Supplementary Material

Table S1. ROC analysis of CA125, HE4, ROMA and CPH for diagnosis of EOC or MCO. *p*-values of the comparison between ROC curves.

	CA125	HE4	ROMA	CPH
Total				
	CA125	*HE4*	*ROMA*	*CPH*
AUC	*0.873*	*0.909*	*0.939*	*0.936*
(95% CI)	*(0.842–0.904)*	*(0.881–0.938)*	*(0.916–0.962)*	*(0.913–0.958)*
CA125	*-*	*0.0294*	*0.0000*	*0.0000*
He4	*0.0294*	*-*	*0.0004*	*0.0053*
ROMA	*0.0000*	*0.0004*	*-*	*0.5994*
CPH	*0.0000*	*0.0053*	*0.5994*	*-*
Premenopausal				
	CA125	*HE4*	*ROMA*	*CPH*
AUC (95% CI)	*0.756*	*0.863*	*0.866*	*0.860*
	(0.675–0.842)	*(0.791–0.934)*	*(0.796–0.937)*	*(0.793–0.928)*
CA125	*-*	*0.0125*	*0.0000*	*0.0000*
He4	*0.0125*	*-*	*0.0005*	*0.0057*
ROMA	*0.0000*	*0.0005*	*-*	*0.6118*
CPH	*0.0000*	*0.0057*	*0.6118*	*-*
Postmenopausal				
	CA125	*HE4*	*ROMA*	*CPH*
AUC (95% CI)	*0.933*	*0.905*	*0.956*	*0.955*
	(0.907–0.959)	*(0.870–0.940)*	*(0.937–0.975)*	*(0.935–0.975)*
CA125	*-*	*0.1569*	*0.0075*	*0.0310*
HE4	*0.1569*	*-*	*0.0001*	*0.0001*
ROMA	*0.0075*	*0.0001*	*-*	*0.3882*
CPH	*0.0310*	*0.0001*	*0.3882*	*-*
Inconclusive ultrasound according to IOTA simple rules				
	CA125	*HE4*	*ROMA*	*CPH*
AUC (95% CI)	*0.810*	*0.844*	*0.893*	*0.876*
	(0.743–0.877)	*(0.779–0.910)*	*(0.846–0.941)*	*(0.822–0.931)*
CA125	*-*	*0.3863*	*0.0005*	*0.0037*
HE4	*0.3863*	*-*	*0.0316*	*0.1399*
ROMA	*0.0005*	*0.0316*	*-*	*0.0344*
CPH	*0.0037*	*0.1399*	*0.0344*	*-*
Stage I EOC				
	CA125	*HE4*	*ROMA*	*CPH*
AUC (95% CI)	*0.810*	*0.856*	*0.909*	*0.901*
	(0.751–0.869))	*(0.793–0.8869)*	*(0.863–0.955)*	*(0.855–0.947)*
CA125	*-*	*0.2410*	*0.0014*	*0.0001*
HE4	*0.2410*	*-*	*0.0099*	*0.0572*
ROMA	*0.0014*	*0.0099*	*-*	*0.6415*
CPH	*0.0001*	*0.0572*	*0.6415*	*-*

Table S2. False negative results for tumor markers and probabilistic indexes.

	CA125	HE4	ROMA	CPH
Total	*53 (100%)*	*38(100%)*	*8 (100%)*	*20 (100%)*
Serous carcinoma	*27 (50.94%)*	*16 (42.11%)*	*3 (37.50%)*	*6 (30.00%)*
Endometrioid carcinoma	*14 (26.42%)*	*8 (21.05%)*	*2 (25.00%)*	*7 (35.00%)*
Mucinous carcinoma	*2 (3.77%)*	*5 (13.06%)*	*3 (37.50%)*	*3 (15.00%)*
Clear cell carcinoma	*10 (18.87%)*	*9 (23.68%)*	*0 (0.00%)*	*4 (20.00%)*
Undifferenciated	*6 (11.32%)*	*6 (15.79%)*	*2 (25.00%)*	*4 (20.00%)*
Metastatic cancer in the ovary	*12 (22.64%)*	*15 (39.47%)*	*7 (87.50%)*	*10 (50.00%)*