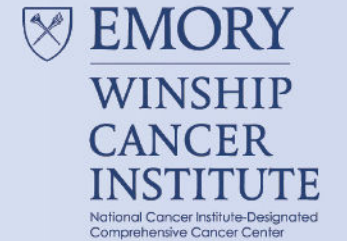




2025

DEBATES AND DIDACTICS  
in **Hematology**  
and **Oncology**



Where **Science** Becomes **Hope**

**JULY 24 - 27, 2025 • SEA ISLAND, GEORGIA**

This activity is jointly provided by



# Omission of Sentinel Lymph Node Biopsy in Breast Cancer: CON

Mylin A. Torres MD, FASTRO

James W. Keller Distinguished Professor in Radiation Oncology

Department of Radiation Oncology

Co-Leader, Cancer Prevention and Control Program

Winship Cancer Institute

Emory University

# Disclosures

- Emory
- NRG Oncology
- NCI
- Pfizer
- Varian
- BioAscend
- MJH Life Sciences
- OncoHealth
- There will be no discussion of off-label drug or device use or references to proprietary technology

# Morbidity of Surgical Evaluation of the Axilla



**Lymphedema  
(10-15%)**



**Chronic Pain  
(5-10%)**



**Axillary Web Syndrome  
(30-50%)**

# Morbidity of Surgical Evaluation of the Axilla



Edema  
(10-15%)



in  
(10%)



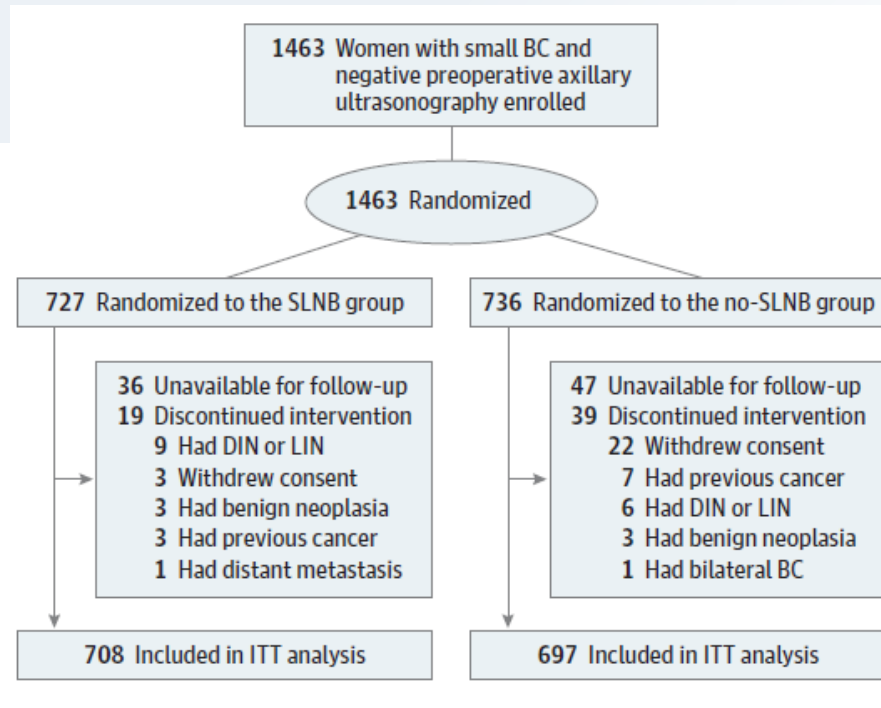
Axillary Web Syndrome  
(30-50%)

**NOT THAT BAD**



# SOUND and INSEMA Trials

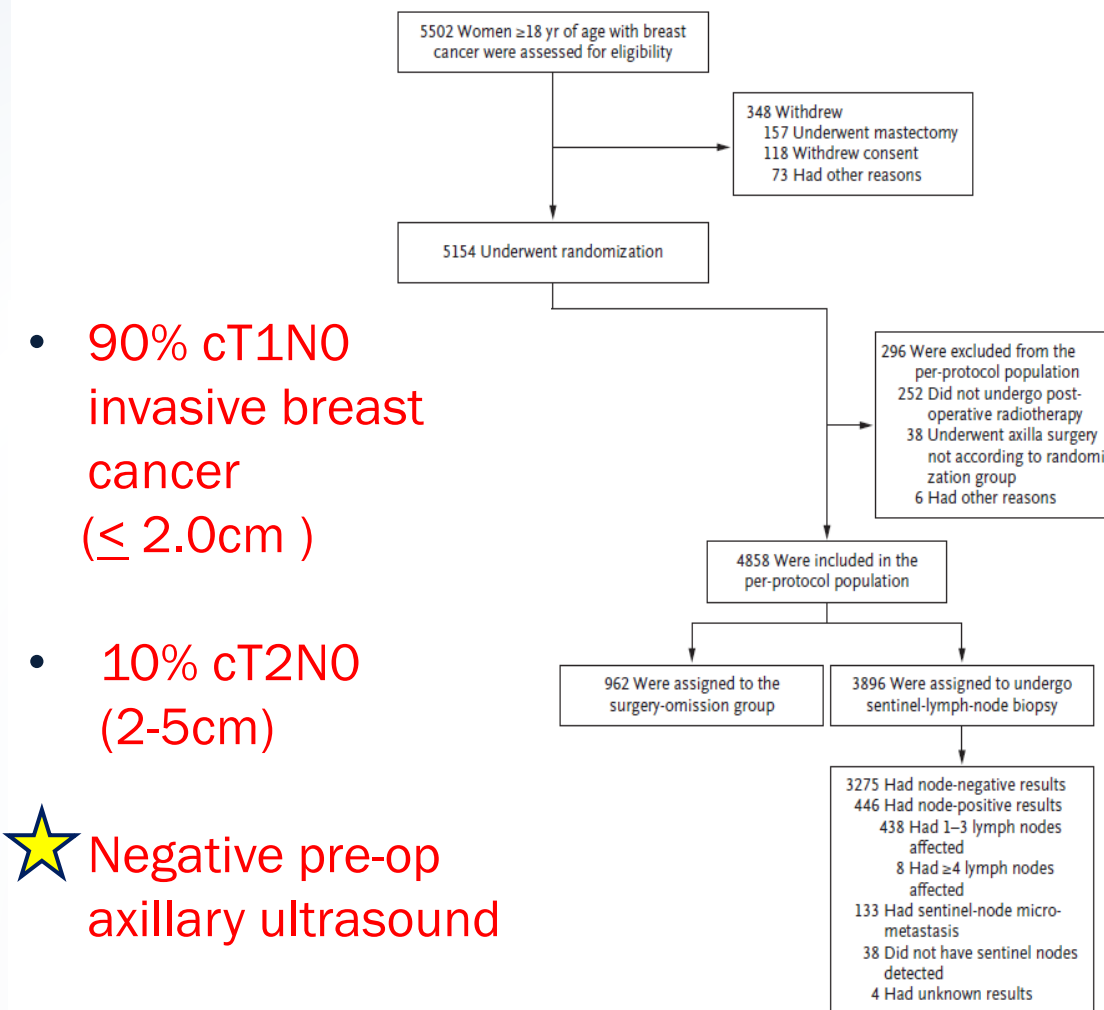
## SOUND



BC indicates breast cancer; DIN, ductal intraepithelial neoplasia; ITT, intention to treat; LIN, lobular intraepithelial neoplasia; and SLNB, sentinel lymph node biopsy.

Gentilini et al., JAMA Oncology, 2023

## INSEMA



- 90% cT1N0 invasive breast cancer ( $\leq 2.0$ cm)

- 10% cT2N0 (2-5cm)

★ Negative pre-op axillary ultrasound

Reimer et al., NEJM, 2024

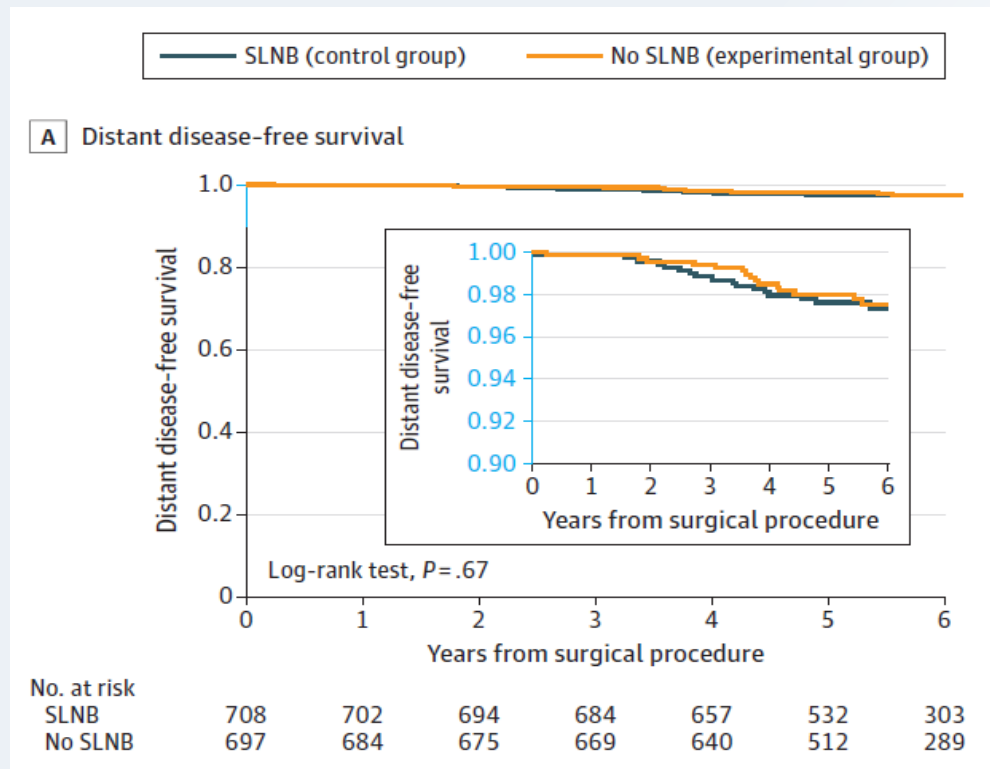
# SOUND and INSEMA Patient, Tumor, and Treatment Characteristics

- $\geq 80\%$  age 50 years or older
- $\geq 75\%$  postmenopausal
- $\geq 80\%$  pT1
- 85% pN0
- $\geq 80\%$  Gr1 or 2
- $\geq 87\%$  HR+, Her2-
- 13-20% received chemotherapy
- $\geq 90\%$  received endocrine therapy
- $\geq 98\%$  received radiation (almost all WBI, ~10% received PBI on SOUND)

Reimer et al., NEJM, 2024; Gentilini et al., JAMA Oncology, 2023

# Primary Endpoints

## SOUND



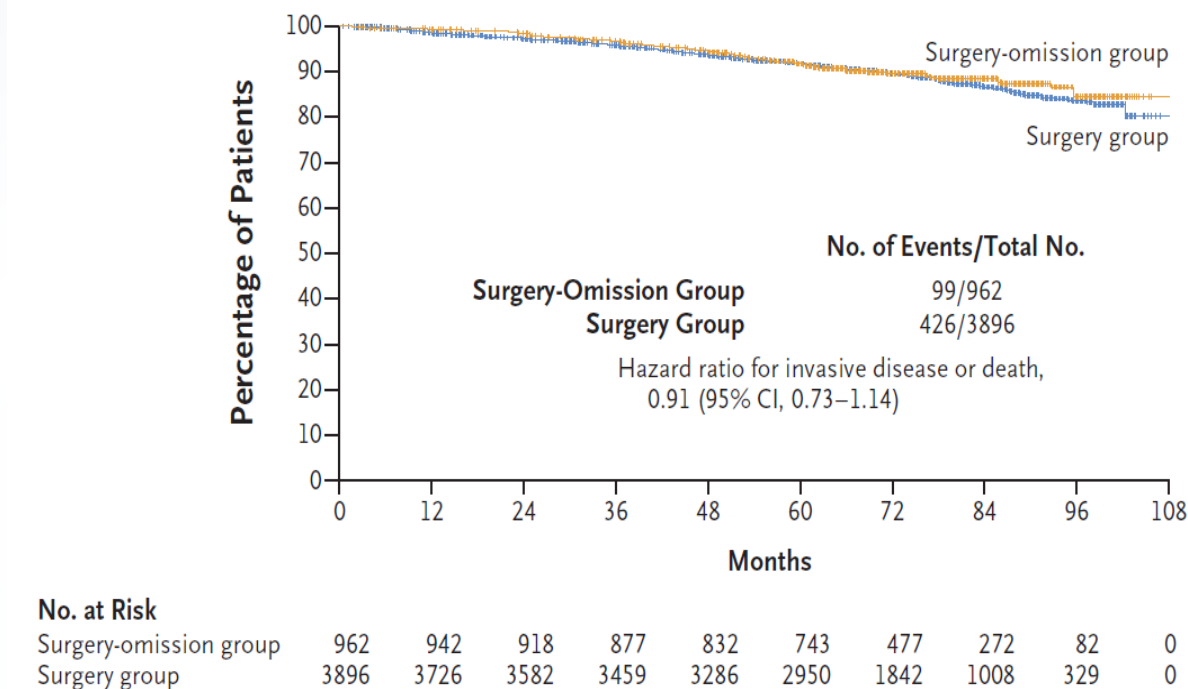
No differences in DFS or OS

No difference in axillary recurrence rates (~0.4% vs. 0.7%)

Gentilini et al., JAMA Oncology, 2023

## INSEMA

**A** Invasive Disease-free Survival in the Per-Protocol Population



No differences in OS

Reimer et al., NEJM, 2024



# 2025 ASCO Guideline Update: Sentinel Lymph Node Biopsy in Early Stage Breast Cancer

Findings from multi-institutional trials in academic and community practice settings indicate that patients with low-risk breast cancer and negative nodal status (confirmed by pre-operative ultrasound) may safely forego sentinel nodal biopsy and avoid any axillary surgery if:

Post-menopausal &

Age >50 &

pT1 &

ER+/PR+/Her2- &

Gr 1 or 2 disease &

Receive radiation treatment &

Receive hormone therapy

## Under-represented:

- Lobular
- TNBC
- HER2+
- Gr 3
- T2 tumors
- Mastectomy

Park et al., JCO, 2025

# Systemic Therapy and Radiation Recommendations

- 85% of patients with a negative axillary ultrasound have tumors that are pN0
- Omission of SLNbx should not alter adjuvant systemic therapy or radiation recommendations in the appropriate patients who can safely forego SLNbx:
  - Post-menopausal &
  - Age >50 &
  - pT1 &
  - ER+/PR+/Her2- &
  - Gr 1 or 2 disease &
  - Receive radiation treatment &
  - Receive hormone therapy

Park et al., JCO, 2025

# Systemic Therapy and Radiation Recommendations

- In patients with axillary ultrasound that is negative, 13-14.9% pN1 and 0.2-0.6% pN2
- Systemic therapy decisions dependent upon genomic assay score (e.g., 21-Gene Recurrence Score) of primary tumor, except in premenopausal patient or those with pN2 disease
- Radiation may be omitted in women  $\geq 65$  yo with pT1N0 HR+, HER2- breast cancer, adhered to endocrine therapy
- cdk4/6 inhibitors, PARPi recommended in all patients with pN2 disease
- Ribociclib recommended in patients with pT2, Gr3, node negative disease
- PBI not administered in N+ breast cancer
- RNI administered in N2 and some N1 breast cancers

Park et al., JCO, 2025

# Patient Perspectives

- Most older women want to be treated like younger patients and receive SLNB
- Patients associate “peace of mind” with SLNB
- 15% of the time pre-operative axillary ultrasound gets it wrong
- SLNB has the potential to inform multidisciplinary care and appropriate adjuvant treatments

**Thank you!**