

Table S6. Associations between early-life exposures and timing of thelarche in the Sister Study cohort by Bayesian family history score (BFHS) (N=49,151)

| | BFHS<median ^a (n=24,233) | | | | BFHS≥median ^a (n=24,918) | | | | P-het for median BFHS ^d | P-het for continuous BFHS ^e |
|---|--|------------|---------------------------------|------------|--|------------|---------------------------------|------------|--|--|
| | Early (≤10 years) ^{b,c} | | Late (≥14 years) ^{b,c} | | Early (≤10 years) ^{b,c} | | Late (≥14 years) ^{b,c} | | | |
| | OR | 95% CI | OR | 95% CI | OR | 95% CI | OR | 95% CI | | |
| <i>Maternal pregnancy characteristics</i> | | | | | | | | | | |
| Diabetes | | | | | | | | | 0.18 | 0.21 |
| Any | 1.49 | 1.06, 2.10 | 0.88 | 0.61, 1.28 | 0.95 | 0.65, 1.38 | 0.94 | 0.66, 1.33 | | |
| None | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Gestational hypertensive disorder | | | | | | | | | 0.22 | 0.68 |
| Any | 1.10 | 0.90, 1.35 | 0.95 | 0.78, 1.15 | 1.40 | 1.17, 1.68 | 0.98 | 0.81, 1.18 | | |
| None | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| DES use | | | | | | | | | 0.58 | 0.59 |
| Yes | 1.31 | 1.01, 1.70 | 0.95 | 0.73, 1.23 | 1.17 | 0.94, 1.45 | 1.06 | 0.86, 1.30 | | |
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Smoking during pregnancy | | | | | | | | | 0.73 | 0.11 |
| Yes | 1.22 | 1.12, 1.33 | 1.04 | 0.96, 1.13 | 1.18 | 1.09, 1.27 | 1.01 | 0.94, 1.08 | | |
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Farm exposure | | | | | | | | | 0.16 | 0.40 |
| Work and residence | 1.02 | 0.91, 1.14 | 1.04 | 0.94, 1.15 | 0.99 | 0.87, 1.13 | 0.83 | 0.73, 0.94 | | |
| Work only | 0.93 | 0.66, 1.32 | 1.20 | 0.91, 1.59 | 1.18 | 0.86, 1.61 | 1.22 | 0.91, 1.62 | | |
| Residence only | 0.94 | 0.78, 1.14 | 0.86 | 0.72, 1.02 | 1.02 | 0.84, 1.24 | 0.87 | 0.72, 1.04 | | |
| None | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Age at delivery | | | | | | | | | 0.17 | 0.84 |
| <20 years | 1.37 | 1.14, 1.64 | 0.94 | 0.78, 1.12 | 1.24 | 1.05, 1.46 | 0.92 | 0.78, 1.08 | | |
| 20-24 years | 1.01 | 0.91, 1.13 | 1.01 | 0.91, 1.11 | 1.13 | 1.03, 1.25 | 0.94 | 0.86, 1.02 | | |
| 25-29 years | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| 30-34 years | 0.91 | 0.82, 1.01 | 0.98 | 0.89, 1.07 | 1.00 | 0.90, 1.11 | 0.94 | 0.85, 1.03 | | |
| 35-39 years | 0.99 | 0.88, 1.12 | 1.01 | 0.91, 1.13 | 0.98 | 0.86, 1.12 | 0.88 | 0.78, 0.99 | | |
| ≥40 years | 0.83 | 0.69, 0.99 | 1.01 | 0.87, 1.18 | 1.14 | 0.94, 1.39 | 1.03 | 0.86, 1.22 | | |
| <i>Birth and infancy characteristics</i> | | | | | | | | | | |
| Firstborn | | | | | | | | | 0.26 | 0.81 |
| Yes | 1.23 | 1.12, 1.35 | 0.79 | 0.72, 0.86 | 1.24 | 1.14, 1.35 | 0.87 | 0.80, 0.95 | | |

| | | | | | | | | | | |
|-----------------------------------|------|------------|------|------------|------|------------|------|------------|------|------|
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Birthweight | | | | | | | | | 0.79 | 0.36 |
| <2500g | 1.07 | 0.93, 1.24 | 1.19 | 1.05, 1.36 | 1.05 | 0.91, 1.20 | 1.10 | 0.97, 1.25 | | |
| 2500g-3999g | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| ≥4000g | 1.02 | 0.88, 1.19 | 1.05 | 0.91, 1.20 | 0.99 | 0.85, 1.15 | 0.94 | 0.82, 1.08 | | |
| Multiple birth | | | | | | | | | 0.12 | 0.11 |
| Yes | 0.79 | 0.62, 1.00 | 0.98 | 0.81, 1.18 | 0.96 | 0.77, 1.19 | 1.26 | 1.05, 1.51 | | |
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Gestational age at birth | | | | | | | | | 0.10 | 0.03 |
| Born ≥1 month before due date | 0.91 | 0.68, 1.21 | 1.38 | 1.10, 1.74 | 0.92 | 0.71, 1.19 | 0.98 | 0.77, 1.24 | | |
| Born 2-4 weeks before due date | 1.09 | 0.88, 1.34 | 0.81 | 0.66, 1.01 | 1.04 | 0.87, 1.24 | 1.01 | 0.86, 1.19 | | |
| Not born ≥2 weeks before due date | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Ever breastfed | | | | | | | | | 0.78 | 0.97 |
| Yes | 0.99 | 0.91, 1.08 | 0.93 | 0.86, 1.00 | 0.98 | 0.91, 1.06 | 0.96 | 0.89, 1.03 | | |
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |
| Ever fed soy formula | | | | | | | | | 0.76 | 0.60 |
| Yes | 1.03 | 0.78, 1.35 | 1.00 | 0.78, 1.30 | 1.13 | 0.92, 1.39 | 1.11 | 0.91, 1.34 | | |
| No | 1 | Ref | 1 | Ref | 1 | Ref | 1 | Ref | | |

^aMedian BFHS in analytic sample is 0.306425. Median BFHS is weighted to control for length-biased sampling in calculation of BFHS. N=11 women are excluded due to missing weight.

^bAdjusted for birth cohort, race/ethnicity and childhood family income

^cReferent group is thelarche at age 11-13 years

^dP for heterogeneity calculated from a likelihood ratio test of nested models

^eModel to generate p-het for continuous BFHS was weighted to control for length-biased sampling in calculation of BFHS. N=11 women are excluded due to missing weight. P-value for heterogeneity calculated from a joint Wald test of exposure*BFHS interaction terms.