Supplementary Information

Table S1. Characteristics of the subset.

	Cases (*n* = 24)	**Controls** (*n* = 24)
Age at enrollment (years)		
Mean ±SD	60.9 ± 5.2	60.9 ± 5.3
Age at menarche (years)		
Mean ±SD	13.7 ± 1.5	13.4 ± 1.7
Missing	1	2
Age at menopause (years)		
Mean ±SD	49.4 ± 6.9	50.0 ± 4.6
Missing	-	1
BMI		
Mean ±SD	27.7 ± 3.4	26.5 ± 4.2
Missing	1	-
Use of oral contraceptives, *n* (%)		
No, but used to in the past	12 (50.0)	11 (45.8)
No, never	12 (50.0)	13 (54.2)
Duration of oral contraceptives use [a] (years)		
Median (IQR)	10 (4–15)	6 (2–10)
Use of HT, *n* (%)		
No, but used to in the past	2 (8.3)	4 (16.7)
No, never	22 (91.7)	20 (83.3)
Duration of HT use [a] (years)		
Median (IQR)	1.0 (4.5–8.0)	1.5 (1.0–8.0)
Ovariectomy, *n (%)*		
Both ovaries removed	1 (4.2)	-
Parity, *n* (%)		
Nulliparous	1 (4.2)	-
Number of children [b]		
Median (IQR)	2 (2–3)	3 (3–4)
Smoking, *n* (%)		
No, but used to in the past	12 (50.0)	10 (41.7)
No, never	12 (50.0)	14 (58.3)
Pack-years smoking until stop date [c]		
Median (IQR)	3.8 (1.7–9.6)	3.4 (0.9–12.8)
Missing	1	1
Alcohol intake [d] (g/day)		
Median (IQR)	3.0 (0.4–9.0)	0.5 (0.0–4.6)
Highest level of education [e], *n* (%)		
Level 1	11 (45.8)	15 (62.5)
Level 2	13 (54.2)	6 (25.0)
Level 3	0 (0)	3 (12.5)

SD: standard deviation; BMI: body mass index; IQR: inter-quartile range; HT: menopausal hormone therapy. [a] Among former oral contraceptives/HT users. [b] Among women with children. [c] Among former smokers. [d] Energy-adjusted alcohol intake at enrollment. [e] Level 1 = primary education or lower vocational education, Level 2 = advanced elementary education or intermediate vocational education, Level 3 = higher general secondary education, higher vocational education or university.

Table S2. Characteristics of the serum samples in the subset.

	Cases (*n* = 24)	Controls (*n* = 24)
Serum sample storage duration [a] (years)		
Mean ± SD	11.4 ± 1.3	11.4 ± 1.3
Hours in refrigerator [b]		
Median (IQR)	22 (20–23)	22 (19–23)
Days at −86 °C [c]		
Median (IQR)	8 (5–21)	7 (5–21)
Subjects use of medicines, minerals or vitamins last week [d], *n* (%)		
Yes	17 (70.8)	14 (58.3)
No	7 (29.2)	10 (41.7)
Time since last meal and/or drink of subject [d] (minutes)		
Median (IQR)	122 (95–160)	131 (90–140)

SD: standard deviation; IQR: inter-quartile range. [a] Until experiment. [b] Between collection and centrifugation. [c] Between centrifugation and storage at liquid nitrogen. [d] At moment of blood collection

Table S3. Serum concentrations of all measured proteins in subset of cases diagnosed at 1st screening after inclusion and matched healthy controls.

	Cases (*n* = 24)		Controls (*n* = 24)		Paired T test
Biomarker	Geometric mean concentration	95%CI	Geometric mean concentration	95%CI	p-value
OPN (ng/mL)	1.21	0.80–1.82	1.18	0.65–2.15	0.96
Haptoglobin (mg/mL)	1.34	0.91–1.96	1.10	0.75–1.62	0.41
CA15-3 (U/mL)	7.82	5.83–10.49	9.02	6.72–12.11	0.45
CEA (ng/mL)	0.57	0.43–0.75	0.44	0.32–0.60	0.27
CA-125 (U/mL)	1.99	1.17–3.39	1.33	0.77–2.30	0.28
Prolactin (ng/mL)	3.66	3.05–4.38	3.57	2.57–4.97	0.90
CA19-9 (U/mL)	1.83	1.16–2.89	2.19	1.50–3.21	0.53
AFP (ng/mL)	0.37	0.24–0.57	0.41	0.27–0.63	0.69
Leptin (ng/mL)	21.89	17.02–28.15	18.45	12.91–26.37	0.39
MIF (pg/mL)	145.3	101.8–207.5	204.1	146.2–284.9	0.15

95%CI: 95% confidence interval; OPN: osteopontin; CA15-3: cancer antigen 15-3; CEA: carcinoembryonic antigen; CA-125: cancer antigen 125; CA19-9: cancer antigen 19-9; AFP: α-fetoprotein; MIF: migration inhibitory factor.