



## Correction to: The influence of treatment on hormone receptor subgroups and breast cancer-specific mortality within US integrated healthcare systems

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**Correction to: Cancer Causes & Control**  
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Following publication of the original article [1] the authors identified that the name of Erin J Aiello Bowles was

incorrectly spelled. The correct spelling is shown above. In addition, the legend of Fig. 1 and Table 1 were incorrectly printed and digits in the revised values were mixed with digits in the original values. The corrected versions of Fig. 1 and Table 1 are included.

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The original article can be found online at <https://doi.org/10.1007/s10552-022-01589-4>.

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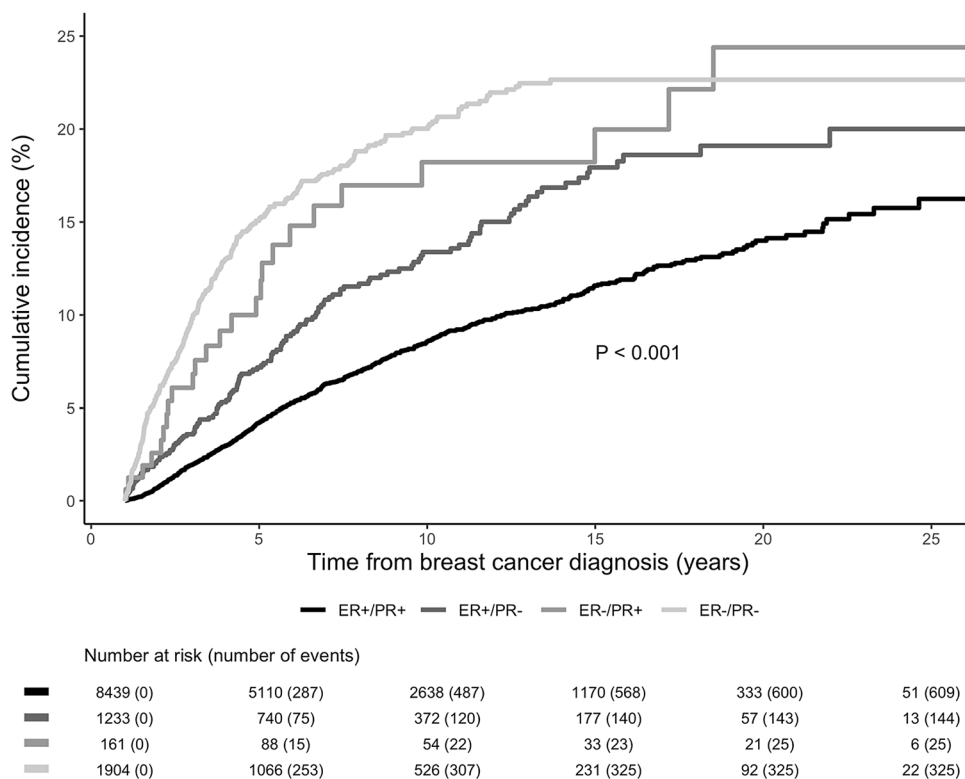
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**Fig. 1** Cumulative incidence of breast cancer-specific mortality accounted for competing risks (non-breast cancer mortality) among 11,737 women who survived  $\geq 1$  years after being diagnosed with a first primary breast cancer with known ER/PR status at Kaiser Permanente Colorado ( $n = 5068$  between 1994 and 2014) or Kaiser Permanente Washington ( $n = 6669$  between 1990 and 2016).  $P$  value was based on the Gray’s test. One patient diagnosed with ER+/PR+ had a breast cancer-related death 25 years after her initial diagnosis and this event does not appear in the table above



**Table 1** Risk of breast cancer cancer-specific mortality for hormone receptor subgroups in Kaiser Permanente Colorado and Kaiser Permanente Washington ( $N = 11,737$ )

Hormone receptor subgroups	No. of women at risk	No. of breast cancer deaths	Unadjusted	Multivariable-adjusted <sup>a</sup>	Multivariable-adjusted + treatment receipt <sup>b</sup>
			HR (95% CI)	HR (95% CI)	HR (95% CI)
ER+/PR+	8439	610	1.00 (ref)	1.00 (ref)	1.00 (ref)
ER+/PR-	1233	144	1.62 (1.35 to 1.94)	1.43 (1.17 to 1.75)	1.58 (1.27 to 1.97)
ER-/PR+	161	25	2.06 (1.38 to 3.07)	1.39 (0.94 to 2.13)	1.08 (0.65 to 1.79)
ER-/PR-	1904	325	2.53 (2.21 to 2.89)	1.59 (1.35 to 1.88)	1.47 (1.12 to 1.92)

HR hazard ratio, ER estrogen receptor, PR progesterone receptor

<sup>a</sup>Adjusted for race (white, Black or other/unknown), BMI (<25, 25–30,  $\geq 30$ , missing), and study site (KP Colorado, KP Washington) and stratified the baseline hazard by age at diagnosis (5-year groups: <30, 30–35; 35–40; 40–45; 45–50; 50–55; 55–60; 60–65; 65–70; 70–75; 75–80;  $\geq 80$ ), grade (well differentiated, moderately differentiated, poorly differentiated, undifferentiated, unknown), stage (0, I, II, III/IV), and histology (ductal, lobular, mixed, other)

<sup>b</sup>Adjusted for race (white, Black or other/unknown), study site (KP Colorado, KP Washington), initial surgery combined with radiotherapy (breast conserving surgery alone, breast conserving surgery including unilateral mastectomy and radiotherapy, and bilateral mastectomy), BMI (<25, 25–30,  $\geq 30$ , missing), and the baseline hazard was stratified by age at diagnosis (5-year groups: <30, 30–35; 35–40; 40–45; 45–50; 50–55; 55–60; 60–65; 65–70; 70–75; 75–80;  $\geq 80$ ), grade (well differentiated, moderately differentiated, poorly differentiated, undifferentiated, unknown), stage (0, I, II, III/IV), histology (ductal, lobular, mixed, other), ever receiving chemotherapy (yes, no), and ever taking adjuvant endocrine therapy (yes, no; women were considered users of adjuvant endocrine therapy if they had accumulated at least 90 days of therapy during any one treatment course)

**Reference**

1. Ramin C, Gierach GL, Abubakar M et al (2022) The influence of treatment on hormone receptor subgroups and breast

cancer-specific mortality within US integrated healthcare systems. *Cancer Causes Control* 33(7):1019–1023

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