

Table 1A. Breastfeeding and breast cancer risk stratified by hormone receptor expression

First author (Ref.)	Country (study)	No. cases	Breastfeeding (months) ²	Risk estimate (95% CI) ¹	
				ER+	ER-
Hildreth (42)	USA	148	Ever	1.4 (0.8-2.4)	0.5 (0.2-1.0)
McTiernan (39)	USA (CASH-WA)	240	1-3	0.8 (0.5-1.4)	0.5 (0.3-1.1)
			4-12	0.6 (0.3-1.1)	0.6 (0.3-1.3)
			13+	0.4 (0.2-1.0)	0.7 (0.3-1.6)
Cooper (36)	Australia	380	<13	1.0 (0.5-1.7)	0.7 (0.4-1.5)
			13+	1.1 (0.6-2.1)	0.6 (0.3-1.4)
Yoo (41)	Japan	455	Per 3 months	1.0 (1.0-1.1)	1.0 (0.9-1.1)
Yoo (41)	Japan	455	Per 3 months	PR+	PR-
				1.0 (0.9-1.1)	1.0 (0.9-1.1)
Cotterchio (24)	Canada (ONT)	3276	<i>Premenopause</i>	ER+/PR+	ER-/PR-
			1-6	1.2 (0.8-1.8)	0.7 (0.4-1.2)
			6+	1.4 (1.0-2.1)	0.9 (0.5-1.4)
			<i>Postmenopause</i>		
			1-6	1.0 (0.8-1.3)	1.0 (0.7-1.4)
			6+	0.9 (0.7-1.2)	1.1 (0.8-1.5)
Huang (32)	USA (CBCS)	783	1+	0.7 (0.5-1.0)	0.8 (0.5-1.1)
Britton (29)	USA (WISH)	1212	1-2	1.0 (0.8-1.3)	0.8 (0.6-1.1)
			3+	0.8 (0.6-1.1)	0.8 (0.5-1.1)
Yoo (41)	Japan	455	Per 1 child	1.0 (1.0-1.1)	1.0 (0.9-1.1)

1. Odds ratios (OR) were the reported risk estimates for case-control studies, and relative risks (RR) for cohort designs.

2. Reference group is women who never breastfed. Risk estimates based on only parous women, with the exception of studies conducted by Cooper, Cotterchio, and Huang et al. who also included nulliparous women in the reference group. All risk estimates adjusted for parity and age at first birth.

Table 2a. Alcohol consumption and breast cancer risk stratified by hormone receptor expression

First author (Ref.)	Country (study)	No. cases	Alcohol consumption ²	Risk estimate (95% CI) ¹	
				ER+	ER-
Yoo (41)	Japan	455	Ever	1.0 (0.7-1.3)	0.7 (0.5-1.1)
McTiernan (39)	USA (CASH-WA)	240	1-6 drinks/wk 7+	1.2 (0.7-1.9) 1.7 (1.1-2.8)	1.1 (0.6-2.0) 2.1 (1.1-3.6)
Nasca (34)	USA	1152	<1.5 g/day 1.5-4.9 5.0-14.9 15+	1.2 (0.9-1.6)* 1.3 (0.9-1.8)* 1.3 (1.0-1.7)* 1.4 (1.0-1.9)*	0.9 (0.6-1.4)* 1.2 (0.8-1.8)* 0.9 (0.6-1.4)* 1.1 (0.7-1.6)*
Cooper (36)	Australia	380	<2.5 g/day 2.5-9.3 9.4+	1.0 (0.6-1.8) 0.9 (0.5-1.9) 1.3 (0.8-2.1)	0.6 (0.3-1.1) 1.1 (0.5-2.2) 1.2 (0.6-2.5)
Sellers (16)	USA (IOWA)	1355	<5 g/day 5+	1.1 (0.9-1.2) 1.1 (0.9-1.3)	1.4 (1.0-2.0) 1.6 (1.1-2.4)
				PR+	PR-
Yoo (41)	Japan	455	Ever	1.0 (0.7-1.4)	0.8 (0.6-1.1)
Sellers (16)	USA (IOWA)	1355	<5 g/day 5+	1.0 (0.9-1.2) 1.1 (0.9-1.3)	1.2 (1.0-1.6) 1.3 (1.0-1.7)
				ER+/PR+	ER-/PR-
Huang (32)	USA (CBCS)	783	Ever	0.8 (0.6-1.1)	0.9 (0.6-1.2)
Yoo (41)	Japan	455	Ever	1.0 (0.7-1.4)	0.7 (0.4-1.1)
Potter (17)	USA (IOWA)	610	Ever	1.2 (1.0-1.4)	1.4 (0.9-2.2)
Enger (30,31)	USA (LA County)	424	<i>Pre</i> menopause 1-5 g/day 6-13 14+	0.7 (0.5-1.2) 1.1 (0.7-1.7) 1.1 (0.7-1.8)	0.7 (0.4-1.2) 0.9 (0.5-1.5) 1.0 (0.6-1.8)
		760	<i>Post</i> menopause 1-13 g/day 14-26 27+	1.0 (0.7-1.3) 1.2 (0.8-1.8) 1.8 (1.1-2.7)	0.8 (0.5-1.3) 0.9 (0.5-1.8) 1.4 (0.7-2.8)
Cotterchio (24)	Canada (ONT)	3276	<i>Pre</i> menopause ≤1 drinks/wk 1.5-3 3.5+	1.1 (0.7-1.6) 0.8 (0.6-1.3) 1.4 (0.9-2.1)	1.3 (0.8-2.2) 1.4 (0.8-2.3) 0.9 (0.5-1.7)
			<i>Post</i> menopause ≤1 drinks/wk 1.5-3 3.5+	1.0 (0.2-1.3) 0.9 (0.7-1.2) 1.3 (1.0-1.6)	1.1 (0.8-1.5) 0.9 (0.6-1.3) 1.1 (0.8-1.6)
Britton (29)	USA (WISH)	1212	<7 drinks/wk 7+	1.1 (0.9-1.4) 1.3 (0.9-1.9)	1.1 (0.8-1.4) 1.4 (0.9-2.1)

1. Odds ratios (OR) were the reported risk estimates for case-control studies, and relative risks (RR) for cohort designs.

2. Reference group was abstainers.

* Age-adjusted only.

Note: Interactions of alcohol with hormone-replacement therapy (19) and race (26) were not tabulated.

Table 3a. Cigarette smoking and breast cancer risk stratified by hormone receptor expression

First author (Ref.)	Country (study)	No. cases	Smoking status ²	Risk estimate (95% CI) ¹	
				ER+	ER-
Stanford (38)	USA (CASH-GA)	458	Ever	1.0 (0.7-1.4)*	1.0 (0.7-1.4)*
Yoo (41)	Japan	455	Ever	1.4 (1.0-1.9)	1.3 (0.9-2.0)
Cooper (36)	Australia	380	Ever	1.0 (0.7-1.4)	1.6 (1.0-2.7)
			Former	0.9 (0.6-1.4)	1.9 (1.0-3.6)
			Current	1.3 (0.8-2.0)	1.3 (0.7-2.5)
McTeirnan (39)	USA (CASH-WA)	240	Former	1.0 (0.6-1.6)	0.8 (0.5-1.6)
			Current	1.1 (0.7-1.8)	0.8 (0.4-1.3)
London (20)	USA (NHS)	890	Former	1.2 (1.0-1.4)	1.1 (0.7-1.6)
			1-14 cpd	1.1 (0.8-1.5)	0.7 (0.4-1.1)
			15-24 cpd	1.1 (0.8-1.4)	1.2 (0.8-1.6)
			25+ cpd	1.4 (1.0-1.8)	1.1 (0.7-1.6)
Morabia ³ (33)	Switzerland	242	passive	1.8 (1.1-3.0)*	3.8 (1.5-10.0)*
			active <20 cpd	2.2 (1.3-3.6)*	3.8 (1.4-10.3)*
			active 20+ cpd	2.4 (1.4-4.5)*	4.3 (1.4-13.2)*
Manjer (21)	Sweden	267	Former	1.0 (0.7-1.5)	2.7 (1.4-5.1)
			Current	0.9 (0.6-1.2)	2.2 (1.2-4.0)
			<20 cpd	0.9 (0.6-1.3)	2.0 (1.1-3.9)
			20+ cpd	0.8 (0.5-1.4)	2.6 (1.2-5.9)
Yoo (41)	Japan	455	Ever	PR+	PR-
				1.7 (1.2-2.5)	1.1 (0.7-1.5)
Manjer (21)	Sweden	267	Former	0.9 (0.6-1.6)	1.6 (1.1-2.4)
			Current	1.1 (0.7-1.7)	1.1 (0.7-1.6)
			<20 cpd	1.1 (0.7-1.7)	1.0 (0.7-1.6)
			20+ cpd	1.1 (0.6-2.0)	1.1 (0.6-2.0)
Huang (32)	USA (CBCS)	783	Ever	ER+/PR+	ER-/PR-
				1.1 (0.8-1.5)	1.1 (0.8-1.5)
Yoo (41)	Japan	455	Ever	1.7 (1.2-2.5)	1.1 (0.7-1.9)
Britton (29)	USA (WISH)	1212	Former	1.0 (0.8-1.3)	1.0 (0.8-1.4)
			Current	1.1 (0.9-1.4)	0.9 (0.7-1.2)
Manjer (21)	Sweden	267	Former	0.8 (0.4-1.4)	2.6 (1.3-5.2)
			Current	1.0 (0.7-1.6)	2.1 (1.1-4.1)
			<20 cpd	1.1 (0.7-1.7)	2.1 (1.0-4.2)
			20+ cpd	1.0 (0.5-1.9)	2.6 (1.0-6.4)
Cotterchio (24)	Canada (ONT)	3276	<i>Premenopause</i>		
			0.1-10 pack-yrs	0.9 (0.6-1.3)	1.1 (0.7-1.7)
			>10	1.1 (0.8-1.6)	1.3 (0.8-2.1)
			<i>Postmenopause</i>		
			0.1-10 pack-yrs	1.0 (0.8-1.4)	0.9 (0.6-1.4)
			>10	1.2 (0.9-1.4)	1.5 (1.2-2.0)

1. Odds ratios (OR) were the reported risk estimates for case-control studies, and relative risks (RR) for cohort designs.

2. Reference group is never smokers. Cigarettes smoked per day (cpd).

3. Never smokers refers to subjects never having been exposed to either active or passive smoking. Passive smokers defined as women who reported having been exposed to passive smoke at least 1 hour per day for at least 12 consecutive months during their lifetime.

Table 4a. First-degree relative with breast cancer and breast cancer risk stratified by hormone receptor expression

First author (Ref.)	Country (study)	No. cases	Risk estimate (95% CI) ¹	
			ER+	ER-
Morabia (33)	Switzerland	242	2.1 (1.2-3.8)	1.2 (0.4-3.6)
Yoo (41)	Japan	455	1.5 (0.9-2.7)	1.7 (0.8-3.4)
Cooper (36)	Australia	380	1.6 (0.8-3.1)	1.5 (0.5-4.3)
Stanford (38)	USA (CASH-GA)	458	2.3 (1.2-4.2)	2.1 (1.1-3.7)
Hislop (37)	Canada	512	1.9 (1.2-3.1)*	1.5 (0.8-2.8)*
McTiernan (39)	USA (CASH-WA)	240	1.5 (0.7-3.0)	1.9 (0.8-4.2)
Tutera ² (18)	USA (IOWA)	610	1.1	1.7 (1.0-2.8)
Kreiger (35)	Canada	528	1.8 (1.1-2.8)	5.7 (2.7-12.2)
			PR+	PR-
Tutera ² (18)	USA (IOWA)	610	1.3 (1.0-1.7)	1.0
Yoo (41)	Japan	455	1.9 (1.0-3.5)	1.4 (0.7-2.6)
Kreiger (35)	Canada	528	1.9 (1.1-3.1)	4.1 (2.2-7.5)
			ER+/PR+	ER-/PR-
Yoo (41)	Japan	455	1.7 (0.9-3.4)	1.5 (0.7-3.4)
Tutera (18)	USA (IOWA)	610	1.3 (1.0-1.7)	1.6 (0.9-2.8)
Britton (29)	USA (WISH)	1212	2.3 (1.7-3.2)	2.5 (1.7-3.7)
Potter (17)	USA (IOWA)	610	1.2 (0.9-1.6)	1.5 (0.8-2.8)
Cotterchio (24)	Canada (ONT)	3276	<i>Premenopause</i> 1.7 (1.1-2.8)	2.4 (1.4-4.1)
			<i>Postmenopause</i> 1.3 (1.0-1.7)	1.2 (0.8-1.7)

1. Odds ratios (OR) were the reported risk estimates for case-control studies, and relative risks (RR) for cohort designs.

Risk estimates for first degree female relatives compared to women with no family history of breast cancer; except for the study conducted by Potter et al., which includes second degree relatives.

2. Risk estimates abstracted from text of publication, and confidence intervals not always provided.

* Age-adjusted only.

Table 5a. Premenopausal body mass and breast cancer risk stratified by hormone receptor expression

First author (Ref.)	Country (Study)	No. cases	BMI (kg/m ²) ¹		Risk estimate (95% CI) ²	
			Reference group	BMI category	ER+	ER-
Yoo (40)	Japan	455	continuous	Per 1 kg/m ²	1.05 (0.99-1.12)	1.02 (0.94-1.11)
Yoo (40)	Japan	455	continuous	Per 1 kg/m ²	PR+ 1.02 (0.95-1.10)	PR- 1.06 (0.99-1.14)
Enger (30)	USA (LA County)	424	<21.7	21.7-23.6 23.7-27.0 27.1+	ER+/PR+ 1.3 (0.9-1.9) 1.0 (0.7-1.6) 1.1 (0.7-1.8)	ER-/PR- 1.1 (0.7-1.8) 1.0 (0.6-1.7) 1.1 (0.6-1.7)
Huang ³ (32)	USA (CBCS)	783	<23	23-31 31+	0.7 (0.4-1.1) 0.6 (0.3-1.2)	0.9 (0.6-1.6) 0.6 (0.3-1.2)
Cotterchio (24)	Canada (ONT)	771	≤25	25.1-27 >27	1.1 (0.8-1.7) 0.7 (0.5-1.0)	1.4 (0.8-2.3) 1.4 (0.9-2.1)

1. Current or baseline BMI (kg/m²); except for Enger *et al.* and Huang *et al.* who report BMI one year prior to interview.

2. Odds ratios (OR) were the reported risk estimates for case-control studies, and relative risks (RR) for cohort designs.

3. Includes perimenopausal women in addition to *premenopausal* women.