

**Appendix II:** Levels of evidence and grades of statement used in this work (Guyatt et al., 2008; Howick et al., 2011).

### **Oxford Centre for Evidence-Based Medicine (CEBM) Levels of Evidence**

**1a:** Systematic review (with homogeneity) of Level-1 diagnostic studies; or clinical decision rule with Level-1b studies from different clinical centres

**1b:** Validating cohort study with good reference standards; or clinical decision rule tested within one clinical centre

**1c:** Absolute SpPins and SnNouts\*

**2a:** Systematic review (with homogeneity) of Level > 2 diagnostic studies

**2b:** Exploratory cohort study with good reference standards; or clinical decision rule after derivation or validated only on split-sample or databases.

**3a:** Systematic review (with homogeneity) of studies Level  $\geq$  3b

**3b:** Non-consecutive study; or without consistently applied reference standards.

**4:** Case-control study; poor or non-independent reference standard

**5:** Expert opinion without explicit critical appraisal, or based on physiology, bench research or 'first principles'

### **Grades of Statement**

**A (High):** Further research is very unlikely to change our confidence in the estimate of effect.

- Several high-quality studies with consistent results
- In special cases: one large, high-quality multicentre trial

**B (Moderate):** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

- One high-quality study
- Several studies with some limitations

**C (Low):** Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

- One or more studies with severe limitations

**D (Very low):** Any estimate of effect is very uncertain.

- Expert opinion
- No direct research evidence
- One or more studies with very severe limitations

Note: A minus sign '–' may be added to the level of evidence to denote evidence that fails to provide a conclusive answer because it is either: (a) a single result with a wide confidence interval; or (b) a systematic review with considerable heterogeneity.

Such evidence is inconclusive, and therefore can only generate Grade-D recommendations. \*'Absolute SpPin' is a diagnostic finding whose specificity is so high that a positive result rules in the diagnosis; 'Absolute SnNout' is a diagnostic finding whose sensitivity is so high that a negative result rules out the diagnosis.