

**Supplementary Table 1. Cohort-specific characteristics of study population in the Prospective Study of AMH and Gynecologic Cancer Risk**

	Columbia (N = 17)	CLUE I/II (N = 138)	EPIC (N = 149)	Guernsey (N = 27)	NHS/NHSII (N = 35)	NYUWHS (N = 96)	NSHDS (N = 94)	ORDET (N = 34)	SWHS (N = 81)
	<i>Mean (SD) or median (IQR)</i>								
Anti-Mullerian Hormone <sup>a</sup> , ng/mL	1.18 (0.68-1.71)	1.22 (0.43-3.04)	1.03 (0.32-3.68)	0.60 (0.18-1.16)	0.74 (0.12-1.73)	1.13 (0.48-2.36)	0.97 (0.36-2.24)	1.04 (0.37-1.96)	0.44 (0.18-1.29)
Anti-Mullerian Hormone <sup>b</sup> , ng/mL	1.43 (0.72-2.82)	1.17 (0.50-2.10)	1.15 (0.47-2.39)	1.11 (0.50-1.89)	1.26 (0.43-2.40)	0.99 (0.44-1.77)	1.12 (0.49-2.35)	1.09 (0.44-1.71)	1.12 (0.46-2.35)
Andronestendione, ng/dL	141 (114-175.5)	83.9 (58.8-128.0)	134.7 (85.5-178.9)	463 (360-567)	-	145 (107-212.5)	138 (118-214)	237.5 (207-400)	-
DHEAS, µg/dL	95.1 (69.0-144.2)	109 (83-174)	73.6 (50.8-110.7)	183.4 (158.1-223.3)	-	124.9 (82.5-180.5)	102.6 (64.6-141.7)	129.7 (89.4-239.5)	-
Testosterone, ng/dL	41 (31-56.5)	40 (22.0-47.2)	39 (27.5-48.2)	53 (50-84)	-	32 (26-44)	35 (28-38)	47.5 (39-60)	-
SHBG, nmol/L	69.7 (43.5-91.0)	60.6 (47.6-82.8)	61.8 (44.1-79.7)	53.9 (39.1-68.4)	-	55.7 (44.0-74.8)	53.8 (37.8-62.7)	42.2 (32.9-56.9)	-
Age at blood draw, yrs	40.8 (39.5-42.7)	38.7 (33.6-42.7)	41.9 (39.6-44.6)	40.5 (36.5-43.7)	43.6 (41.3-45.4)	40.8 (38.6-43.2)	40.1 (39.9-40.3)	42.3 (38.9-43.8)	43.6 (42.1-44.7)
Height, cm	164.5 (4.4)	163.2 (6.1)	160.7 (6.7)	162.8 (4.2)	164.6 (6.4)	162.3 (5.4)	165.3 (5.0)	158.1 (5.7)	160.4 (5.1)
Body mass index, kg/m <sup>2</sup>	25.2 (6.9)	26.8 (6.0)	24.7 (4.3)	24.8 (5.0)	24.9 (5.6)	23.5 (3.5)	24.7 (3.8)	25.1 (4.2)	23.1 (3.1)
Age at menarche, yrs	12.6 (1.2)	12.3 (1.9)	12.6 (1.5)	13.0 (1.2)	12.9 (1.7)	12.4 (1.6)	13.3 (1.5)	12.9 (1.6)	14.9 (1.7)
	<i>Percentage</i>								
Race									
White	100 %	99 %	-	100 %	97 %	73 %	98 %	100 %	0 %
Asian	0 %	0 %	-	0 %	3 %	0 %	0 %	0 %	100 %
Black or other	0 %	1 %	-	0 %	0 %	6 %	0 %	0 %	0 %
Missing	0 %	0 %	-	0 %	0 %	21 %	2 %	0 %	0 %

Supplementary Table 1. Continued.

	Columbia	CLUE I/II	EPIC	Guernsey	NHS/NHSII	NYUWHS	NSHDS	ORDET	SWHS
	<i>Percentage</i>								
Education									
High school of less	-	73 %	52 %	-	0 %	16 %	52 %	62 %	95 %
Vocational school	-	0 %	26 %	-	0 %	4 %	11 %	6 %	4 %
Attended college	-	26 %	22 %	-	100 %	64 %	26 %	32 %	1 %
Missing	-	1 %	0 %	-	0 %	17 %	12 %	0 %	0 %
Smoking status									
Never	53 %	55 %	54 %	48 %	57 %	42 %	36 %	68 %	100
Past	18 %	15 %	19 %	4 %	31 %	32 %	15 %	12 %	0
Current	29 %	30 %	27 %	26 %	11 %	17 %	20 %	21 %	0
Missing	0 %	0 %	1 %	22 %	0 %	9 %	29 %	0 %	0
Oral contraceptive use									
Never	29 %	14 %	23 %	37 %	20 %	23 %	20 %	44 %	89 %
Past	59 %	19 %	58 %	52 %	80 %	67 %	30 %	56 %	11 %
Current	12 %	7 %	6 %	11 %	0 %	0 %	3 %	0 %	0 %
Missing	0 %	60 %	12 %	0 %	0 %	10 %	47 %	0 %	0 %
Total number of pregnancy									
0	0 %	3 %	11 %	19 %	17 %	45 %	10 %	9 %	0 %
1	24 %	2 %	12 %	7 %	9 %	8 %	9 %	15 %	32 %
2	12 %	10 %	30 %	41 %	31 %	34 %	22 %	47 %	36 %
≥3	65 %	9 %	33 %	33 %	43 %	7 %	37 %	29 %	32 %
Missing	0 %	76 %	15 %	0 %	0 %	5 %	22 %	0 %	0 %
Menstrual phase									
Follicular	24 %	47 %	40 %	48 %	3 %	53 %	-	0 %	42 %
Luteal	65 %	53 %	38 %	48 %	54 %	47 %	-	100 %	58 %
Missing	12 %	0 %	22 %	4 %	43 %	0 %	-	0 %	0 %

Abbreviations: Columbia, the Columbia, Missouri (USA); the CLUE I/II, Campaign Against Cancer and Heart Disease (USA); EPIC, the European Prospective Investigation into Cancer and Nutrition Cohort study (Europe); Guernsey, the Guernsey Cohort Study (UK); NYUWHS, the New York University Women's Health Study (USA); NHS/NHSII, the Nurses' Health Studies (USA); ORDET, the Hormones and Diet in the Etiology of Breast Cancer study (Italy); NSHDS, Northern Sweden Health and Disease Study (Sweden); SWHS, the Shanghai

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Women's Health Study (China)

<sup>a</sup>AMH values are unadjusted raw values.

<sup>b</sup>AMH values are adjusted for age at blood draw and current use of oral contraceptives.

**Supplementary Table 2. Multivariable-adjusted median and the interquartile range of anti-müllerian hormone (ng/mL) across demographics and lifestyle factors in the Prospective Study of AMH and Gynecologic Cancer Risk from 5 multiply imputed datasets**

Factors	Multivariable model <sup>a</sup>	P-value <sup>b</sup>
Age (yrs)		
<35	2.53 (0.62-4.54)	<0.001
≥35-<40	1.57 (0.67-3.00)	
≥40	0.70 (0.24-1.45)	
Race		
White	1.11 (0.44-2.13)	0.92
Asian	1.09 (0.44-2.19)	
Education		
High school or less	1.12 (0.45-2.12)	0.65
Vocational school	1.38 (0.43-2.88)	
Attended college	1.12 (0.44-2.14)	
Height (cm)		
≤157.7	1.03 (0.39-2.12)	0.42
>157.7-≤162	1.20 (0.46-2.38)	
>162-≤167	1.06 (0.44-1.93)	
>167	1.21 (0.55-2.34)	
BMI (kg/m <sup>2</sup> )		
<20	1.17 (0.47-2.11)	0.94
≥20-<25	1.09 (0.41-2.16)	
≥25-<30	1.18 (0.46-2.40)	
≥30	1.17 (0.59-2.06)	
Smoking status		
Never	1.19 (0.49-2.29)	0.47
Past	1.00 (0.34-1.97)	
Current	1.10 (0.46-1.89)	
Current use of oral contraceptives		
No	1.16 (0.47-2.22)	0.21
Yes	0.66 (0.04-1.60)	
Parity		
by Never/Ever		
Nulliparous	1.19 (0.41-2.07)	0.60
Parous	1.11 (0.46-2.20)	
by Total number of childbirths		
Nulliparous	1.17 (0.43-2.09)	0.48
1 child	1.02 (0.38-1.84)	
2 children	1.06 (0.45-2.27)	
≥3 children	1.25 (0.50-2.29)	

**Supplementary Table 2. Continued.**

Factors	Multivariable model <sup>a</sup>	P-value <sup>b</sup>
Age at menarche, yrs		
<12	1.05 (0.40-1.96)	0.12
12-<13	1.05 (0.43-2.28)	
13-<14	1.14 (0.48-2.03)	
≥14	1.22 (0.47-2.37)	
Menstrual cycle		
Follicular	1.11 (0.43-2.13)	0.79
Luteal	1.15 (0.47-2.21)	

<sup>a</sup> Model adjusted for age (continuous, yrs), current use of oral contraceptives (yes, no) and age at menarche (<12, 12-<13, 13-<14, ≥14 yrs).

<sup>b</sup> P-values were calculated using an F-test in each of 5 multiply imputed dataset, using a continuous term for continuous variables (age, height, body mass index, number of childbirths and age at menarche) or a nominal term for categorical variables (race, education, smoking status, current uses of oral contraceptives, ever parity, menstrual cycle), and combined using Rubin's rule.