

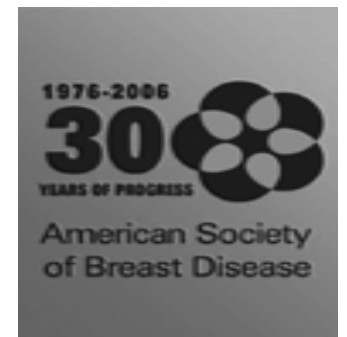
# Interdisciplinary Tumor Board

Friday, April 28  
2:45 pm – 4:30 pm

**Mini-Topic Presentation**  
*Neoadjuvant therapy*

*Faculty*

**Andy Seidman, MD**



# Trastuzumab for HER2-Driven Early Breast Cancer: Adjuvant and Neoadjuvant

Andrew D. Seidman, MD

Associate Attending Physician

Breast Cancer Medicine Service

Memorial Sloan-Kettering Cancer  
Center

## Neoadjuvant Trastuzumab Pilot Studies

<b>Study</b>	<b>N=</b>	<b>Clinical Stage</b>	<b>Neoadjuvant Regimen</b>	<b>pCR Rate (%)</b>	<b>Cardiac Toxicity</b>
<b>Hurley ASCO '02</b>	34	T3-4 or N2, M0 or 1	docetaxel+ cisplatin	21	6% grd 3
<b>Burstein JCO '03</b>	40	II/III, inflamm.	paclitaxel q w	18	0% grd 3
<b>Harris ASCO '03</b>	28	II/III, inflamm.	vinorelbine	29	0% grd 3
<b>Schiffhauser ASCO '03</b>	16	not specified	docetaxel	25	0% grd 3
<b>Bines SABCS '03</b>	33	IIIA/B	docetaxel q w	12	0% grd 3
<b>Van Pelt Clin Brst Ca '03</b>	22	LABC, inflamm, M1	docetaxel	NR	"clin relevant" 2 pts (10%)
<b>Coudert SABCS '04</b>	33	T2-3, N0-2	docetaxel	41	0% grd 3
<b>Gennari</b>					

# Neoadjuvant trastuzumab induces apoptosis in primary breast tumors

Serial core biopsies of primary tumor at dx, 24 hrs after loading dose,  
and just before week 2, 3, and 4 doses

## Apoptotic indices

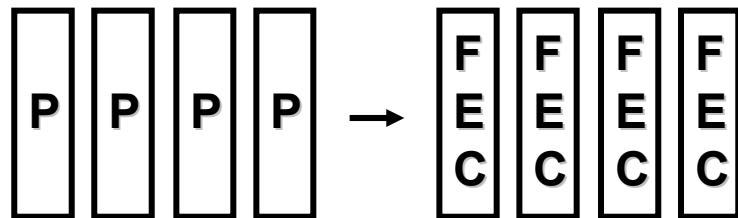
- Cleaved caspase-3
- p-AKT

## Proliferative indices

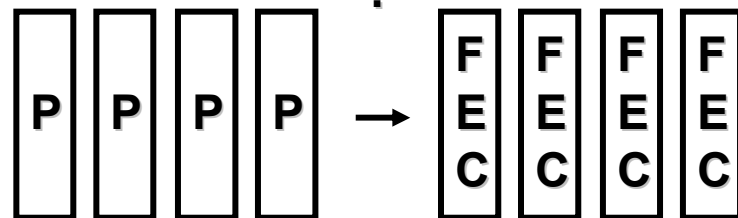
- p27
- p-MAPK
- Ki-67

} No Change

# Treatment Plan



VS



+



**Paclitaxel (P) = 225 mg/m<sup>2</sup> 24 hr IV infusion Q 3 weeks**

**FEC • Fluorouracil 500 mg/m<sup>2</sup>**

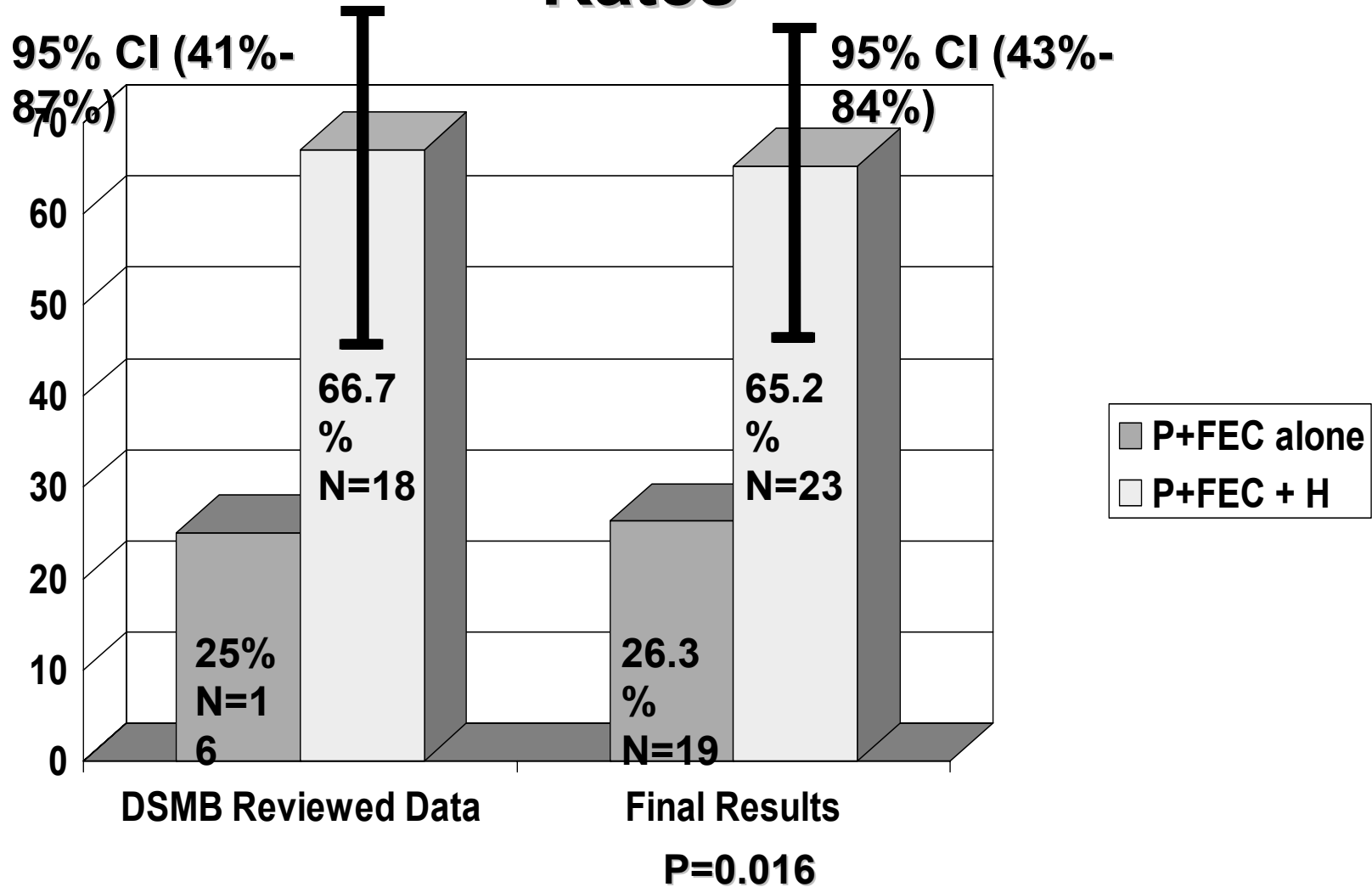
**IV day 1 & 4**

**• Epirubicin 75 mg/m<sup>2</sup> IV day 1 only**

**• Cyclophosphamide 500 mg/m<sup>2</sup> IV Day 1 only**

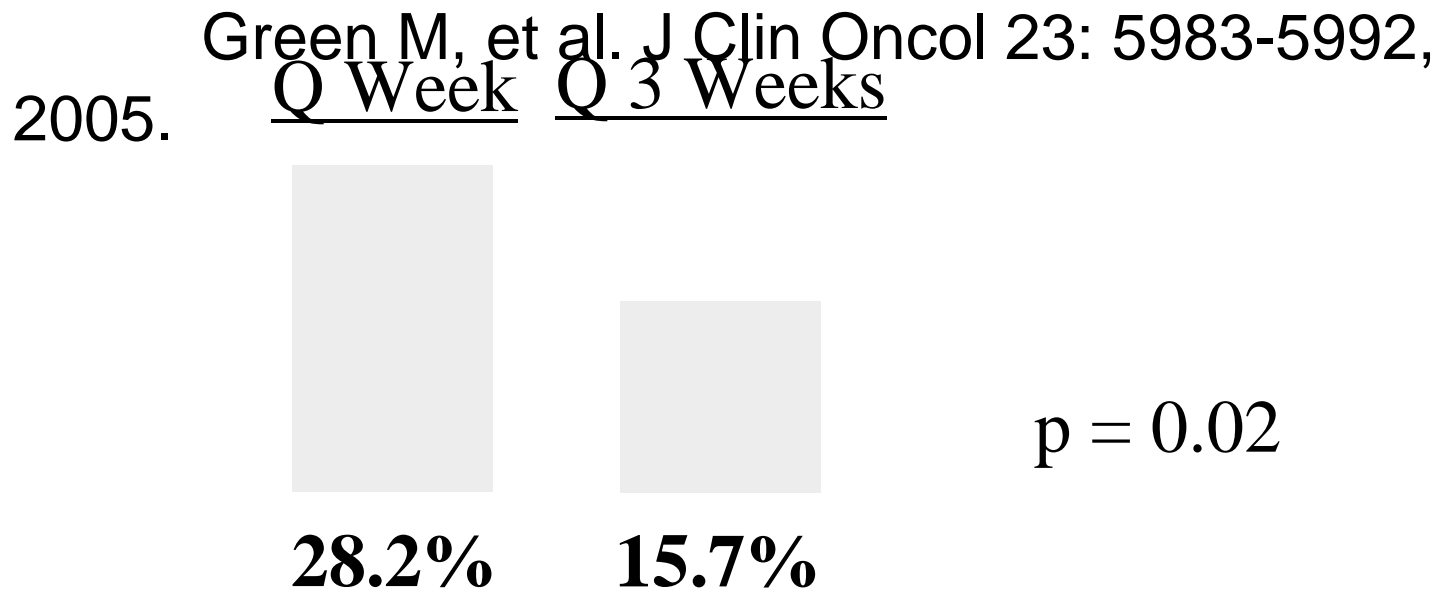
**Trastuzumab (H) = 4 mg/kg Q 3 weeks IV day 1, then 2 mg/kg IV weekly**

# Pathological Complete Response Rates

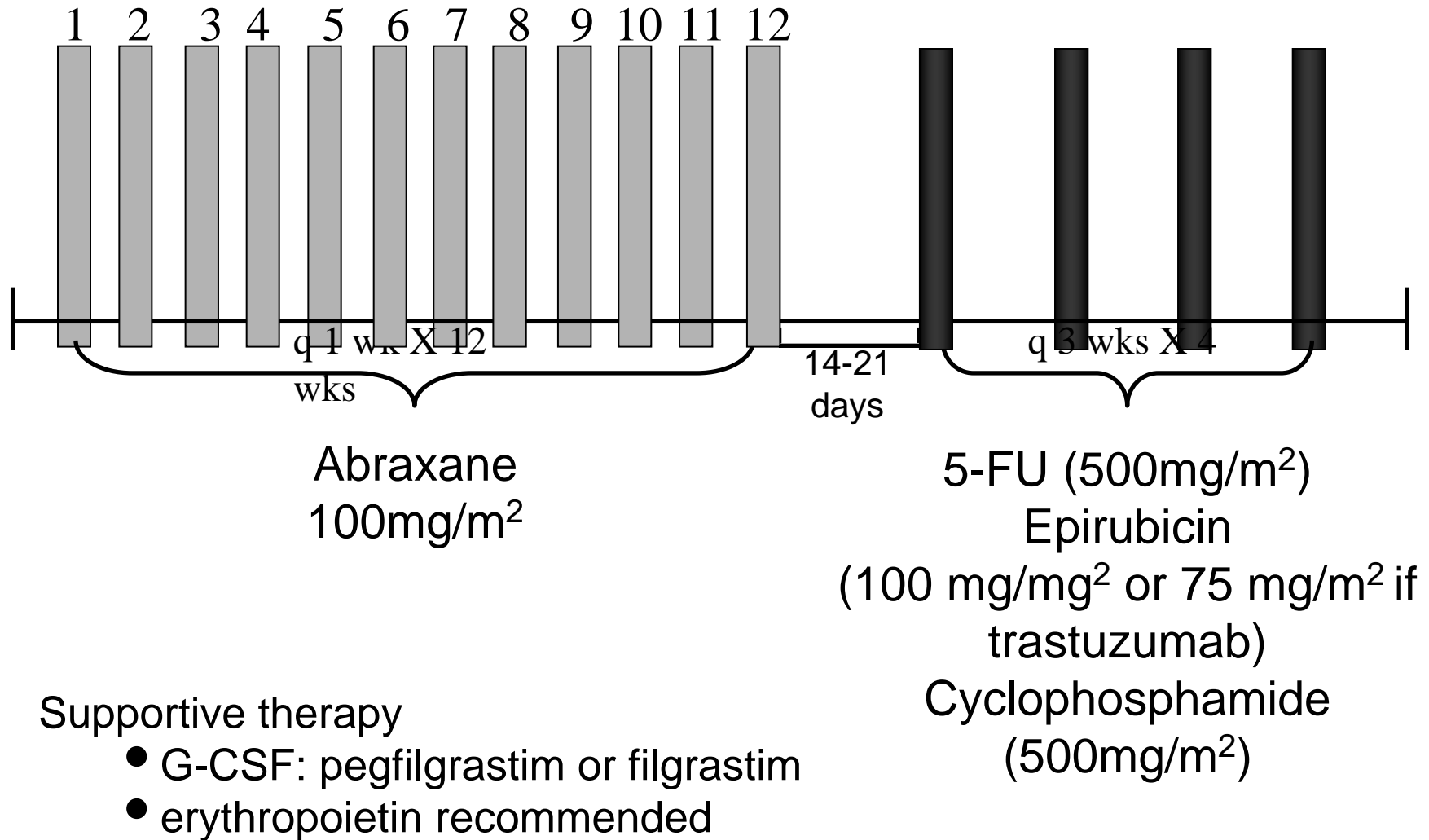


# Optimize the Taxane Component

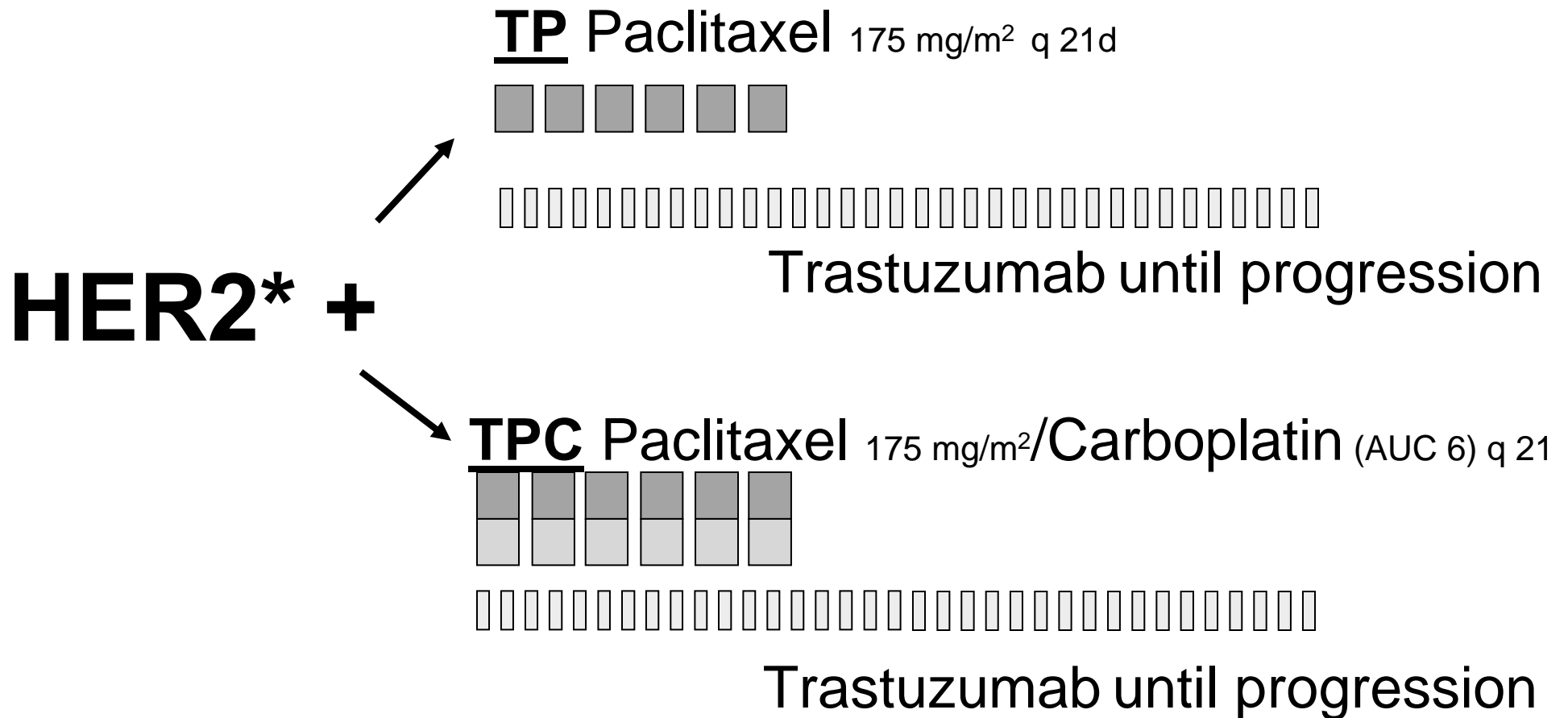
- Weekly Paclitaxel Improves Pathologic CR in Operable Breast Cancer When Compared with Paclitaxel Every 3 Weeks



# NSABP Protocol FB-AX-003 Treatment Regimen

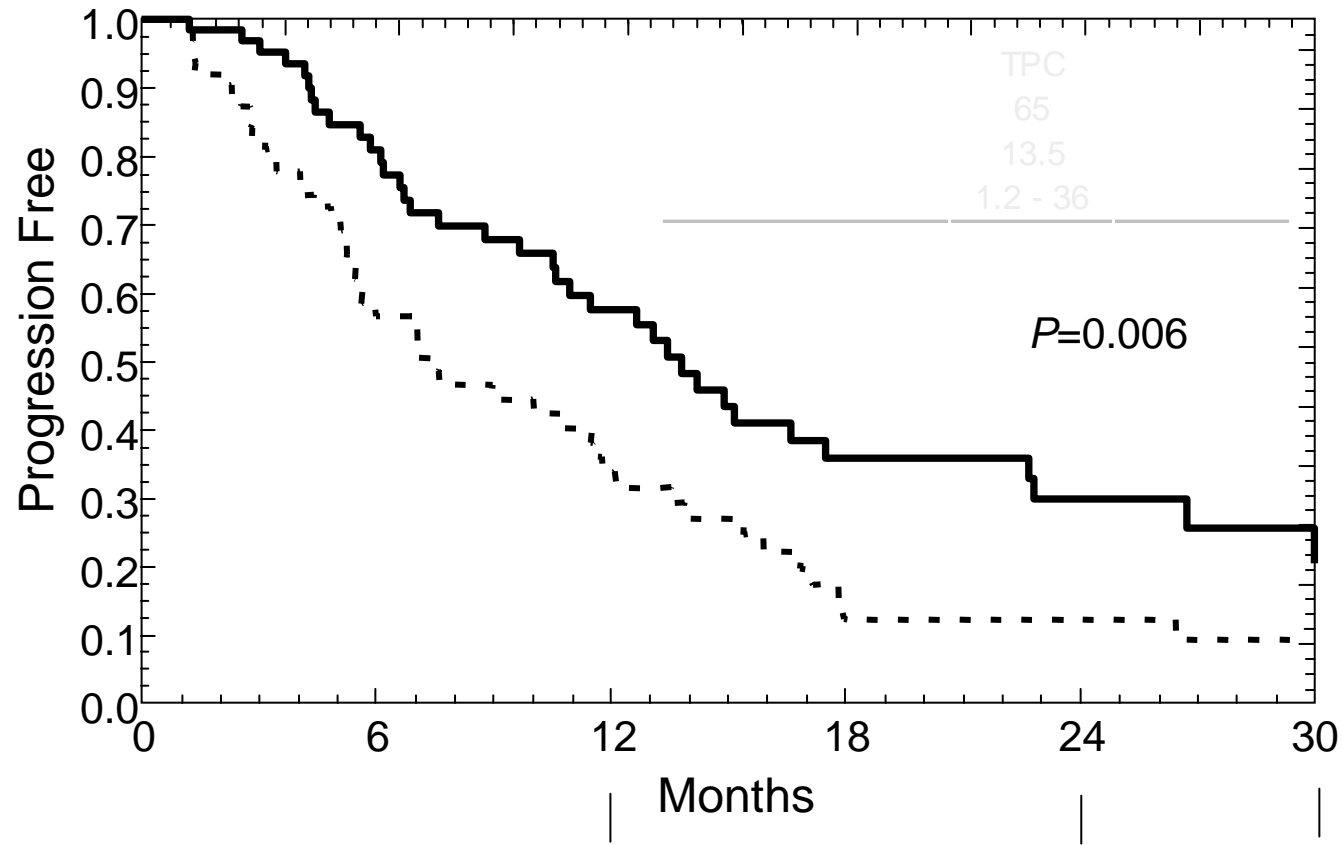


# HER-2 Positive MBC: Does Carboplatin Add to Paclitaxel+Trastuzumab?



\*Patients were stratified by ICH 2+ versus 3+

# Estimated Progression-Free Survival for the HER2 IHC 3+ Patients by Treatment Arm



TPC (% Progression Free)

58

30

21

TP (% Progression Free)

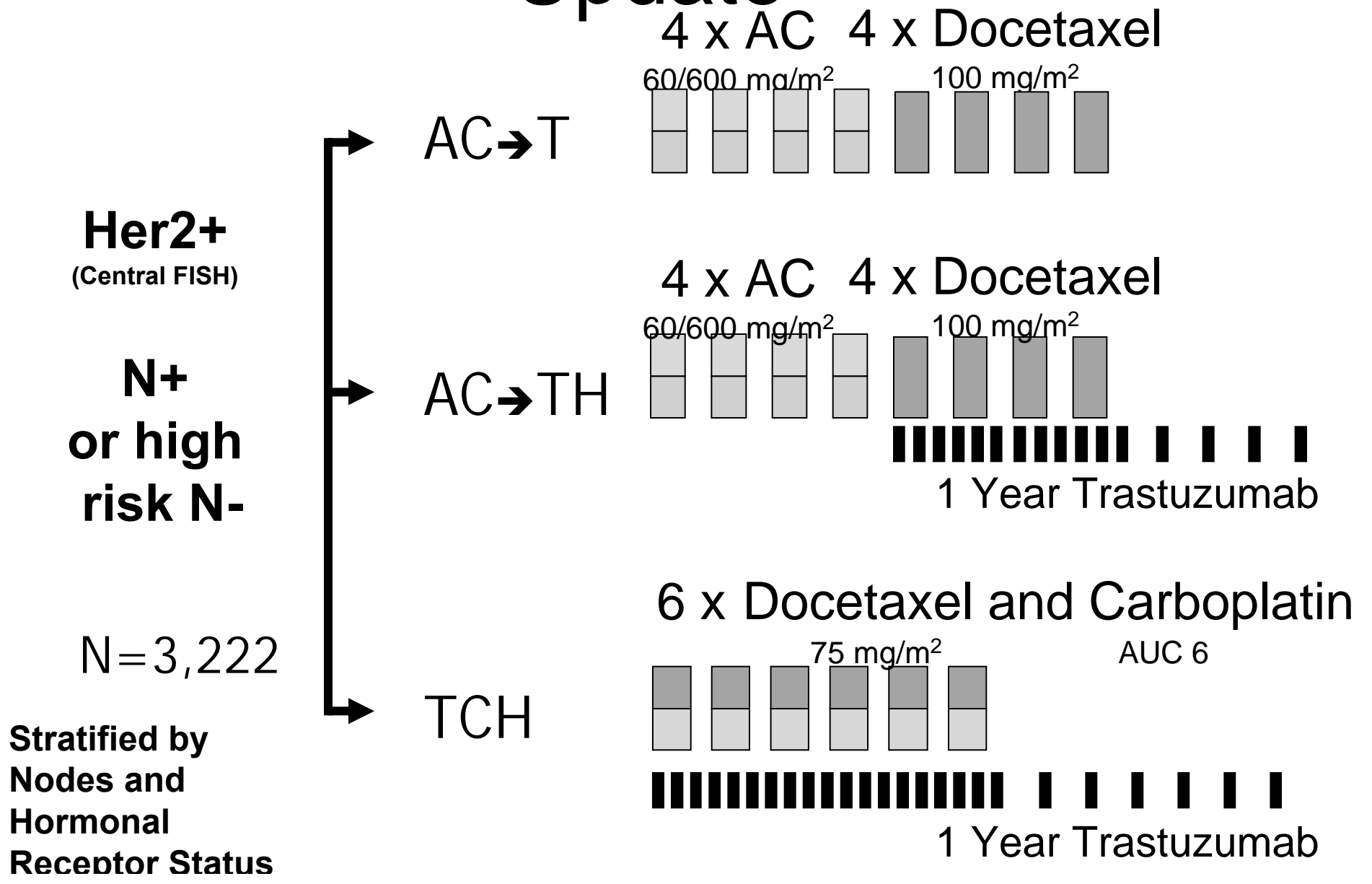
34

12

9

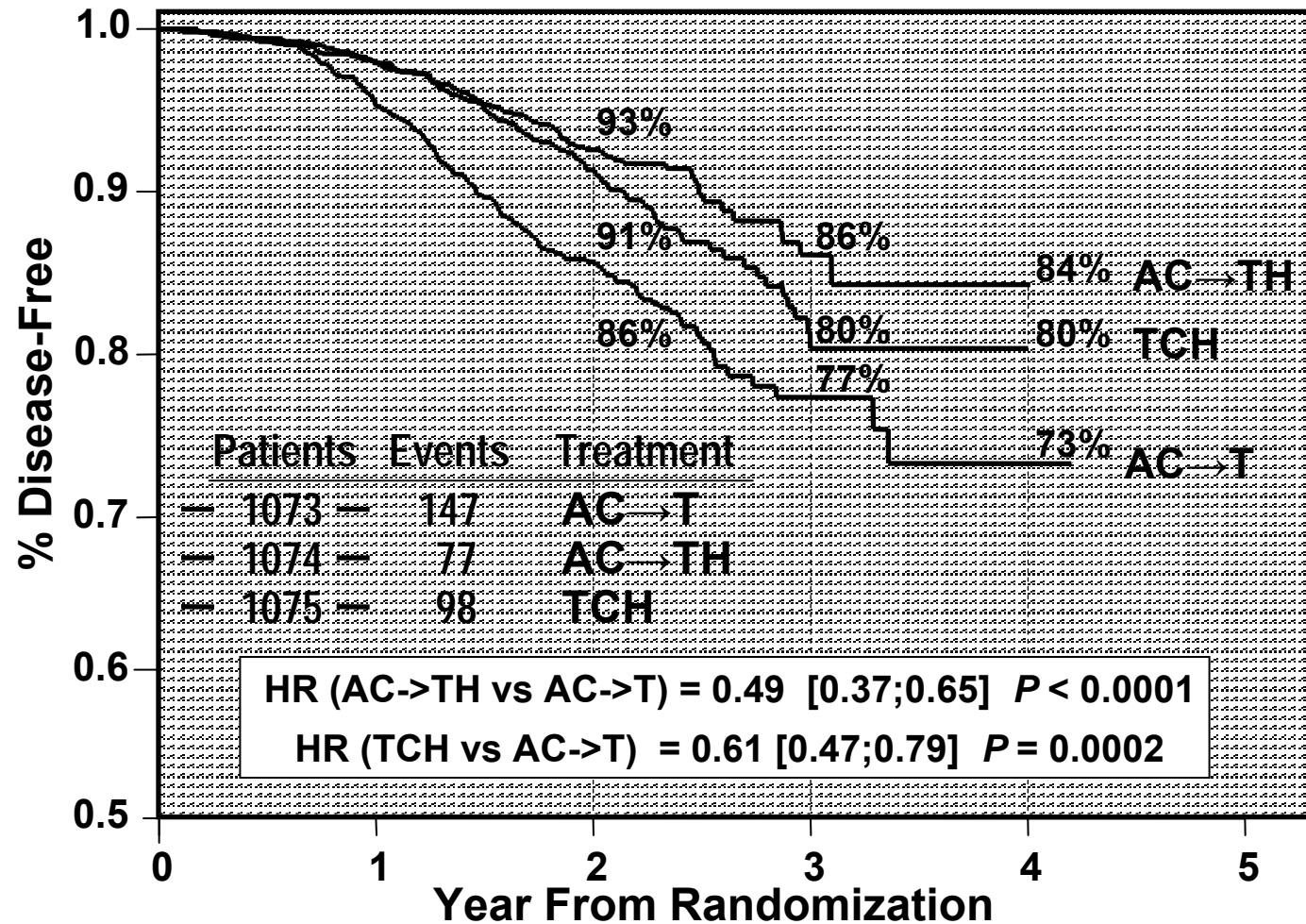
# BCIRG 006: SABCS 2005

## Update



# BCIRG 006

## Disease-Free Survival



# Clinically significant cardiac events as per independent review panel

	AC-T n=1,050	AC-TH n=1,068	TCH n=1,056
Patients	<b>10</b>	<b>25</b>	<b>14</b>
% (95% C.I.)	0.95% (0.46% - 1.74%)	2.34% (1.52% - 3.44%)	1.33% (0.73% - 2.21%)

$P = 0.016$        $P = 0.11$   
 $P = 0.54$