

**Supplementary Table SI.** Distribution of AMH, CA-125, VAS score, cyst lateral and volume in patients with stage III and IV ovarian endometriosis cysts

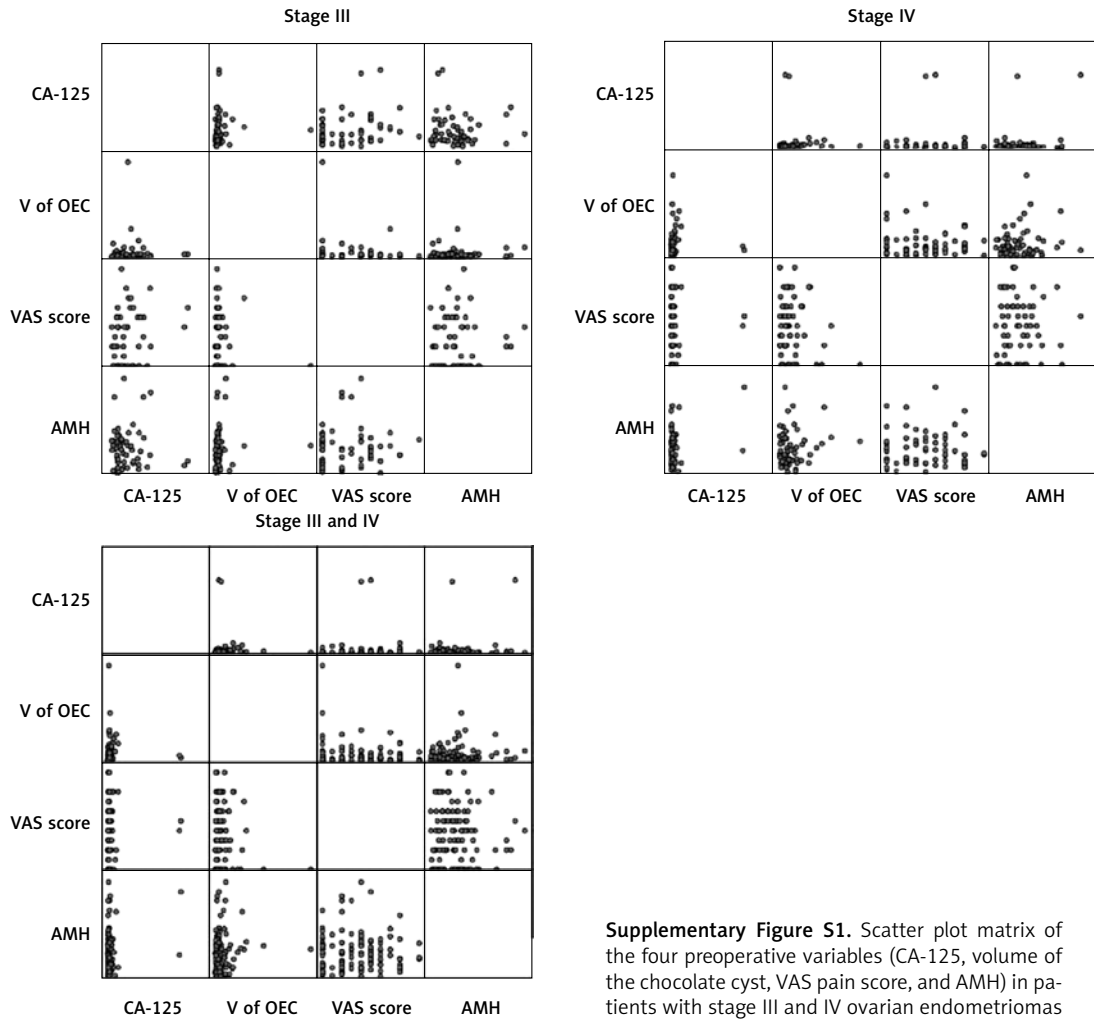
Category	Stage III (n = 56)	Stage IV (n = 59)	$\chi^2$	P-value
Lateral distribution of cyst			37.74	< 0.001
Left ovarian chocolate cyst, n (%)	35 (62.50)	11 (18.64)		
Right ovarian chocolate cyst, n (%)	18 (32.14)	15 (25.43)		
Bilateral ovarian chocolate cyst, n (%)	3 (5.36)	33 (55.93)		
Preoperative CA-125 distribution			5.709	0.017
Preoperative CA-125 < 35 IU/ml, n (%)	24 (42.86)	13 (22.03)		
Preoperative CA-125 > 35 IU/ml, n (%)	32 (57.14)	46 (77.97)		
Preoperative volume distribution of cyst			15.07	0.004
Volume < 50 cm <sup>3</sup> , n (%)	25 (44.64)	12 (20.34)		
Volume = 50–100 cm <sup>3</sup> , n (%)	19 (33.93)	14 (23.73)		
Volume = 100–200 cm <sup>3</sup> , n (%)	6 (10.72)	17 (28.81)		
Volume = 200–400 cm <sup>3</sup> , n (%)	4 (7.14)	11 (18.65)		
Volume > 400 cm <sup>3</sup> , n (%)	2 (3.57)	5 (8.47)		
Preoperative VAS score distribution, n (%):			5.331	0.149
0 points	20 (35.71)	11 (18.64)		
1–3 points	13 (23.22)	15 (25.43)		
4–6 points	18 (32.14)	22 (37.29)		
7–10 points	5 (8.93)	11 (18.64)		
Postoperative AMH distribution			0.496	0.780
Postoperative AMH fall, n (%)	33 (58.93)	38 (64.41)		
Postoperative AMH fall and rise, n (%)	13 (23.21)	13 (22.03)		
Postoperative AMH rise, n (%)	10 (17.86)	8 (13.56)		

**Supplementary Table SII.** Two-by-two Spearman's rank correlation analysis of the four variables (preoperative CA-125, preoperative volume of cyst, preoperative VAS pain score, and preoperative AMH) in patients with stage III and IV ovarian endometriomas

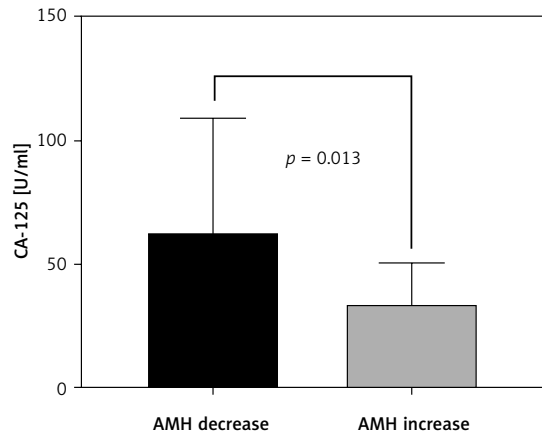
Variable	CA-125 and volume of cyst	CA-125 and VAS score	Volume of cyst and VAS score	AMH and CA-125	Volume of cyst and AMH	AMH and VAS score
Stage III						
Correlation coefficient <i>r</i>	0.291	0.192	0.060	0.061	0.172	0.054
P-value	0.030	0.157	0.658	0.657	0.206	0.693
Stage IV						
Correlation coefficient <i>r</i>	0.333	0.272	0.068	0.041	0.029	0.001
P-value	0.010	0.837	0.609	0.755	0.825	0.994
Stage III + IV						
Correlation coefficient <i>r</i>	0.380	0.190	0.071	0.037	0.047	0.025
P-value	0.000	0.042	0.453	0.694	0.618	0.794

**Supplementary Table SIII.** Six-month postoperative AMH comparison with preoperative AMH in patients with stage III and IV ovarian endometriomas

Variable	Preoperative AMH	Six-month postoperative AMH	Falling range (%)	Z value	P-value
All cases of stage III	2.72 ±2.06	2.25 ±1.66	17.28	-3.765	0.000
Unilateral lesions of stage III	2.66 ±1.98	2.24 ±1.66	15.79	-3.453	0.001
Bilateral lesions of stage III	3.79 ±2.35	2.30 ±1.43	39.31	-2.352	0.018
All cases of stage IV	2.54 ±1.81	1.69 ±1.20	33.46	-5.272	0.000
Unilateral lesions of stage IV	2.86 ±1.59	2.24 ±1.12	21.68	-3.404	0.001
Bilateral lesions of stage IV	2.29 ±1.94	1.26 ±1.09	44.98	-4.101	0.000



Supplementary Figure S1. Scatter plot matrix of the four preoperative variables (CA-125, volume of the chocolate cyst, VAS pain score, and AMH) in patients with stage III and IV ovarian endometriomas



**Supplementary Figure S2.** Comparison of preoperative CA-125 values in different performance groups of postoperative AMH