



# For Breast Cancer

A program of the  
UAMS College of Pharmacy

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Arkansas Affiliate**

# Overview of Breast Cancer



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# Breast Cancer

- The most common form of cancer among women
- The second most common cause of cancer related mortality
- 1 of 8 women (12.2%)
- One third of women with breast cancer die from breast cancer



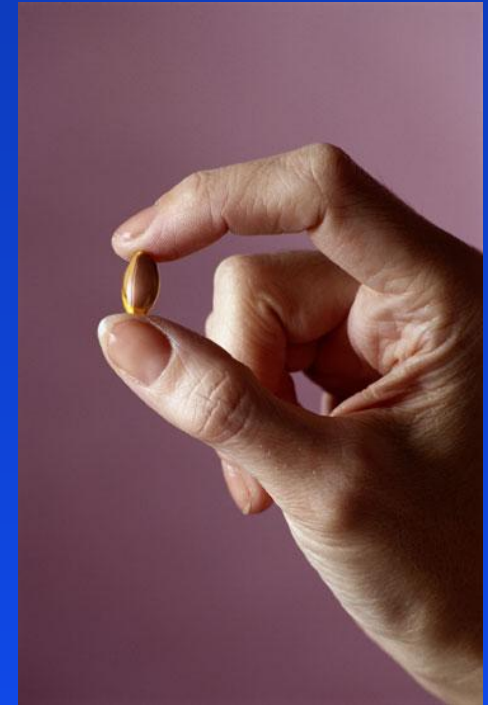
# Risk Factors for Breast Cancer

- Female (1% male)
- Aging
- Relative (mother or sister)
- Menstrual history
  - early on set
  - late menopause
- Child birth
  - After the age of 30



# Exogenous Estrogen

- Hormonal replacement therapy(HRT)
  - 30% increased risk with long term use
- Oral Contraceptives(OC)
  - risk slight
  - risk returns to normal once the use of OC's has been discontinued



# Risk Factors for Breast Cancer

- Radiation exposure
- Breast disease
  - Atypical Hyperplasia
  - Intraductal carcinoma in situ
  - Intralobular carcinoma in situ
- Obesity
- Diet
  - Fat
  - Alcohol



# Genetics

- BRCA-1
- BRCA-2
- P53, Rb-1
- Her-2/neu, c-erB2, c-myc




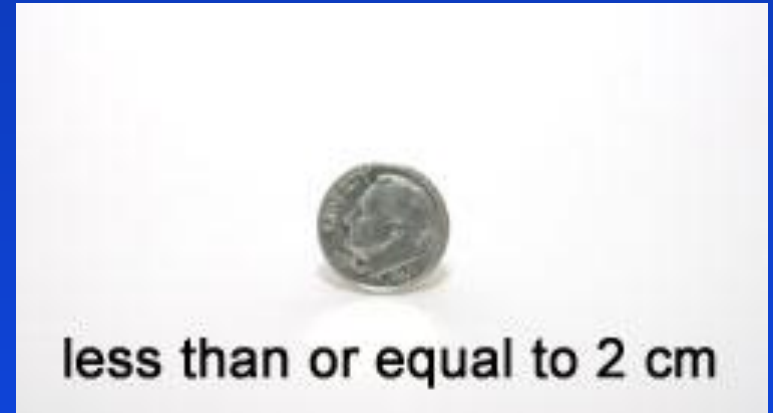
# Staging of Breast Cancer

- **The American Joint Committee on Cancer (AJCC) has designated staging by TNM**
- T= tumor size
- N = lymph node involvement
- M = metastasis



# Stage 1

- Tumor  $\leq 2.0$  cm in greatest dimension
- No nodal involvement (N0) 
- No metastases (M0)



# Stage II

- Tumor  $> 2.0 \leq 5$  cm  
or
- Ipsilateral axillary lymph node (N1)
- No Metastasis (M0)



# Stage III

- **Tumor > 5 cm (T3)**
- **or ipsilateral axillary lymph nodes fixed to each other or other structures (N2)**
- **involvement of ipsilateral internal mammary nodes (N3)**
- **Inflammatory carcinoma (T4d)**

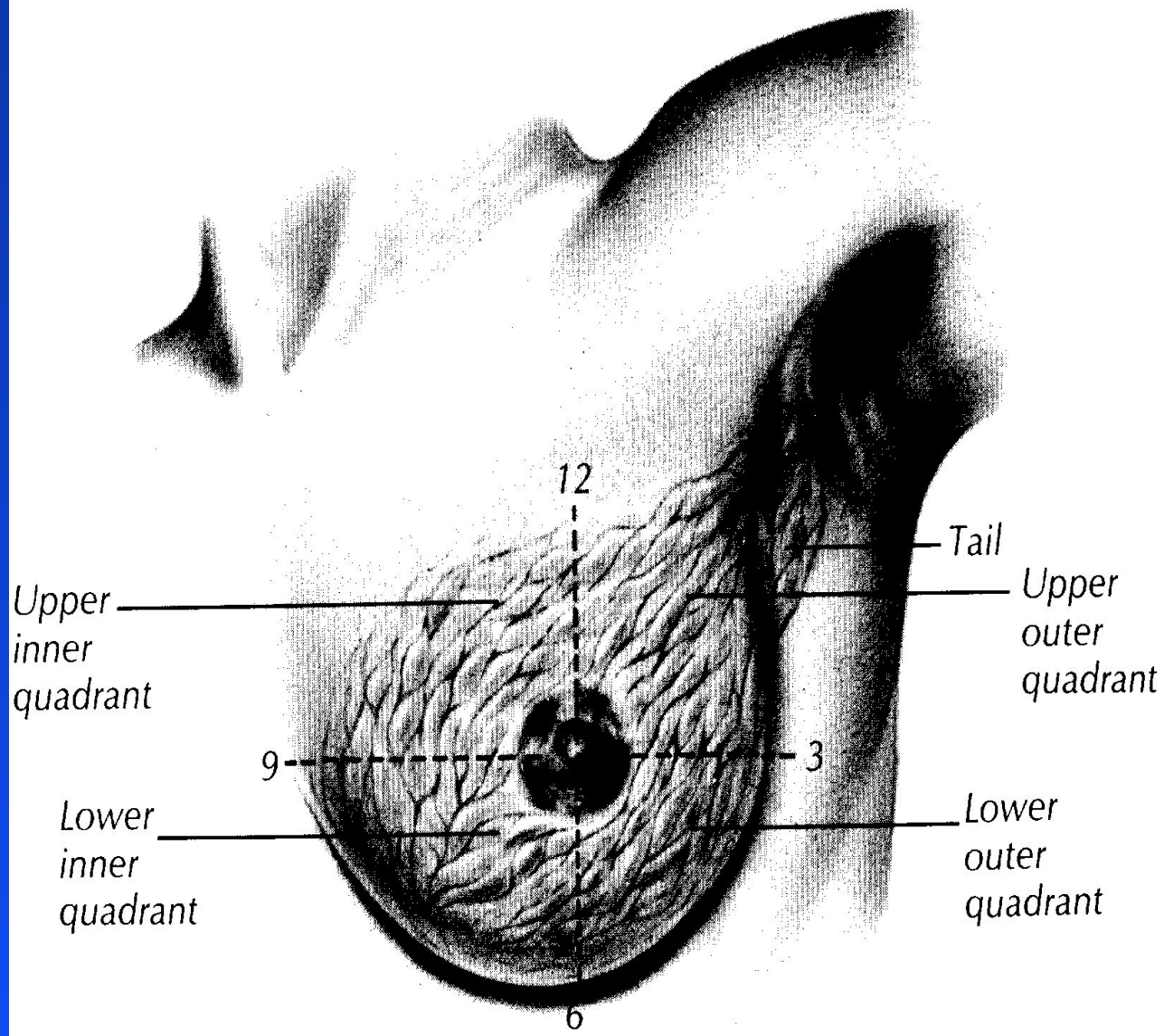
# Stage IV (Metastatic breast cancer)

- **Any T**
- **Any N**
- **Metastasis (M1)**

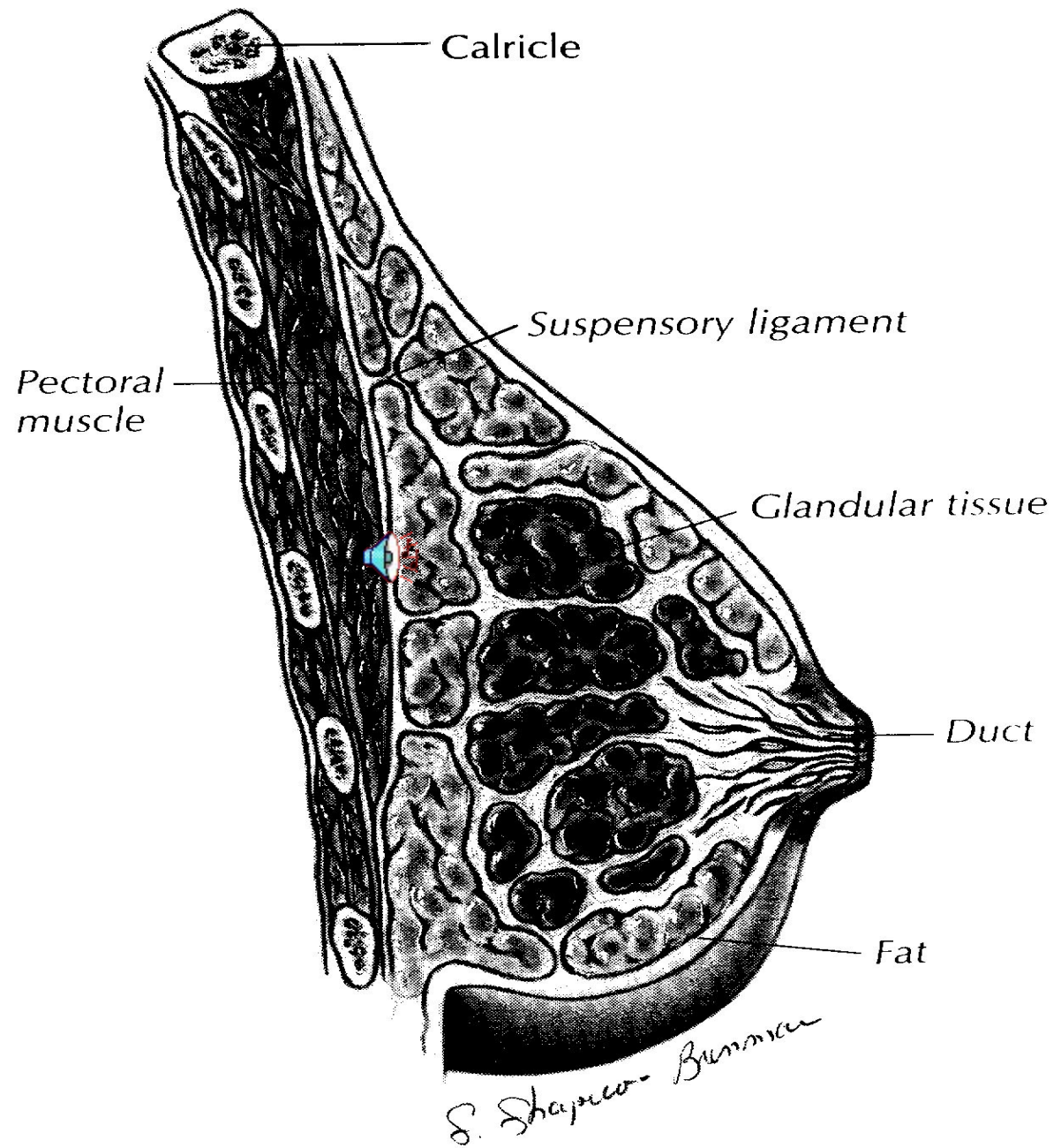
# Types of breast cancer

- In situ
  - Intraductal (DCIS)
  - Intralobular (LCIS)
- Invasive
  - Infiltrating ductal carcinoma
  - Tubular carcinoma
  - Medullary carcinoma
  - Mucinous carcinoma

# Symptoms and Screening



**LEFT BREAST**





# Normal breast physiology and anatomy

- Symmetry and balance
- Size
  - weight
  - menstrual cycle
  - pregnancy and lactation
- Texture
- Shape
  - age

# Abnormal signs and symptoms

- Puckering
- Dimpling
- Retraction
- Nipple discharge
- Thickening of skin or lump or “knot”
- Retracted nipple

# Abnormal signs and symptoms

- Change in breast size
- Pain or tenderness
- Redness
- Change in nipple position
- Scaling around nipples
- Sore on breast that does not heal

# Methods of Detection

- Clinical exam by MD or nurse
- Mammography
- Monthly breast self-exam (BSE)

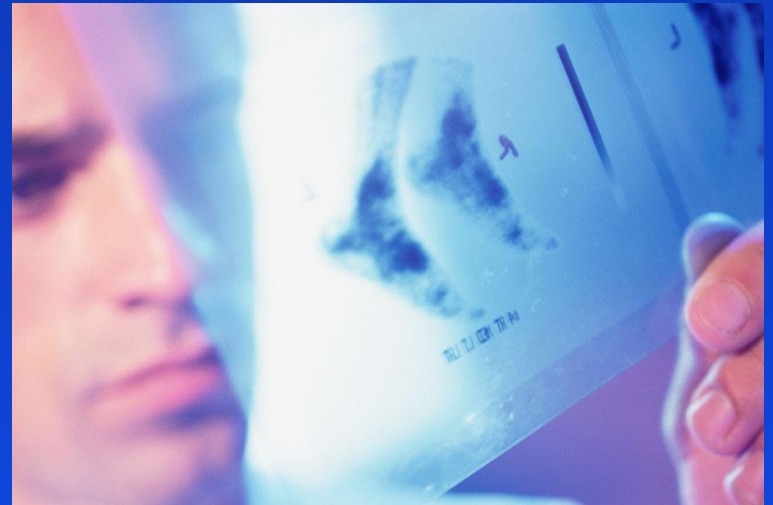
# Clinical examination

- Performed by doctor or trained nurse practitioner
- Annually for women over 40
- At least every 3 years for women between 20 and 40
- More frequent examination for high risk patients



# Mammography

- X-ray of the breast
- Has been shown to save lives in patients 50-69
- Data mixed on usefulness for patients 40-49
- Normal mammogram does not rule out possibility of cancer completely



# Mammography

American Cancer Society recommends:

Women (asymptomatic) 40 years of age and older should have a mammogram every year.

# Mammography-more guidelines

- Mammogram facility guidelines
- Avoid mammogram week before period
- Don't wear deodorant powder or cream
- Bring a list of the places and dates of other mammograms, biopsies you've had before
- If you don't hear from the MD within 10 days, call the facility



# Free Mammograms

- Medicare
- Arkansas Breast Cancer Control Program
- Breast and Cervical Cancer Control Program of the Arkansas Department of Health

# Medicare

- Women over 65

# Arkansas Breast Cancer Control Program

- Started in 1999
- Eligibility
  - Women 40 or older
  - No insurance
  - Income at or below 2 times the poverty level
  - Call county or state health department
    - 1-800-482-5400

# Eligibility for ABCCCP Mammogram

- 50 years or older and
- At or below 200 percent poverty

OR

- Between 40 and 49 and
- A breast cancer survivor or have a mother, daughter, or sister who has breast cancer and
- At or below 200 percent poverty

# Breast Self Examination

- Opportunity for woman to become familiar with her breasts
- Monthly exam of the breasts and underarm area
- May discover any changes early
- Begin at age 20, continue monthly



# When to do BSE

- Menstruating women- 5 to 7 days after the beginning of their period
- Menopausal women - same date each month
- Pregnant women – same date each month
- Takes about 20 minutes
- Perform BSE at least once a month
- Examine all breast tissue



# Why don't more women practice BSE?

- Fear
- Embarrassment
- Youth
- Lack of knowledge
- Too busy, forgetfulness



# Conclusion

**Pharmacists have a  
responsibility as  
patient advocates for  
breast cancer  
awareness**

