

**Supplementary Table SVII Association between age at menopause, age at hysterectomy and cause-specific mortality (Fine and Gray competing risk model).**

Age at menopause or age at hysterectomy	CVD mortality SHR (95% CI)	Cancer mortality SHR (95% CI)	Mortality from all other causes SHR (95% CI)
Natural menopause			
<40	2.32 (1.62, 3.34)	1.17 (0.87, 1.56)	1.47 (1.18, 1.83)
40–44	1.37 (1.07, 1.77)	1.16 (0.99, 1.37)	1.13 (0.99, 1.29)
45–49	1.40 (1.17, 1.68)	1.17 (1.05, 1.31)	1.03 (0.94, 1.13)
50–52	Reference	Reference	Reference
≥53	1.03 (0.86, 1.23)	0.97 (0.87, 1.08)	0.92 (0.85, 1.00)
Surgical menopause			
<40	1.40 (0.88, 2.22)	1.10 (0.80, 1.50)	1.09 (0.84, 1.41)
40–44	1.14 (0.71, 1.82)	1.26 (0.97, 1.63)	1.08 (0.86, 1.35)
45–49	0.92 (0.62, 1.37)	0.98 (0.78, 1.23)	1.21 (1.03, 1.43)
50–52	1.16 (0.75, 1.78)	0.88 (0.66, 1.17)	1.21 (1.00, 1.48)
≥53	0.43 (0.18, 1.03)	1.27 (0.92, 1.74)	1.13 (0.88, 1.47)
Hysterectomy			
<40	1.60 (1.24, 2.07)	1.10 (0.93, 1.32)	1.12 (0.98, 1.29)
40–44	1.35 (1.02, 1.79)	0.98 (0.81, 1.18)	0.91 (0.78, 1.07)
45–49	0.64 (0.40, 1.02)	0.92 (0.73, 1.17)	0.87 (0.72, 1.06)
50–52	1.00 (0.47, 2.11)	0.68 (0.39, 1.17)	0.72 (0.48, 1.09)
≥53	0.45 (0.11, 1.78)	0.93 (0.51, 1.68)	1.36 (0.93, 1.98)

Model included age at menopause or age at hysterectomy, race/ethnicity, year of birth, BMI, smoking, years of education, age at menarche and parity.  
CVD, cardiovascular diseases; SHR, sub-distribution hazard ratio.