



# Overview of Breast Cancer

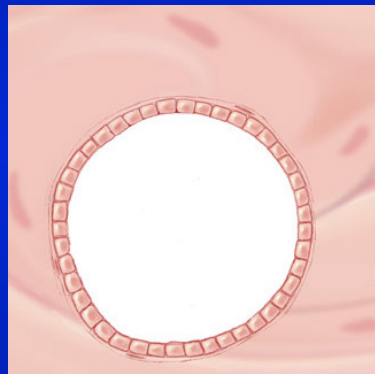
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Gary W. Unzeitig, M.D., F.A.C.S  
Laredo, Texas

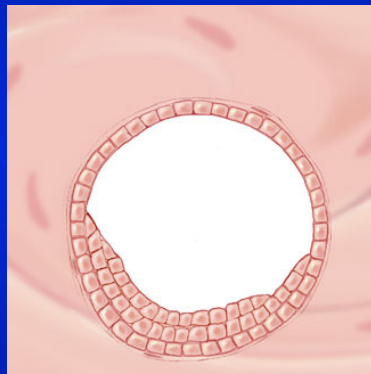
No Disclosures

# OBJECTIVES

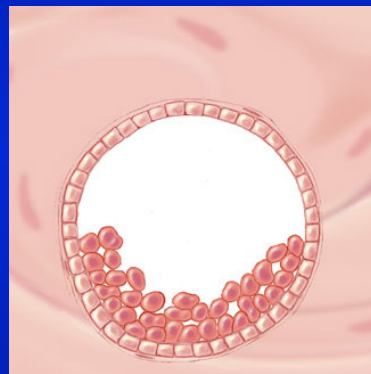
- Brief overview of breast cancer
- Discuss the diagnosis and treatment phases of breast cancer and decision making
- Discuss the rationale for neoadjuvant treatment and tumor biology
- Overview of some open trials



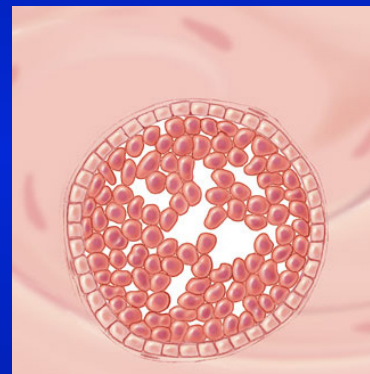
Normal Duct



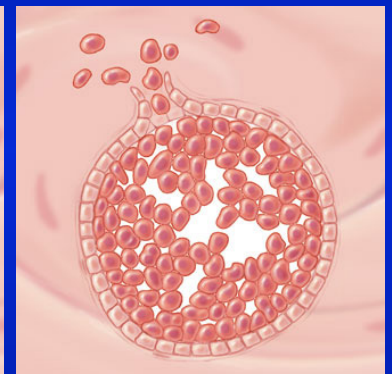
Intraductal Hyperplasia



Atypical Ductal Hyperplasia



Ductal Carcinoma *In Situ*



Invasive Ductal Carcinoma

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**Predict and Prevent**

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**Detect and Treat**

# TNM System

Tis	Carcinoma in situ
T1	2 cm or less
T2	> 2 but $\leq$ 5 cm
T3	Greater than 5 cm
T4	Skin, chest wall involvement, or inflammatory

through Grades 2 and 3 with a worsening prognosis. Remember, though, that a cell that appears poorly differentiated does not necessarily function poorly.

## STAGING OF CANCER



### STAGE I

*Disease is confined to the breast, with or without dimpling of the skin.*



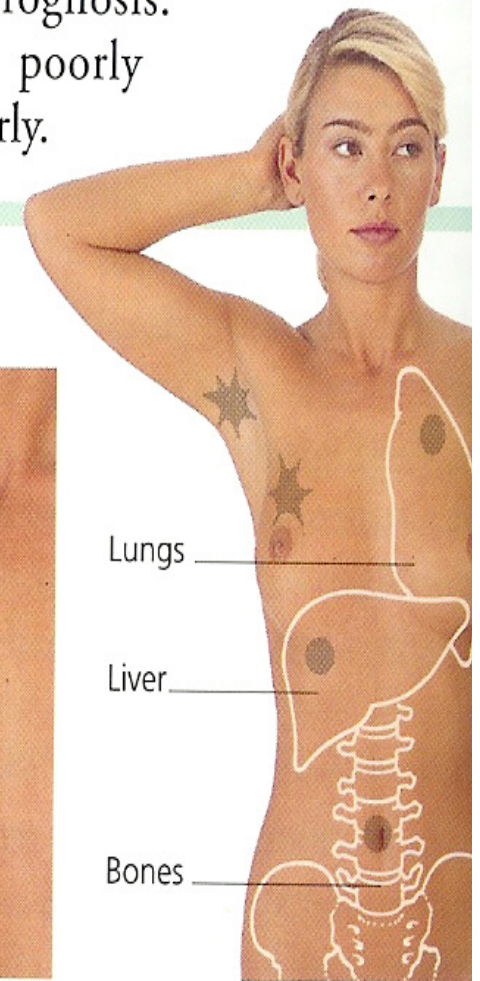
### STAGE II

*The tumor is larger and the axillary nodes may be affected. Surgery may cure, but some systemic treatment is usually advised.*



### STAGE III

*Cancer has invaded the muscles of the chest wall, the overlying skin, or possibly the lymph nodes above the collarbone.*



### STAGE IV

*The cancer has spread to elsewhere in the body, typically the bones, liver, or lungs.*

biopsy

surgery

radiation

systemic therapy

what order??

# Neoadjuvant treatment



<http://www3.mdanderson.org/app/medcalc/index.cfm?pagename=jsconvert3>

The screenshot shows a web browser window with the URL "http://www3.mdanderson.org/app/medcalc/index.cfm?pagename=jsconvert3". The page header includes the MD Anderson Cancer Center logo and navigation links such as "Request an appointment" and "You can help. Give now". Below the header, there are tabs for "Patient and Cancer Information" and "Education and Research", along with a search bar. The main content area is titled "Residual Cancer Burden Calculator" and contains a form with the following fields:

\*Values must be entered into all fields for the calculation results to be accurate.

**(1) Primary Tumor Bed**

Primary Tumor Bed Area:  (mm) X  (mm)

Overall Cancer Cellularity (as percentage of area):  (%)

Percentage of Cancer That is in situ Disease:  (%)

**(2) Lymph Nodes**

Number of Positive Lymph Nodes:

Diameter of Largest Metastasis:  (mm)

Buttons:

# A011106

**ALternate approaches for clinical stage II  
or III Estrogen Receptor positive breast  
cancer NeoAdjuvant TrEatment  
(ALTERNATE) in postmenopausal women:  
A Phase III Study (A011106)**

# Inclusion Criteria

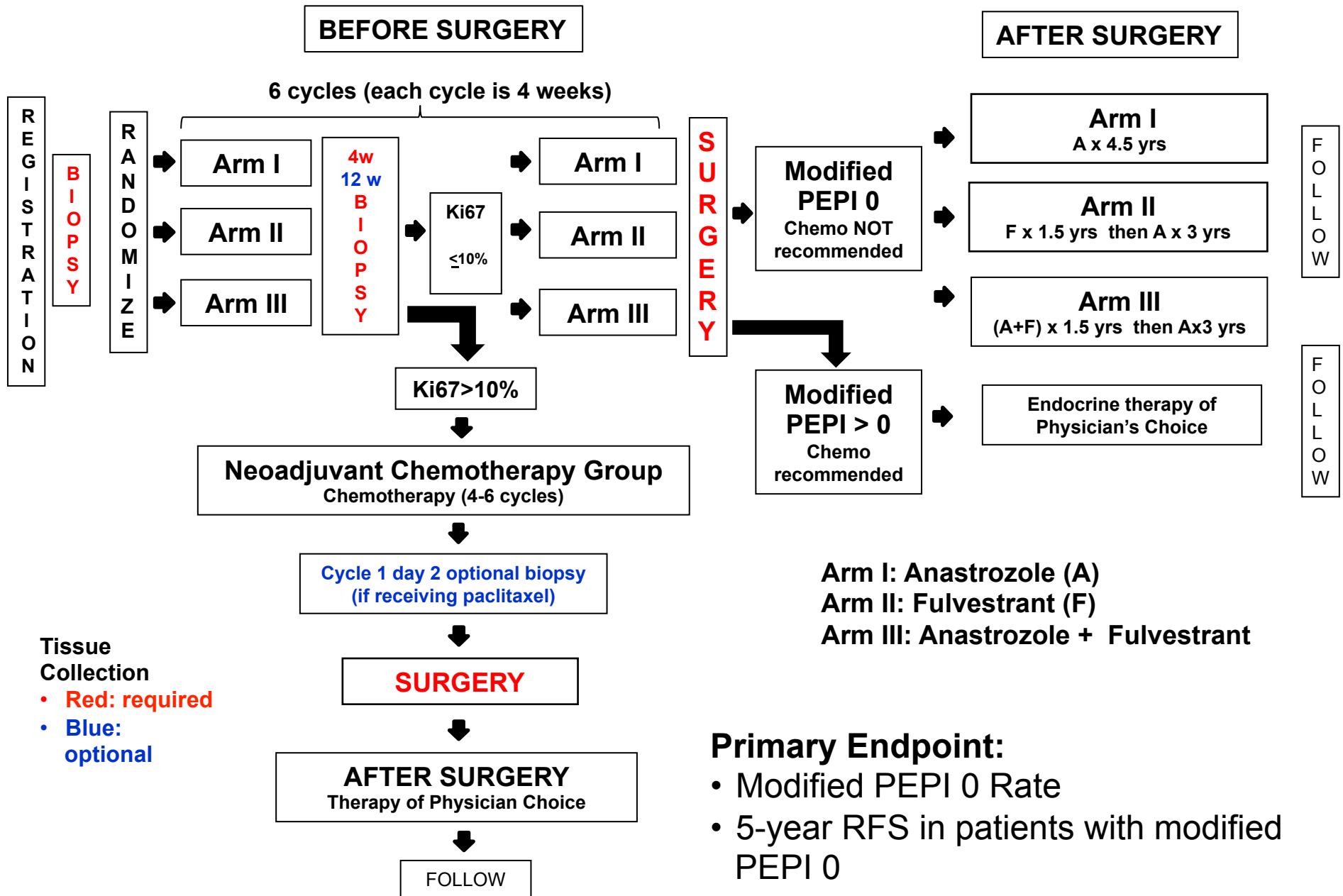
- ECOG performance status 0-2
- Postmenopausal women
- Clinical T2-T4c, any N, M0 invasive breast cancer
- ER+ with an Allred score of 6, 7 or 8 (ER% > 67%)
- HER2-
- Agree to required research biopsies at baseline, week 4 and at surgery

# Exclusion Criteria

- Surgical axillary staging procedure prior to study entry.  
Note: FNA or core needle biopsy of axillary node is permitted.
- History of invasive breast cancer or contralateral DCIS.

# ALTERNATE Schema

N= 1,740 - 2,820





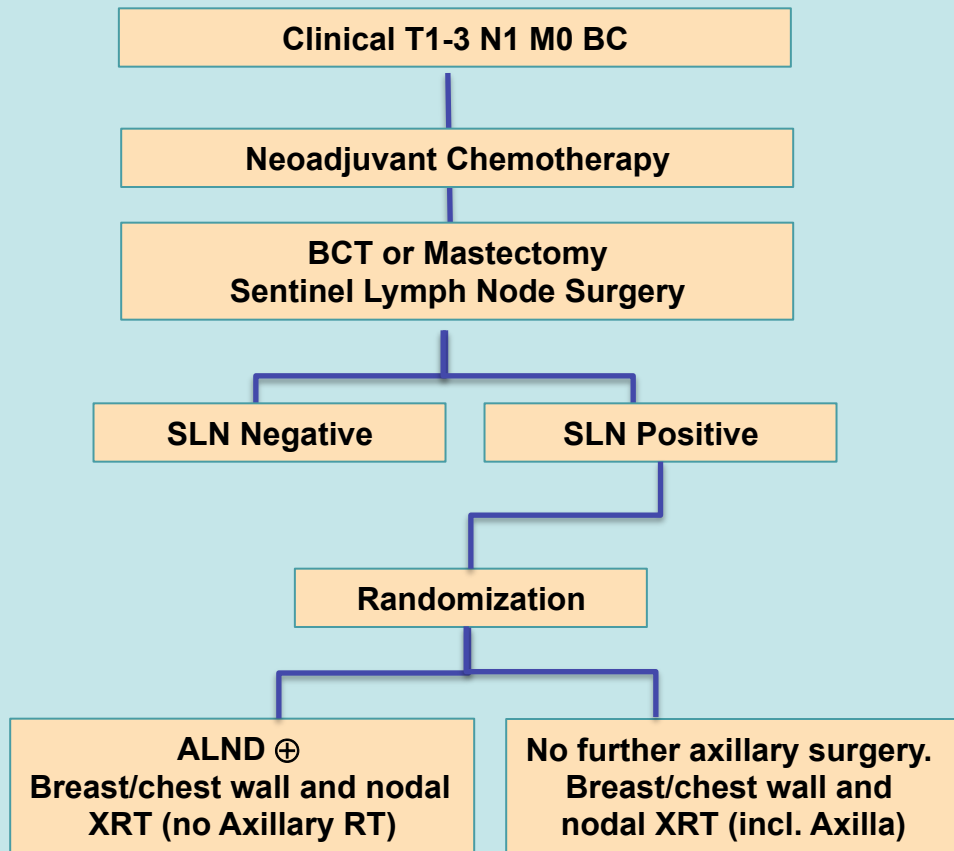
# A011202

A randomized phase III trial evaluating the role of axillary lymph node dissection in breast cancer patients (cT1-3 N1) who have positive sentinel lymph node disease after receiving neoadjuvant chemotherapy

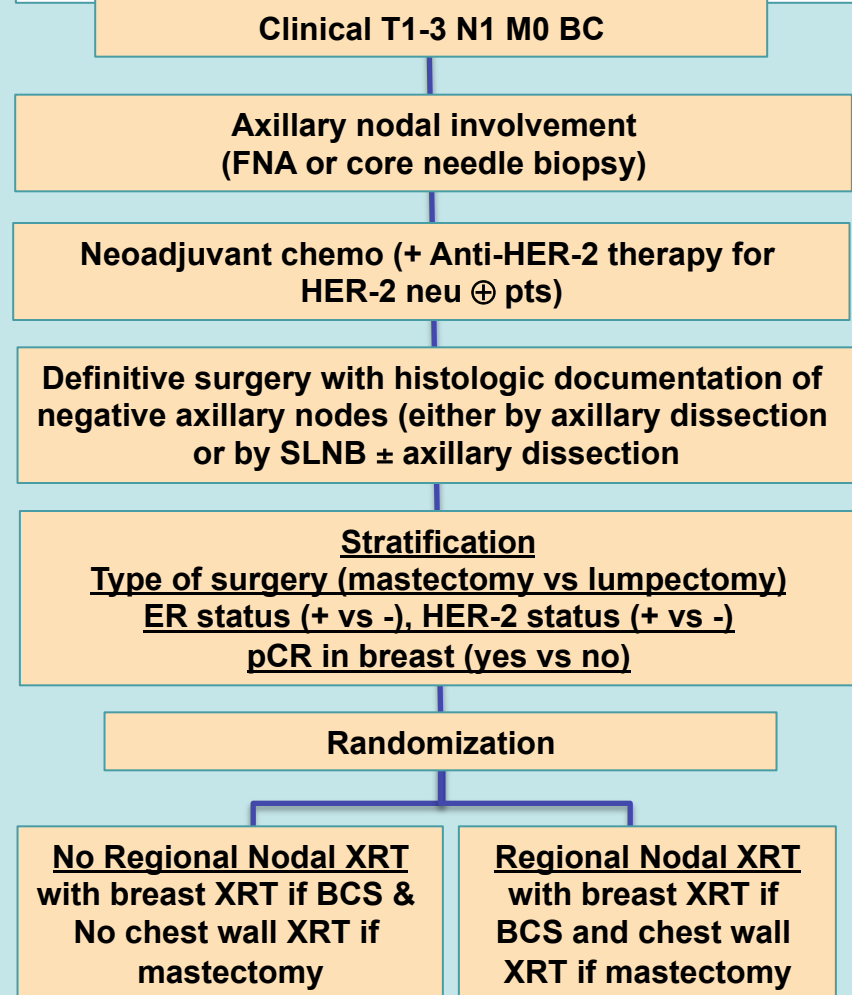
Judy C. Boughey MD, Bruce G. Haffty MD,  
Thomas Buchholz MD, W. Fraser Symmans MD,  
Kelly K. Hunt MD, Jane Armer, PhD, RN,  
Janice Cormier, MD, Vera Suman PhD

# Node Positive Neoadjuvant Patients

## ALLIANCE A11202 Schema



## NSABP B-51/RTOG 1304 (NRG 9353) Schema



Alliance A11104/ACRIN 6694

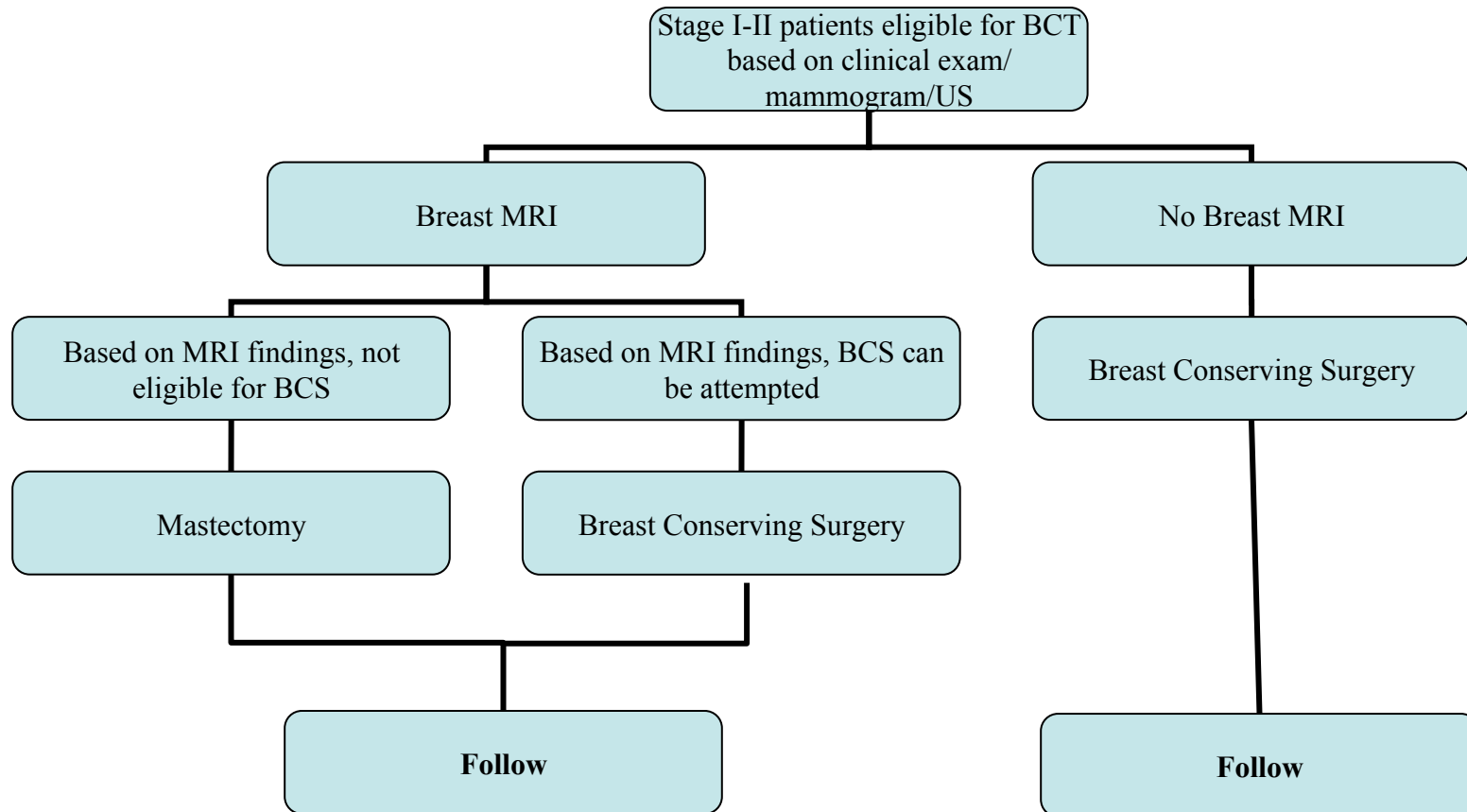
Effect of Preoperative Breast MRI on  
Surgical Outcomes, Costs and Quality of  
Life of Women with Breast Cancer

# Eligibility criteria

- Women with
  - her-2 positive breast cancer (ER/PR negative) OR
  - Triple negative breast cancer
- Stage I-II, unilateral cancer
- No previous breast cancer history
- No preoperative chemotherapy
- No plans for partial breast irradiation following lumpectomy
- No BRCA carriers



# Alliance A11104 Phase III trial



Sample size: 244 patients/arm

# Eligibility criteria

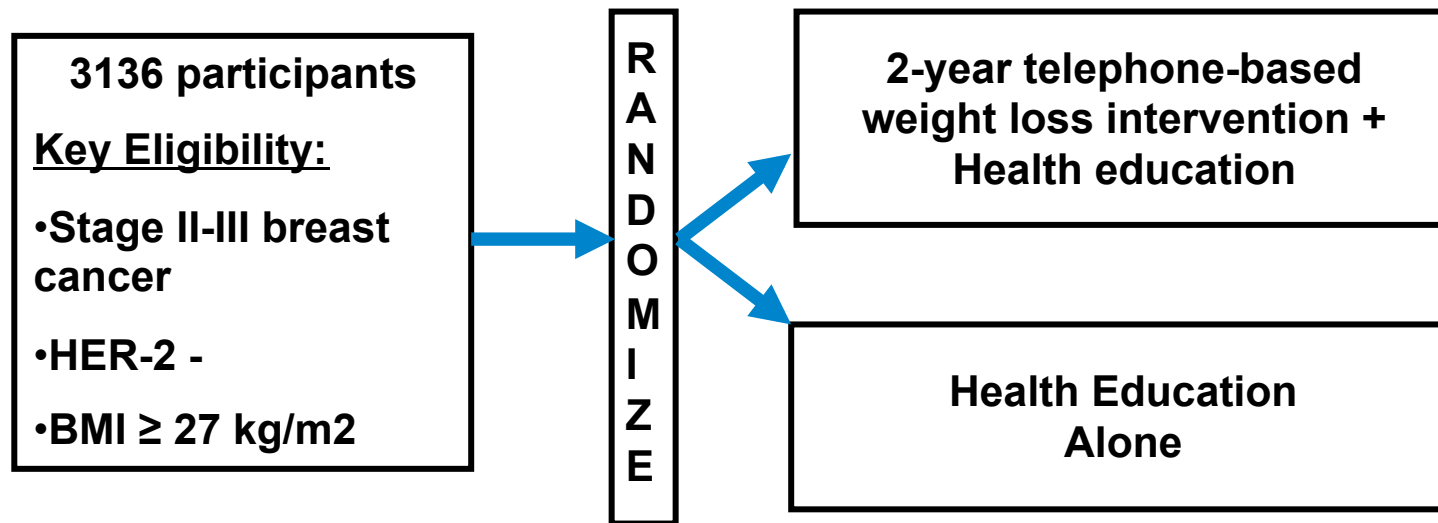
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**Randomized Phase III Trial Evaluating the  
Role of Weight Loss In Adjuvant Treatment of  
Overweight and Obese Women with Early  
Breast Cancer  
(Alliance 011401)**

**The Breast cancer WEight Loss (BWEL)  
Study**

*PI Jennifer Ligibel  
Co-PI Pamela Goodwin*

# BWEL Study Schema



**Conducted through NCTN/NCORP**

***Activation date: August 29, 2016***

# Select Eligibility Criteria

- **Breast cancer diagnosed within past 12 months**
- **Her-2 negative**
- **Stage II-III**
  - **Triple negative tumors: T2-T3, N0-3; any T, N1-3**
  - **ER+: any T, N1-3**
- **Completed with all chemotherapy and surgery (current radiation and hormonal, bisphosphonate, and biologic therapies okay)**
- **Life expectancy from other causes at least 5 years**
- **BMI  $\geq$  27 kg/m<sup>2</sup>**
- **Pre- or postmenopausal**

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