Requires compression sleeve, glove

CELLULITIS

- Infectious process
- Requires antibiotics
- Teach patients how to prevent and signs and symptoms

Redness

Warm to touch

Painful

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RADIATION ONCOLOGY

- Required if positive surgical margins
- Positive lymph nodes
- Treatment for 4 to 6 weeks
- Side effects: redness, induration, peeling
- Palliative care for bone or brain mets
- Whole brain
- SRS

Treatment side effects: radiation therapy

- Inflammation of the lung
- Upper extremity lymphedema
- Trunk lymphedema
- Higher risk of developing breast cancer in the contralateral breast

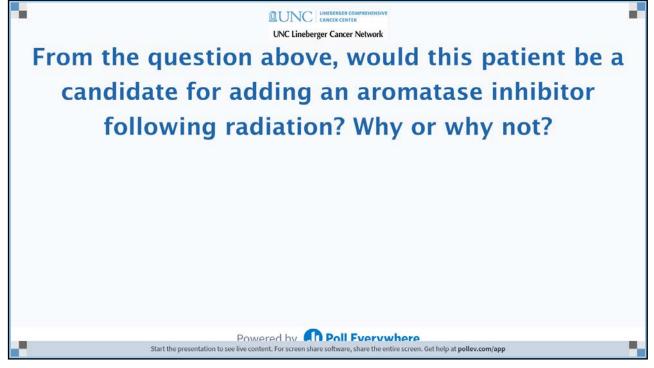
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TEST QUESTION:

A 67 Y/O woman had a diagnostic mammogram and ultrasound that revealed a 30 x 25 x 21 mm lobulated irregular hypoechoic finding in the left breast. A core biopsy revealed a high-grade, triple negative infiltrating mammary carcinoma. MRI reveals an extension of the original tumor from the chest wall to the anterior skin and there is questionable chest wall involvement by tumor.

AT THIS TIME, the MOST appropriate treatment choice is...





SURVIVORSHIP

- Patient is survivor from moment of diagnosis
- Survivorship happens when active treatment is complete
- Will be followed by oncology through 5 years, often 10
- Return to primary care physician



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Emotional Needs of the patient with breast cancer:

- Psycho social needs vary
- Resources may be limited
- Often have to depend on family and friends
- MUST talk about real racial disparities
- TRUST significant factor for better outcomes
- Build a team



NURSING CARE for Patients with Breast Cancer

- Body
- Mind
- Spirit
- Extends to caregivers
- Includes social issues
- Often complex but never wrong

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Thought:

"As a nurse, we have the opportunity to heal the heart, mind, soul and body of our patients, their families and ourselves. They may forget your name, but they will never forget how you made them feel"

Maya Angelou

Author, poet, and civil rights activist



References

• American Cancer Society

www.cancer.org

American Society of Clinical Oncology

www.cancer.net

• Yarbro, C.H., Wujcik, D., & Gobel, B. H., (2013) *Breast Care Certification Review*. Burlington MA: Jones and Bartlett Learning

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HANK YOU

LINEBERGER COMPREHENSIVE CANCER CENTER

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Patrick Muscarella, Technology Support Technician

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COMING LIVE WEBINARS

UNC Lineberger Cancer Network
NORTH CAROLINA
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ONCOLOGY WEBINARS

February 21 12:00 PM Caring for Patients with Head and Neck Cancers

Trevor Hackman, MD, FACS Catherine J. Lumley, MD

March 21 12:00 PM Caring for Patients with GI Cancers

Melanie N. Allard, DNP, APRN, FNP-BC, CCRN

For a complete listing and details on coming events visit: learn.unclcn.org/cco

SELF-PACED, ONLINE COURSES

NORTH CAROLINA
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Gynecologic Cancers: A Team Approach to Women's Health Care

Daniel Clarke-Pearson, MD Lyn Filip, RN, BSN, OCN

Palliative Care and Hospice for the Cancer Patient

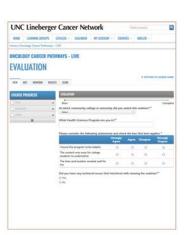
Gary Winzelberg, MD, MPH Jenny Hanspal, RN, BSN, MS, OCN

Today's webinar will be available in *November 2022* as a *FREE*, Self-Paced, Online Course

For a complete listing and details on coming events visit: learn.unclcn.org/cco

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LUATION SURVEY



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