



*Prof. Dr*  
**ALAA EL - SUITY**



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ



*UPDATE  
MANAGEMENT OF  
EARLY BREAST  
CANCER*

*PROF. DR. ALAA EL - SUITY*

# Items :

- ▶ *Anatomy*
- ▶ *Risk factors of breast cancer*
- ▶ *Diagnosis (c/p & investigations )*
- ▶ *Treatment of early breast cancer*
- ▶ *References*

# ANATOMY

## UNDERSTANDING BREAST CANCER

### What is Breast Cancer?

Breast cancer is a disease in which abnormal cells in the breast grow out of control. It can spread to other parts of the body. The most common type is ductal carcinoma in situ (DCIS), which is a non-invasive cancer. Invasive breast cancer starts in the ducts and spreads to the surrounding breast tissue. It can also spread to other parts of the body.

### Types of Breast Cancer

**Ductal Carcinoma in Situ (DCIS)**  
This is the earliest stage of breast cancer. It is a non-invasive cancer that starts in the ducts and has not yet spread to the surrounding breast tissue.

**Invasive Ductal Carcinoma (IDC)**  
This is the most common type of breast cancer. It starts in the ducts and spreads to the surrounding breast tissue. It can also spread to other parts of the body.

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### Diagnosis of Breast Cancer

The doctor will perform a physical exam and ask about the history of the breast. They may also perform a mammogram, ultrasound, or biopsy to confirm the diagnosis.

### Breast Self Examination (BSE)

Breast self-examination (BSE) is a simple way to check for changes in your breasts. It involves looking at and feeling your breasts for lumps, changes in size or shape, or changes in the way they look or feel.



Understanding the stages of breast cancer is important for determining the best treatment options. The stages are based on the size of the tumor, whether it has spread to the lymph nodes, and whether it has spread to other parts of the body.



**Stage I**  
The tumor is small and has not spread to the lymph nodes.

**Stage II**  
The tumor is larger and has spread to the lymph nodes.

**Stage III**  
The tumor is large and has spread to the lymph nodes and other parts of the breast.

**Stage IV**  
The tumor is very large and has spread to other parts of the body.

### Mammography

A mammogram is an X-ray of the breasts. It is used to check for changes in the breasts before they are large enough to feel. It can also be used to check for changes in the lymph nodes.



### Surgery

Surgery is the most common treatment for breast cancer. It involves removing the tumor and some of the surrounding breast tissue. It can also involve removing the lymph nodes.



### Causes of Breast Cancer

The exact cause of breast cancer is not known. However, there are several factors that can increase the risk of developing breast cancer, including age, family history, and certain genetic mutations.

### Signs and Symptoms

Signs and symptoms of breast cancer include a lump in the breast, changes in the way the breast looks or feels, and changes in the way the breast behaves. It can also cause changes in the lymph nodes.

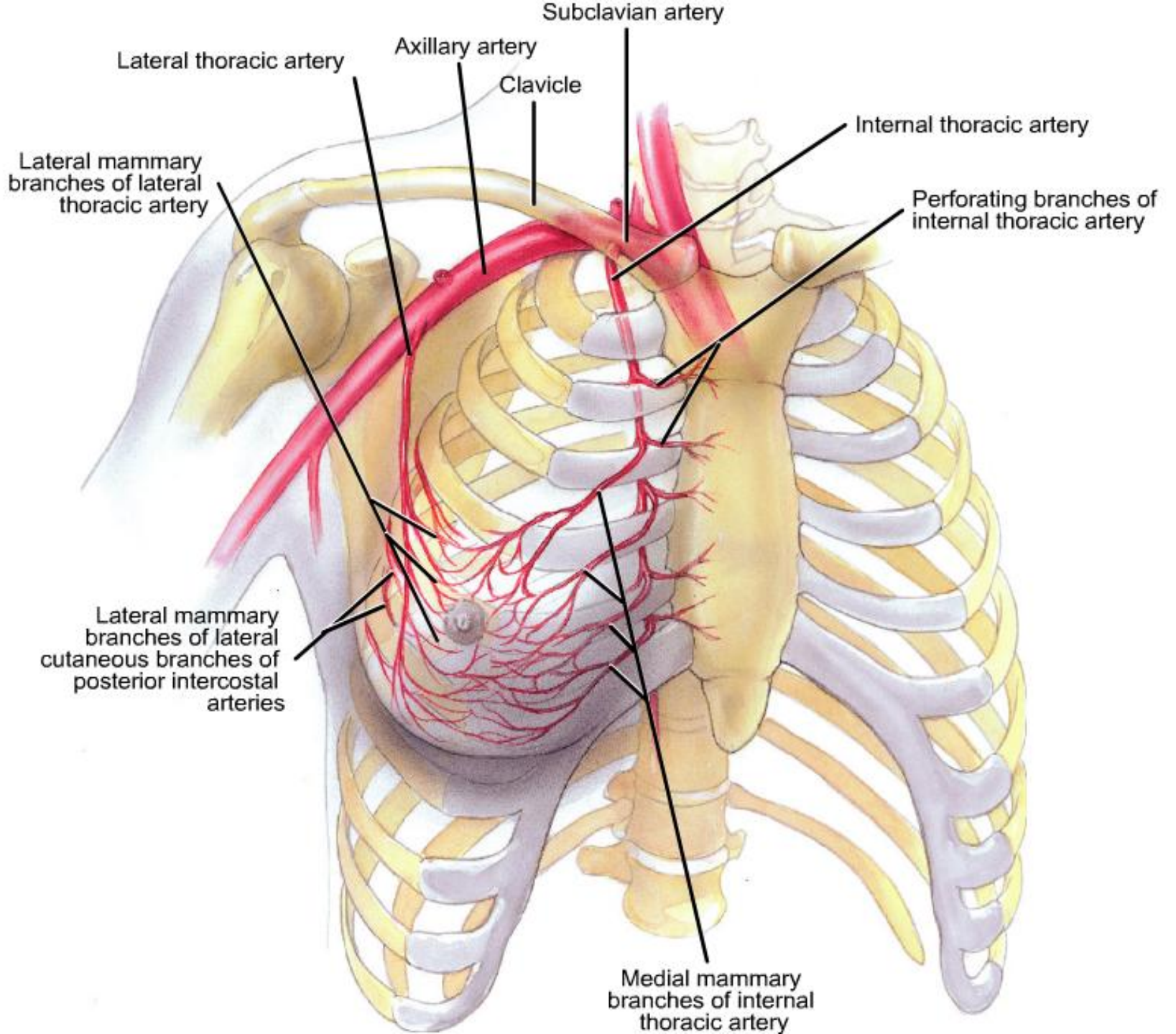
### Treatment Options

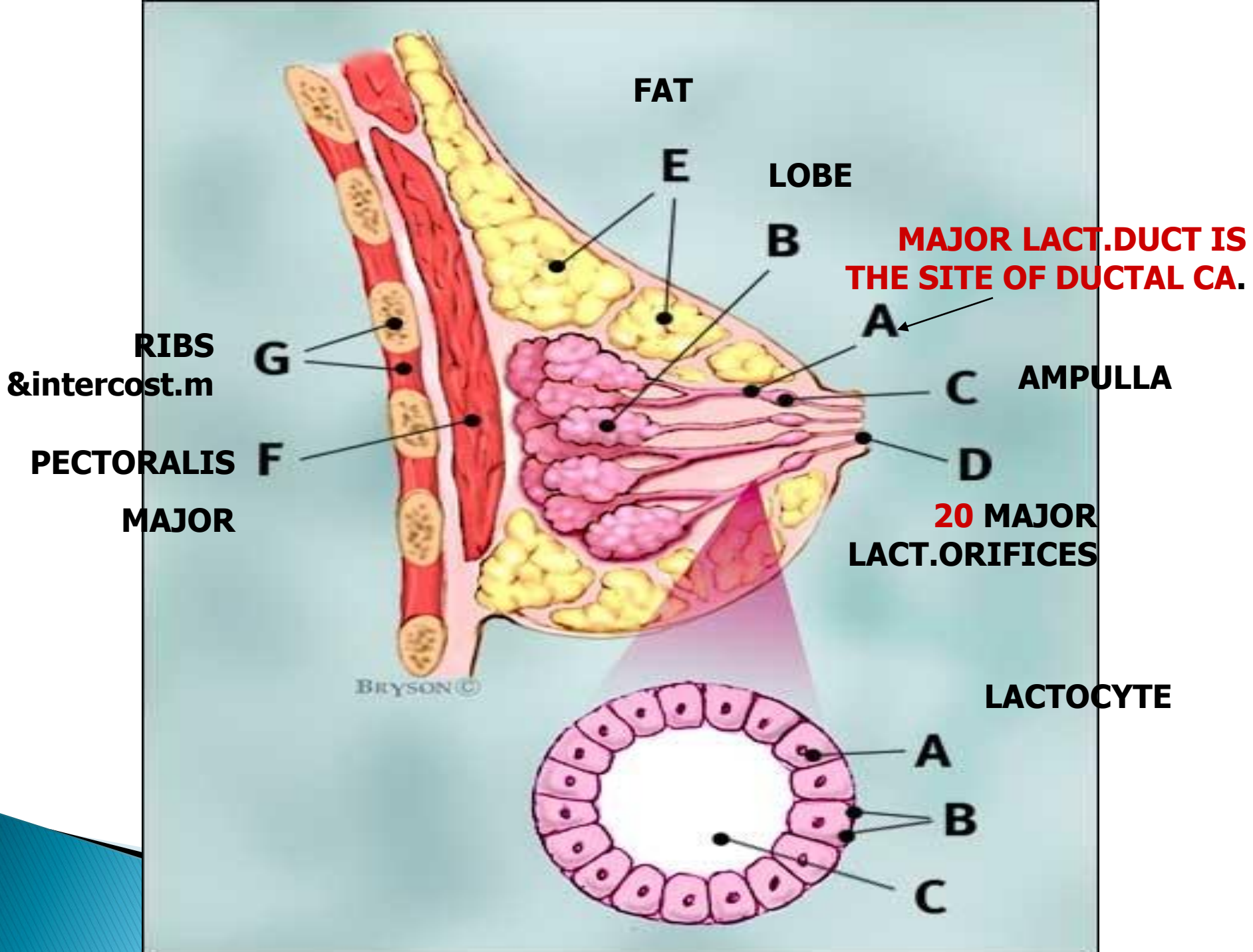
Treatment options for breast cancer include surgery, chemotherapy, radiation therapy, and hormone therapy. The best treatment option depends on the stage of the cancer and the patient's overall health.

### Adjuvant Treatment

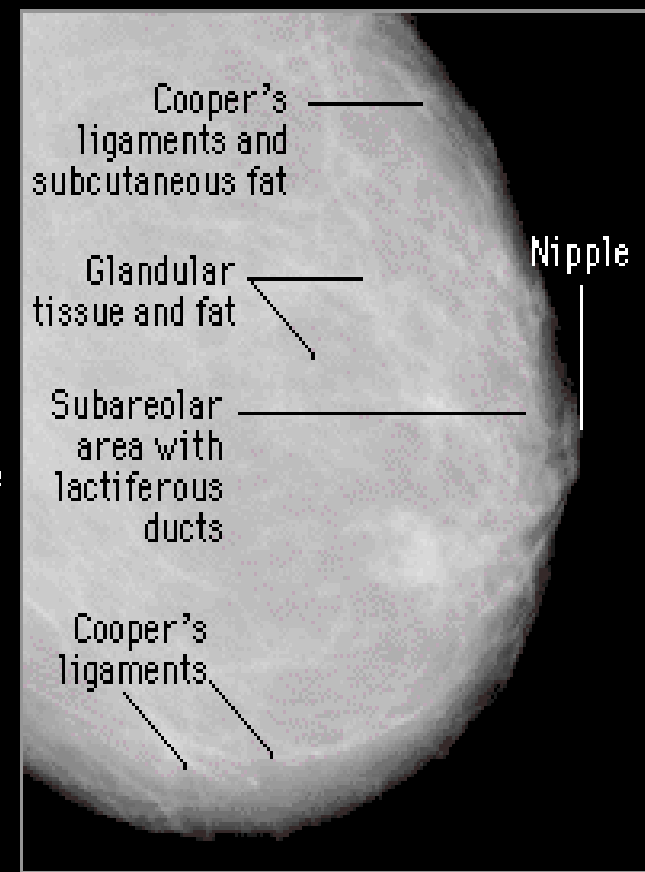
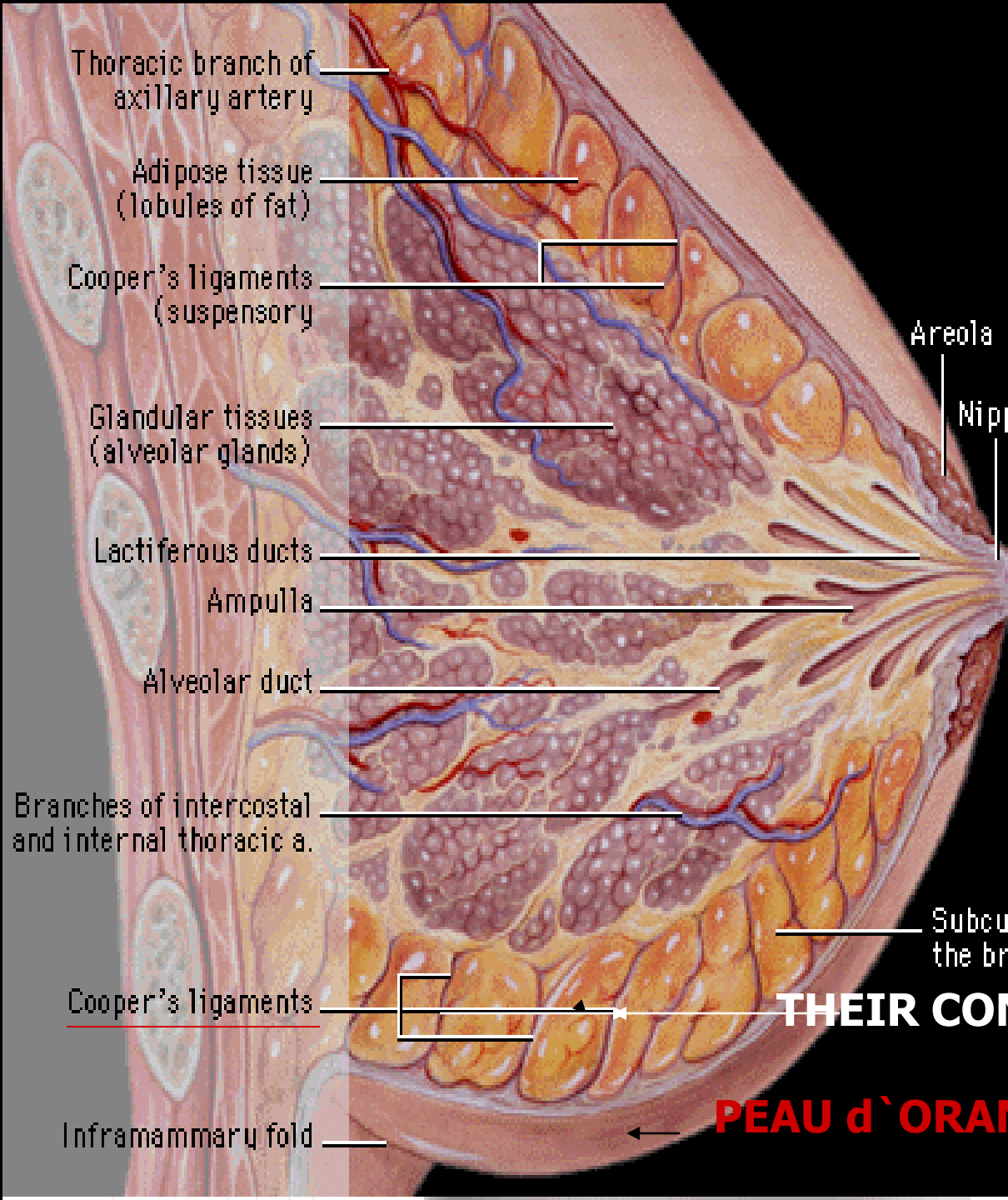
Adjuvant treatment is treatment given to a patient with breast cancer to reduce the risk of the cancer coming back. It can include chemotherapy, radiation therapy, and hormone therapy.

**TERES MAJOR**  
**LATISSIMUS DORSI**  
**SERRATUS ANTER**





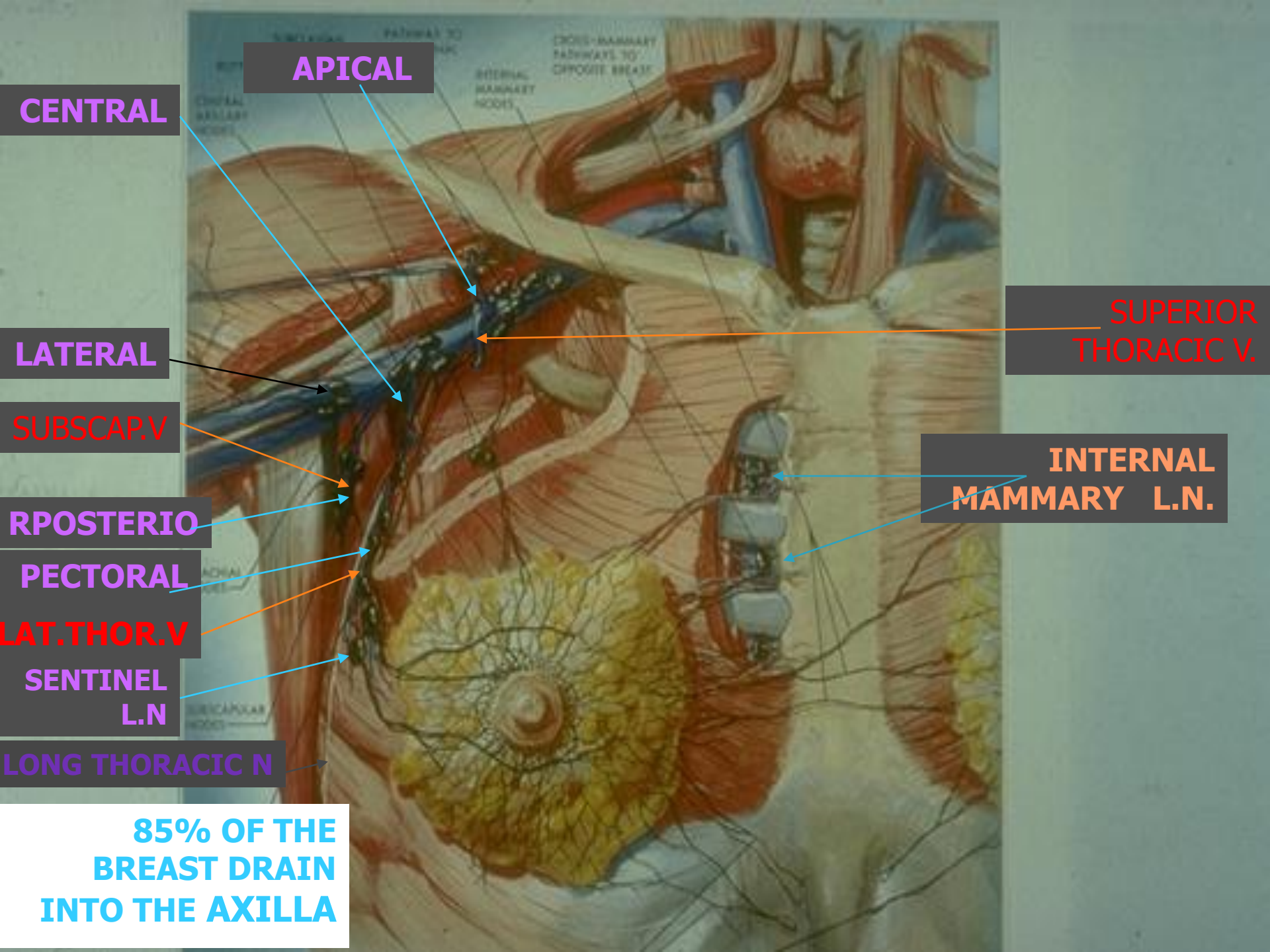




Lateral oblique mammogram

Subcutaneous fat of the breast

**THEIR CONTRACTION CAUSES SKIN DIMPLING**  
**PEAU d`ORANGE IS DUE TO OEDEMA OF SKIN LYMPHATIC**



**APICAL**

**CENTRAL**

**LATERAL**

**SUBSCAP.V**

**POSTERIO**

**PECTORAL**

**LAT.THOR.V**

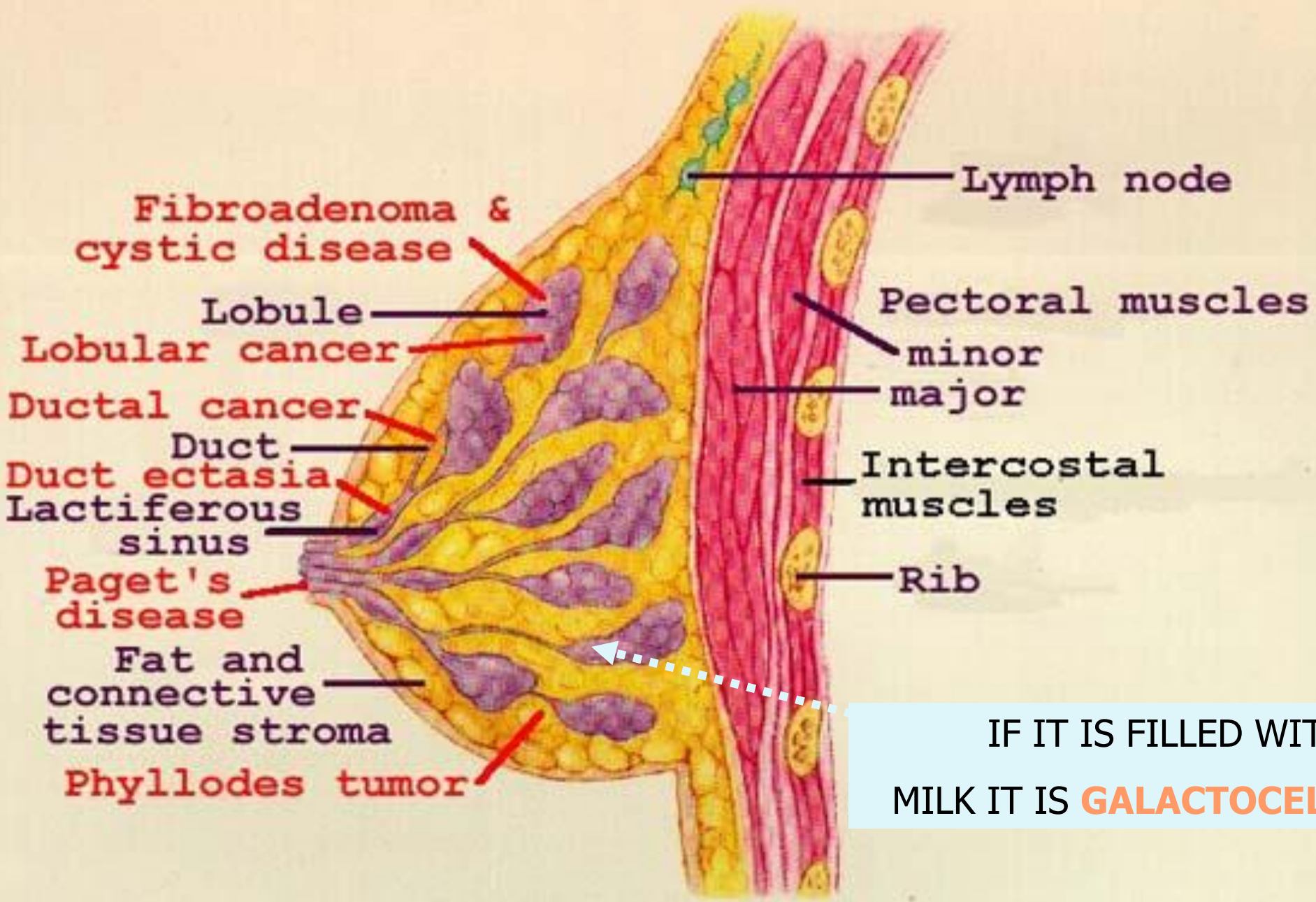
**SENTINEL  
L.N**

**LONG THORACIC N**

**SUPERIOR  
THORACIC V.**

**INTERNAL  
MAMMARY L.N.**

**85% OF THE  
BREAST DRAIN  
INTO THE AXILLA**



Fibroadenoma & cystic disease

Lobule

Lobular cancer

Ductal cancer

Duct

Duct ectasia

Lactiferous sinus

Paget's disease

Fat and connective tissue stroma

Phyllodes tumor

Lymph node

Pectoral muscles

minor

major

Intercostal muscles

Rib

IF IT IS FILLED WITH MILK IT IS GALACTOCEL

# Regional Lymph Nodes for Breast

**A:** Pectoralis major muscle

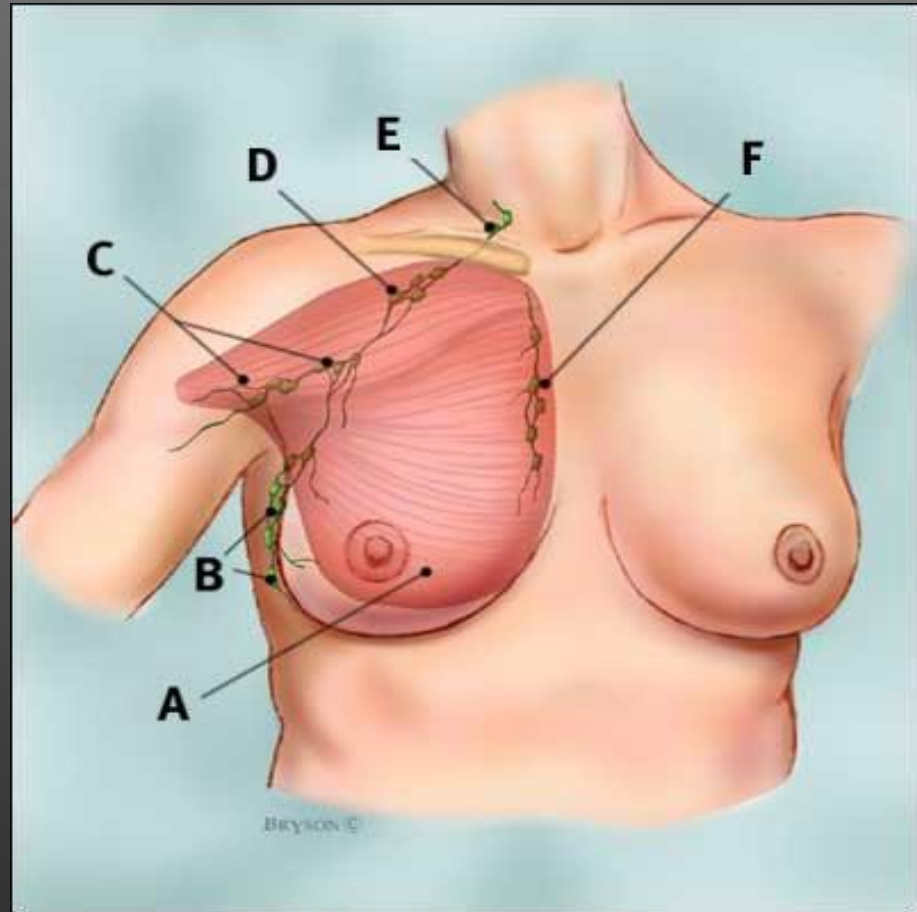
**B:** Axillary lymph nodes level I

**C:** Axillary lymph nodes level II

**D:** Axillary lymph nodes level III

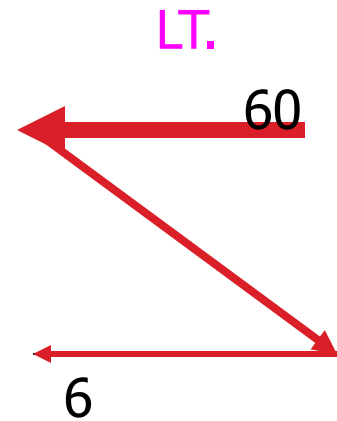
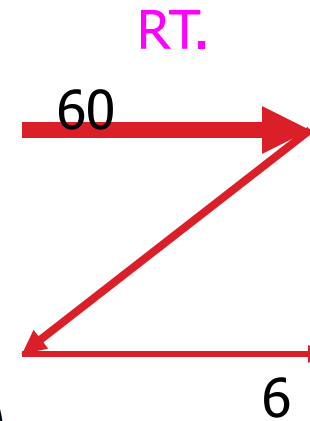
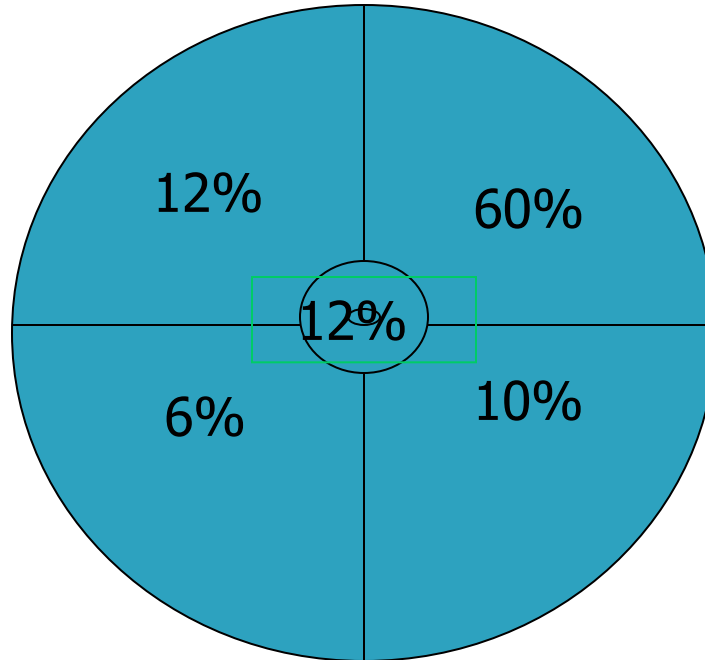
**E:** Supraclavicular lymph nodes

**F:** Internal mammary lymph nodes



# SITES

LT.BREAST



# Breast Cancer Risk Factors

- ▶ Risk Factors do not cause breast cancer but are associated with an increased chance of getting breast cancer
- ▶ The number one risk factor for breast cancer is being a women
- ▶ Age is a risk; the chance of getting breast cancer increases with age

# *Age as a Risk Factor*

	<i>RISK</i>
By age 30	1 out of 2,000
By age 40	1 out of 233
By age 50	1 out of 53
By age 60	1 out of 22
By age 70	1 out of 13
By age 80	1 out of 9
Lifetime risk	1 out of 8

NCI SEER Program, 1995–1997

# Risk Factors

## *Controllable*

- ▶ Alcohol drinking
- ▶ Being overweight
- ▶ Never having children
- ▶ 1st child >30yrs of age
- ▶ Hormone Replacement
- ▶ Birth control pills (very slight)

ACS Breast Cancer Facts 2001-02

## *Uncontrollable*

- ▶ Getting older
- ▶ First degree relative with breast cancer
- ▶ A previous breast biopsy showing atypical changes