

Case # 2: Exploring the Role of Non-Anthracycline Regimens in Early Breast Cancer

Angelo Di Leo, MD, PhD
“Sandro Pitigliani ” Medical Oncology Unit
Hospital of Prato
Istituto Toscano Tumori
Prato, Italy

This Clinical Case

Age = 68 years, medical history: myocardial infarction 2 years ago, hyperlipoproteinemia → on treatment

Disease relapse risk factors: pT 12 mm, N-, no vascular/lymphatic invasion

Endocrine-sensitivity: modest

(ER 20%, PgR 15%, HER2+, G3)

Chemo-sensitivity: high

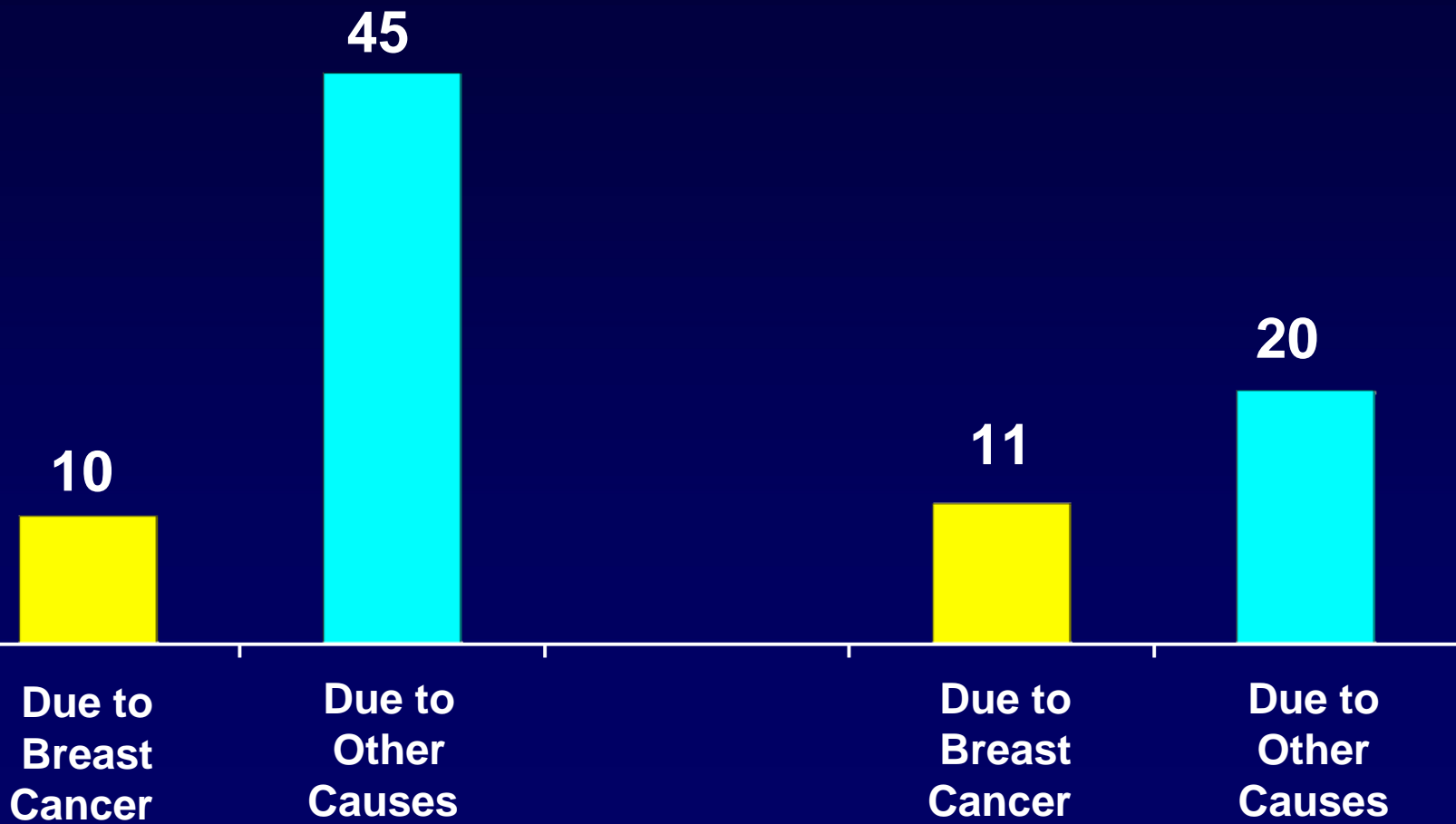


Risk of Death in Absence of Systemic Therapy by Adjuvant Online!

Major Health Problems

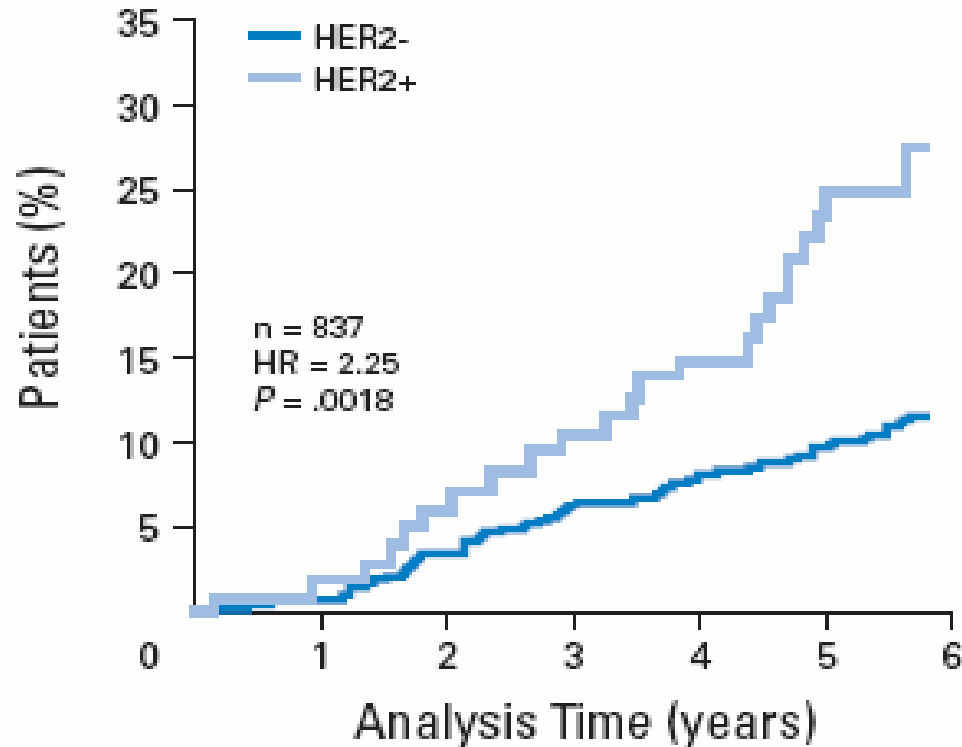
Average by Age Health Status

% Risk of Death at 10 Years

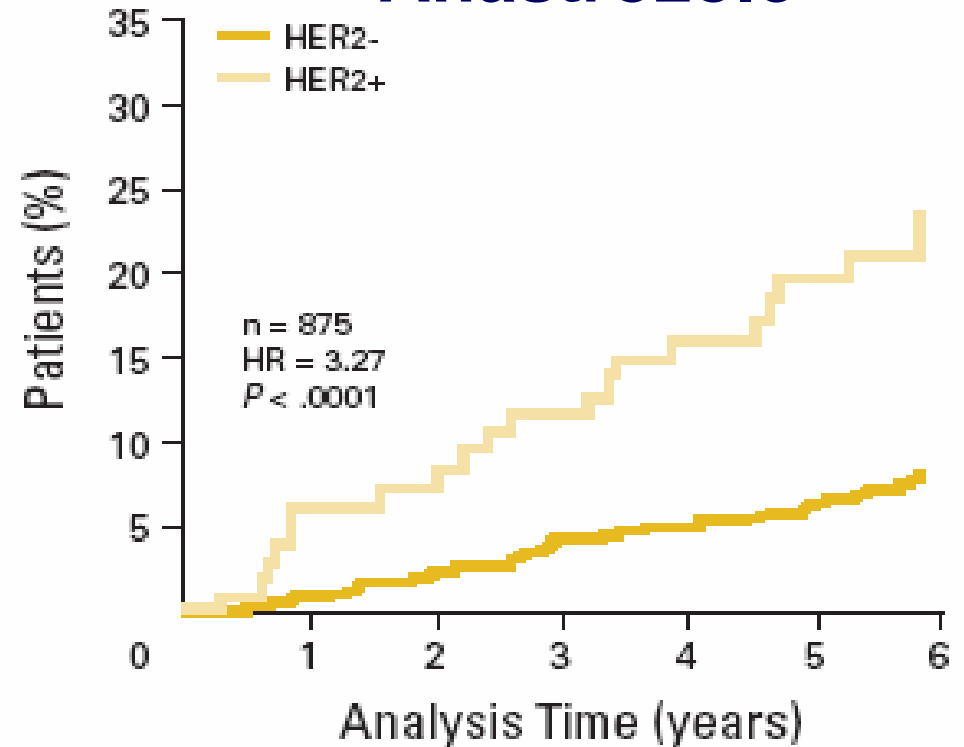


Hormonotherapy Alone Is Not an Appropriate Treatment in HER2-Positive Patients¹

Tamoxifen

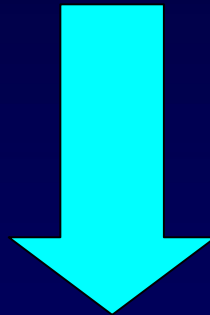


Anastrozole



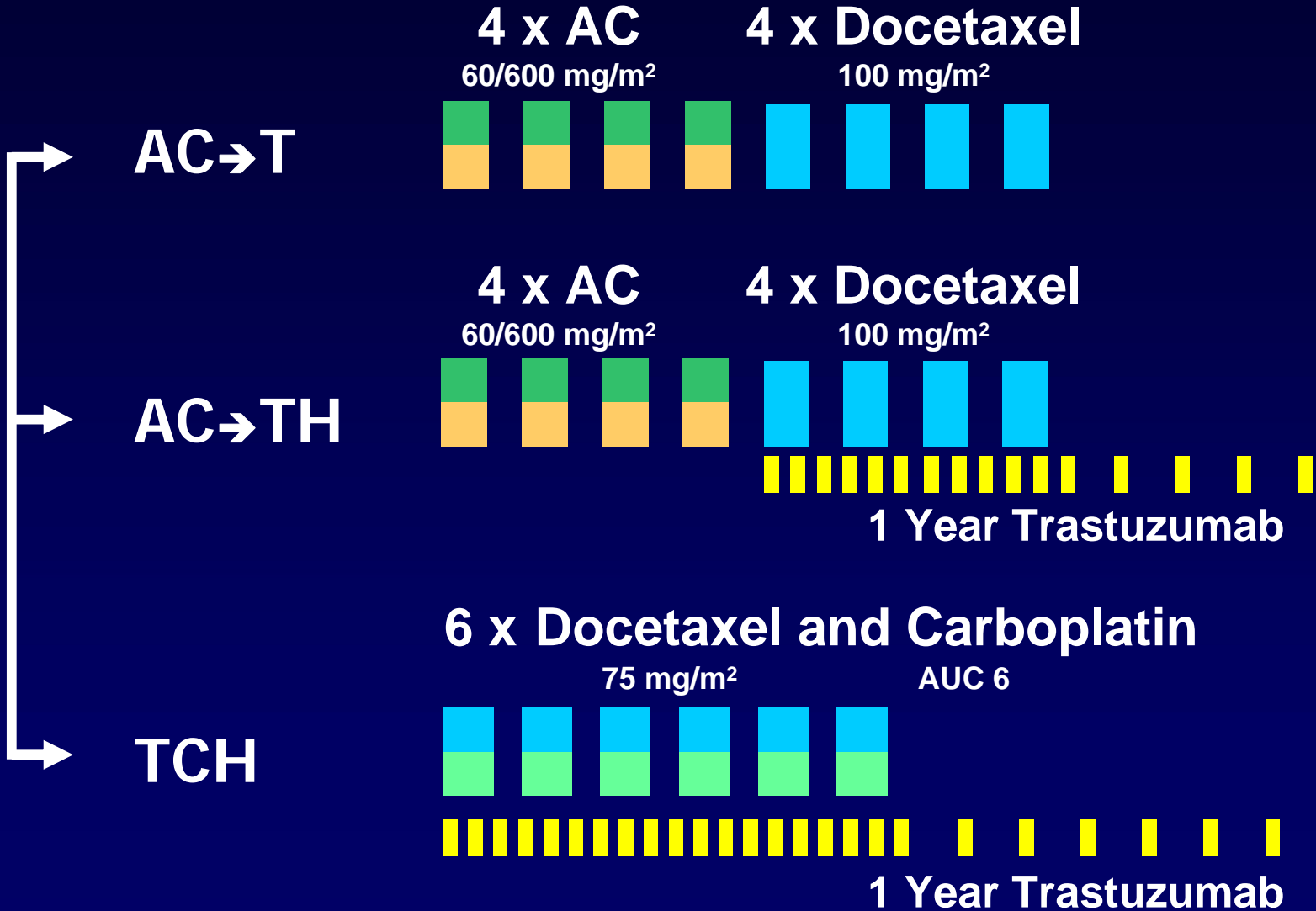
Similar results reported also in the context of the BIG 1-98 trial²

Medical history: myocardial infarction 2 years ago treated with percutaneous coronary angioplasty; hyperlipoproteinemia. Medications: ACE inhibitor, beta blockers, statin, aspirin



This is a patient in which the use of anthracyclines is associated with a substantial risk of cardiac toxicity

Use of Trastuzumab-Based Regimens Without Anthracyclines: the BCIRG 006 Trial



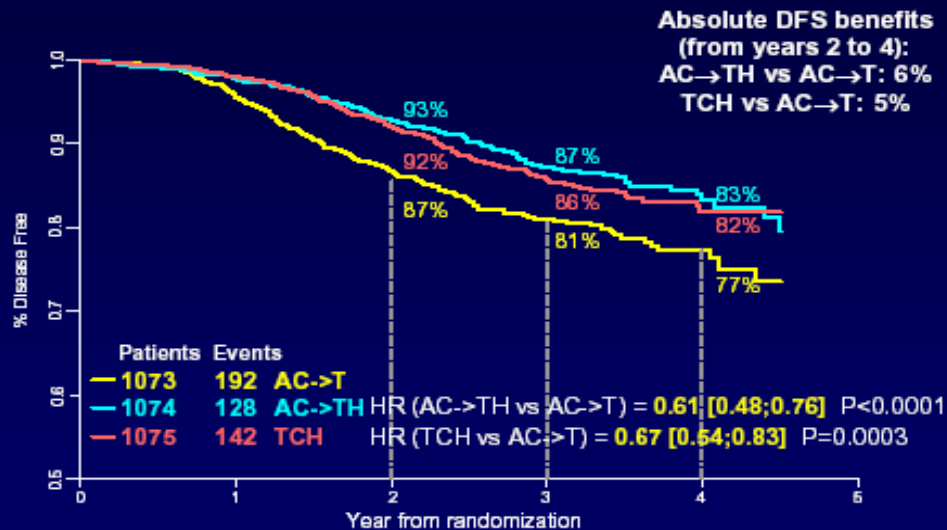
Cardiac Entry Criteria and Left Ventricular Ejection Fraction (LVEF) Monitoring

- **Baseline LVEF of $\geq 50\%$**
- **LVEF assessment by ECHO or MUGA at 3, 6, 9, and 18 months up to 36 months**

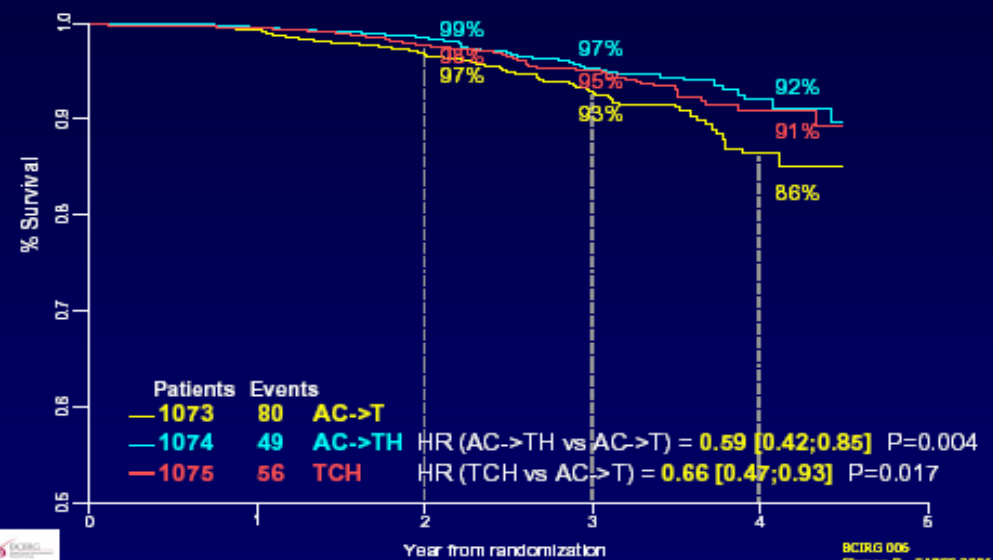
Efficacy Data

Disease-Free Survival

Overall Survival



BCIRG 006
Slamon D., SABCS 2006



BCIRG 006
Slamon D., SABCS 2006

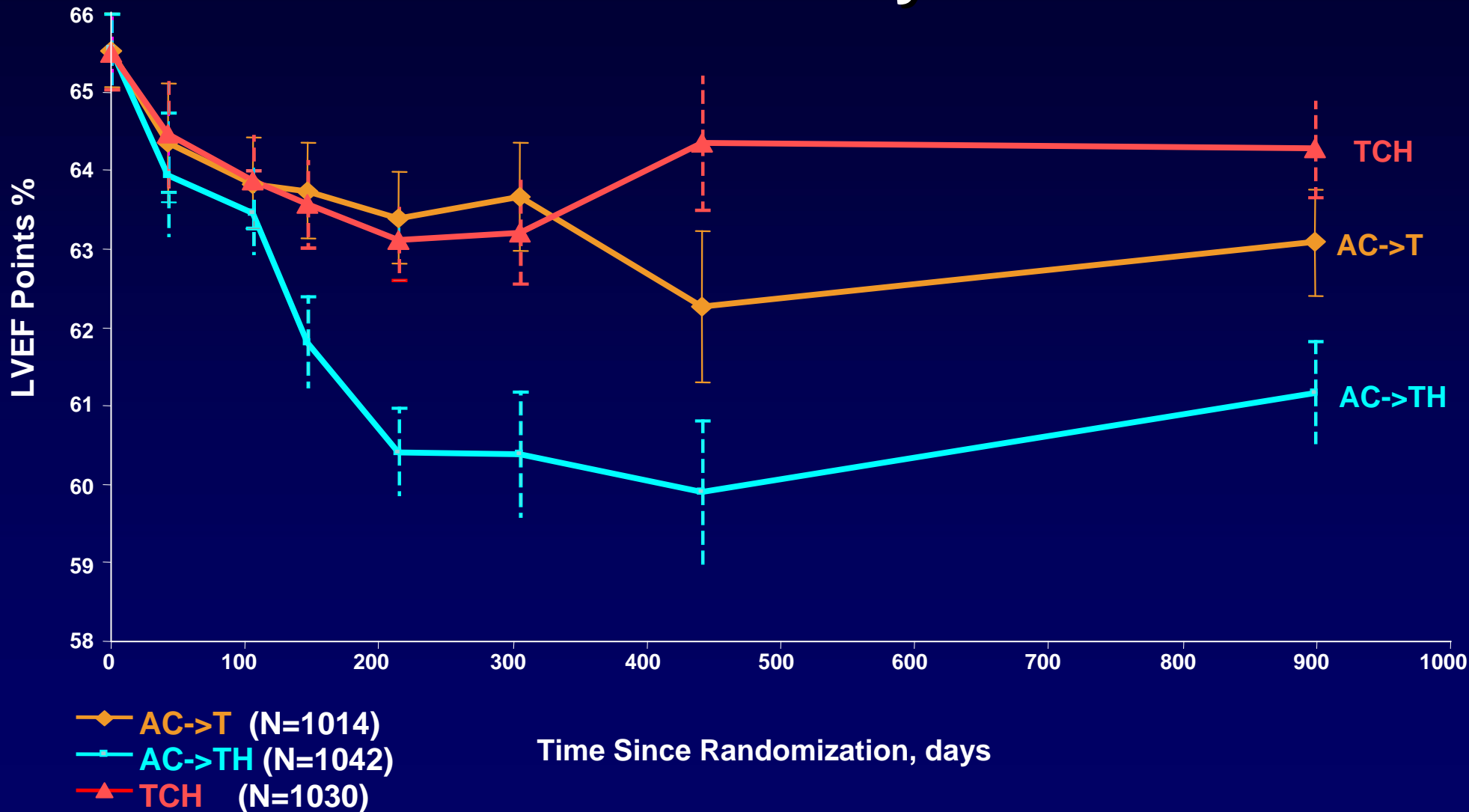
Median follow-up 36 months

BCIRG 006 Cardiac Safety Data 36-Months Median Follow-Up

Events	AC-T n = 1050	AC-TH n = 1068	TCH n = 1056
Cardiac-related death	0	0	0
Cardiac left ventricular function (CHF) grade 3/4	4	20	4
Absolute difference between non-H and H arms		1.5%	0
Absolute difference between non-H and H arms at 23 months		1.31%	0.18%

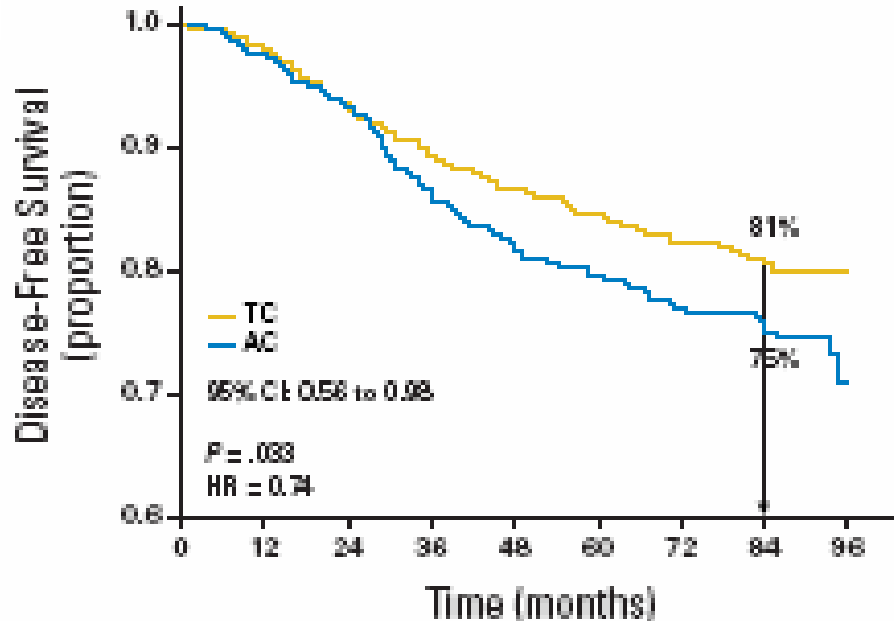
Mean LVEF—All Observations

2nd Interim Analysis

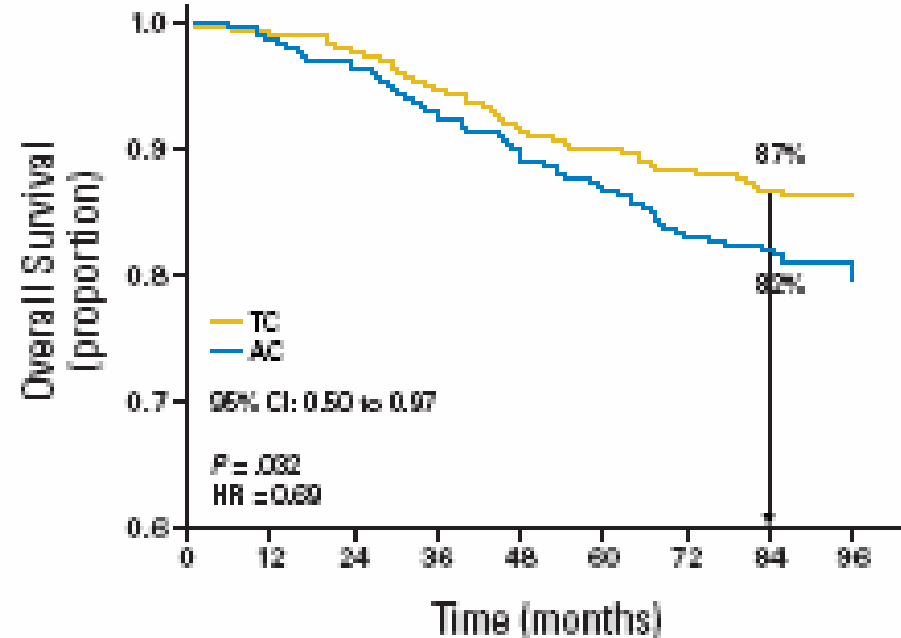


Alternative Choices to TCH

7-yr results of the TC (Docetaxel-Cyclophosphamide) vs AC (Doxorubicin-Cyclophosphamide)



No. at risk	0	12	24	36	48	60	72	84	96
TC	506	481	442	410	378	349	320	195	
AC	510	483	449	405	372	343	303	184	



No. at risk	0	12	24	36	48	60	72	84	96
TC	506	487	461	434	398	371	344	207	
AC	510	488	464	438	407	375	327	210	

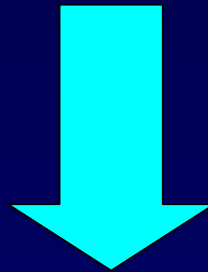
In Summary

- **Substantial risk of death unrelated to breast cancer**
- **Endocrine therapy alone appears to be inadequate**
- **Anthracyclines are not recommended**
- **TCH or TC → trastuzumab are adequate choices. Hormonotherapy sequentially after chemotherapy (aromatase inhibitor)**
- **Caution during trastuzumab treatment (cardiac monitoring)**
- **TC → hormonotherapy might also be considered an appropriate choice**

Just to Complicate the Situation . . .

Same patient but . . .

- No cardiac history
- N+ disease



Then, I would recommend a sequential anthracycline → taxane treatment. Trastuzumab to be started concomitantly with taxanes.