



Letter regarding Sopik V et al. entitled “Impact of microinvasion on breast cancer mortality in women with ductal carcinoma in situ”

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To the Editor

With great interest, we have read the article “Impact of microinvasion on breast cancer mortality in women with ductal carcinoma in situ” (by Sopik V et al. *Breast Cancer Res Treat.* 2018 Feb;167(3):787–795), which analyzed the clinicopathological characteristics and breast cancer mortality of ductal carcinoma in situ (DCIS), DCIS with microinvasive carcinoma (≤ 0.1 mm of invasion) (DCIS-M), and invasive carcinoma (IC) 0.2–2.0 cm in size. The study retrieved 525,395 women from the Surveillance, Epidemiology and End Results (SEER) registries database (1990–2013) and came to the conclusion that the 20-year breast cancer-specific mortality of DCIS-M (6.9%) was higher than DCIS (3.8%) and more closely to small IC (0.2–1.0 cm) (6.8%). Sopik V et al. really did a great work.

Status of ER and PR was shown in Table 1 and total ER positive patients (357,819; 84.7%) were well above total ER negative patients (64,815; 15.3%) [1]. However, PR positive

patients (106,128; 25.7%) were much less than PR negative patients (306,235; 74.3%). In our opinion, PR negative patients were no less than PR positive patients in breast cancer, so we searched the evidence online.

Firstly, PR is a downstream gene target of ER and patients with ER + PR—breast cancer constitutes only 10–15% of all breast cancers in previous studies [2]. Secondly, the similar study from SEER database (1990–2012) by Wang et al. showed PR negative patients accounted for only 23.0% in all patients [3]. Furthermore, another similar study from ten Senonetwork Italia breast centers demonstrated that 76.9% breast cancer patients were PR positive [4]. Therefore, We believe the PR status was displayed incorrectly in the article (Table 1). The incorrect data were further analyzed, so partial results related to PR status were not correct in Tables 2 and 3. We believe the correct data more likely to be that the number of patients with negative PR is 106,128 (25.7%) and positive PR is 306,235 (74.3%).

Xiangyu Wang and Xiangyi Kong contributed equally to this article.

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The original and revised Table 1.

Original Table 1:

Characteristic	Value	Pure DCIS, no invasion <i>N</i> = 161,394	Microinvasive (≤ 0.1 cm) <i>N</i> = 13,489	Invasive 0.2–1.0 cm <i>N</i> = 153,856	Invasive 1.1–2.0 cm <i>N</i> = 196,656
ER status	Negative	14,361 (15.6%)	2968 (28.7%)	17,110 (12.3%)	30,376 (16.8%)
	Positive	77,730 (84.4%)	7386 (71.3%)	122,406 (87.7%)	150,297 (83.2%)
	Unknown	69,303	3135	14,340	15,783
PR status	Positive	22,161 (25.5%)	4085 (40.7%)	31,974 (23.3%)	47,908 (26.9%)
	Negative	64,743 (74.5%)	5962 (59.3%)	105,151 (76.7%)	130,379 (73.1%)
	Unknown	74,490	3442	16,731	18,369

Revised Table 1:

Characteristic	Value	Pure DCIS, no invasion <i>N</i> = 161,394	Microinvasive (≤ 0.1 cm) <i>N</i> = 13,489	Invasive 0.2–1.0 cm <i>N</i> = 153,856	Invasive 1.1–2.0 cm <i>N</i> = 196,656
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Anyway, the small mistake didn't influence the main conclusions and it would make the article more perfect if authors could fix the mistake or attach our letter behind the article.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflicts of interest.

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent Informed consent was obtained from all individual participants included in the study.

References

1. Sopik V, Sun P, Narod SA (2018) Impact of microinvasion on breast cancer mortality in women with ductal carcinoma in situ. *Breast Cancer Res Treat* 167(3):787–795
2. Liu XY, Ma D, Xu XE, Jin X, Yu KD, Jiang YZ, Shao ZM (2018) Genomic landscape and endocrine-resistant subgroup in estrogen receptor-positive, progesterone receptor-negative, and HER2-negative breast cancer. *Theranostics* 8(22):6386–6399
3. Wang W, Zhu W, Du F, Luo Y, Xu B (2017) The demographic features, clinicopathological characteristics and cancer-specific outcomes for patients with microinvasive breast cancer: a SEER database analysis. *Sci Rep* 7:42045
4. Costarelli L, Cianchetti E, Corsi F, Friedman D, Ghilli M, Lacaria M, Menghini L, Murgo R, Ponti A, Rinaldi S et al (2019) Microinvasive breast carcinoma: an analysis from ten Senonetwork Italia breast centres. *Eur J Surg Oncol* 45(2):147–152

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