

## SUPPLEMENTARY MATERIAL

### Diagnostic accuracy of cancer ratio and other new parameters in differentiating malignant from benign pleural effusions

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**Supplementary Table 1. Characteristics of the studies investigating the diagnostic accuracy of cancer ratio and cancer ratio plus in differentiating MPE from benign pleural effusions.**

Author	Year	MPE	Controls	Study design	Cut -off	Sensitivity	Specificity	PPV	NPV	PLR	NLR	AUC
<b>Cancer ratio</b>												
<b>Verma A et al [8]</b>	2016	100	54	Retrospective	20	0.98	0.94	0.97	0.96	32.6	0.03	0.81
<b>Verma A et al [9]</b>	2016	84	34	Prospective	20	0.95	0.85	0.94	0.87	16	0.13	0.81
<b>JH Huang et al (BUFF) [15]</b>	2023	35	123	Retrospective	20	0.57	0.61	-	-	-	-	0.63
<b>JH Huang et al (SIMPLE) [15]</b>	2023	88	111	Prospective	20	0.67	0.54	-	-	-	-	0.60
<b>ElSharawy DE et al [11]</b>	2020	47	31	Prospective	22	0.92	0.88	93.4	84	-	-	0.947
<b>Zhang F et al [17]</b>	2016	318	669	Prospective	10.6	0.94	0.73	-	-	-	-	0.841
<b>Gayaf M et al [13]</b>	2021	101	131	Retrospective	14.25	0.84	0.53	61.6	73.3	1.78	0.3	0.729
<b>Korczynski P et al [10]</b>	2018	74	66	Retrospective	16.4	0.95	0.68	-	-	2.97	0.08	0.826
<b>Zhang Y et al [18]</b>	2021	145	117	Retrospective	14.97	0.91	0.67	-	-	-	-	0.85
<b>Ren Z et al [20], (Age ≤50 y)</b>	2021	9	80	Retrospective	12.9	0.89	0.89	47.1	98.6	7.9	0.13	0.940
<b>Ren Z et al [20], (Age &gt;50 y)</b>	2021	91	39	Retrospective	19.2	0.81	0.87	93.7	66.7	6.34	0.21	0.847
<b>Zhou J et al [14]</b>	2022	90	130	Prospective	21.24	0.8	0.8	-	-	4	0.25	0.859
<b>Hussein SA et al [19]</b>	2020	94	56	Prospective	16.02	0.61	0.96	79	92	16.99	0.41	0.88

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<b>Present Study</b>	2024	59	61	Prospective	10	0.93	0.95	94.8	93.5	18.95	0.07	0.97
<b>Cancer Ratio Plus</b>												
<b>Verma A et al [9]</b>	2016	84	34	Prospective	30	97.6	94.1	0.97	0.94	41	0.06	0.863
<b>ElSharawy DE et al [11]</b>	2020	47	31	Prospective	41	93.6	91.7	87.7	88	-	-	0.975
<b>Gayaf M et al [13]</b>	2021	101	131	Retrospective	28.7	82.2	45.8	53.9	76.9	1.52	0.39	0.687
<b>Ren Z et al [20], (Age ≤50 y)</b>	2021	9	80	Retrospective	25	88.9	92.5	57.1	98.7	11.85	0.12	0.93
<b>Ren Z et al [20], (Age &gt;50 y)</b>	2021	91	39	Retrospective	22.6	86.8	84.6	92.9	73.3	5.64	0.16	0.836
<b>Zhou J et al [14]</b>	2022	90	130	Prospective	34.7	81.5	80	-	-	4.08	0.23	0.874
<b>Present study</b>	2024	59	61	Prospective	15	83.1	72.1	74.2	81.5	2.98	0.23	0.89