

Bone & Joint Open

Supplementary Material

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Table i. Receiver operating characteristic curve analysis for all marker combinations analyzed.

Marker combinations	AUC	Sensitivity, %	Specificity, %	PPV	NPV
Knee PJI					
ESR + CRP	0.88	91.15	75.96	80.47	88.76
Syn. WBC + PMN	0.98	89.53	100.00	100.00	80.00
ESR + CRP + Syn. WBC + PMN	0.99	94.87	100.00	100.00	87.50
ESR + CRP + NLR	0.90	89.58	75.29	80.37	86.49
ESR + CRP + MLR	0.91	88.12	75.86	80.91	84.62
ESR + CRP + PVR	0.87	90.77	79.25	84.29	87.50
ESR + CRP + PLR	0.89	90.10	74.42	80.53	86.49
ESR + CRP + NLR + MLR	0.91	87.50	76.47	80.77	84.42
ESR + CRP + NLR + MLR + PVR	0.90	94.64	67.39	77.94	91.18
ESR + CRP + NLR + MLR + PVR + PLR	0.90	71.43	91.30	90.91	72.41
ESR + CRP + MLR + PVR	0.89	87.72	76.09	81.97	83.33
ESR + CRP + MLR + PVR + PLR	0.92	80.70	89.13	90.20	78.85
ESR + CRP + PVR + PLR	0.89	91.23	71.74	80.00	86.84
ESR + CRP + PVR + NLR	0.89	87.50	76.09	81.67	83.33
ESR + CRP + PVR + PLR	0.89	91.23	71.74	80.00	86.84
ESR + CRP + PLR + NLR	0.90	90.63	72.62	79.09	87.14
ESR + CRP + Syn. WBC + PMN + NLR	0.99	95.45	100.00	100.00	87.50
ESR + CRP + Syn. WBC + PMN + MLR	0.99	97.10	100.00	100.00	91.67
ESR + CRP + Syn. WBC + PMN + PVR	1.00	97.73	100.00	100.00	91.67
ESR + CRP + Syn. WBC + PMN + PLR	0.99	97.10	100.00	100.00	91.67
Hip PJI					
ESR + CRP	0.83	89.83	65.96	76.81	83.78
Syn. WBC + PMN	0.82	83.61	79.17	91.07	65.52
ESR + CRP + Syn. WBC + PMN	0.88	79.66	85.00	94.00	58.62
ESR + CRP + NLR	0.81	89.52	58.44	74.60	80.36
ESR + CRP + MLR	0.81	88.79	58.44	74.80	78.95
ESR + CRP + PVR	0.88	89.83	71.93	76.81	87.23
ESR + CRP + PLR	0.82	88.79	58.44	74.80	78.95
ESR + CRP + NLR + MLR	0.82	85.71	64.94	76.92	76.92
ESR + CRP + NLR + MLR + PVR	0.86	62.75	91.11	88.89	68.33
ESR + CRP + NLR + MLR + PVR + PLR	0.85	60.78	93.33	91.18	67.74

ESR + CRP + MLR + PVR	0.85	62.75	88.89	86.49	67.80
ESR + CRP + MLR + PVR + PLR	0.85	60.78	93.33	91.18	67.74
ESR + CRP + PVR + PLR	0.85	80.39	73.33	77.36	76.74
ESR + CRP + PVR + NLR	0.85	84.31	68.89	75.44	79.49
ESR + CRP + PVR + PLR	0.85	80.39	73.33	77.36	76.74
ESR + CRP + PLR + NLR	0.82	80.95	70.13	78.70	72.97
ESR + CRP + Syn. WBC + PMN + NLR	0.87	90.20	76.47	92.00	72.22
ESR + CRP + Syn. WBC + PMN + MLR	0.87	90.57	76.47	92.31	72.22
ESR + CRP + Syn. WBC + PMN + PVR	0.98	96.15	100.00	100.00	87.50
ESR + CRP + Syn. WBC + PMN + PLR	0.90	90.57	76.47	92.31	72.22

CRP and ESR measured in mg/l and mm/h, respectively.

AUC, area under the curve; MLR, monocyte-to-lymphocyte ratio; NLR, neutrophil-to-lymphocyte ratio; NPV, negative predictive value; PJI, periprosthetic joint infection; PLR, platelet-to-lymphocyte ratio; PMN%, polymorphonuclear neutrophils; PPV, positive predictive value; PVR, platelet-to-volume ratio; Syn. WBC, synovial white blood cell count.