

Supplementary Table1 The results of all the included studies.										
Study	Year	TP	FP	TN	FN	Sensitivity(%)	Specificity(%)	Cut-off	AUC	Correlation coefficient
Thoracic surgery										
Kang et al ¹¹	2016	33	13	4	25	86.8	65.8	3.5	0.82	NA
Fu et al ¹²	2015	8	6	4	6	66.7	50.0	8.5	0.77	0.41
Fu et al ¹²	2015	8	3	2	7	80.0	70.0	8.5	0.78	0.68
Fu et al ¹³	2014	8	5	8	9	50.0	64.0	NA	0.51	-0.17
Miñana et al ¹⁴	2020	8	3	14	14	36.4	82.4	8.0	0.47	NA
Jeony et al ¹⁵	2017	26	39	3	11	89.7	22.0	NA	0.53	NA
Suehiro et al ¹⁶	2010	14	1	3	13	82.4	92.3	10.5	0.90	0.87
Suehiro et al ¹⁶	2011	13	9	9	7	58.3	44.0	10.0	0.65	NA
Suehiro et al ¹⁷	2011	18	4	5	8	85.7	66.7	10.5	0.78	NA
Cardiac surgery										
Kim et al ¹⁸	2013	16	4	5	8	76.0	67.0	13.0	0.81	0.57

Monte nij et al ¹⁹	2016	5	4	4	9	56.0	69.0	10.0	0.70	0.32
Broch et al ²⁰	2011	30	9	16	28	65.0	76.0	12.0	0.72	0.57
Broch et al ²¹	2012	35	9	19	31	65.0	77.0	11.0	0.77	0.62
Hofer et al ²²	2005	17	5	6	12	74.0	71.0	12.5	0.82	-0.66
Presi man et al ²³	2005	26	7	6	32	81.0	82.0	NA	0.58	0.58
Haas et al ²⁴	2012	4	5	0	13	100.0	72.2	11.0	0.87	NA
Cann esson et al ²⁵	2009	14	1	3	7	82.0	88.0	10.0	0.87	NA
ICU after cardiac surgery										
Fisch er et al ²⁶	2013	8	1	19	9	30.0	90.0	NA	0.50	NA
Hofer et al ²⁷ (PiCC O)	2008	20	4	3	13	87.0	76.0	12.1	0.86	0.70
Hofer et al ²⁷ (Vigil eo)	2008	21	3	2	14	91.0	83.0	9.6	0.82	0.65
Geert s et al ²⁸	2011	7	0	3	10	70.0	100.0	7.3	0.90	0.67
Kang	2014	25	4	2	23	92.3	84.0	13.5	0.94	NA

et al ²⁹										
De Waale t al ³⁰	2009	11	3	0	8	100.0	78.0	8.0	0.91	0.75

TP, true positive; FP, false positive; TN, true negative; FN, false negative; AUC, area under the curve