Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: von Minckwitz G, Procter M, de Azambuja E, et al. Adjuvant pertuzumab and trastuzumab in early HER2-positive breast cancer. N Engl J Med 2017;377:122-31. DOI: 10.1056/NEJMoa1703643

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US sites

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Southern California Kaiser Permanente	United States	POLIKOFF JONATHAN
Carle Foundation	United States	JOHNSON Patricia
Grand Rapids Clinical Oncology Program	United States	KATHLEEN K.
Montefiore Medical Center	United States	SPARANO Joseph

Illinois Cancer Care	United States	LE LINSQWISTER Nguyet
Sanford USD School of Medicine	United States	MAZURCZAK Miroslaw
Lutheran Hematology &Oncology	United States	CASKEY Jennifer
Mayo Clinic-Jacksonville	United States	MORENO ASPITIA Alvaro.
Dayton Clinical Oncology Prog	United States	GROSS Howard.
Toledo Clinic Cancer Center-Oregon	United States	MOWAT R.
Memorial Cancer Institute	United States	HIRSCH Robert Alan
Cancer Center of Kansas	United States	DAKHIL Shaker
Coborn Cancer Center	United States	JURGENS Donald
Marshfield Clinic	United States	ONITILO Adedayo
Wellmonth Physician Services	United States	SHAO Ryan.
Florida Cancer Specialists, Research Department	United States	RAYMOND Marilyn
Albert Einstein Healthcare Network ; Cancer Center	United States	MORGINSTIN Mark
Carolina Oncology Specialists, PA - Hickory	United States	ORLOWSKI Richard.
Hematology Oncology Associates of the Treasure Coast	United States	IANNOTTI Nicholas
Providence St. Mary Regional Cancer Center	United States	CUNNINGHAM James
Magee women's Hospital	United States	BRUFSKY Adam.
Marin Cancer Care	United States	EISENBERG Peter.
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SUNY Upstate Medical University	United States	BENJAMIN Sam.
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Jackson Oncology Associates, PLLC	United States	SHUMAKER Grace
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GEORGIA CANCER SPECIALISTS	United States	BORDONI Rodolfo

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Providence Regional Medical Center	United States	WANG Xiaowen
New England Cancer Specialists	United States	WEISBERG Tacey.
Northern Utah Associates	United States	HANSEN Vincent
Cedars-Sinai Medical Center	United States	MITA Monica
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UCSD Moores Cancer Center	United States	BOLES Sarah
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SUTTER CANCER CENTER	United States	ROHATGI Nitin
Kootenai Cancer Center	United States	KIM Kevin.
Mercy Medical Center	United States	RISEBERG David.
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Northwest Georgia Oncology Centers PC - Marietta	United States	OYOLA Rau
Dana Farber Can Ins	United States	ISAKOFF Steven
Beth Israel Medical Center	United States	KLEIN Paula.
West Michigan Cancer Center	United States	NAGPAL S.
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West Virginia University Hospitals Inc	United States	SALKENI M.
Pinnacle Oncology Hematology	United States	KATO Giraldo
CHARLESTON CANCER CENTER	United States	HOLLADAY Charles.

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Phoebe Putney Memorial Hospital	United States	JANIChirag
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Virginia Cancer Institute	United States	GOBLE Sharon
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K. Permanente - Santa Clara	United States	FEHRENBACHER Louis.
Kaiser Permanente - Oakland	United States	FEHRENBACHER Louis.
K. Permanente - S. San Fran	United States	FEHRENBACHER Louis.
Kaiser Permanente Sacramento Medical Center	United States	FEHRENBACHER Louis.
K. Permanente - San Fransisco	United States	FEHRENBACHER Louis.
Kaiser Permanente - Hayward	United States	FEHRENBACHER Louis.
Kaiser Permanente - Roseville	United States	FEHRENBACHER Louis.
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Beth Israel Comprehensive Cancer Center	United States	KLEIN Paula
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Rocky Mountain Cancer Center - Denver	United States	PAUL Devchand
Charleston Hematology Oncology	United States	KEOGH George
Texas Oncology - Dallas Presbyterian Hospital	United States	MCINTYRE Kristi
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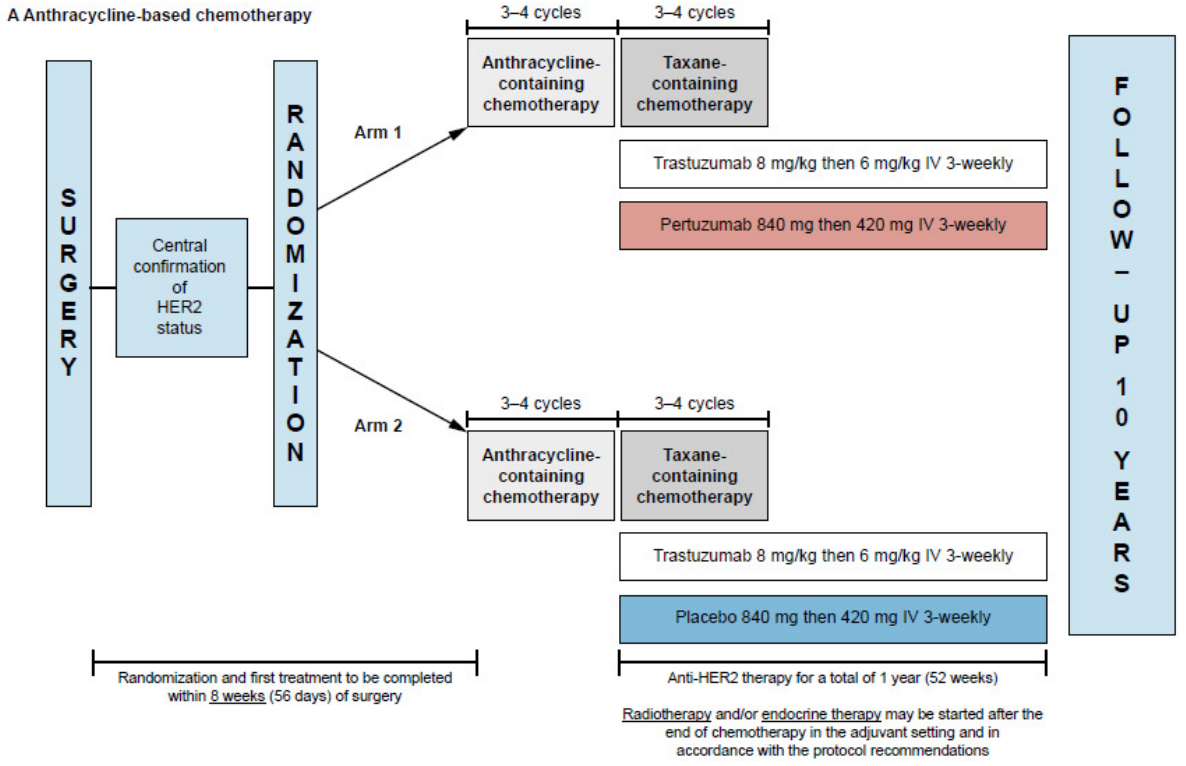
Texas Oncology-Fort Worth 12th Ave	United States	OOMMEN Sanjay
Texas Oncology-Baylor Sammons Cancer Center	United States	OSBORNE Cynthia
Cancer Centers of the Carolina; Eastside Medical Center	United States	EDENFIELD William.
Nebraska Cancer Research Center	United States	SOORI Gamini

Figure S1. Schema for the APHINITY Trial.

IV denotes intravenous.


A Anthracycline-based chemotherapy
SURGERY
Central confirmation of HER2 status
RANDOMIZATION
Arm 1
3–4 cycles
3–4 cycles
Anthracycline-containing chemotherapy
Taxane-containing chemotherapy
Trastuzumab 8 mg/kg then 6 mg/kg IV 3-weekly
Pertuzumab 840 mg then 420 mg IV 3-weekly
Arm 2
3–4 cycles
3–4 cycles
Anthracycline-containing chemotherapy
Taxane-containing chemotherapy
Trastuzumab 8 mg/kg then 6 mg/kg IV 3-weekly
Placebo 840 mg then 420 mg IV 3-weekly
FOLLOW-UP 10 YEARS
Randomization and first treatment to be completed within 8 weeks (56 days) of surgery
Anti-HER2 therapy for a total of 1 year (52 weeks)
Radiotherapy and/or endocrine therapy may be started after the end of chemotherapy in the adjuvant setting and in accordance with the protocol recommendations

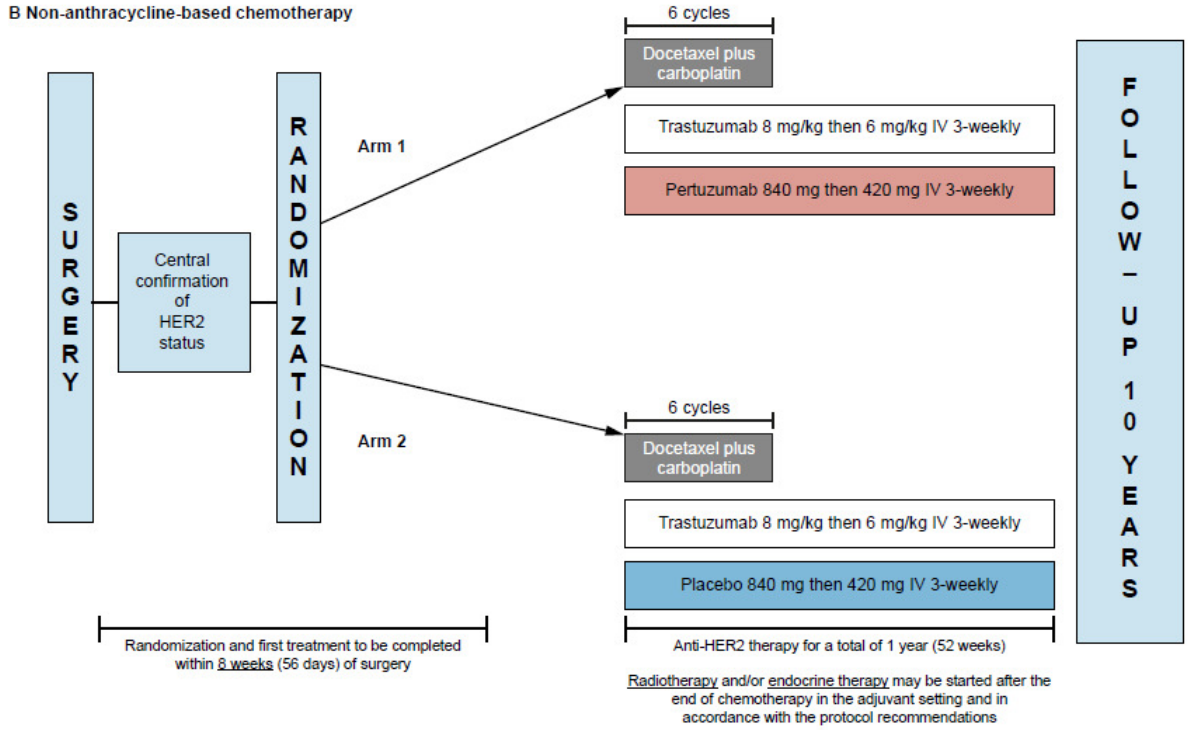
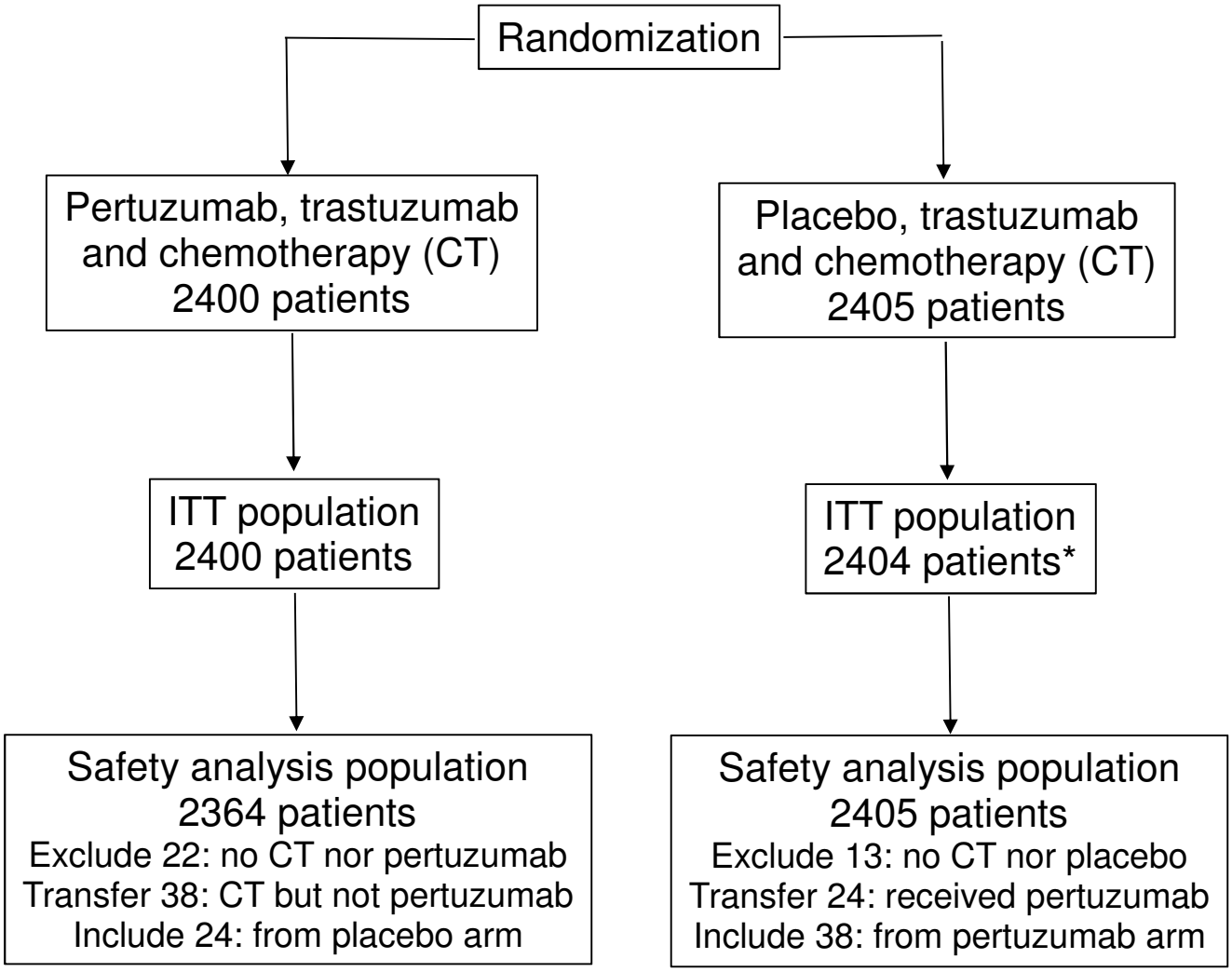

B Non-anthracycline-based chemotherapy
SURGERY
Central confirmation of HER2 status
RANDOMIZATION
Arm 1
6 cycles
Docetaxel plus carboplatin
Trastuzumab 8 mg/kg then 6 mg/kg IV 3-weekly
Pertuzumab 840 mg then 420 mg IV 3-weekly
Arm 2
6 cycles
Docetaxel plus carboplatin
Trastuzumab 8 mg/kg then 6 mg/kg IV 3-weekly
Placebo 840 mg then 420 mg IV 3-weekly
FOLLOW-UP 10 YEARS
Randomization and first treatment to be completed within 8 weeks (56 days) of surgery
Anti-HER2 therapy for a total of 1 year (52 weeks)
Radiotherapy and/or endocrine therapy may be started after the end of chemotherapy in the adjuvant setting and in accordance with the protocol recommendations

Figure S2. CONSORT Diagram for the APHINITY Trial.



* One patient excluded from the ITT population due to her falsification of personal information

ITT denotes intent-to-treat.

Figure S3. Kaplan–Meier Plots of Invasive Disease-Free Survival by Hormone Receptor Status.

Panel A shows plots for hormone receptor-negative disease. Panel B shows plots for hormone receptor-positive disease. CI denotes confidence interval.

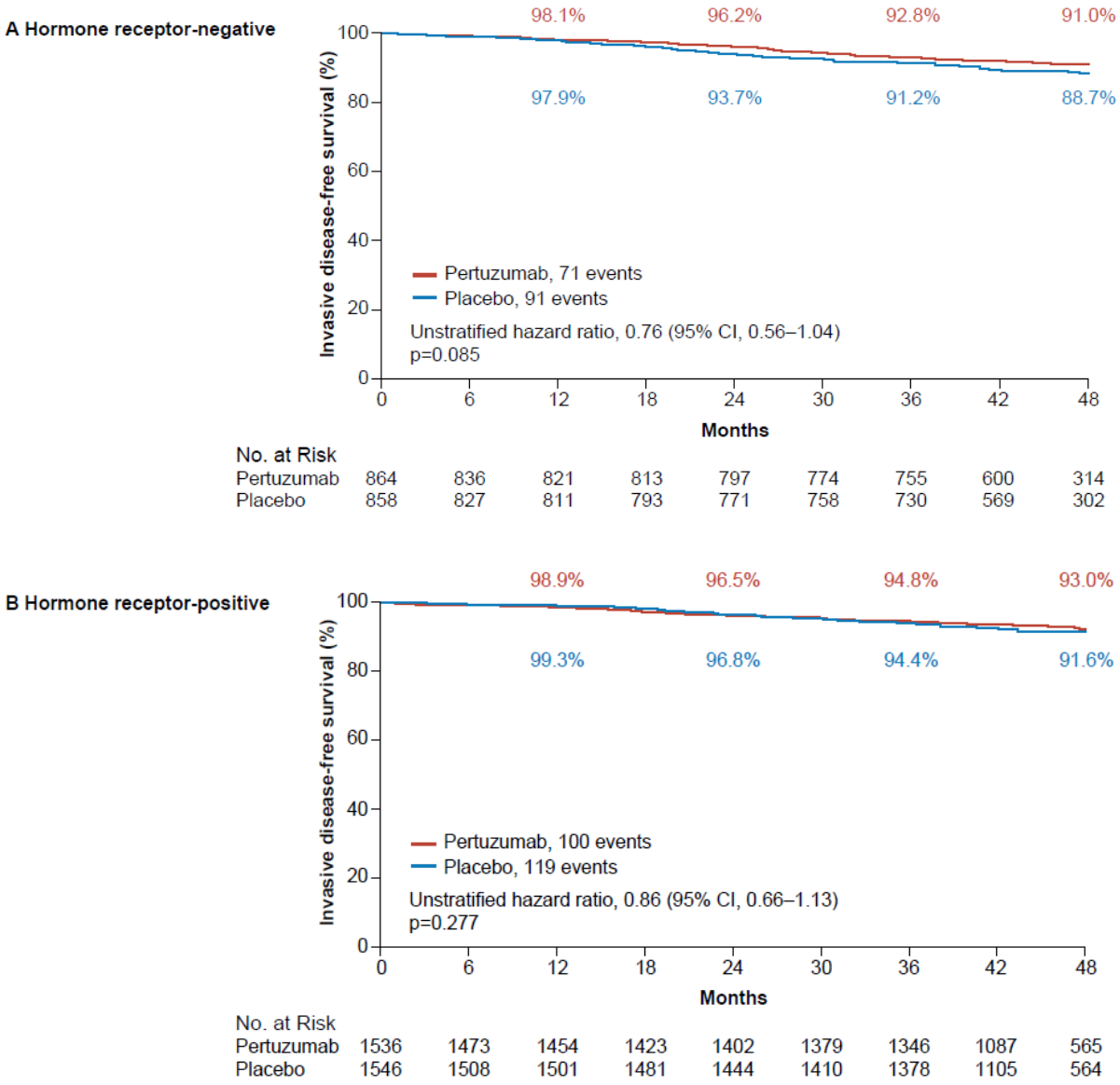
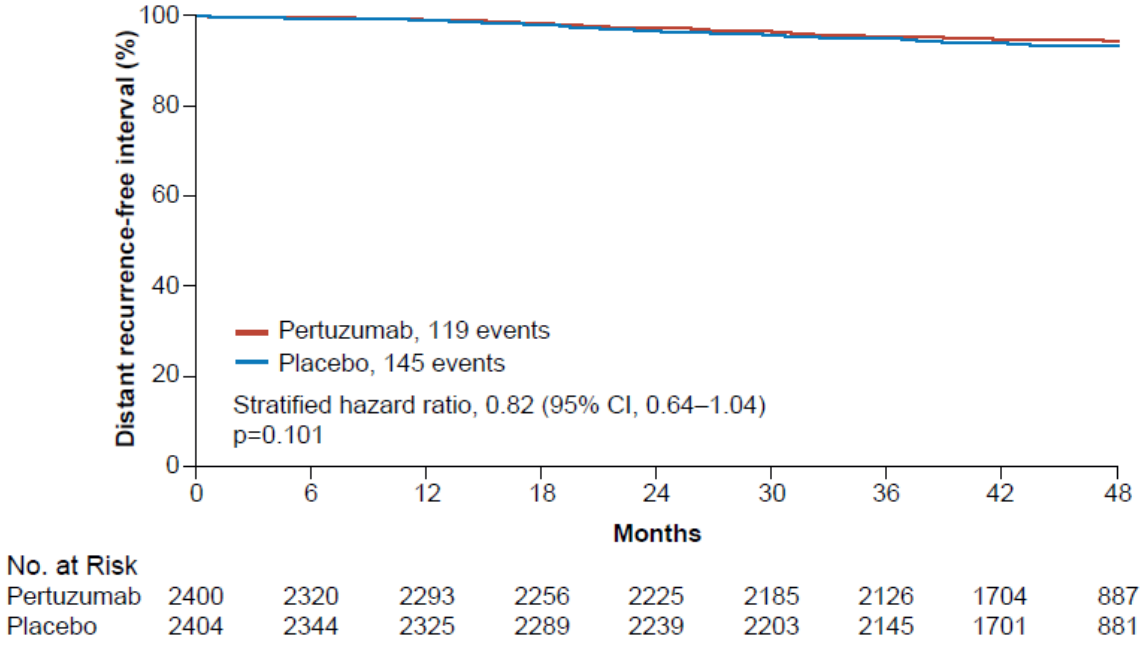


Figure S4. Kaplan–Meier Plots of Distant Recurrence-Free Interval.

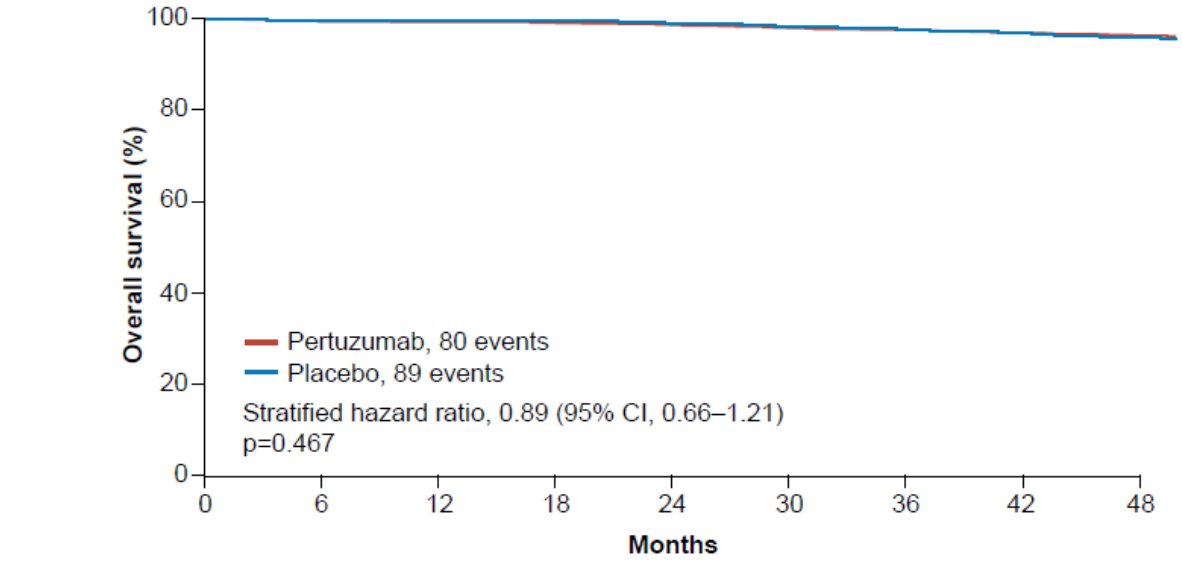
CI denotes confidence interval.



No. at Risk									
Pertuzumab	2400	2320	2293	2256	2225	2185	2126	1704	887
Placebo	2404	2344	2325	2289	2239	2203	2145	1701	881

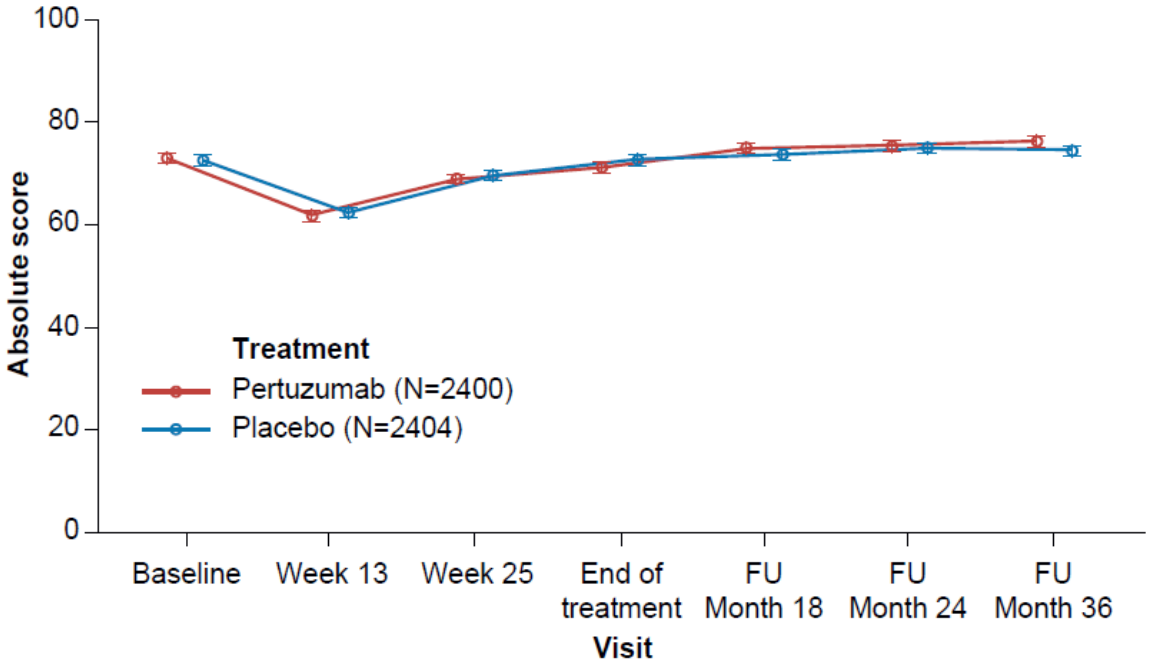
Figure S5. Kaplan–Meier Plots of Overall Survival.

CI denotes confidence interval.



No. at Risk									
Pertuzumab	2400	2324	2305	2282	2263	2231	2186	1744	901
Placebo	2404	2350	2339	2318	2293	2262	2209	1747	905

Figure S6. Plot of Mean EORTC QLQ-C30 global health status by treatment regimen, ITT population



Clinically meaningful decrease defined as below 10pts from BL; Osoba *et al*

Baseline questionnaires were completed prior to physician assessment and prior to receiving treatment. Week 13 assessment corresponds to end of taxane treatment for all patients, regardless of whether they received 3, 4 or 6 cycles of taxane (corresponding to week 10, 13 or 19 of targeted treatment).

Table S1. Demographic and Baseline Disease Characteristics of the Patients (Extended).

	Pertuzumab + trastuzumab + chemotherapy N = 2400	**Placebo + trastuzumab + chemotherapy N = 2404**
Nodal status – no. (%)	n = 2400	n = 2404
0 positive nodes and tumor ≤1 cm*	90 (3.8)	84 (3.5)
0 positive nodes and tumor >1 cm*	807 (33.6)	818 (34.0)
1–3 positive nodes	907 (37.8)	900 (37.4)
≥4 positive nodes	596 (24.8)	602 (25.0)
Adjuvant chemotherapy regimen (randomized) – no. (%)	n = 2400	n = 2404
Anthracycline-containing regimen	1865 (77.7)	1877 (78.1)
Non-anthracycline-containing regimen	535 (22.3)	527 (21.9)
Hormone receptor status (central) – no. (%)	n = 2400	n = 2404
Negative (ER- and PgR-negative)	864 (36.0)	858 (35.7)
Positive (ER- and/or PgR-positive)	1536 (64.0)	1546 (64.3)
Protocol version – no. (%)	n = 2400	n = 2404
Protocol A	1828 (76.2)	1827 (76.0)
Protocol Amendment B	572 (23.8)	577 (24.0)
Age – yr	n = 2400	n = 2404

Mean (SD)	51.7 (10.9)	51.4 (10.7)
Median	51.0	51.0
Range	22–86	18–85
Age – yr – no. (%)	n = 2400	n = 2404
<35	149 (6.2)	144 (6.0)
35–39	177 (7.4)	183 (7.6)
40–49	708 (29.5)	702 (29.2)
50–64	1051 (43.8)	1082 (45.0)
65–74	285 (11.9)	267 (11.1)
≥75	30 (1.3)	26 (1.1)
Sex – no. (%)	n = 2400	n = 2404
Female	2397 (99.9)	2396 (99.7)
Male	3 (0.1)	8 (0.3)
Menopausal status at screening – no. (%)	n = 2397	n = 2395
Pre-menopausal	1152 (48.1)	1173 (49.0)
Post-menopausal	1242 (51.8)	1220 (50.9)
Unknown	3 (0.1)	2 (<0.1)
Pathologic tumor size – cm	n = 2400 tumors	n = 2405 tumors
Mean (SD)	2.4 (1.5)	2.5 (1.5)
Median	2	2
Range	0–18	0–14

Pathologic tumor size – cm – no. (%)	n = 2400 tumors	n = 2405 tumors
0–<2	978 (40.8)	948 (39.4)
≥2–<5	1275 (53.1)	1283 (53.3)
≥5	147 (6.1)	174 (7.2)

* Protocol A only.

Patients with bilateral tumors will report pathologic characteristics for both tumors; therefore, pathologic tumor characteristics are summarized on the tumor level.

ER denotes estrogen receptor, PgR progesterone receptor, and SD standard deviation.

Table S2. Site of First Invasive Disease-Free Survival Event by Hormone Receptor Status.

A Hormone Receptor-Negative Cohort.

No. (%)	Pertuzumab + trastuzumab + chemotherapy N = 864	Placebo + trastuzumab + chemotherapy N = 858
Total patients with IDFS event	71 (8.2)	91 (10.6)
Category of first IDFS event		
Distant recurrence	43 (5.0)	60 (7.0)
CNS metastases	20 (2.3)	20 (2.3)
Locoregional recurrence	12 (1.4)	12 (1.4)
Contralateral breast cancer	3 (0.3)	4 (0.5)
Death without prior event	13 (1.5)	15 (1.7)

Patients who experience additional IDFS event(s) within 61 days of their first IDFS event are reported in the category according to the following hierarchy: [1] Distant recurrence; [2] locoregional recurrence; [3] contralateral breast cancer; [4] death without prior event.

CNS metastases is a subset of distant recurrence.

CNS denotes central nervous system and IDFS invasive disease-free survival.

B Hormone Receptor-Positive Cohort.

No. (%)	Pertuzumab + trastuzumab + chemotherapy N = 1536	Placebo + trastuzumab + chemotherapy N = 1546
Total patients with IDFS event	100 (6.5)	119 (7.7)
Category of first IDFS event		
Distant recurrence	69 (4.5)	79 (5.1)
CNS metastases	25 (1.6)	24 (1.6)
Locoregional recurrence	14 (0.9)	22 (1.4)
Contralateral breast cancer	2 (0.1)	7 (0.5)
Death without prior event	15 (1.0)	11 (0.7)

Patients who experience additional IDFS event(s) within 61 days of their first IDFS event are reported in the category according to the following hierarchy: [1] Distant recurrence; [2] locoregional recurrence; [3] contralateral breast cancer; [4] death without prior event.

CNS metastases is a subset of distant recurrence.

CNS denotes central nervous system and IDFS invasive disease-free survival.

Table S3. Summary of First Distant Reccurrence.

No. (%)	Pertuzumab + trastuzumab + chemotherapy N = 2400	Placebo + trastuzumab + chemotherapy N = 2404
Patients with a distant recurrence at any time	119 (5.0)	145 (6.0)
Site of first distant recurrence		
CNS	46 (1.9)	45 (1.9)
Lung/liver/pleural effusion	43 (1.8)	61 (2.5)
Other	9 (0.4)	9 (0.4)
Bone	21 (0.9)	30 (1.2)

The first distant recurrence may occur after a prior IDFS event.

CNS includes brain metastasis and meningitis carcinomatosa. If a patient experiences a distant recurrence in more than one site within 61 days of the date of their first recurrence, they are counted in the category according to the following hierarchy: [1] CNS; [2] lung/liver/pleural effusion; [3] other; [4] bone.

CNS denotes central nervous system.

Table S4. Summary of Secondary Efficacy Endpoints

	Pertuzumab + trastuzumab + chemotherapy N = 2400	**Placebo + trastuzumab + chemotherapy N = 2404**
IDFS (STEEP definition)		
Patients with an event	189 (7.9)	230 (9.6)
3-year event-free rate – %	93.5	92.5
95% CI	92.5–94.5	91.4–93.6
Stratified hazard ratio	0.82	
95% CI	0.68-0.99	
p-value (log-rank)	0.043	
Disease-Free Survival		
Patients with an event	192 (8.0%)	236 (9.8%)
3-year event-free rate – %	93.4	92.3
Stratified hazard ratio	0.81	
95% CI	(0.67, 0.98)	
p-value (log-rank)	0.033	
Recurrence-Free Interval		
Patients with an event	138 (5.8%)	173 (7.2%)
3-year event-free rate – %	95.2	94.3
Stratified hazard ratio	0.79	
95% CI	(0.63, 0.99)	
p-value (log-rank)	0.043	

Distant recurrence-free interval		
Patients with an event	119 (5.0%)	145 (6.0%)
3-year event-free rate – %	95.7	95.1
Stratified hazard ratio	0.82	
95% CI	(0.64, 1.04)	
p-value (log-rank)	0.101	

CI denotes confidence interval and STEEP standardized efficacy endpoints.

Table S5. Patient Disposition.

Status – no (%)	Pertuzumab + trastuzumab + chemotherapy N = 2400	Placebo + trastuzumab + chemotherapy N = 2404
Completed pertuzumab/placebo treatment	2028 (84.5)	2100 (87.4)
Discontinued pertuzumab/placebo treatment	372 (15.5)	304 (12.6)
Safety	186 (7.8)	155 (6.4)
Adverse event	176 (7.3)	149 (6.2)
Death	9 (0.4)	6 (0.2)
Pregnancy	1 (<0.1)	0
Non-safety	186 (7.8)	149 (6.2)
Lost to follow-up	0	1 (<0.1)
Non-compliance with study drug	44 (1.8)	29 (1.2)
Physician decision	30 (1.3)	15 (0.6)
Protocol violation	1 (<0.1)	3 (0.1)
Recurrence of disease	20 (0.8)	29 (1.2)
Contralateral breast cancer	2 (<0.1)	0
Withdrawal by subject	55 (2.3)	47 (2.0)
Other	34 (1.4)	25 (1.0)

Table S6 Summary of Adverse Events by Chemotherapy Regimen (Safety Analysis Population)

	Pertuzumab + trastuzumab + anthracycline N = 1834	**Placebo + trastuzumab + anthracycline N = 1894**	**Pertuzumab + trastuzumab + non-anthracycline N = 528**	**Placebo + trastuzumab + non-anthracycline N = 510**
At least 1 Grade ≥ 3 Adverse Event	1133 (61.8%)	1080 (57.0%)	384 (72.7%)	299 (58.6%)
Neutropenia	301 (16.4%)	304 (16.1%)	84 (15.9%)	73 (14.3%)
Febrile Neutropenia	235 (12.8%)	204 (10.8%)	51 (9.7%)	62 (12.2%)
Neutrophil count decreased	193 (10.5%)	197 (10.4%)	35 (6.6%)	33 (6.5%)
Diarrhoea	137 (7.5%)	59 (3.1%)	95 (18.0%)	31 (6.1%)
Anaemia	74 (4.0%)	56 (3.0%)	89 (16.9%)	57 (11.2%)
Fatal Adverse Event	12 (0.7%)	16 (0.8%)	6 (1.1%)	4 (0.8%)
Primary Cardiac Event	15 (0.8%)	7 (0.4%)	2 (0.4%)	1 (0.2%)
Treatment difference (pertuzumab – placebo) 95% CI*	0.4 (-0.1, 1.0)		0.2 (-0.6, 0.9)	
Heart failure (NYHA III or IV) and significant LVEF decline	13 (0.7%)	5 (0.3%)	2 (0.4%)	1 (0.2%)
Cardiac death (definite or probable)	2 (0.1%)	2 (0.1%)	0	0

Secondary Cardiac Event	55 (3.0%)	60 (3.2%)	9 (1.7%)	7 (1.4%)
Treatment difference (pertuzumab – placebo) 95% CI*	-0.2 (-1.3, 1.0)		0.3 (-1.3, 1.9)	
Identified automatically from LVEF assessments	46 (2.5%)	44 (2.3%)	4 (0.8%)	3 (0.6%)
Identified by CAB	9 (0.5%)	16 (0.8%)	5 (0.9%)	4 (0.8%)

Percentages are based on N in the column headings;

The summary of grade $\geq$ 3 adverse events includes AEs with onset from first dose of any study treatment through 28 days after last dose of study treatment. The incidence of all other grade $\geq$ 3 AEs was < 5% in both safety analysis population arms.

Primary cardiac events are counted over the whole study period, including post-treatment follow-up.

Secondary cardiac events are counted up to the date of recurrence or end of post-treatment follow-up, whichever occurs earlier

Secondary cardiac events are only counted for patients who have not experienced a primary cardiac event

Significant LVEF decline defined as a decline of ≥10% points to a value <50%

* 95% confidence interval with Hauck-Anderson correction

Table S7. Summary of Incidence of Grade ≥3 Diarrhea (Safety Analysis Population).

No. (%)	Pertuzumab + trastuzumab + chemotherapy N = 2364	Placebo + trastuzumab + chemotherapy N = 2405
Study treatment period*	232 (9.8)	90 (3.7)
Targeted therapy (post-chemotherapy period)†	12 (0.5)	4 (0.2)

* Includes grade ≥3 adverse events with onset from first dose of any study treatment through 28 days after last dose of study treatment.

† Includes grade ≥3 adverse events with onset during the targeted therapy post-chemotherapy treatment period.

REFERENCES

1. Piccart-Gebhart MJ, Procter M, Leyland-Jones B, Goldhirsch A, Untch M, Smith I, et al. Trastuzumab after adjuvant chemotherapy in HER2-positive breast cancer. N Engl J Med. 2005 Oct 20;353(16):1659–72.
2. Romond EH, Perez EA, Bryant J, Suman VJ, Geyer CE, Davidson NE, et al. Trastuzumab plus Adjuvant Chemotherapy for Operable HER2-Positive Breast Cancer. N Engl J Med. 2005 Oct 20;353(16):1673–84.
3. Slamon D, Eiermann W, Robert N, Pienkowski T, Martin M, Press M, et al. Adjuvant trastuzumab in HER2-positive breast cancer. N Engl J Med. 2011 Oct 6;365(14):1273–83.
4. Zardavas D, Fouad TM, Piccart M. Optimal adjuvant treatment for patients with HER2-positive breast cancer in 2015. Breast. 2015 Nov;24 Suppl 2:S143-148.
5. Baselga J, Swain SM. Novel anticancer targets: revisiting ERBB2 and discovering ERBB3. Nat Rev Cancer. 2009 Jul;9(7):463–75.
6. Scheuer W, Friess T, Burtscher H, Bossenmaier B, Endl J, Hasmann M. Strongly enhanced antitumor activity of trastuzumab and pertuzumab combination treatment on HER2-positive human xenograft tumor models. Cancer Res. 2009 Dec 15;69(24):9330–6.
7. Baselga J, Cortés J, Kim S-B, Im S-A, Hegg R, Im Y-H, et al. Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. N Engl J Med. 2012 Jan 12;366(2):109–19.
8. Swain SM, Baselga J, Kim S-B, Ro J, Semiglazov V, Campone M, et al. Pertuzumab, trastuzumab, and docetaxel in HER2-positive metastatic breast cancer. N Engl J Med. 2015 Feb 19;372(8):724–34.
9. Swain SM, Ewer MS, Cortés J, Amadori D, Miles D, Knott A, et al. Cardiac tolerability of pertuzumab plus trastuzumab plus docetaxel in patients with HER2-positive metastatic breast cancer in CLEOPATRA: a randomized, double-blind, placebo-controlled phase III study. The Oncologist. 2013;18(3):257–64.
10. Gianni L, Pienkowski T, Im Y-H, Roman L, Tseng L-M, Liu M-C, et al. Efficacy and safety of neoadjuvant pertuzumab and trastuzumab in women with locally advanced, inflammatory, or early HER2-positive breast cancer (NeoSphere): a randomised multicentre, open-label, phase 2 trial. Lancet Oncol. 2012 Jan;13(1):25–32.
11. Gianni L, Pienkowski T, Im Y-H, Tseng L-M, Liu M-C, Lluch A, et al. 5-year analysis of neoadjuvant pertuzumab and trastuzumab in patients with locally advanced, inflammatory, or early-stage HER2-positive breast cancer (NeoSphere): a multicentre, open-label, phase 2 randomised trial. Lancet Oncol. 2016 Jun;17(6):791–800.
12. Wolff AC, Hammond MEH, Hicks DG, Dowsett M, McShane LM, Allison KH, et al. Recommendations for Human Epidermal Growth Factor Receptor 2 Testing in Breast Cancer: American Society of Clinical Oncology/College of American Pathologists Clinical Practice Guideline Update. J Clin Oncol. 2013 Nov;31(31):3997–4013.
13. Hudis CA, Barlow WE, Costantino JP, Gray RJ, Pritchard KI, Chapman J-AW, et al. Proposal for standardized definitions for efficacy end points in adjuvant breast cancer trials: the STEEP system. J Clin Oncol. 2007 May 20;25(15):2127–32.
14. De Mattos-Arruda L, Shen R, Reis-Filho JS, Cortés J. Translating neoadjuvant therapy into survival benefits: one size does not fit all. Nat Rev Clin Oncol. 2016 Mar 22;13(9):566–79.
15. Piccart-Gebhart M, Holmes E, Baselga J, de Azambuja E, Dueck AC, Viale G, et al. Adjuvant Lapatinib and Trastuzumab for Early Human Epidermal Growth Factor Receptor 2-Positive Breast Cancer: Results From the Randomized Phase III Adjuvant Lapatinib and/or Trastuzumab Treatment Optimization Trial. J Clin Oncol. 2016 Apr 1;34(10):1034–42.
16. Chan A, Delaloge S, Holmes FA, Moy B, Iwata H, Harvey VJ, et al. Neratinib after trastuzumab-based adjuvant therapy in patients with HER2-positive breast cancer (ExteNET): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol. 2016 Mar;17(3):367–77.