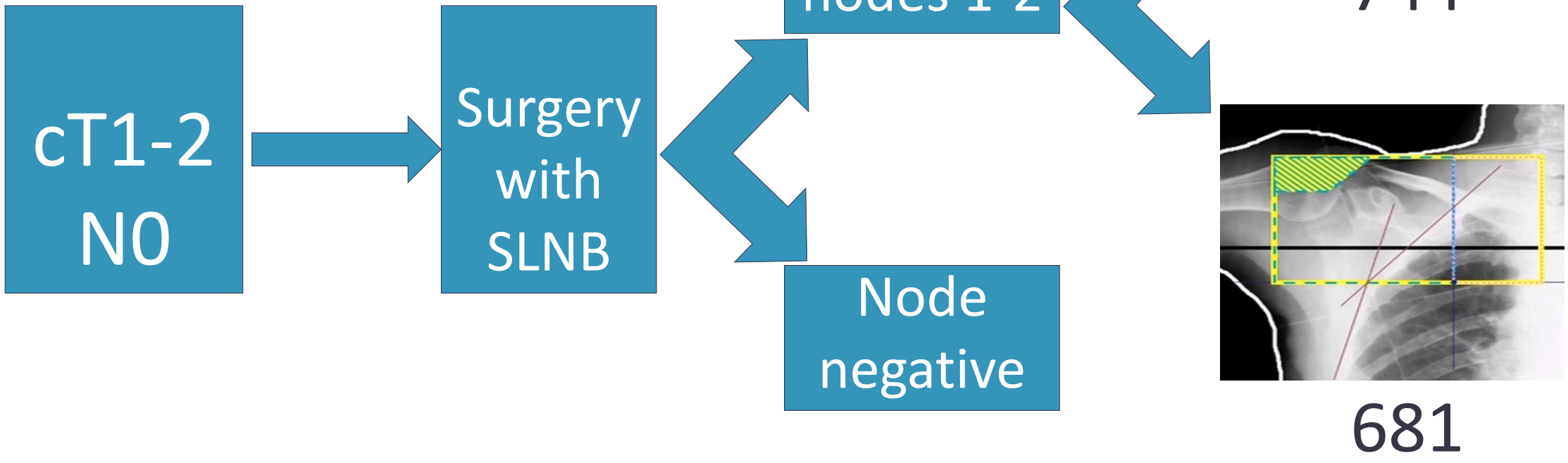
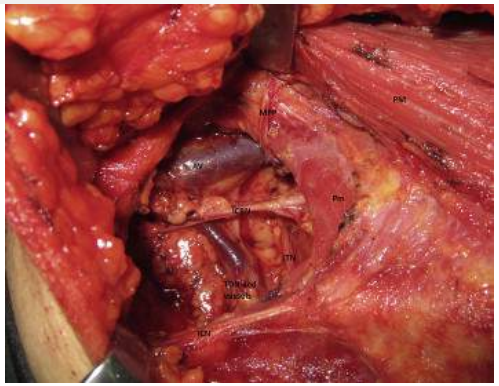
Alexander Bessonov, MD, PhD

What is new in San Antonio Breast Cancer Symposium®: 2018 SABCS®

AMAROS 10-year results.

- Trial design





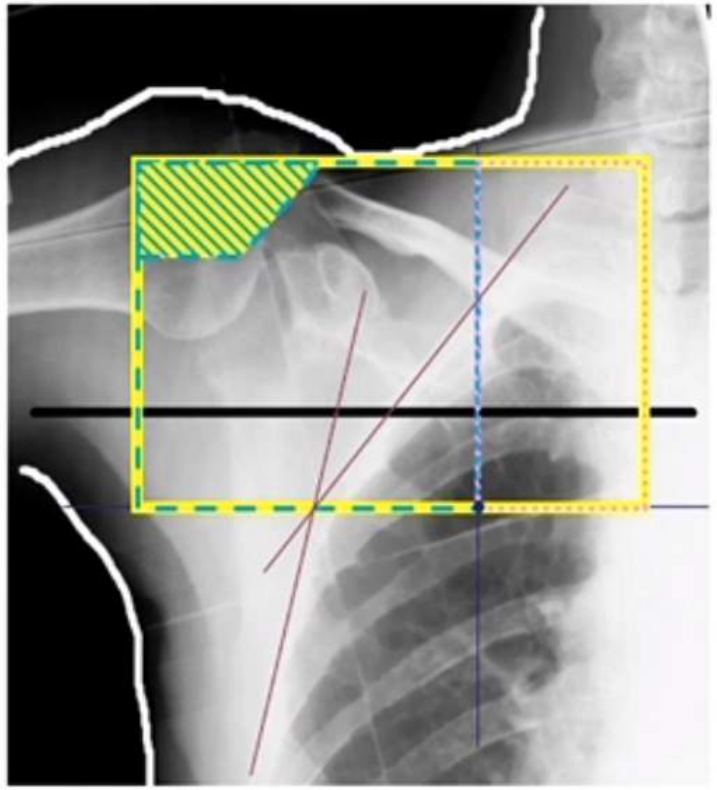
744

681

Adjuvant therapy by choice

Ax radiotherapy

- **Timing:**
  Start < 12 weeks after SNB
- **Extent:**
  level I + II + III + medial SC
- **Dose & schedule:**
  25 x 2 Gy or equivalent
- **Quality control:**
  dummy run



Hurkmans et al, Radiother Oncol 2003

Baseline clinical characteristics.

	ALND (744 pts)	AxRT (681 pts)
Median age (Q1-Q3)	56 (48 - 64)	55 (48 - 63)
Menopausal stage		
pre-menopausal	38.1 %	42.5 %
post-menopausal	57.7 %	54.5 %
Median tumor size (Q1-Q3)	17 mm (13 - 22)	18 mm (13 - 23)
Grade		
1	24.1 %	22.6 %
2	47.8 %	45.7 %
3	25.8 %	29.4 %
Pre-operative ultrasound axilla	59.2 %	61.5 %

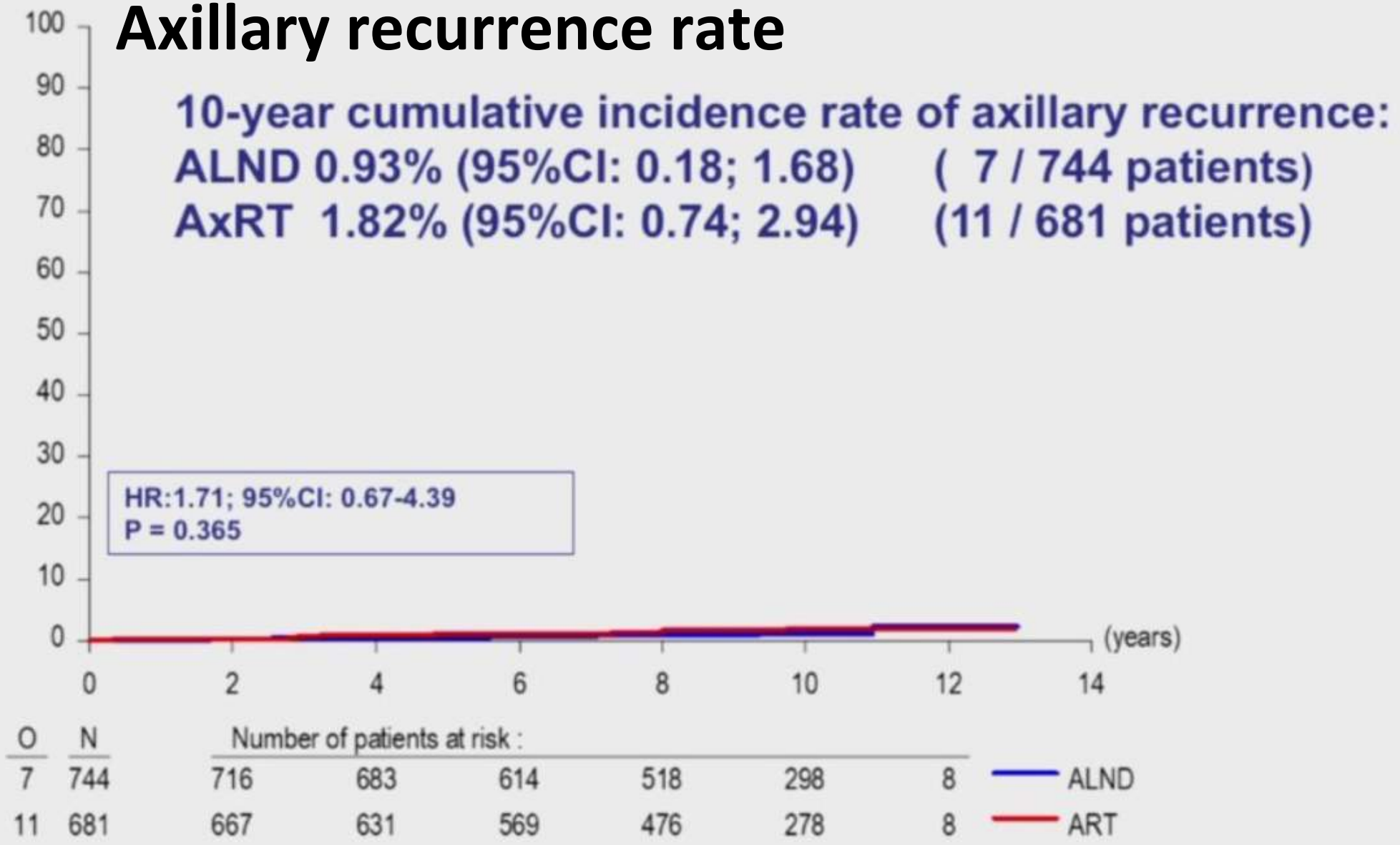
Donker M, Van Tienhoven G, E Straver M, et al. Lancet Oncol 2014; 15 (12):1303-1310

Traetment characteristics.

	ALND (744 pts)	AxRT (681 pts)
Breast surgery		
BCS	81.9 %	81.8 %
Mastectomy	17.1 %	17.8 %
Systemic treatment		
chemotherapy	60.9 %	61.3 %
hormonal therapy	78.6 %	77.1 %
immunotherapy	6.0 %	6.4 %
no systemic treatment	9.0 %	9.4 %
RT breast/chest wall	84.9 %	87.8 %

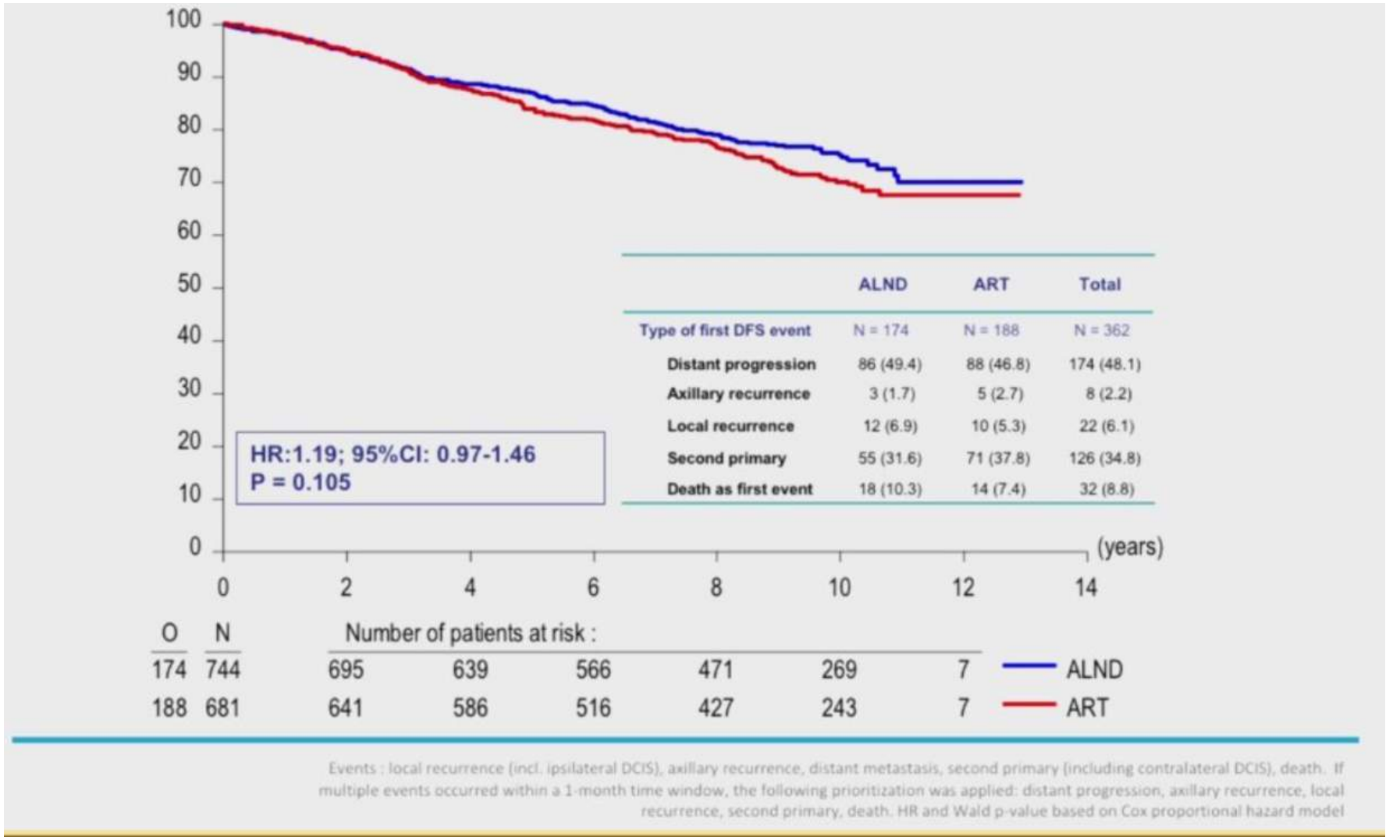
Donker M, Van Tienhoven G, E Straver M, et al. Lancet Oncol 2014; 15 (12):1303-1310

Axillary recurrence rate

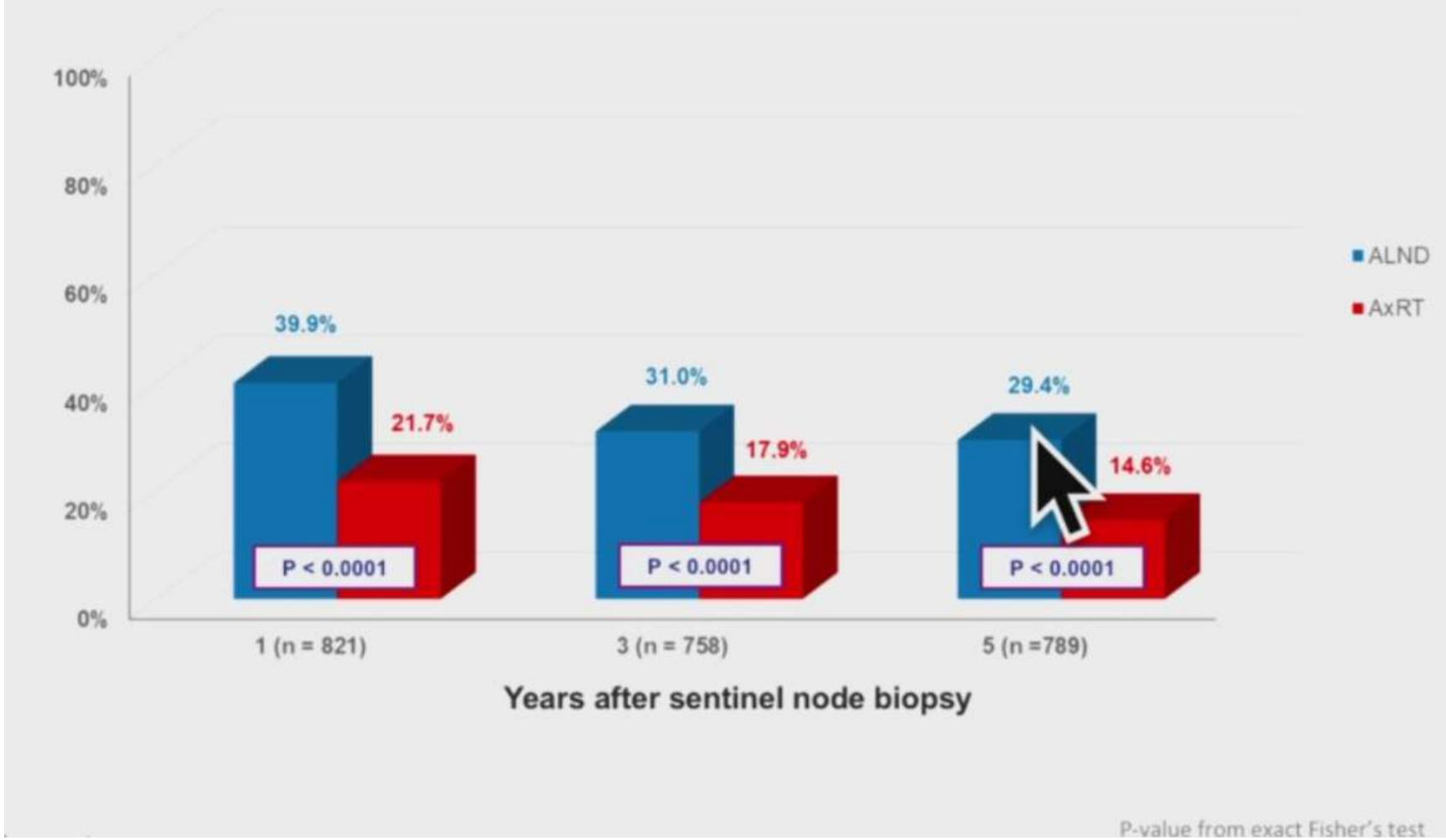


Cumulative incidence analysis considers death as a competing risks. HR and Wald p-value based on Fine & Gray model

Disease-free survival



Lymphedema: clinical observation/treatment



AMAROS long-term outcome: Conclusions

- Cummulative risks of axillary recurrence are low in both study arms and the difference is not statistically signifficant (p=0.365)
- Omitting axillary lymph node dissection is safe in patients with 1-2 positive sentinel nodes. Radiotherapy is a valid alternative
- Arm morbidity is signifficantly less in the RT arm.

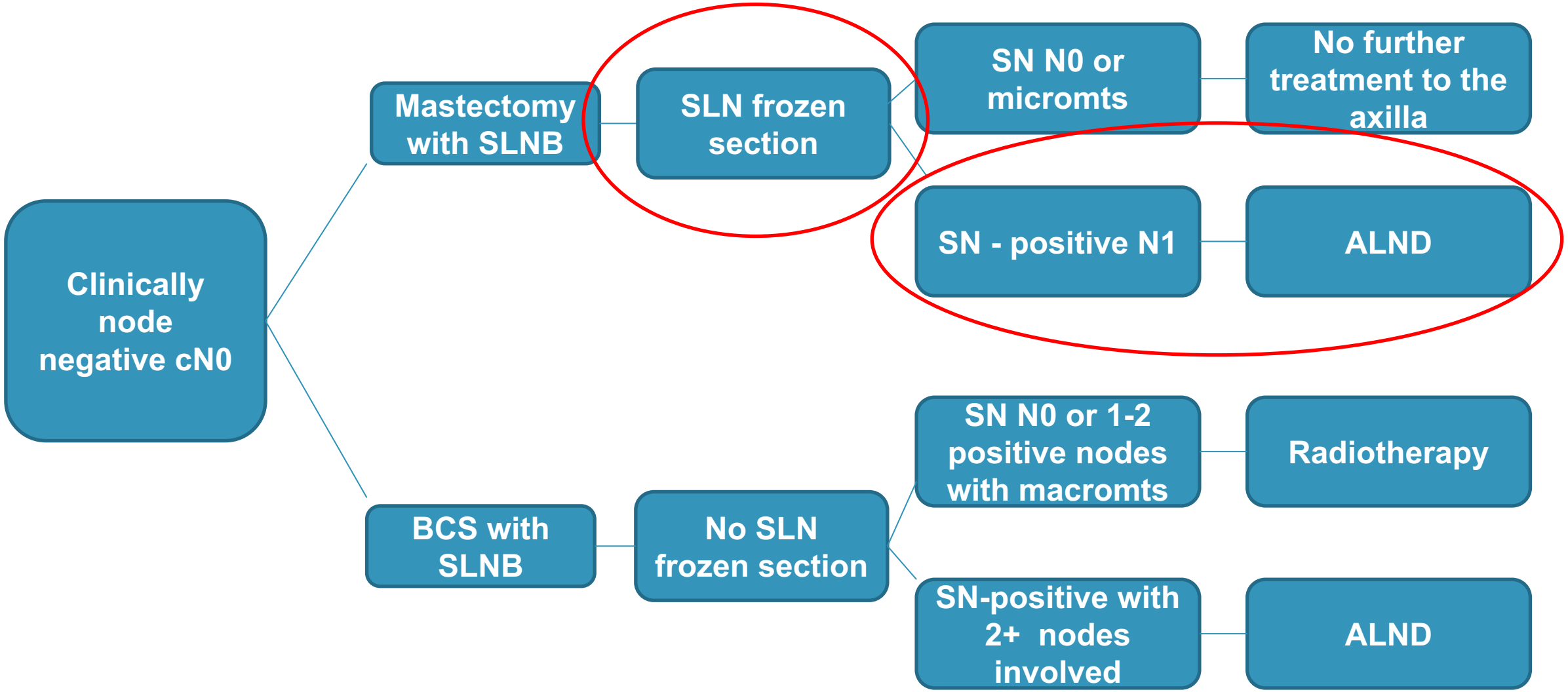
Clinical trials cT1-2N0 with 1-2 positive nodes (macro mts) after mastectomy with SLNB

	Trials with 1-2 positive nodes, mastectomy subpopulation	
	AMAROS	OTOASAR
# of patients	121 (17.8%)	30 (16%)
Axillary recurrence in the radiotherapy arm	2.7%	1.7%
Observation period	10 years	8 years

- **NCDB (1998-2005): 3747 SLNB only cases with 1-2 positive nodes, refuse of further treatment, axillary recurrence 1.2 % in 5 years.**
- **MSKCC: 210 of SLNB only cases – 1.2% recurrence in 4 years.**
- **MDACC: 96 of SLNB only cases – 3.8% recurrence in 10 years.**

Bilimoria K, J Clin Oncol 2009; Donker M. Lancet Oncol 2014; Galimberti V. Lancet Oncol 2013;
Savolt A. EJSO 2017, Fitzsullivan Ann Surg Oncol 2017; Milgrom S. Ann Surg Oncol 2012

ACOSOG suggested algorithm, 2015



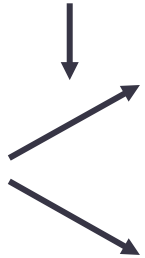
Melissa L. Pilewskie, MD
Monica Morrow, MD

KATHERINE: Trastuzumab Emtansine vs Trastuzumab as Adjuvant Therapy for HER2+ EBC

- International, randomized, open-label phase III study

Stratified by clinical stage, HR status, single vs dual neoadjuvant HER2-targeted therapy, pathological nodal status after neoadjuvant therapy

Patients with HER2+ BC (cT1-4/N0-3/M0) who had residual invasive disease in breast or axillary nodes after neoadjuvant chemotherapy plus HER2-targeted therapy* at surgery
(N = 1486)



T-DM1† 3.6 mg/kg IV Q3W x 14 cycles
(n = 743)

Trastuzumab 6 mg/kg IV Q3W x 14 cycles
(n = 743)

Randomization occurred within 12 wks of surgery; radiotherapy and/or endocrine therapy given per local standards. *Minimum of 9 wks taxane and trastuzumab. †Patients who d/c T-DM1 for toxicity allowed switch to trastuzumab to complete 14 cycles.

- Primary endpoint: IDFS
- Secondary endpoints including: distant recurrence-free survival, OS, safety

Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

KATHERINE: Baseline Characteristics

Characteristic	T-DM1 (n = 743)	Trastuzumab (n = 743)
Median age, yrs (range)	49 (24-79)	49 (23-80)
▪ < 40 yrs, n (%)	143 (19.2)	153 (20.6)
▪ 40-64 yrs, n (%)	542 (72.9)	522 (70.3)
▪ ≥ 65 yrs, n (%)	58 (7.8)	68 (9.2)
Race, n (%)		
▪ White	551 (74.2)	531 (71.5)
▪ Asian	65 (8.7)	64 (8.6)
▪ American Indian*/Alaska native	36 (4.8)	50 (6.7)
▪ Black	21 (2.8)	19 (2.6)
▪ Other	70 (9.4)	79 (10.6)
Region, n (%)		
▪ North America	170 (22.9)	164 (22.1)
▪ Western Europe	403 (54.2)	403 (54.2)
▪ Rest of world	170 (22.9)	176 (23.7)
Prior anthracycline, n (%)	579 (77.9)	564 (75.9)

*Includes North, Central, and South American Indians.

Characteristic, n (%)	T-DM1 (n = 743)	Trastuzumab (n = 743)
Primary tumor stage†‡		
▪ ypT0, ypT1a, ypT1b, ypT1mic, ypTis	331 (44.5)	306 (41.2)
▪ ypT1/ypT1c	175 (23.6)	184 (24.8)
▪ ypT2	174 (23.4)	185 (24.9)
▪ ypT3, ypT4	63 (8.5)	67 (9.0)
Regional lymph node stage†		
▪ ypN0	344 (46.3)	335 (45.1)
▪ ypN1	220 (29.6)	213 (28.7)
▪ ypN2, ypN3	123 (16.6)	133 (17.9)
▪ ypNX	56 (7.5)	62 (8.3)
Residual invasive disease ≤ 1 cm AND negative axillary nodes (ypT1a, ypT1b, or ypT1mic and ypN0)	170 (22.9)	161 (21.7)

†At definitive surgery.
‡ypTX, n = 1 in trastuzumab arm; ypT1 without further subspecification, n = 5.

Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

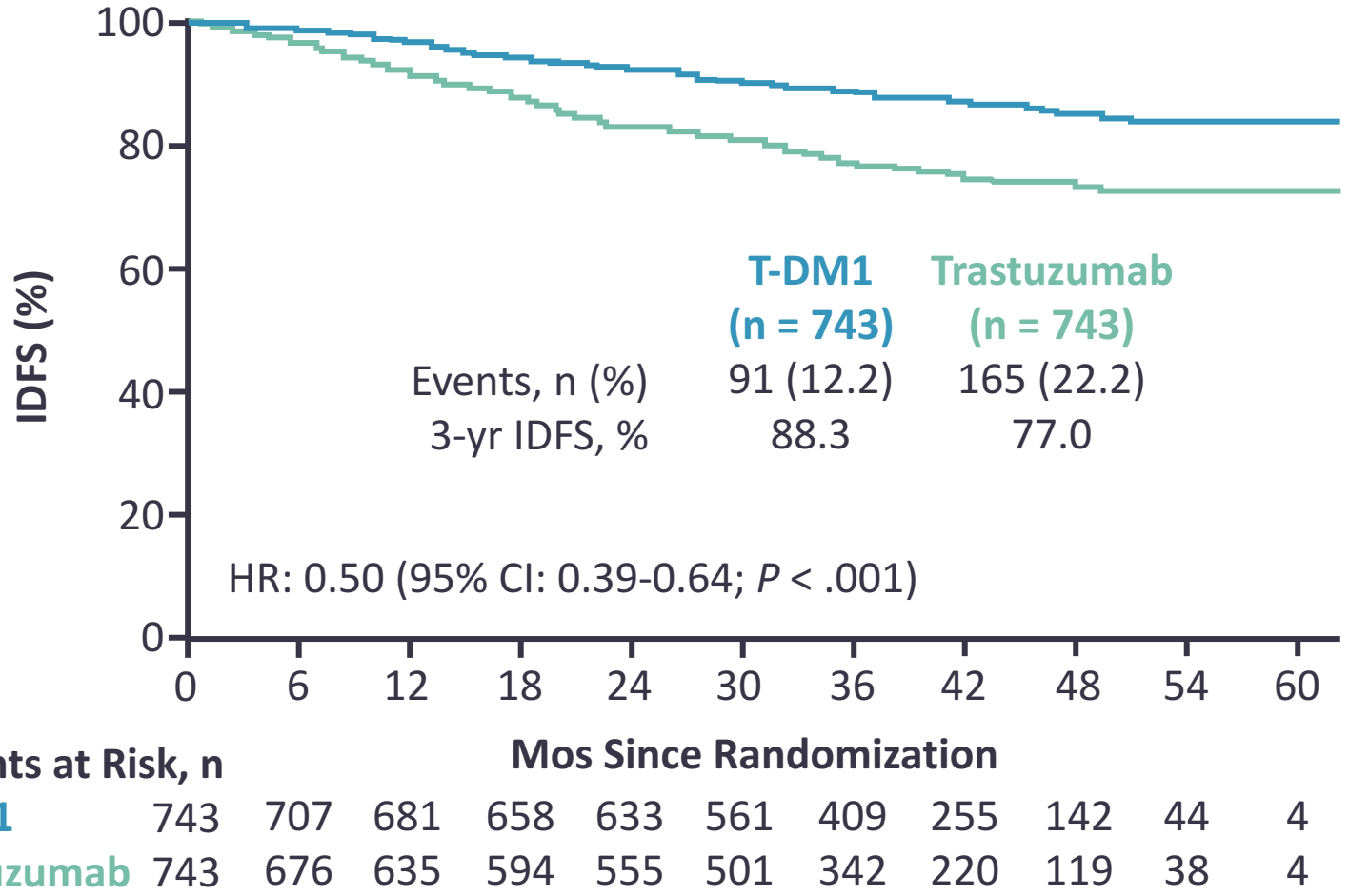
KATHERINE: Stratification Factors

Stratification Factor, n (%)	T-DM1 (n = 743)	Trastuzumab (n = 743)
Clinical stage at presentation		
▪ Operable (cT1-3N0–1M0)	558 (75.1)	553 (74.4)
▪ Inoperable (cT4NxM0 or cTxN2–3M0)	185 (24.9)	190 (25.6)
Hormone receptor status		
▪ ER and/or PgR positive	534 (71.9)	540 (72.7)
▪ ER negative and PgR negative/unknown	209 (28.1)	203 (27.3)
Preoperative HER2-targeted therapy		
▪ Trastuzumab alone	600 (80.8)	596 (80.2)
▪ Trastuzumab + other HER2-targeted agents*	143 (19.2)	147 (19.8)
• Trastuzumab + pertuzumab†	133 (17.9)	139 (18.7)
Pathologic nodal status after preoperative therapy		
▪ Node positive	343 (46.2)	346 (46.6)
▪ Node negative/not done	400 (53.8)	397 (53.4)

*Includes afatinib, dacomitinib, lapatinib, neratinib, pertuzumab. †Not a stratification factor; for informational purposes only.

Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

KATHERINE: IDFS



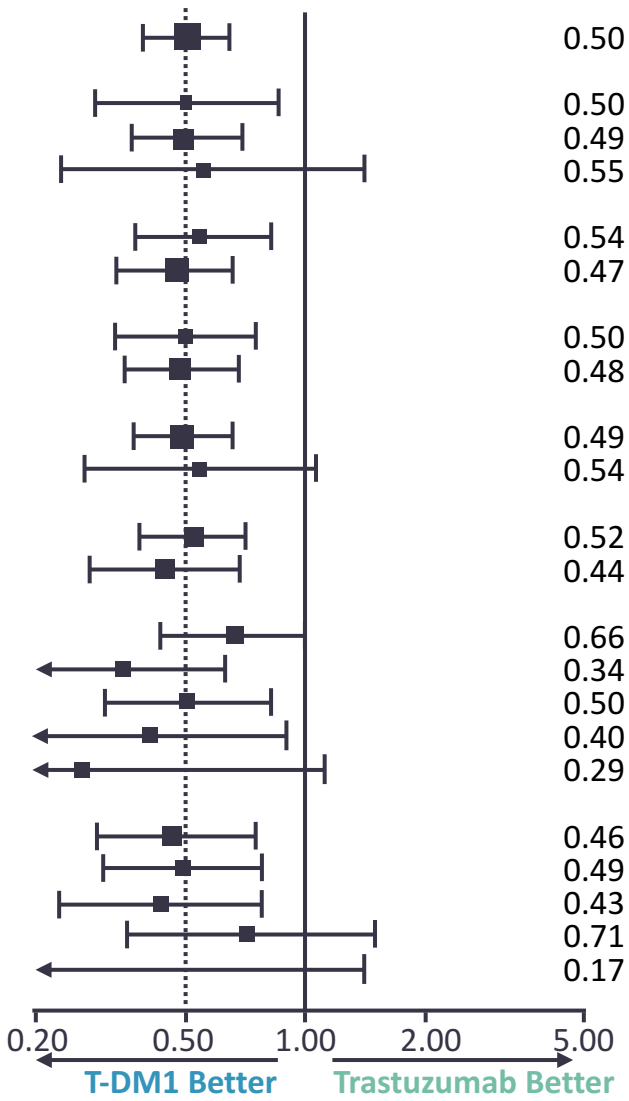
First IDFS Event, %	T-DM1	T
Any	12.2	22.2
Distant recurrence	10.5*	15.9†
Locoregional recurrence	1.1	4.6
Contralateral breast cancer	0.4	1.3
Death without prior event	0.3	0.4

CNS events: *5.9% vs †4.3%.

Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

KATHERINE: IDFS by Subgroup

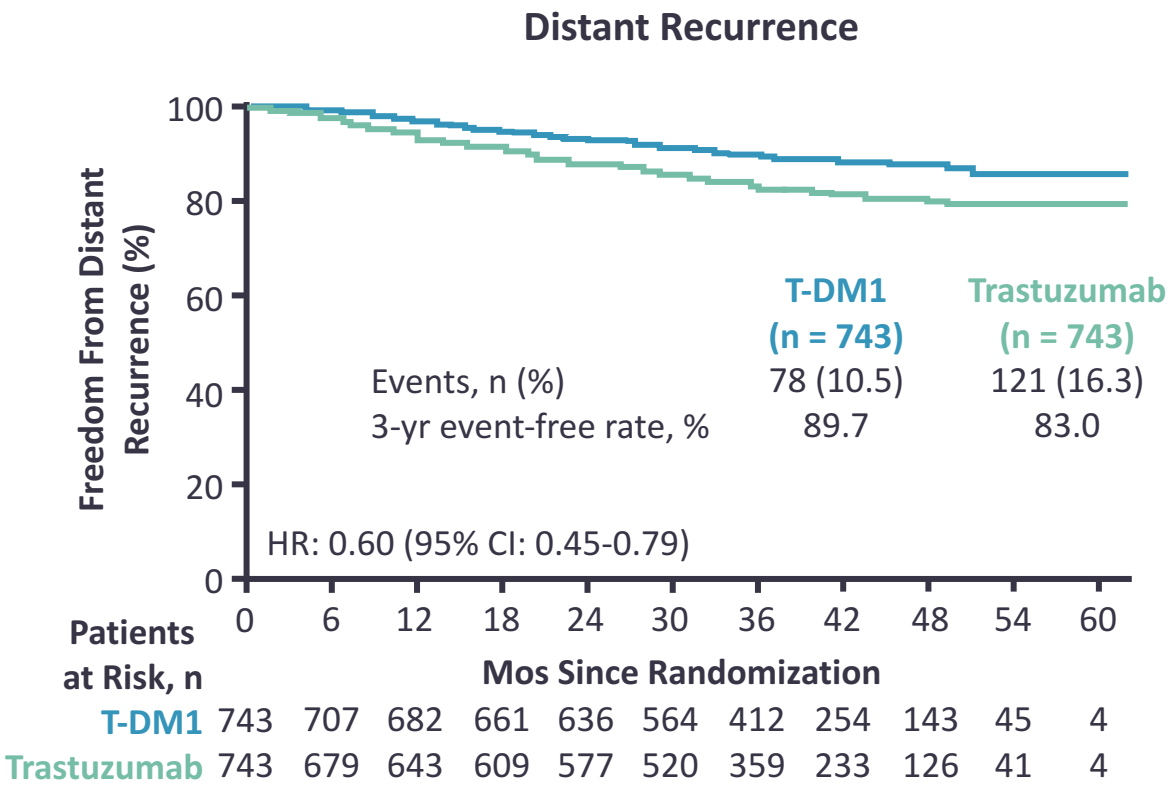
Subgroup	Events/Patients, n/N		HR (95% CI)	3-Yr IDFS Rate, %	
	T-DM1	Trastuzumab		T-DM1	Trastuzumab
All patients	91/743	165/743	0.50 (0.39-0.64)	88.3	77.0
Age					
< 40 yrs	20/143	37/153	0.50 (0.29-0.86)	86.5	74.9
40-64 yrs	64/542	113/522	0.49 (0.36-0.67)	88.8	77.1
≥ 65 yrs	7/58	15/68	0.55 (0.22-1.34)	87.4	81.1
Clinical stage at presentation					
Inoperable breast cancer	42/185	70/190	0.54 (0.37-0.80)	76.0	60.2
Operable breast cancer	49/558	95/553	0.47 (0.33-0.66)	92.3	82.8
Hormone receptor status					
ER neg and PgR negative or unknown	38/209	61/203	0.50 (0.33-0.74)	82.1	66.6
ER and/or PgR positive	53/534	104/540	0.48 (0.35-0.67)	90.7	80.7
Preoperative HER2-directed therapy					
Trastuzumab alone	78/600	141/596	0.49 (0.37-0.65)	87.7	75.9
Trastuzumab + other HER2-directed agents	13/143	24/147	0.54 (0.27-1.06)	90.9	81.8
Pathologic nodal status after preoperative therapy					
Node positive	62/343	103/346	0.52 (0.38-0.71)	83.0	67.7
Node negative/not done	29/400	62/397	0.44 (0.28-0.68)	92.8	84.6
Primary tumor stage at definitive surgery					
ypT0, ypT1a, ypT1b, ypT1mic, ypTis	40/331	52/306	0.66 (0.44-1.00)	88.3	83.6
ypT1, ypT1c	14/175	42/184	0.34 (0.19-0.62)	91.9	75.9
ypT2	25/174	44/185	0.50 (0.31-0.82)	88.3	74.3
ypT3	9/51	21/57	0.40 (0.18-0.88)	79.8	61.1
ypT4, ypTX	3/12	6/11	0.29 (0.07-1.17)	70.0	30.0
Regional lymph node stage at definitive surgery					
ypN0	28/344	56/335	0.46 (0.30-0.73)	91.9	83.9
ypN1	29/220	50/213	0.49 (0.31-0.78)	88.9	75.8
ypN2	16/86	38/103	0.43 (0.24-0.77)	81.1	58.2
ypN3	17/37	15/30	0.71 (0.35-1.42)	52.0	40.6
ypNX	1/56	6/62	0.17 (0.02-1.38)	98.1	88.7

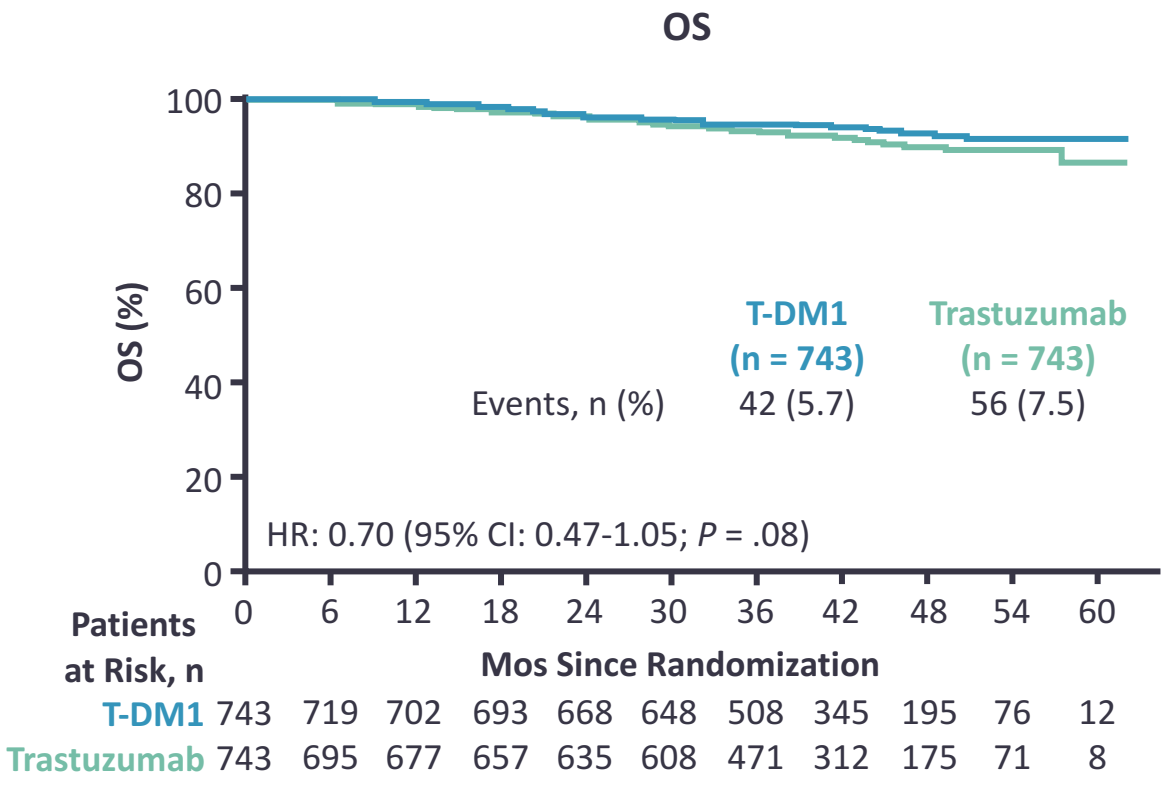


Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

Slide credit: clinicaloptions.com

KATHERINE: Secondary Endpoints





Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

KATHERINE: Conclusions

- In patients with HER2+ EBC who had residual invasive disease after neoadjuvant chemotherapy plus HER2-targeted therapy at surgery, T-DM1 significantly prolonged IDFS compared with trastuzumab
  - HR: 0.50 (95% CI: 0.39-0.64; $P < .001$)
  - Benefit with T-DM1 consistent across examined subgroups
- No unexpected safety signals
- Longer follow-up needed for OS
- Study investigators conclude that T-DM1 will likely represent a new standard of care in this population

Geyer. SABCS 2018. Abstr GS1-10. von Minckwitz. NEJM. 2018;[Epub].

POTENTIALLY OPERABLE DISEASE: ADJUVANT THERAPY AFTER PREOPERATIVE SYSTEMIC THERAPY

- Complete planned chemotherapy regimen course if not completed preoperatively.
- Consider adjuvant capecitabine in patients with triple-negative breast cancer and residual invasive cancer following standard neoadjuvant treatment with taxane-, alkylator-, and anthracycline-based chemotherapy.

and

- Adjuvant radiation therapy[s] is based on maximal disease stage from prechemotherapy tumor characteristics at diagnosis and post-chemotherapy pathology results.
  - Post mastectomy:[s]
    - ◊ Strongly consider radiation to the chest wall + infraclavicular region, supraclavicular area, internal mammary nodes, and any part of the axillary bed at risk for clinical N1, ypN0.
    - ◊ For ANY positive axillary nodes after chemotherapy, radiation therapy as indicated to the chest wall + infraclavicular region, supraclavicular area, internal mammary nodes, and any part of the axillary bed at risk.
  - Post lumpectomy:[s]
    - ◊ Adjuvant radiation post-lumpectomy is indicated to the whole breast with or without boost to the tumor bed.
    - ◊ Strongly consider radiation to the whole breast + infraclavicular region, supraclavicular area, internal mammary nodes, and any part of the axillary bed at risk for clinical N1, ypN0.
    - ◊ For ANY positive axillary nodes after chemotherapy, radiation therapy as indicated to the whole breast + infraclavicular region, supraclavicular area, internal mammary nodes, and any part of the axillary bed at risk.

and

- Adjuvant endocrine therapy,[cc] if ER-positive and/or PR-positive (category 1)

and

- If HER2-positive:
  - If no residual disease: Complete up to one year of HER2-targeted therapy with trastuzumab (category 1) ± pertuzumab. HER2-targeted therapy may be administered concurrently with radiation and with endocrine therapy if indicated.[tt]
  - If residual disease: Ado-trastuzumab emtansine (category 1) alone for 14 cycles. If ado-trastuzumab emtansine discontinued for toxicity, then trastuzumab (category 1) ± pertuzumab to complete one year of therapy. HER2-targeted therapy may be administered concurrently with radiation and with endocrine therapy if indicated.[uu]

→ See Surveillance/ Follow-up (BINV-17)

[s] See Principles of Radiation Therapy (BINV-I).

[cc] Chemotherapy and endocrine therapy used as adjuvant therapy should be given sequentially with endocrine therapy following chemotherapy. Available data suggest that sequential or concurrent endocrine therapy with radiation therapy is acceptable. See Adjuvant Endocrine Therapy (BINV-K) and Preoperative/ Adjuvant Therapy Regimens (BINV-L).

[uu] Consider extended adjuvant neratinib following adjuvant trastuzumab-containing therapy for patients with HR-positive, HER2-positive disease with a perceived high risk of recurrence. The benefit or toxicities associated with extended neratinib in patients who have received pertuzumab or ado-trastuzumab emtansine is unknown.

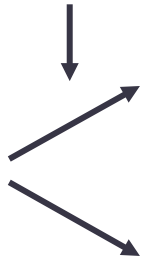
Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Create-X: Standard therapy+Capecitabine vs Standard therapy as Adjuvant Therapy for HER2-negative BC

- Randomized, open-label study

Stratified by clinical stage, HR status pathological nodal status after neoadjuvant therapy

Patients with HER2- BC ECOG 0-1 (cT1-4/N0-3/M0) who had residual invasive disease in breast or axillary nodes after neoadjuvant chemotherapy therapy with anthracyclines, taxanes or both at surgery
(N = 910)



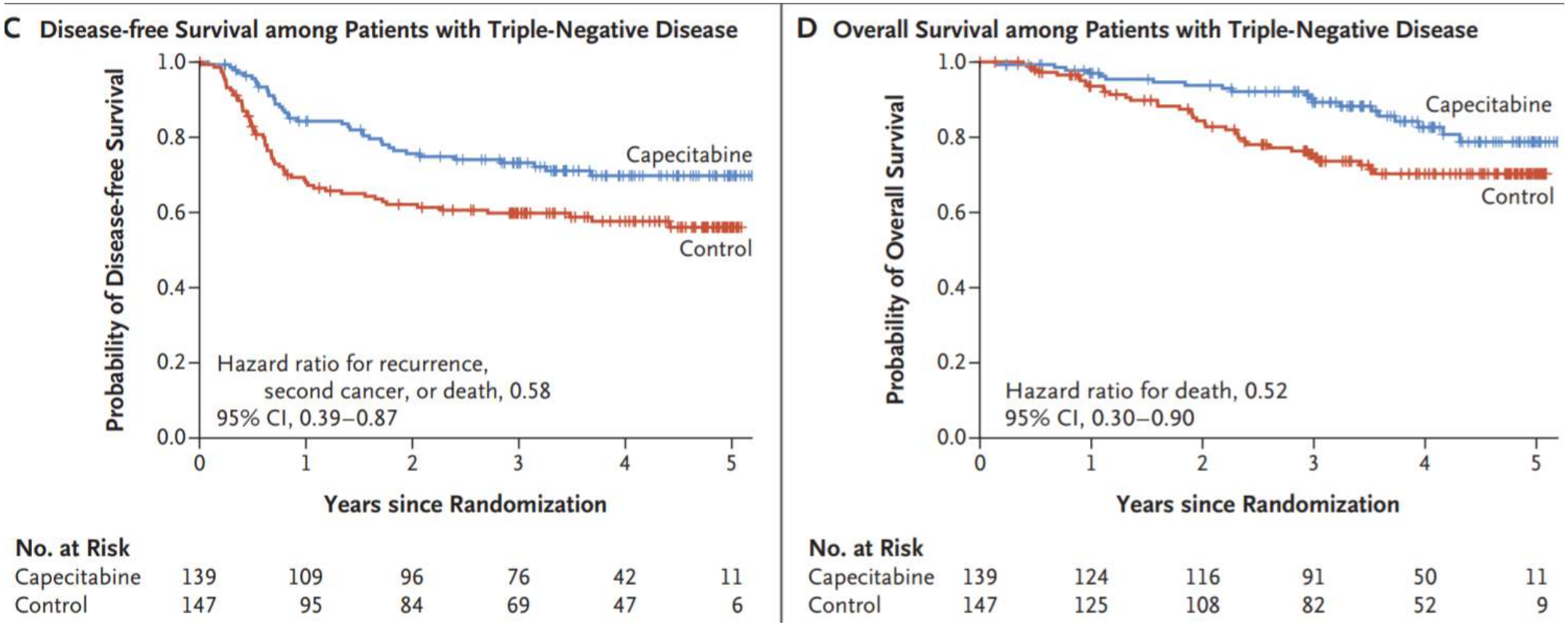
Capecitabine 1250 mg/m^2 twice a day, day 1-14
6 cycles
(n = 455)

Standard therapy (n = 455)

- Primary endpoint: DFS, OS

Masuda, N., Lee, S.-J., Ohtani, S., Im, Y.-H., Lee, E.-S., Yokota, I., … Toi, M. (2017). *Adjuvant Capecitabine for Breast Cancer after Preoperative Chemotherapy. New England Journal of Medicine, 376(22), 2147–2159.*

Create-X: Standard therapy+Capecitabine vs Standard therapyas Adjuvant Therapy for HER2-negative BC



Capecitabine + Trastuzumab vs Trastuzumab as Adjuvant Therapy for HER2+ EBC

- International, randomized, open-label phase III study

Stratified by clinical stage, HR status, single vs dual neoadjuvant HER2-targeted therapy, pathological nodal status after neoadjuvant therapy

Patients with HER2+ EBC (cT1-4/N0-3/M0) who had residual invasive disease in breast or axillary nodes after neoadjuvant chemotherapy plus HER2-targeted therapy* at surgery
(N = …..)

Capecitabine 1250 mg/m^2 twice a day, day 1-14 + Trastuzumab 6 mg/kg IV Q3W x 14 cycles
(n = ….)

Trastuzumab 6 mg/kg IV Q3W x 14 cycles
(n = ….)

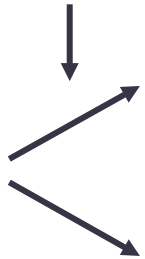
- Primary endpoint: OS, DFS

KATHERINE 2(???): Trastuzumab Emtansine 7 cycles vs Trastuzumab Emtansine 14 cycles as Adjuvant Therapy for HER2+ BC

- International, randomized, open-label phase III study

Stratified by clinical stage, HR status, single vs dual neoadjuvant HER2-targeted therapy, pathological nodal status after neoadjuvant therapy

Patients with HER2+ BC (cT1-4/N0-3/M0) who had residual invasive disease in breast or axillary nodes after neoadjuvant chemotherapy plus HER2-targeted therapy* at surgery
(N = …..)



T-DM1† 3.6 mg/kg IV Q3W x 14 cycles
(n = ….)

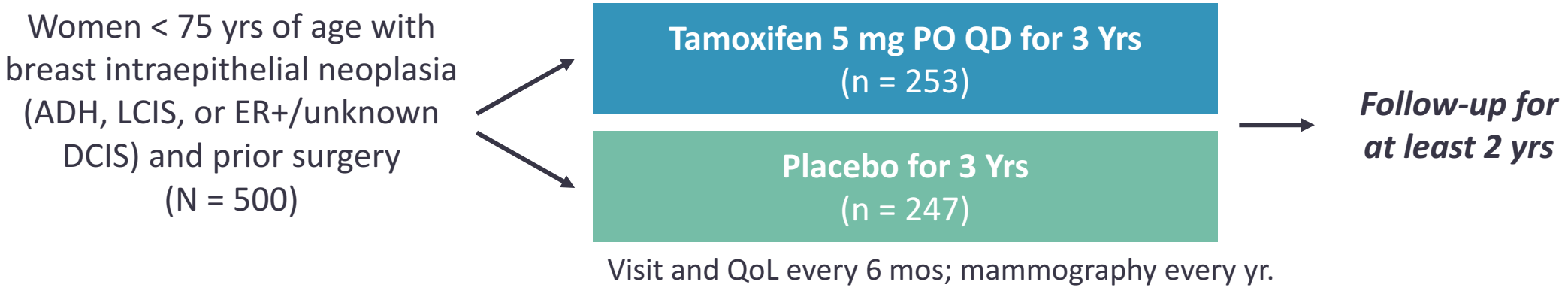
T-DM1† 3.6 mg/kg IV Q3W x 7 cycles
(n = ….)

Randomization occurred within 12 wks of surgery; radiotherapy and/or endocrine therapy given per local standards. *Minimum of 9 wks taxane and trastuzumab. †Patients who d/c T-DM1 for toxicity allowed switch to trastuzumab to complete 14 cycles.

- Primary endpoint: IDFS
- Secondary endpoints including: distant recurrence-free survival, OS, safety

TAM-01: Low-Dose Tamoxifen vs Placebo as Adjuvant Therapy for BIN

- Multicenter, randomized, triple-blind phase III study



- Primary endpoint: incidence of invasive breast cancer
- Secondary endpoints including: safety, patient-reported outcomes, adherence

DeCensi. SABCS 2018. Abstr GS3-01. NCT01357772.

TAM-01: Baseline Characteristics

Characteristic	Tamoxifen (n = 253)	Placebo (n = 247)
Mean age, yrs (SD)	54 (9.6)	54 (9.1)
Premenopausal, %	46	44
Mean BMI (SD)	25.7 (4.8)	25.3 (4.2)
ADH, %	20	20
LCIS, %	11	10
DCIS, %	69	70
▪ ER positive/unknown, %	66/34	67/33
HER2+, %	8	9
Quadrantectomy/mastectomy, %	84/16	82/18
Radiotherapy, %	43	43

DeCensi. SABCS 2018. Abstr GS3-01.

TAM-01: Recurrence

Outcome, n	Tamoxifen (n = 253)	Placebo (n = 247)	HR (95% CI)	*P* Value
All breast events*	14	28	0.48 (0.26-0.92)	.024
Contralateral breast cancer	3	12	0.24 (0.07-0.87)	.018

*Rate: 11.6 vs 23.9/1000 PY.

- Median follow-up: 5.1 yrs (IQR: 3.9-6.3)

DeCensi. SABCS 2018. Abstr GS3-01.

TAM-01: Adherence and safety

Adherence Measure, %	Tamoxifen (n = 253)	Placebo (n = 247)
Persistent use of treatment > 2.5 yrs*	64.8	60.7

*P = .39

Serious AE, n	Tamoxifen	Placebo
Endometrial cancer	1	0
DVT or PE	1	1
Other neoplasms	4	6
Coronary heart disease	2	2
Other	3	5
Death	1	2
Total	**12**	**16**

DeCensi. SABCS 2018. Abstr GS3-01.

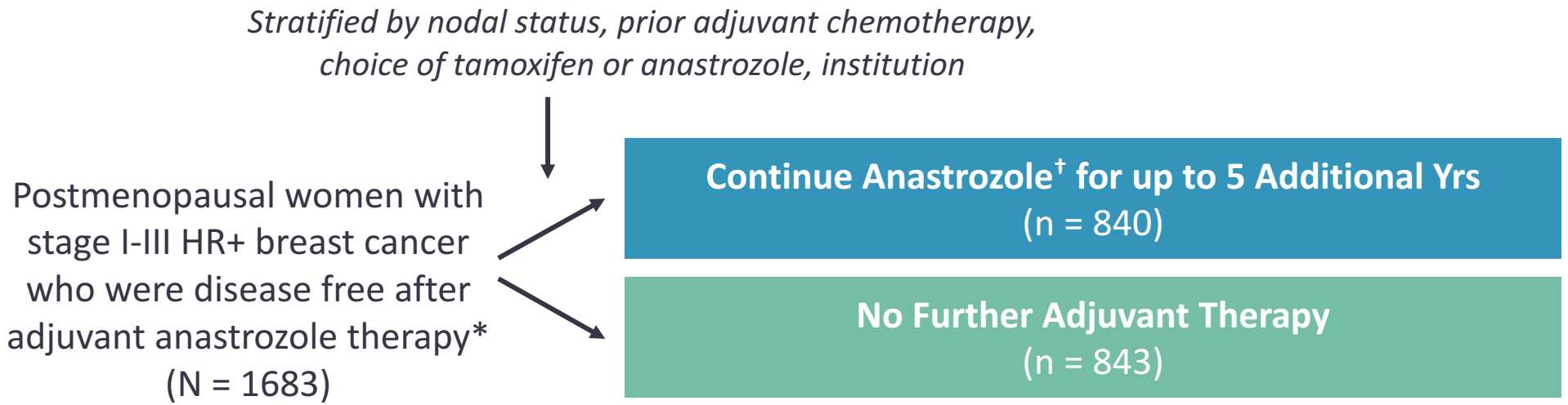
TAM-01: Conclusions

- Following surgery in patients with intraepithelial neoplasia, 3 yrs of low-dose tamoxifen (ie, 5 mg/day) halved breast cancer recurrence vs placebo
  - HR: 0.48 (95 CI: 0.26-0.92; *P* = .024)
- Risk of contralateral breast cancer reduced by 76% with low-dose tamoxifen vs placebo
- Similar rates of serious AEs (eg, endometrial cancer, DVT or PE) and most menopausal symptoms between arms
  - Frequency of self-reported hot flashes higher with tamoxifen vs placebo
- Study investigators conclude that low-dose tamoxifen provides a valid preventative option to avoid recurrence in this population

DeCensi. SABCS 2018. Abstr GS3-01.

AERAS: Extended Adjuvant Therapy With Anastrozole for Postmenopausal Women With HR-Positive EBC

- Prospective, multicenter, randomized, open-label phase III study



*As monotherapy for 4 yrs 9 mos to 5 yrs 2 mos *or* for > 2 yrs after tamoxifen for a total of 5 yrs adjuvant therapy. †1 mg PO QD.

- Primary endpoint: DFS
- Secondary endpoints including: OS, distant DFS, safety

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AERAS: Baseline Characteristics

Characteristic	Continue Anastrozole (n = 840)	Stop Therapy (n = 843)
Median age, yrs	64.3	64.5
BMI	23.3	23.3
T-stage, n (%)		
▪ T1	449 (53.4)	437 (51.8)
▪ T2	358 (42.6)	378 (44.8)
▪ T3/T4	33 (3.9)	28 (3.3)
N-stage, n (%)		
▪ N0	650 (77.3)	667 (79.1)
▪ N1	171 (20.3)	163 (19.3)
▪ N2	19 (2.2)	13 (1.5)

Characteristic, n (%)	Continue Anastrozole (n = 840)	Stop Therapy (n = 843)
Hormone receptor		
▪ ER+	830 (98.8)	836 (99.1)
▪ PgR+	618 (73.5)	627 (74.3)
Radiotherapy	456 (54.2)	457 (54.2)
Adjuvant chemotherapy	328 (39)	332 (39.3)
Endocrine therapy		
▪ Anastrozole	774 (91.1)	772 (91)
▪ Tamoxifen, then anastrozole	75 (8.9)	76 (9)

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AERAS: Patient Disposition

Outcome	Continue Anastrozole	Stop Therapy
Median treatment duration, yrs	4.9	4.9
Completed 5 yrs of treatment in study, %	70.1	75.2
Reason for early termination, %		
▪ AEs	9.6	0
▪ Patient refusal	7.4	3
▪ Changing hospital	2.2	2.2
▪ Breast cancer recurrence	5.4	11.3
▪ Second cancer (not breast related)	1.9	5.4
▪ Other	2.9	4.1

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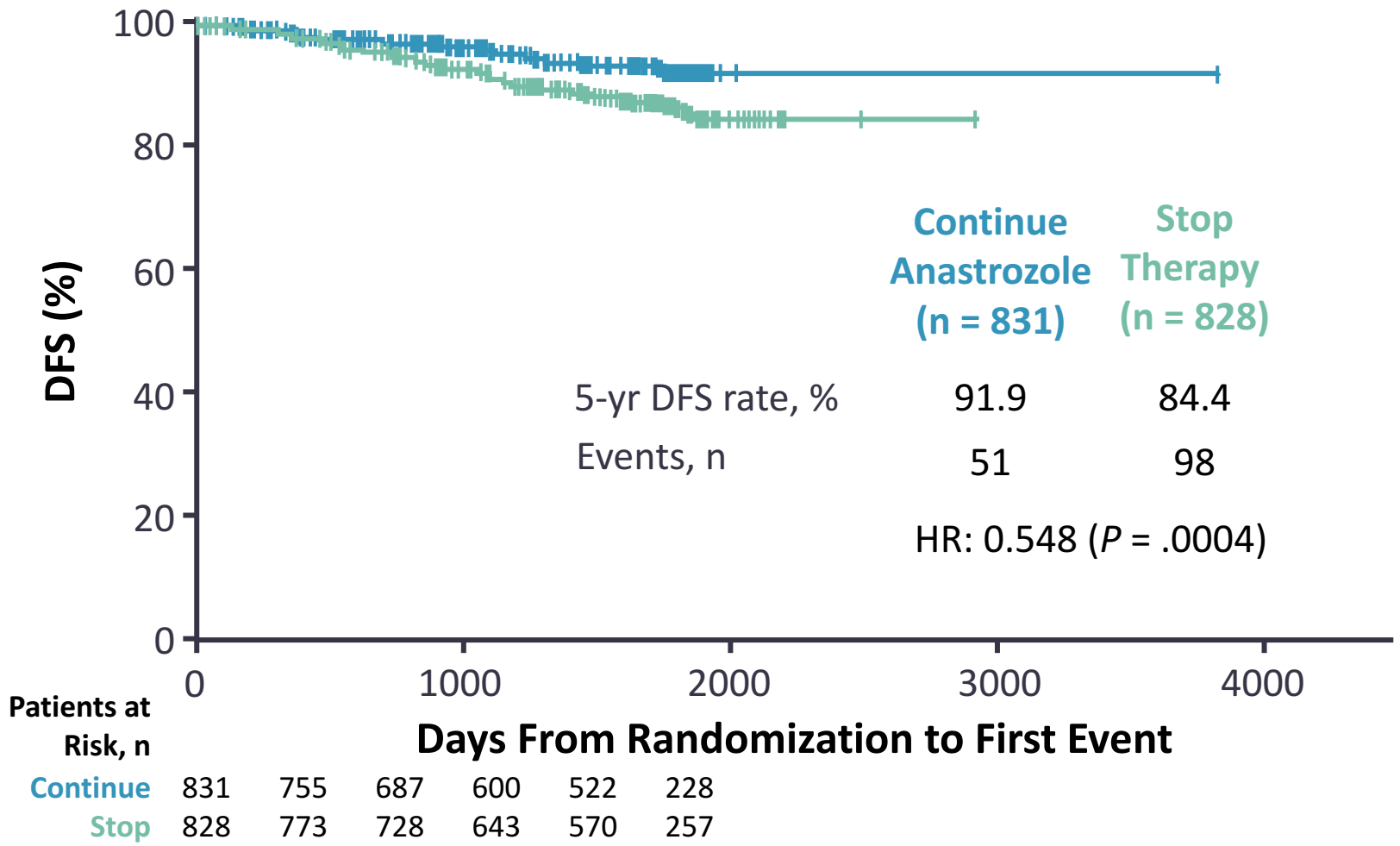
AERAS: Disease-Free Survival



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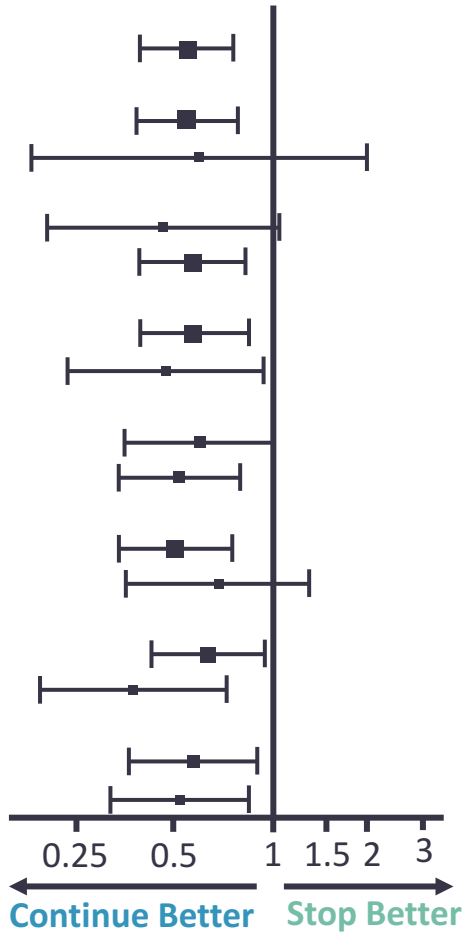
AERAS: DFS by Subgroup

Subgroup	Events/Patients, n/N (%) Continue	Stop	HR (95% CI)	*P* Value*
Overall	51/831 (6.1)	97/829 (11.7)	0.55 (0.39-0.77)	.0006
Prior endocrine therapy				.5677
Anastrozole	47/757 (6.2)	89/753 (11.8)	0.55 (0.39-0.78)	
Tamoxifen, then anastrozole	4/74 (5.4)	8/76 (10.5)	0.60 (0.18-1.99)	
Age				.0487
< 60 yrs	8/200 (4.0)	18/204 (8.8)	0.46 (0.20-1.06)	
≥ 60 yrs	43/631 (6.8)	79/625 (12.6)	0.57 (0.40-0.83)	
BMI				.3088
< 25	40/598 (6.7)	72/599 (12.0)	0.58 (0.40-0.86)	
≥ 25	11/233 (4.7)	25/230 (10.9)	0.47 (0.23-0.96)	
T-stage				.0005
T1	21/427 (4.9)	36/415 (8.7)	0.60 (0.35-1.04)	
≥ T2	30/375 (8.0)	61/384 (15.9)	0.52 (0.34-0.81)	
N-stage				.2881
N0	36/621 (5.8)	76/634 (12.0)	0.51 (0.34-0.76)	
≥ N1	15/181 (8.3)	21/165 (12.7)	0.69 (0.35-1.33)	
Hormone status				.6668
ER+PgR+	39/580 (6.7)	67/587 (11.4)	0.64 (0.43-0.95)	
Any negative	12/222 (5.4)	30/212 (14.2)	0.38 (0.19-0.73)	
Prior chemotherapy				.0205
No	27/488 (5.5)	50/487 (10.3)	0.58 (0.36-0.92)	
Yes	24/313 (7.7)	47/311 (15.1)	0.53 (0.32-0.86)	



*Test of interaction between treatment and each subgroup unadjusted for multiplicity.

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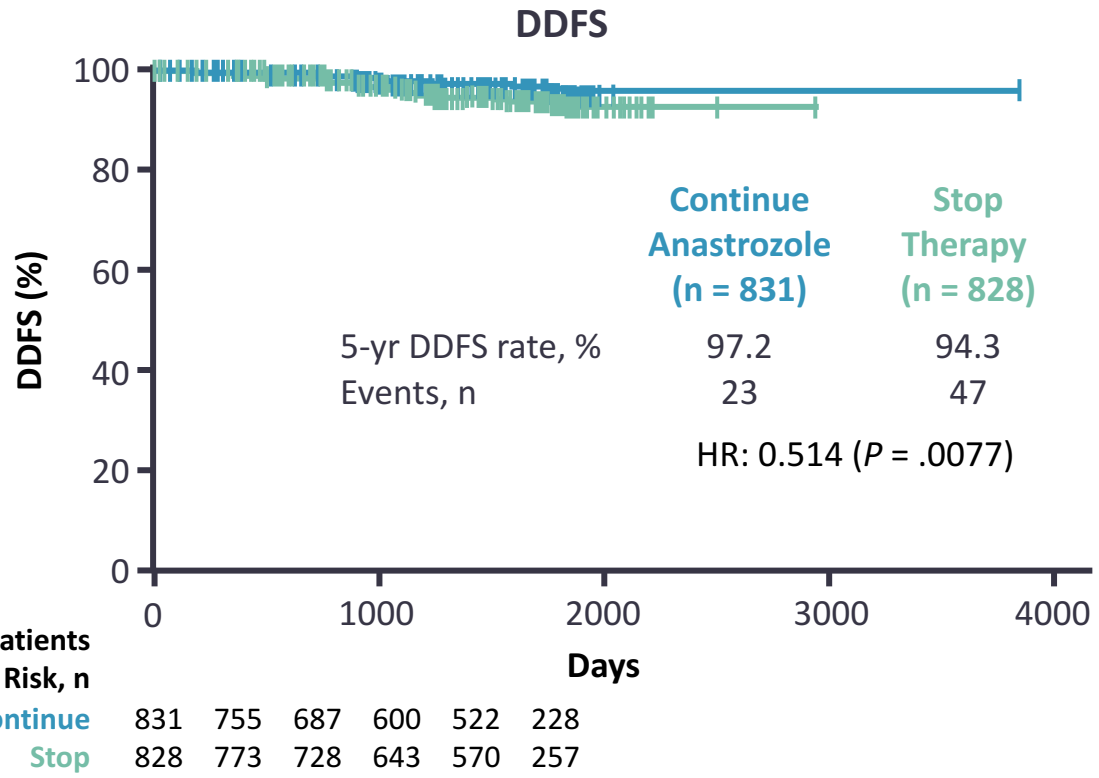
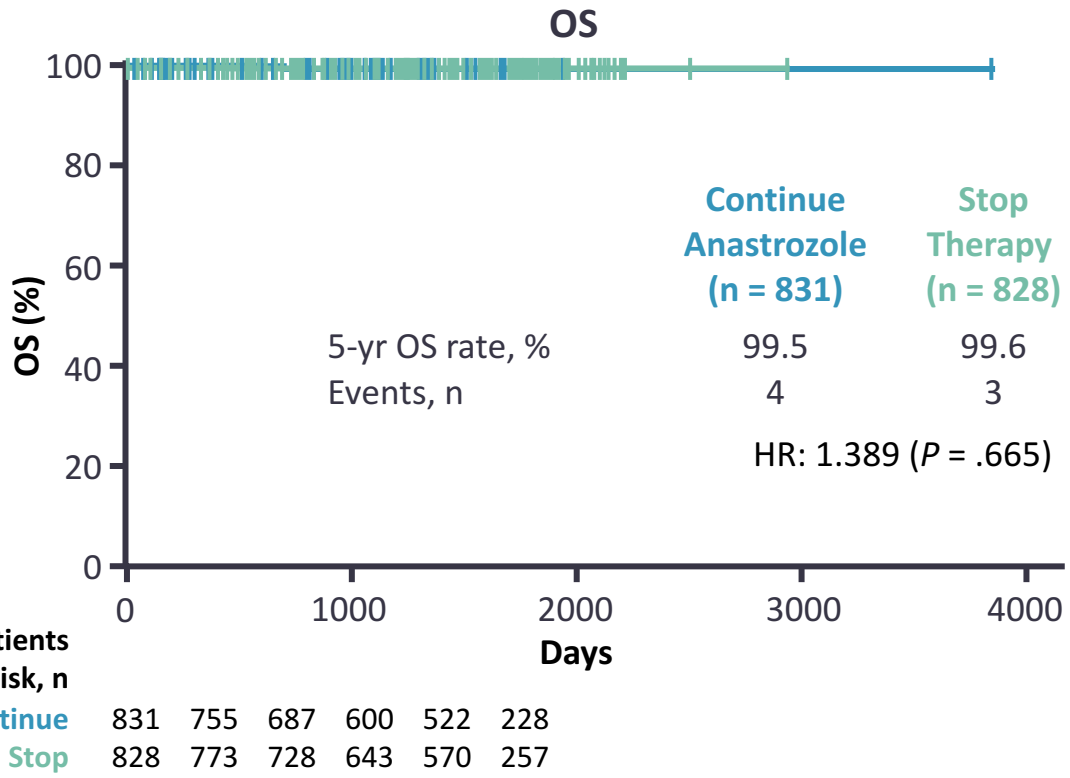
AERAS: Distant Disease–Free Survival and OS





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AERAS: Safety, Event Overview

Predefined AE, %	Continue Anastrozole (n = 783)		Stop Therapy (n = 783)	
	Any	Gr ≥ 3	Any	Gr ≥ 3
Bone fractures	2.8	0.5	1.1	0.1
Osteoporosis	33	0.3	28	0.1
Arthralgia	19.2	0.8	11.7	0.1
Stiff joints	11.7	0.3	4.9	0
Hot flashes	6.7	0.5	3.2	0
Headache	2.1	0.1	1.8	0

Event, n (%)	Continue Anastrozole (n = 831)	Stop Therapy (n = 828)
Local recurrence	15 (1.8)	32 (3.8)
Distant recurrence	23 (2.7)	47 (5.6)
Contralateral breast cancer	6 (0.7)	7 (0.8)
Second primary cancer	13 (1.5)	35 (4.3)
Death	4 (0.4)	3 (0.3)

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AERAS: Conclusions

- In postmenopausal women with primary HR+ breast cancer who were disease free after 5 yrs of adjuvant endocrine therapy, an additional 5 yrs of anastrozole significantly prolonged DFS compared with patients who stopped therapy
  - 5-yr DFS rate: 91.9% vs 84.4%, respectively (HR: 0.548; *P* = .0004)
- DDFS also significantly prolonged with anastrozole extension vs discontinuation
  - 5-yr DDFS rate: 97.2% vs 94.3%, respectively (HR: 0.514; *P* = .0077)
- 5-yr OS rates comparable between arms
- Local and distant recurrence, second primary cancers numerically less frequent with anastrozole extension vs discontinuation
- AE rates numerically higher with anastrozole extension vs discontinuation

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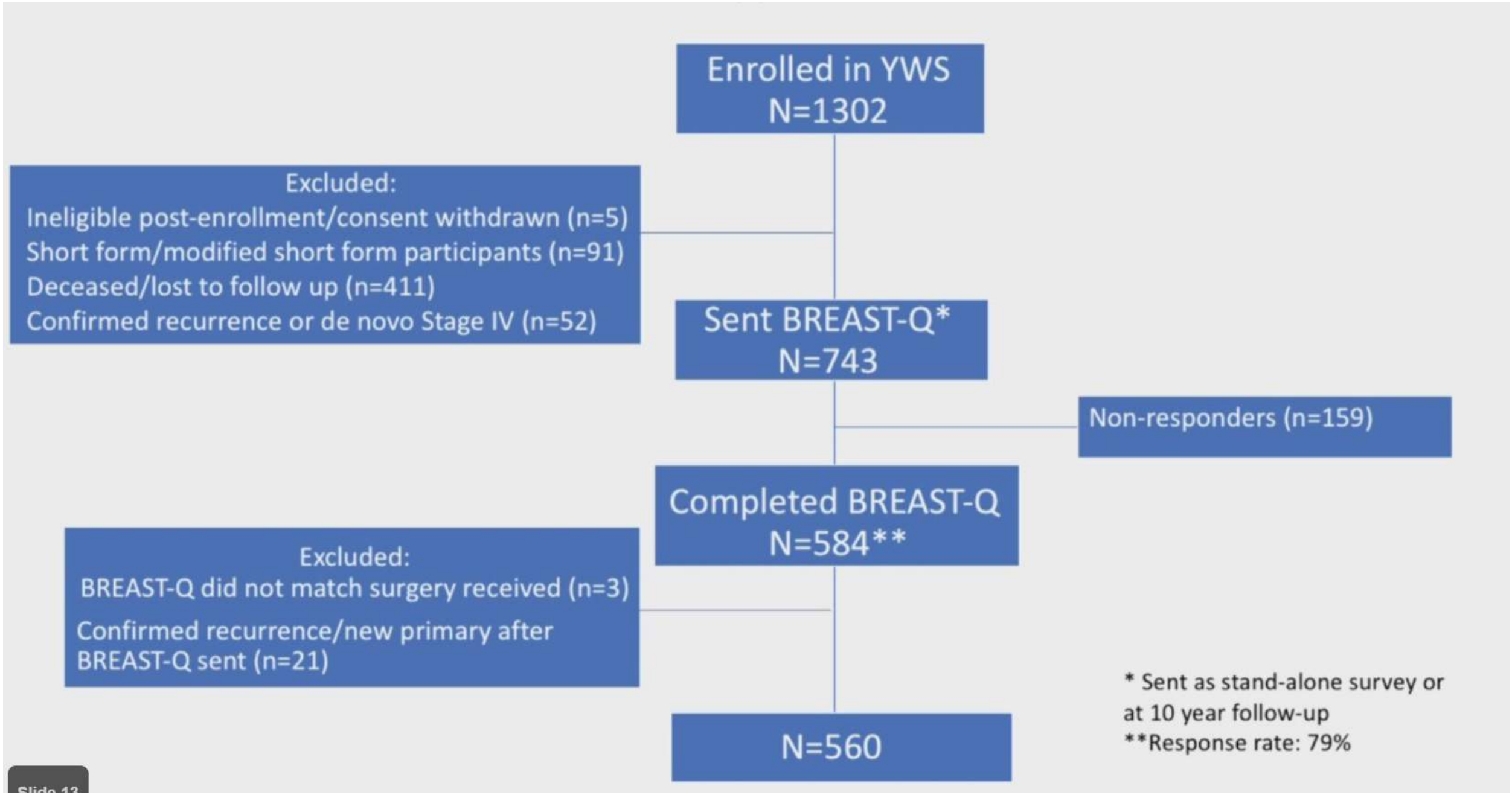
Young women breast cancer study

- Multicentric prospective cohort study
- 12 participating clinics
- Aim – study medical and psychosocial aspects of life of patients aged 40 and less at the time of diagnosis
- Patient enrollement October 2006 till June 2016
- 1302 women agreed to participate
- Median age 37 years (17-40 y.o.)


Enrolled in YWS
N=1302
Excluded:
Ineligible post-enrollment/consent withdrawn (n=5)
Short form/modified short form participants (n=91)
Deceased/lost to follow up (n=411)
Confirmed recurrence or de novo Stage IV (n=52)
Sent BREAST-Q*
N=743
Non-responders (n=159)
Completed BREAST-Q
N=584**
Excluded:
BREAST-Q did not match surgery received (n=3)
Confirmed recurrence/new primary after BREAST-Q sent (n=21)
N=560
* Sent as stand-alone survey or at 10 year follow-up
**Response rate: 79%

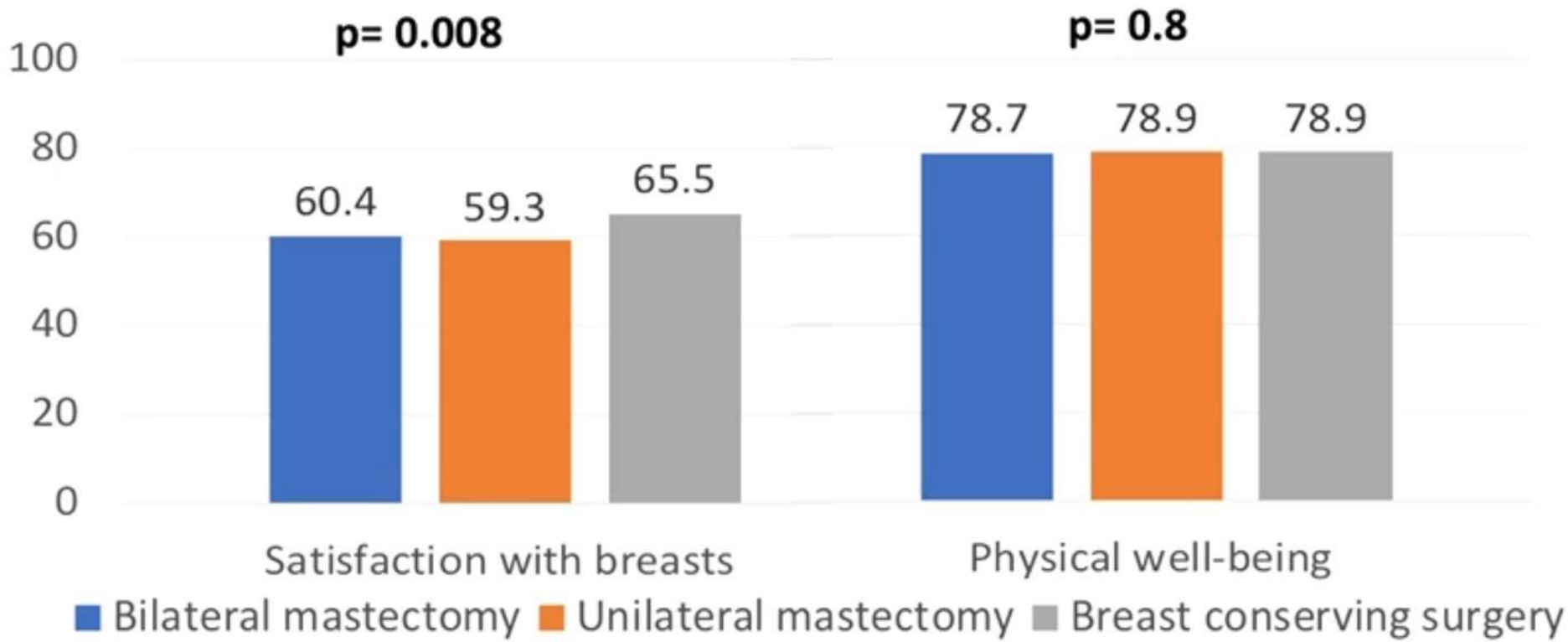
Breast-Q (median time to questionary fill – 5.8 years)

- Satisfaction with how the breast looks
- Psychosocial well-being
- Physical well-being
- Sex-life satisfaction
- Overall result
- Satisfaction with treatment and care provided

Patients characteristics

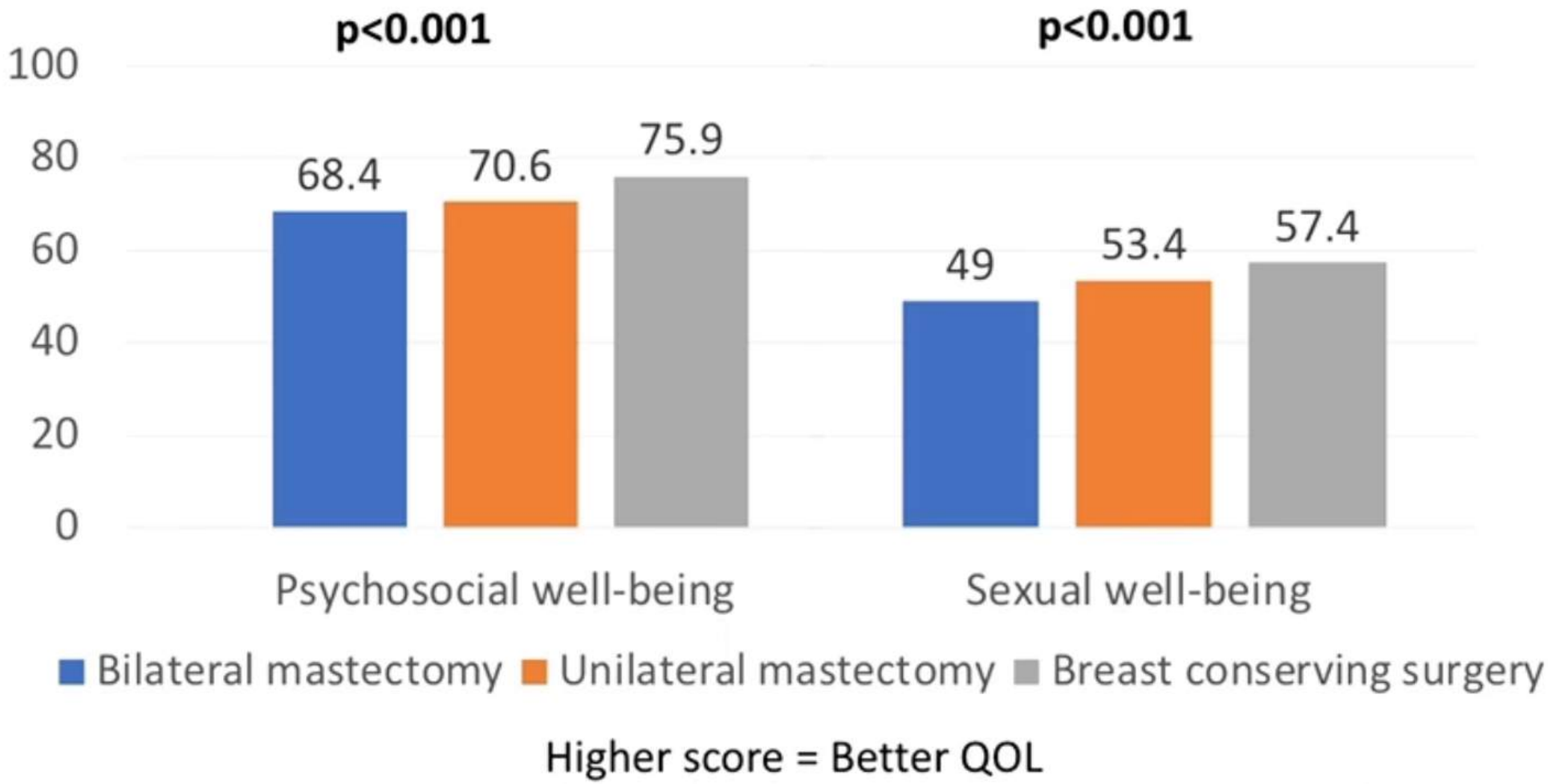
Surgery	N=560
Breast conserving surgery	160 (28%)
Unilateral mastectomy	110 (20%)
Bilateral mastectomy	290 (52%)
Reconstruction (N=400)	
No reconstruction	42 (11%)
Implant based reconstruction	276 (69%)
Flap reconstruction	49 (12%)
Unknown/other	33 (8%)
Radiation	216 (39%)
BCS	159 (99%)
Postmastectomy radiation ()	181 (45%)
Lympedema at 1 year	163 (29%)

BREAST-Q Mean Scores



Higher score = Better QOL

BREAST-Q Mean Scores



Higher score = Better QOL

YWBCS: Conclusions

- White college-educated American women with good income that undergo BCS are more satisfied with the overall result….
- ….Than a mixed group of White college-educated American women that lost their breast/breasts

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- THANK YOU FOR YOUR ATTENTION!