

## WEB MATERIAL

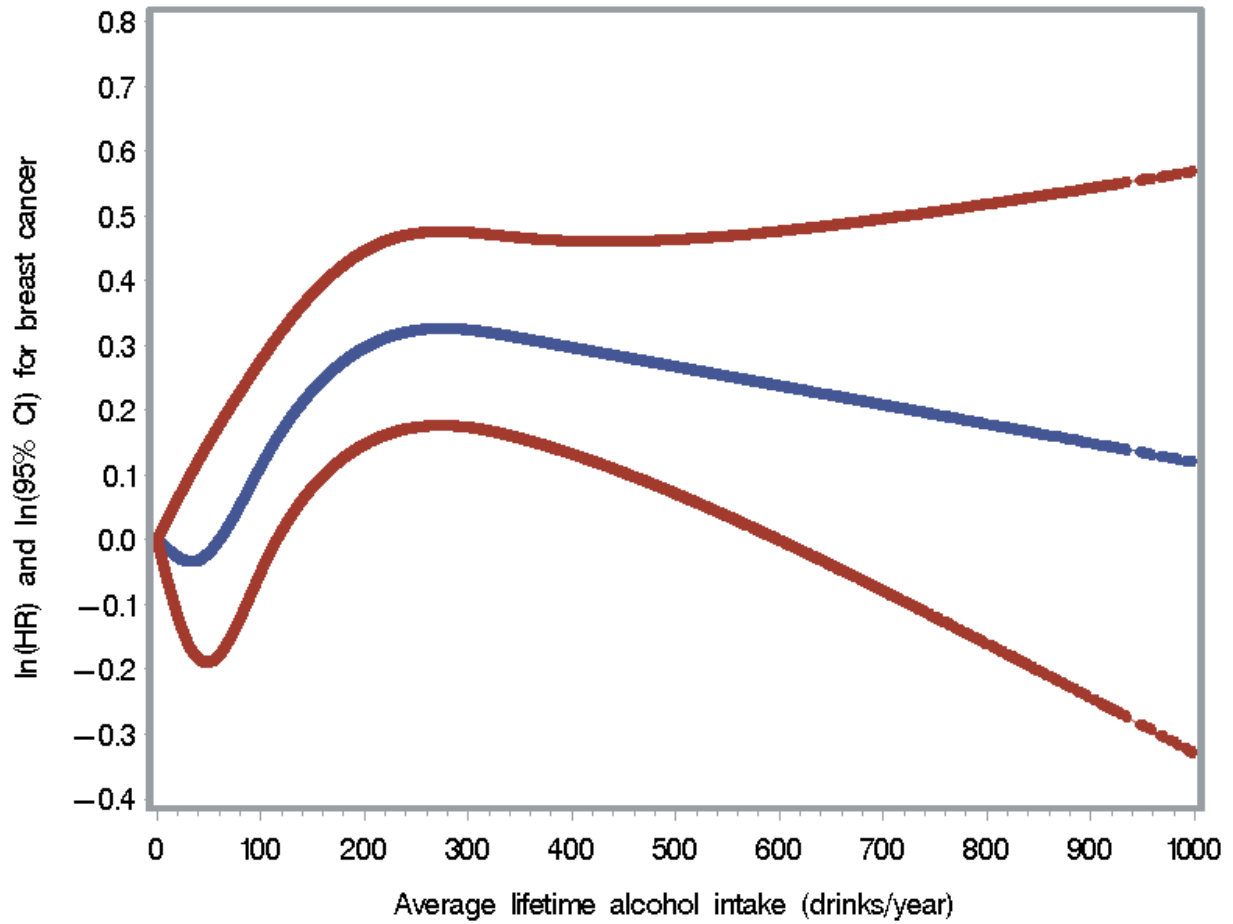
### **“Lifetime Alcohol Intake, Binge Drinking Behaviors, and Breast Cancer Risk”**

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**Web Figure 1.** Restricted cubic splines, with 4 knots (5%, 35%, 65%, 95%), modeling the association between average lifetime alcohol intake (drinks/year) and invasive breast cancer risk, Sister Study, 2003–2014. CI, confidence interval; HR, hazard ratio.

**Web Table 1.** Association of Average Lifetime Alcohol Intake With DCIS, ER Tumor Status, and Menopausal Status at Diagnosis, Sister Study, 2003–2014<sup>a</sup>

Tumor Characteristic	Average Lifetime Alcohol Consumption							
	<60 Drinks/Year		60–229 Drinks/Year			≥230 Drinks/Year		
	No.	HR	No.	HR	95% CI	No.	HR	95% CI
DCIS	213	1.00	167	0.98	0.79, 1.21	55	0.99	0.72, 1.35
ER status <sup>b,c</sup>								
ER+	503	1.00	447	1.18	1.04, 1.35	186	1.42	1.19, 1.70
ER–	104	1.00	84	1.09	0.81, 1.46	24	0.96	0.60, 1.53
Menopausal status at diagnosis <sup>b</sup>								
Premenopausal	131	1.00	149	1.30	1.02, 1.66	50	1.45	1.03, 2.06
Postmenopausal	535	1.00	468	1.17	1.03, 1.34	179	1.36	1.13, 1.63

Abbreviations: BMI, body mass index; CI, confidence interval; DCIS, ductal carcinoma in situ; ER, estrogen receptor; HR, hazard ratio.

<sup>a</sup> HRs were adjusted for age, race, education, age at menarche, age at first birth, parity, use of hormonal birth control, alcohol intake, use of postmenopausal hormones, age at menopause and menopausal status, and BMI.

<sup>b</sup> ER status and menopausal status at diagnosis were limited to invasive cases.

<sup>c</sup> Case-case analysis:  $P = 0.7$ .

**Web Table 2.** Ever Binge Drinking Relative to Low Lifetime Alcohol Intake in Association With DCIS, ER Tumor Status, and Menopausal Status at Diagnosis, Sister Study, 2003–2014<sup>a</sup>

Tumor Characteristic	Ever Binge Drinking				
	Low Alcohol Intake		Ever Binging		
	No.	HR	No.	HR	95% CI
DCIS	213	1.00	168	0.98	0.79, 1.22
ER status <sup>b,c</sup>					
ER+	503	1.00	531	1.32	1.16, 1.51
ER–	104	1.00	84	1.07	0.79, 1.46
Menopausal status at diagnosis <sup>c</sup>					
Premenopausal	131	1.00	183	1.38	1.09, 1.76
Postmenopausal	535	1.00	485	1.28	1.12, 1.47

Abbreviations: BMI, body mass index; CI, confidence interval; DCIS, ductal carcinoma in situ; ER, estrogen receptor; HR, hazard ratio.

<sup>a</sup> HRs were adjusted for age, race, education, age at menarche, age at first birth, parity, use of hormonal birth control, alcohol intake, use of postmenopausal hormones, age at menopause and menopausal status, and BMI.

<sup>b</sup> ER status and menopausal status at diagnosis were limited to invasive cases.

<sup>c</sup> Case-case analysis:  $P = 0.5$ .