

Table S1 Comparison of the diagnostic efficacy of HE4, CA125, and the ROMA score (Mindray & Roche)

System	Parameter	Menopausal status	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)	AUC	95% CI
Mindray	ROMA	Premenopausal	80.43	75.27	44.05	93.96	76.29	0.911	0.851–0.971
		Postmenopausal	93.44	75.41	79.17	92.00	84.43	0.966	0.937–0.996
	HE4	Premenopausal	50.00	100.00	100.00	88.90	90.09	0.902	0.837–0.967
		Postmenopausal	72.13	100.00	100.00	78.21	86.07	0.924	0.876–0.971
	CA125	Premenopausal	93.48	60.75	37.07	97.41	67.24	0.883	0.813–0.953
		Postmenopausal	95.08	73.77	78.38	93.75	84.43	0.959	0.926–0.993
Roche	ROMA	Premenopausal	76.09	76.88	44.87	92.86	76.72	0.866	0.801–0.932
		Postmenopausal	93.44	72.13	77.03	91.67	82.79	0.962	0.928–0.996
	HE4	Premenopausal	50.00	100.00	100.00	88.90	90.09	0.852	0.780–0.924
		Postmenopausal	72.13	100.00	100.00	78.21	86.07	0.920	0.871–0.969
	CA125	Premenopausal	89.13	55.91	33.33	95.41	45.26	0.879	0.815–0.944
		Postmenopausal	95.08	70.49	76.32	93.48	82.79	0.953	0.914–0.991

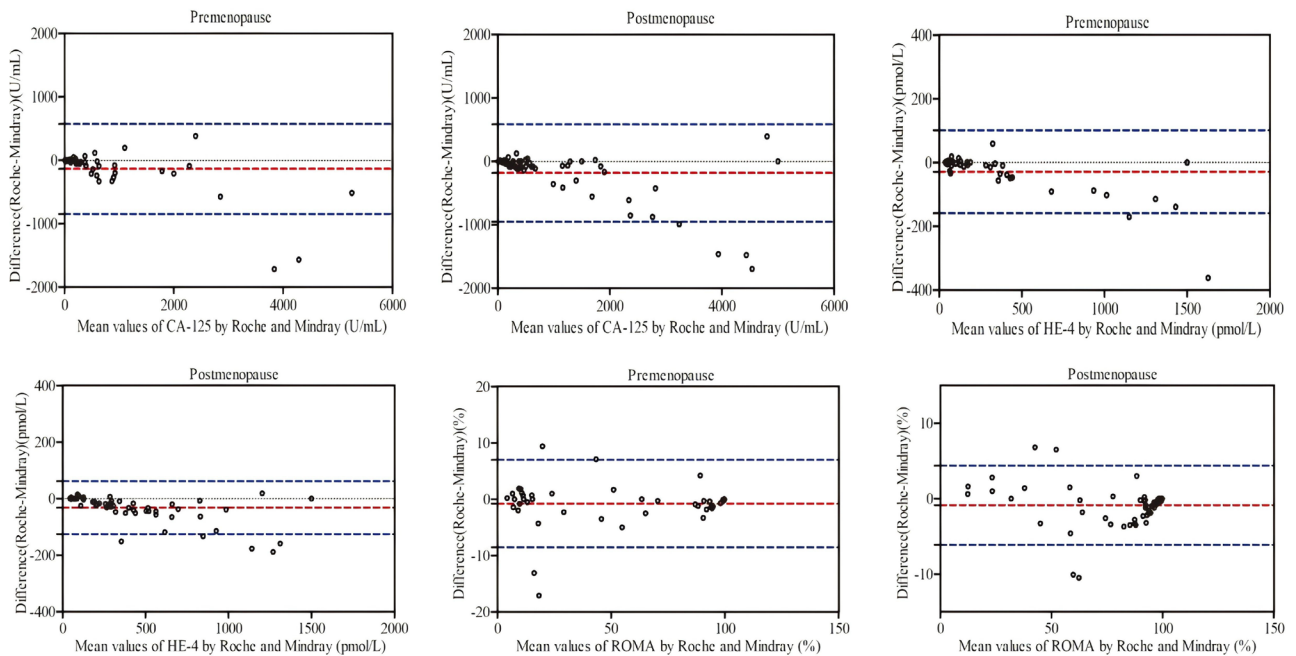


Figure S1 Bland-Altman analysis of the consistency of the results of the two detection systems.

Table S2 Bias and 95% limits of agreement between the Mindray and Roche systems

Parameter	Bias	SD of bias	95% limits of agreement
Premenopause			
CA125	24.26	170.70	-310.30, 358.80
HE4	4.68	31.72	-57.49, 66.84
ROMA	-0.23%	2.00%	-4.15%, 3.69%
Postmenopause			
CA125	90.61	291.90	-481.50, 662.80
HE4	16.09	37.62	-57.62, 89.80
ROMA	-0.42%	3.40%	-7.08%, 6.24%

Table S3 Performance of Mindray HE4 and CA125 follow-up measurements in ovarian cancer patients receiving first-line chemotherapy

Characteristics	HE4 concentration (pmol/L) during the first-line of treatment median (range)		CA12-5 concentration (U/L) during the first-line of treatment median (range)	
	Recurrence (n=9)	Non-recurrence (n=23)	Recurrence (n=9)	Non-recurrence (n=23)
Measurement at diagnosis	656.6 (110.5–1330.3)	397.7 (38.3–2513.7)	1249.9 (91.1–5571.3)	1120.6 (16.1–10000)
Measurement after the 3 rd chemotherapy during the first-line of treatment	72.5 (34.2–448.2)	61 (29–199.6)	41.9 (15.8–127.6)	50.75 (6.4–283.9)
Measurement after the 6 th chemotherapy during the first-line of treatment	62.9 (29.4–170)	43.25 (25.3–172.4)	20.7 (8.8–53.3)	10.6 (7.9–82.5)
Recent measurement before first recurrence	62.9 (29.4–142.2)	–	15.2 (8.3–53.3)	–
Measurement at first recurrence	136 (47.7–2311.4)	–	45.8 (6.9–8169.6)	–