Appendix 1 (as supplied by the authors): Detailed literature search strategy

We searched MEDLINE via PubMed and EMBASE via Embase.com for reports published in the English language from 1975 to August 21, 2014 with the search strategy described below. Additionally, we used Science Citation Index and Google Scholar to search for reports that cited included articles, and looked at the first 20 "related articles" of included studies in PubMed. We also examined references of included studies and review articles.

Search strategy in MEDLINE (PubMed):

((clinical[tiab] AND predict*[tiab]) OR (clinical[tiab] AND model*[tiab]) OR (clinical[tiab] AND score* [tiab]) OR (decision [tiab] AND rule*[tiab]) OR (derive*[tiab] AND validat*[tiab]) OR (diagnos*[tiab] AND accura*[tiab]) OR (diagnos*[tiab] AND rule*[tiab]) OR (diagnos*[tiab] AND score*[tiab]) OR (diagnos*[tiab] AND value[tiab]) OR (predict*[tiab] AND outcome*[tiab]) OR (predict*[tiab] AND rule*[tiab]) OR(predict*[tiab] AND score*[tiab])OR (predict*[tiab]AND validat*[tiab])OR (predict* [tiab] AND value*[tiab]) OR (risk*[tiab] AND assessment*[tiab]) OR (risk[tiab] AND score*[tiab]) OR (sensitivity [tiab] AND specificity [tiab]) OR (symptoms [tiab] AND signs [tiab]) OR (validat*[tiab] AND decision*[tiab]) OR (validat*[tiab] AND rule*[tiab]) OR (validat*[tiab] AND score*[tiab]) OR (predict*[tiab] AND risk*[tiab]))

AND ("pharyngitis/diagnosis"[Mesh] OR "pharyngitis/microbiology"[Mesh] OR "pharyngitis"[tiab] OR "tonsillitis"[Mesh] OR "tonsillopharyngitis"[tw] OR "pharyngotonsillitis"[tw] OR sore throat*[tw] OR "streptococcal infections/diagnosis"[Mesh] OR "streptococcal infections/microbiology"[Mesh] OR group a beta hemolytic streptococc*[tw] OR group a hemolytic streptococc*[tw] OR group a beta haemolytic streptococc*[tw] OR group a haemolytic streptococc*[tw] OR "gabhs"[tw] OR "streptococcus pyogenes/isolation and purification"[MeSH] OR "streptococcus pyogenes"[tw] OR "s. pyogenes"[tw])

AND ("infant"[Mesh] OR infant* OR infancy OR newborn* OR baby* OR babies OR neonat* OR preterm* OR prematur* OR postmatur* OR child[Mesh] OR child* OR schoolchild* OR school age* OR preschool* OR kid or kids OR toddler* OR adolescent[Mesh] OR adoles* OR teen* OR boy* OR girl* OR minors[Mesh] OR minors* OR puberty[Mesh] OR pubert* OR pubescen* OR prepubescen* OR pediatrics[Mesh] OR paediatric* OR paediatric* OR peadiatric* OR schools[Mesh] OR nursery school* OR kindergar* OR primary school* OR secondary school* OR elementary school* OR high school* OR highschool*)

AND ("humans"[Mesh] AND english[Language])

AND ("1975/01/01"[Publication Date] : "3000"[Publication Date])

NOT (pneumonia*[tiab] OR pneumococc*[tiab] OR influenza*[ti] OR group b streptococc*[tiab] OR "tonsillectomy"[ti] OR review[pt] OR case reports[pt] OR editorial[pt] OR comment[pt] OR letter[pt])

Search strategy in EMBASE (embase.com):

1. 'pharyngitis'/exp OR 'pharyngitis':ab,ti OR 'sore throat'/exp OR 'sore throat':ab,ti OR 'tonsillitis':ab,ti OR 'tonsillopharyngitis':ab,ti OR 'pharyngotonsillitis':ab,ti OR 'streptococcus group a'/exp OR 'streptococcus pyogenes'/exp OR 'group a streptococcal infection'/exp AND [embase]/lim

2. 'scoring system'/exp OR 'statistical model'/exp OR 'prediction'/exp OR 'prediction':ab,ti OR 'predictive':ab,ti OR 'clinical prediction':ab,ti OR 'clinical decision':ab,ti OR 'score':ab,ti OR 'scoring':ab,ti OR 'model':ab,ti OR 'decision support techniques'/exp OR 'multivariate analysis'/exp OR 'probability'/exp OR 'algorithm'/exp AND [embase]/lim

3. [preschool]/lim OR [school]/lim OR [child]/lim OR [adolescent]/lim OR 'child$':ab,ti OR 'pediatric$':ab,ti OR 'pediatrics'/exp AND [embase]/lim

4. [english]/lim AND [humans]/lim AND [embase]/lim

5. 'pneumonia*':ab,ti OR 'influenza*':ti,ab OR 'group b':ab,ti OR 'tonsillectomy':ti,ab

6. [review]/lim OR [editorial]/lim OR [erratum]/lim OR [letter]/lim

7. 1 AND 2 AND 3

8. 7 AND 4

9. 8 NOT 5

10. 9 NOT 6