**Supplemental table S3: Quality assessment, Modified Downs and Black Score\***

**Quality assessment,** **Modified Downs and Black Score\***

\* Excluded questions see below

**Reporting**

1. Is the hypothesis/aim/objective of the study clearly described?

2. Are the main outcomes to be measured clearly described in the Introduction or Methods section?

3. Are the characteristics of the patients included in the study clearly described?

4. Are the interventions of interest clearly described?

5. Are the distributions of principal confounders in each group of subjects to be compared clearly described?

6. Are the main findings of the study clearly described?

7. Does the study provide estimates of the random variability in the data for the main outcomes?

8. Have all important adverse events that may be a consequence of the intervention been reported?

9. Have actual probability values been reported for the main outcomes except where the probability value is less than 0.001?

**External validity**

10. Were the subjects asked to participate in the study representative of the entire population from

which they were recruited?

11. Were those subjects who were prepared to participate representative of the entire population from which they were recruited?

**Internal validity (Bias)**

12. Was an attempt made to blind those measuring the main outcomes of the intervention?

13. If any of the results of the study were based on “data dredging”, was this made clear?

14. Were the statistical tests used to assess the main outcomes appropriate?

15. Were the main outcome measures used accurate (valid and reliable)?

**Internal validity - confounding (selection bias)**

16. Were the patients in different intervention groups (trials and cohort studies) or were the cases and controls (case-control studies) recruited from the same population?

17. Were study subjects in different intervention groups (trials and cohort studies) or were the cases and controls (case-control studies) recruited over the same period of time?

18. Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?

**Power**

19. Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Quality assessment,** **Modified Downs and Black Score\*** | | | | | | | | | | | | | | | | | | | | |
|  | **Reporting** | | | | | | | | | **External**  **Validity** | | **Internal**  **Validity**  **(Bias)** | | | | **Internal**  **Validity- Confounding** | | | **Power** | **Total Score** |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** |  |
| *Altman & Davis 2015* | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | **9** |
| *Arulsingh et al. 2015* | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | **8** |
| *Ashizawa at al. 1997* | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **5** |
| *Barnicot et al. 1955* | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **6** |
| *D’AoÛt et al. 2009.* | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | **11** |
| *Echarri et al. 2003* | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | **9** |
| *Goss & Goss 2012.* | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | **10** |
| *Griffin et al. 2010* | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **8** |
| *Kadambande et al. 2006* | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | **11** |
| *Lieberman et al. 2010* | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **8** |
| *Lieberman et al. 2015* | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | **11** |
| *Mei et al. 2015* | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **9** |
| *Rao et al. 1992* | 1 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | **13** |
| *Shu et al. 2015* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | **11** |
| *Sim-Fook et al. 1958* | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | **2** |
| Key: 1= Yes; 0= No. \*2= Yes; 1= Partially; 0= No | | | | | | | | | | | | | | | | | | | | |

**Not-Applicable / Excluded Quality Questions**

**Reporting**

- Have the characteristics of patients lost to follow-up been described?

**External validity**

- Were the staff, places, and facilities where the patients were treated, representative of the treatment the majority of patients receive?

**Internal validity (Bias)**

- Was an attempt made to blind study subjects to the intervention they have received?

- In trials and cohort studies, do the analyses adjust for different lengths of follow-up of patients, or in case-control studies, is the time period between the intervention and outcome the same for cases and controls?

- Was compliance with the intervention/s reliable?

**Internal validity - confounding (selection bias)**

- Were study subjects randomised to intervention groups?

- Was the randomised intervention assignment concealed from both patients and health care staff until recruitment was complete and irrevocable?

- Were losses of patients to follow-up taken into account?