

Table S4. Sensitivity analyses for the association between age at thelarche and incident breast cancer in the Sister Study cohort

Analysis	N in model	Person-years	Age at thelarche ^a												Continuous (per 1-year later)	
			<10 years			10-11 years			12-13 years			>13 years			HR	95% CI
			N cases	HR	95% CI	N cases	HR	95% CI	N cases	HR	95% CI	N cases	HR	95% CI		
Full cohort	49,686	459,726	135	1.23	1.03, 1.46	921	1.03	0.95, 1.11	1725	1	Referent	514	0.91	0.82, 1.00	0.97	0.95, 0.99
<i>Adjusting age at thelarche:</i>																
Assuming age at thelarche occurred one year earlier than reported for women with thelarche-menarche tempo ≤0 years	49,686	459,726	227	1.18	1.02, 1.36	1388	1.11	1.03, 1.20	1380	1	Referent	300	1.00	0.88, 1.13	0.96	0.94, 0.99
Assuming age at thelarche occurred two years earlier than reported for women with thelarche-menarche tempo ≤0 years	49,686	459,726	482	1.19	1.07, 1.33	1626	1.07	0.99, 1.16	997	1	Referent	190	0.94	0.80, 1.09	0.96	0.94, 0.99
<i>Restricting study population:</i>																
Excluding women age ≥60 years at baseline	33,506	314,210	93	1.30	1.05, 1.61	581	1.05	0.95, 1.16	1028	1	Referent	324	0.93	0.82, 1.06	0.96	0.94, 0.99
Excluding women with thelarche-menarche tempo below 5th percentile (-2 years) or above the 95th percentile (3 years)	47,762	442,344	116	1.21	1.00, 1.46	900	1.02	0.94, 1.11	1705	1	Referent	464	0.90	0.81, 1.00	0.97	0.95, 0.99
Excluding women with thelarche-menarche tempo <0 years or >4 years	40,547	375,929	127	1.23	1.03, 1.48	849	1.02	0.94, 1.11	1437	1	Referent	271	0.88	0.77, 1.00	0.97	0.94, 1.00

Excluding women with thelarche-menarche tempo ≤ 0 years (thelarche at the same age or after menarche)	22,476	208,948	109	1.31	1.07, 1.60	574	1.03	0.92, 1.15	673	1	Referent	108	0.95	0.77, 1.16	0.97	0.93, 1.01
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No violations of proportional hazards assumption for any of the exposures of interest.

^aAdjusted for attained age as the underlying time scale, race/ethnicity and family income level growing up and stratified by birth cohort