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Correction to: Relationship between tumor biomarkers and efficacy in MARIANNE, a phase III study of trastuzumab emtansine ± pertuzumab versus trastuzumab plus taxane in HER2-positive advanced breast cancer

Edith A. Perez[1*], Sanne Lysbet de Haas[2], Wolfgang Eiermann[3], Carlos H. Barrios[4], Masakazu Toi[5], Young-Hyuck Im[6], Pier Franco Conte[7], Miguel Martin[8], Tadeusz Pienkowski[9], Xavier B. Pivot[10], Howard A. Burris III[11], Sven Stanzel[2], Monika Patre[2] and Paul Anthony Ellis[12]

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Following publication of the original article [1], the authors reported the following errors in the article.

1) In Table 2, the layout has been updated. The corrected Table 2 is supplied below:
2) The legend for Fig. 3 has been adapted for clearer readability. The updated legend is as follows:
3) The competing interests statement has been updated below.

Competing interests

EAP was a salaried employee of Genentech, Inc. at the time this work was prepared and owns stock in F. Hoffmann-La Roche Ltd. SLdH, SS, and MP are salaried employees of F. Hoffmann-La Roche Ltd. SS and MP own stock in F. Hoffmann-La Roche Ltd. WE has served as a consultant and on Speakers' Bureaus for F. Hoffmann-La Roche Ltd. CHB has served as a consultant for F. Hoffmann-La Roche Ltd., Pfizer, GlaxoSmithKline, Novartis, Boehringer Ingelheim, and Eisai and has received research funding from Amgen, AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, Novartis, Pfizer, F. Hoffmann-La Roche/Genentech, Eisai, Lilly, Sanofi-Aventis, and Celgene. MT has received research funding from Chugai Pharmaceutical. PFC has served on Speakers' Bureaus for Novartis, F. Hoffmann-La Roche Ltd., and AstraZeneca and has received research funding from F. Hoffmann-La Roche Ltd. and Novartis. MM has received honoraria from and has served as a consultant for F. Hoffmann-La Roche Ltd. TP has received honoraria and research funding from F. Hoffmann-La Roche Ltd., Pfizer, and Novartis. He has also served as a consultant for F. Hoffmann-La Roche Ltd. XBP has received honoraria from F. Hoffmann-La Roche Ltd., GlaxoSmithKline, Amgen, Novartis, Pierre Fabre, and Eisai. He has also served as a consultant for F. Hoffmann-La Roche Ltd., Amgen, Novartis, Pierre Fabre, and Eisai. Y-HI, HAB, and PAE have nothing to disclose.

Author details

[1]Mayo Clinic, 4500 San Pablo Rd. S, Jacksonville, FL 32224, USA. [2]F. Hoffmann-La Roche Ltd, Grenzacherstrasse 124, 4070 Basel, Switzerland. [3]Interdisciplinary Oncology Center, Nussbaumstrasse 12, 80336 Munich, Germany. [4]PUCRS School of Medicine, Av. Ipiranga 6681, Porto Alegre, RS 90619-900, Brazil. [5]Graduate School of Medicine, Kyoto University, Yoshida-Konoe-cho, Sakyo-ku, Kyoto 606-8501, Japan. [6]Samsung Medical Centre, 81 Irwon-Ro Gangnam-gu, Seoul 06351, South Korea. [7]Department of Surgery, Oncology and Gastroenterology, University of Padova and Istituto Oncologico Veneto, Via Gattamelata 64, 35128 Padova, Italy. [8]Instituto de Investigacion Sanitaria Gregorio Marañón, CIBERONC, GEICAM, Universidad Complutense, Avda. de Séneca, 2, 28040 Madrid, Spain. [9]Postgraduate Medical Education Center, ul. Marymoncka 99, 02-813 Warsaw, Poland. [10]Paul Strauss Cancer Center, 3 Rue de la Porte de l'Hôpital, BP 30042, 67065 Strasbourg, France. [11]Sarah Cannon Research Institute and Tennessee Oncology, PLLC, 250 25th Ave N, Nashville, TN 37203, USA. [12]Guys Hospital and Sarah Cannon Research Institute, Great Maze Pond, London SE1 9RT, UK.

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Reference

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* Correspondence: Perez.edith@mayo.edu
[1]Mayo Clinic, 4500 San Pablo Rd. S, Jacksonville, FL 32224, USA
Full list of author information is available at the end of the article

Table 2 Progression-free survival by HER2 expression subgroups

	Trastuzumab + taxane (Control)		T-DM1 (T-DM1)			T-DM1 + pertuzumab (T-DM1+P)			
	No. patients / No. patients with PFS event	Median PFS (mo)	No. patients / No. patients with PFS event	Median PFS (mo)	HR vs. trastuzumab + taxane (97.5% CI)[a]	No. patients / No. patients with PFS event	Median PFS (mo)	HR vs. trastuzumab + taxane (97.5% CI)[a]	HR vs. T-DM1 + placebo (97.5% CI)[a]
All patients[b]									
IHC 3+	333/209	14.4	340/215	14.6	0.93 (0.75–1.16)	331/195	16.7	0.83 (0.67–1.04)	0.90 (0.72–1.12)
IHC 2+	27/19	12.6	25/20	7.3	1.13 (0.55–2.32)	29/20	8.3	1.25 (0.61–2.59)	0.98 (0.48–2.02)
IHC 2+/3+ patients combined[c]									
Focal IHC 2+/3+ (10–29%)[d]	14/8	12.4	12/10	6.4	1.51 (0.52–4.40)	15/12	7.5	1.41 (0.50–3.94)	1.00 (0.38–2.65)
Heterogeneous IHC 2+/3+ (30–79%)	35/27	10.6	37/25	8.3	1.04 (0.55–1.94)	33/20	6.3	1.11 (0.57–2.17)	0.91 (0.46–1.78)
Homogeneous IHC 2+/3+ (≥80%)	311/193	14.6	316/200	14.7	0.92 (0.74–1.16)	312/183	17.8	0.82 (0.65–1.04)	0.89 (0.71–1.13)
IHC 3+ patients only									
Focal IHC 3+ (10–29%)[d]	9/5	8.3	11/7	8.3	1.20 (0.32–4.50)	8/7	4.2	5.11 (0.99–26.40)	2.28 (0.60–8.71)
Heterogeneous IHC 3+ (30–79%)	44/29	10.5	45/34	10.0	1.15 (0.65–2.03)	29/16	17.8	0.79 (0.39–1.60)	0.65 (0.33–1.29)
Homogeneous IHC 3+ (≥80%)	280/175	14.6	284/174	15.2	0.89 (0.70–1.14)	294/172	17.7	0.82 (0.65–1.05)	0.92 (0.73–1.17)

[a]Unstratified hazard ratio
[b]Five patients with IHC 0/1+ and five patients with unknown IHC status are not included in this table
[c]Categories were based on IHC subgroup and then combined
[d]Compared with the overall population, samples with focal HER2 expression were more likely to express mutated PIK3CA and lower levels of HER2 mRNA
CI confidence interval, *HER2* human epidermal growth factor receptor 2, *HR* hazard ratio, *IHC* immunohistochemistry, *NE* not estimable, *P* pertuzumab, *PFS* progression-free survival, *PIK3CA* phosphoinositide 3-kinase catalytic subunit alpha, *T-DM1* trastuzumab emtansine

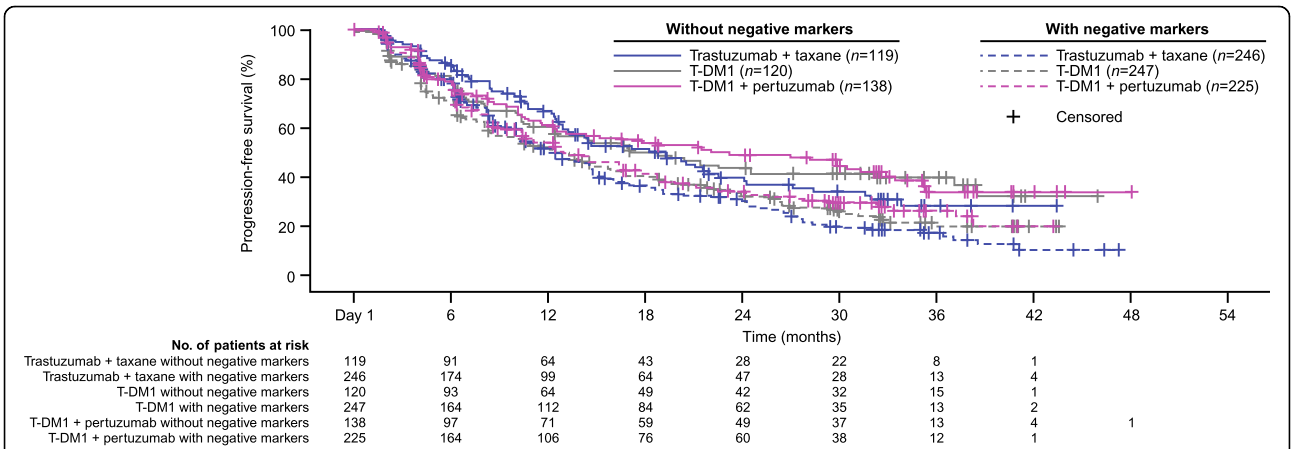

Fig. 3 Kaplan–Meier curve of PFS in subgroups defined by the presence/absence of negatively impacting biomarkers.*
*Biomarkers were considered negatively prognostic of response to HER2-targeted treatment based on their association with a numerical decrease in PFS. Specifically, these included expression of mutated PIK3CA, low HER2 mRNA level (≤median), and focal HER2 distribution. Patients without negative markers were those with nonmutated PIK3CA, high HER2 mRNA levels (>median), and non-focal (i.e., heterogeneous or homogenous) distribution of HER2. Patients with negative markers were those with mutated PIK3CA, low HER2 mRNA levels (≤median), and focal HER2 distribution. *HER2* human epidermal growth factor receptor 2, *PIK3CA* phosphoinositide 3-kinase catalytic subunit alpha, *PFS* progression-free survival, *T-DM1* trastuzumab emtansine