

Supplementary Table. Effect of BMI categories across PCOS phenotypes on SUA

BMI (kg/m ²)	<i>p</i> (Kruskal-Wallis, UA)	High SUA proportion <i>p</i> (Pearson chi-square (Haldane correction))	Control UA (n=6)	Control High SUA n(%)	Phenotype A UA (n=7)	Phenotype A High SUA n (%)	Phenotype B UA (n=2)	Phenotype B High SUA n (%)	Phenotype C UA (n=1)	Phenotype C High SUA n (%)	Phenotype D UA (n=2)	Phenotype D High SUA n (%)	High SUA proportion <i>p</i> (Pearson chi-square)
<18.5	0.171	0.925	4.2 [4.0,4.4]	0 (0.0%)	4.0 [3.7, 4.3]	0 (0.0%)	3.5 [3.2, 3.7]	0 (0.0%)	2.9 [2.9, 2.9]	0 (0.0%)	3.6 [3.4, 3.8]	0 (0.0%)	
18.5–24.9	0.346			0 (0.0%)	1 (4.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0.500
25–29.9	0.669			1 (12.5%)	5 (23.8%)	4.1 [3.9, 4.3]		0 (0.0%)		0 (0.0%)		1 (10.0%)	0.606
≥30	0.244				15 (34.9%)	2 (28.6%)				0 (0.0%)		1 (20.0%)	0.490

Control UA (n=37)	Phenotype A UA (n=25)	Phenotype B UA (n=8)	Phenotype C UA (n=25)	Phenotype D UA (n=13)	Control UA (n=8)	Phenotype A UA (n=21)	Phenotype C UA (n=5)	Phenotype D UA (n=10)	Control UA (n=0)	Phenotype A UA (n=43)	Phenotype B UA (n=7)	Phenotype C UA (n=4)	Phenotype D UA (n=5)
3.8 [3.5, 4.6]	4.5 [3.8, 5.2]	4.5 [4.2, 5.1]	4.2 [3.6, 4.9]	4.3 [3.9, 4.4]	4.6 [4.1, 4.8]	4.8 [4.3, 5.8]	4.2 [3.8, 4.9]	4.5 [4.0, 5.4]		5.5 [4.6, 6.1]	5.6 [5.4, 6.1]	4.50 [4.05, 5.00]	5.20 [4.90, 5.30]

Within each BMI category, serum uric acid median [Q1, Q3] values are presented according to groups. Global *p*: Kruskal-Wallis. High SUA threshold >6.0 mg/dL; Pearson's Chi-square was applied for the difference in proportions, with Haldane correction used when cells were sparse. BMI, body mass index; PCOS, polycystic ovary syndrome; SUA, serum uric acid; UA, uric acid