

Supplementary Table S1 Baseline characteristics of women in the EAGeR and BioCycle cohorts by number of PMS symptoms.

	EAGeR				BioCycle				
	Overall	<5 moderate/severe symptoms	5+ moderate/severe symptoms	p-value	Overall	Vitamin D Subset	<5 moderate/severe symptoms	5+ moderate/severe symptoms	p-value
N	1170	889	281		259	72	59	13	
Age, years	28.8 ± 4.8	28.9 ± 4.8	28.7 ± 4.8	0.50	27.3 ± 8.2	28.8 ± 8.6	28.9 ± 8.9	28.2 ± 7.7	0.81
BMI, kg/m²	26.3 ± 6.5	26 ± 6.2	27.2 ± 7.2	0.006	24.1 ± 3.9	23.6 ± 3.6	23.7 ± 3.8	23.4 ± 2.3	0.82
Race, n (%)									
White	1113 (95.1)	845 (95.1)	268 (95.4)	1.00	148 (59.2)	72 (100)	59 (100)	13 (100)	1.00
Non-White	57 (4.9)	44 (4.9)	13 (4.6)		102 (40.8)	0 (0)	0 (0)	0 (0)	
Married or living with partner, n (%)	1147 (98)	868 (97.6)	279 (99.3)	0.09	65 (26)	26 (36.1)	21 (35.6)	5 (38.5)	1.00
Education > high school, n (%)	995 (87.6)	755 (87.6)	240 (87.6)	1.00	226 (87.3)	66 (91.7)	55 (93.2)	11 (84.6)	0.30
Income, n (%)									
≥ \$100 000	471 (40.3)	352 (39.6)	119 (42.3)	0.65	24 (9.3)	8 (11.1)	7 (11.9)	1 (7.7)	0.93
\$75 000–\$99 999	146 (12.5)	118 (13.3)	28 (10)		45 (17.5)	12 (16.7)	9 (15.3)	3 (23.1)	
\$40 000–\$74 999	177 (15.1)	136 (15.3)	41 (14.6)		72 (28)	27 (37.5)	23 (39)	4 (30.8)	
\$20 000–\$39 999	293 (25)	220 (24.7)	73 (26)		61 (23.7)	14 (19.4)	11 (18.6)	3 (23.1)	
≤ \$19 999	83 (7.1)	63 (7.1)	20 (7.1)		55 (21.4)	11 (15.3)	9 (15.3)	2 (15.4)	
Current smokers, n (%)	140 (12)	100 (11.3)	40 (14.3)	0.21	10 (3.9)	5 (6.9)	4 (6.8)	1 (7.7)	1.00
Parity, n (%)									
Nulliparous	543 (46.4)	397 (44.7)	146 (52)	0.03	187 (73.9)	49 (69)	40 (69)	9 (69.2)	1.00
Parous (1 or 2 prior live births)	627 (53.6)	492 (55.3)	135 (48)		66 (26.1)	22 (31)	18 (31)	4 (30.8)	
Ever used hormonal contraception/meds, n (%)	929 (80.3)	709 (80.7)	220 (79.1)	0.60	140 (54.9)	44 (62)	39 (67.2)	5 (38.5)	0.07
Age at menarche, years	12.7 ± 1.5	12.8 ± 1.5	12.5 ± 1.6	0.04	12.5 ± 1.2	12.4 ± 1.2	12.4 ± 1.3	12.7 ± 1.2	0.10
Age for periods to become regular, year	14.3 ± 4.5	14.4 ± 4.4	14.2 ± 4.9	0.52	14.8 ± 2.9	12.5 ± 1	12.4 ± 1.1	12.8 ± 0.9	0.32
Usual menstrual bleeding, days	5.1 ± 1.7	5 ± 1.3	5.2 ± 2.6	0.04	5.1 ± 1.1	6 ± 0.3	6 ± 0.3	6.1 ± 0.3	0.60
Usual cycle length over last 12 months, days	29.3 ± 4	29.2 ± 3.9	29.5 ± 4.4	0.34	28.4 ± 2.2	28.2 ± 2.4	28.1 ± 2.5	28.8 ± 1.7	0.41
Shortest cycle length in last 12 months, days	26.2 ± 4.5	26.3 ± 4.3	25.9 ± 5	0.29	25.3 ± 3.7	25 ± 3.7	24.8 ± 3.8	25.8 ± 3.4	0.40
Longest cycle in last 12 months, days	33.9 ± 9.8	33.6 ± 9.8	34.8 ± 10	0.08	31.3 ± 6.2	31.4 ± 5.3	31.4 ± 5.7	31.1 ± 2.7	0.84
Describe regularity of period in the last 12 months, n (%)									
Yes	963 (82.9)	744 (84.4)	219 (78.2)	0.03	249 (96.1)	3 (4.2)	2 (3.4)	1 (7.7)	0.46
No	143 (12.3)	96 (10.9)	47 (16.8)		6 (2.3)	68 (94.4)	56 (94.9)	12 (92.3)	
Don't know	56 (4.8)	42 (4.8)	14 (5)		4 (1.5)	1 (1.4)	1 (1.7)	0 (0)	
Number of previous pregnancy losses, n (%)									
0	783 (66.9)	593 (66.7)	190 (67.6)	0.83	43 (55.8)	15 (62.5)	11 (55)	4 (100)	0.38
1					22 (28.6)	8 (33.3)	8 (40)	0 (0)	

(continued)

Supplementary Table S1 Continued

	EAGeR			BioCycle				
	Overall	<5 moderate/ severe symptoms	5+ moderate/ severe symptoms	Overall	Vitamin D Subset	<5 moderate/ severe symptoms	5+ moderate/ severe symptoms	p-value
2	387 (33.1)	296 (33.3)	91 (32.4)	10 (13)	1 (4.2)	1 (5)	0 (0)	
3				2 (2.6)	0 (0)	0 (0)	0 (0)	
SSRI exposure at baseline, n (%)								
Yes	163 (14)	105 (11.9)	58 (20.9)	0.0003	NA	NA	NA	
No	999 (86)	779 (88.1)	220 (79.1)		NA	NA	NA	
Depression scale				4.7 ± 1.4	4.7 ± 1.4	4.4 ± 1.3	6.6 ± 1.2	<0.0001
Alcohol intake, n(%)								
Often	26 (2.2)	21 (2.4)	5 (1.8)	0.53	7 (9.7)	6 (10.2)	1 (7.7)	1.00
Sometimes	361 (31.2)	268 (30.4)	93 (33.7)	153 (59.1)	53 (73.6)	43 (72.9)	10 (76.9)	
Never	771 (66.6)	593 (67.2)	178 (64.5)	87 (33.6)	12 (16.7)	10 (16.9)	2 (15.4)	
CRP, mg/L^a	1.14 ± 2.90 ^b	1.09 ± 2.89	1.30 ± 2.92	0.02	0.68 ± 2.33	0.67 ± 2.31	0.73 ± 2.52	0.75

CRP, high sensitivity c-reactive protein; EAGeR, Effects of Aspirin in Gestation and Reproduction; PMS, premenstrual syndrome; SSRI, selective serotonin reuptake inhibitors.

^aGeometric mean and Geometric SD.

^bExcluding CRP > 10 mg/L.