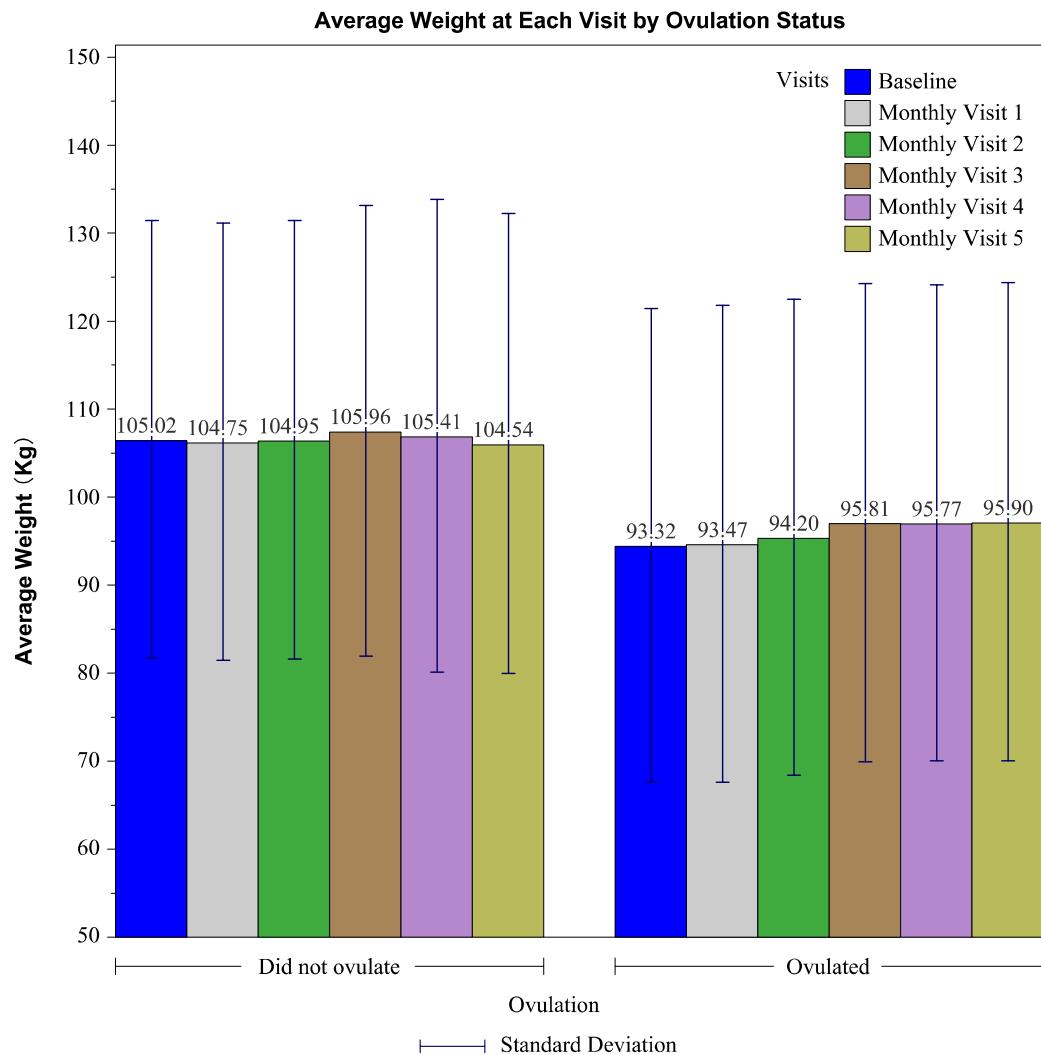


**Supplemental Figure 1**

**Supplemental Table 1: Weight (kg) as a categorical or continuous variable among women with PCOS stratified by ovulation****Weight change as categorical variable:**

Variable	Ovulated (N= 367)	Did not ovulate (N= 87)	P value^
Weight Change			0.42
≤ 0KG	277/367 (75.5)	62/87 (71.3)	
≥ 3KG	90/367 (24.5)	25/87 (28.7)	

**Weight change as continuous variable:**

Variable	Ovulated (N= 592)	Did not ovulate (N= 105)	P value^
Average Weight Change	0.5 (-0.9, 2.1), n=592	0.9 (-0.8, 2.7), n=105	0.05

Abbreviations: PCOS, polycystic ovary syndrome

<sup>^</sup> Wilcoxon's rank-sum test, and Fisher's exact test were used where appropriate.

**Supplemental Table 2: Odds ratios for predictive variables and weight gain among women with PCOS**

Variables	Weight Gain ≥ 3kg vs Weight Gain ≤ 0 kg			
	Adjusted OR (95% CL)	P-value	Unadjusted OR (95% CL)	P-value
Age (years)	1.02 (0.95, 1.09)	0.62	0.99 (0.94, 1.05)	0.85
BMI ( $\text{kg}/\text{m}^2$ )	1.04 (1.01, 1.07)	0.02	1.01 (0.99, 1.04)	0.38
Treatment				
Clomiphene	1		1	
Letrozole	0.88 (0.52, 1.48)	0.63	0.89 (0.573, 1.37)	0.58
Ethnic group				
Hispanic or Latino	1		1	
Not Hispanic or Latino	1.66 (0.64, 4.24)	0.29	1.35 (0.71, 2.56)	0.36
History of pregnancy				
Yes	1		1	
No	0.96 (0.55, 1.68)	0.89	1.18 (0.75, 1.86)	0.47
Number of months attempting conception	0.99 (0.98, 1.01)	0.83	0.99 (0.99, 1.00)	0.11
HOMA IR Score	0.99 (0.98, 0.99)	0.003	0.99 (0.99, 0.99)	0.03
Total Testosterone (ng/dL)	0.99 (0.98, 1.00)	0.15	0.99 (0.98, 1.00)	0.16
Duration of Infertility				
<2 years	1		1	
2-4 years	0.84 (0.43, 1.62)	0.59	0.85 (0.50, 1.43)	0.53
>4 years	0.44 (0.14, 1.38)	0.16	0.58 (0.34, 1.01)	0.06
Maximum Dose				
1 Tablets	1		1	
2 Tablets	0.91 (0.42, 1.94)	0.80	2.02 (1.04, 3.93)	0.04
3 Tablets	1.73 (0.82, 3.67)	0.15	3.96 (2.21, 7.12)	<0.001
Ovulation				
Yes	1		1	
No	1.57 (0.75, 3.29)	0.23	1.93 (1.09, 3.39)	0.02
Treatment Cycles				
1	1		1	
2	5.49 (0.56, 54.22)	0.15	4.32 (0.46, 40.47)	0.19
3	16.04 (1.79, 143.66)	0.01	13.33 (1.64, 108.69)	0.016
4	27.49 (3.03, 249.54)	0.003	25.18 (3.16, 200.57)	0.002
5	21.36 (2.58, 176.86)	0.005	22.01 (2.97, 163.05)	0.003

## Site Region

	1	1	
MW			
NE	1.01 (0.54, 1.91)	0.97	1.06 (0.61, 1.83)
SE	0.33 (0.11, 1.02)	0.05	0.55 (0.22, 1.40)
SW	1.26 (0.42, 3.79)	0.68	0.73 (0.34, 1.57)
W	1.44 (0.58, 3.58)	0.43	1.11 (0.52, 2.35)

Abbreviations: PCOS, polycystic ovary syndrome, BMI, body mass index, MW Midwest, NE Northeast, SE Southeast, SW Southwest, W West

Potential adjustors: Age (years), BMI ( $\text{kg}/\text{m}^2$ ), ethnic group, treatment, history of pregnancy, number of months attempting conception, ovulation, duration of Infertility, maximum dose of clomiphene or letrozole, HOMA-IR and total testosterone level in the model.