

Table 10: Clinical evidence profile for diagnostic accuracy of reduced lung vital capacity (1 litre or more lower than normal) with spirometry for prediction of low oxygen saturation (<96%) in adults with cerebral palsy

Study	N	Risk of bias ¹	Inconsistency	Indirectness ³	Imprecision ⁴	Sensitivity (95% CI)	Specificity (95% CI)	Positive likelihood ratio ⁵	Negative likelihood ratio ⁵	Quality
1 observational study	46	Serious ²	Not applicable	Very serious ⁷	Very serious ⁸	0.86 (0.42 to 1.00)	0.26 (0.12 to 0.45)	1.16	0.55	VERY LOW

CI: confidence interval; N: number of participants in study

1 Risk of bias evaluated using risk of bias items of QUADAS-2 checklist

2 Unclear risk of bias in patient selection, index test and flow & timing.

3 Indirectness was evaluated using the applicability items of QUADAS-2

4 Judgement of imprecision was based on consideration of the 95% CIs of test sensitivity as this was considered to be the primary measure of interest as a false negative - missing patients with respiratory health problems, was considered more important than a false positive - indicating risks of respiratory health problems when there is none. Studies were considered to be of high sensitivity (and not imprecise) if the 95% CI was above 0.9 or of low sensitivity if it was below 0.75. Studies were assessed as subject to serious imprecision if the 95% CI crossed either 0.75 or 0.9, or subject to very serious imprecision if it crossed both 0.75 and 0.9

5 Positive and negative likelihood ratios calculated from sensitivity and specificity estimates

6 Unclear risk of review bias (lack of blinding in the interpretation both of the index test and reference standard – no details are given in the text) and patient selection; with flow and timing of participants and tests unclear

7 Measurement of oxygen saturation at a single point in the daytime is not a good predictor of early respiratory failure

8 95% CI for sensitivity crosses 0.75 and 0.90