SUPPLEMENTARY MATERIAL

**Appendix 2: Quality Assessment and Risk of Bias**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COHORT STUDIES** | **Selection**  **(max 4 \*)** | **Comparability (max 2 \*)** | **Outcome (max 3 \*)** | **Total (/9)** |
| **Aggarwal et al. (2006)** | \*\*\* | \*\* | \*\*\* | 8 |
| **Albala et al (2014)** | \*\*\* | \*\* | \* | 6 |
| **Amieva et al (2003)** | \*\*\* |  | \*\* | 5 |
| **Anang et al. (2014)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Bermejo-Pareja et al. (2007)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Buchman et al. (2007)** | \*\*\* | \*\* | \*\*\* | 8 |
| **Buchman et al. (2011)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Bugalho et al. (2013)** | \*\*\*\* |  | \*\* | 6 |
| **Camargo et al. (2016)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Camicioli et al. (2007)** | \*\*\* | \*\* | \*\* | 7 |
| **Domellöf et al. (2015)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Duara et al. (2011)** | \*\*\*\* | \*\* | \* | 7 |
| **Dumurgier et al. (2016)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Gago et al. (2009)** | \*\*\* |  | \*\*\* | 6 |
| **Gray et al. (2013)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Hobson et al. (2004)** | \*\*\*\* |  | \*\* | 6 |
| **Israeli-Korn et al. (2010)** | \*\*\* |  | \*\*\* | 6 |
| **Lee et al. (2015)** | \*\*\*\* | \* | \*\* | 7 |
| **Lee et al. (2016)** | \*\* | \*\* | \*\* | 6 |
| **Levy et al. (2000)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Louis et al. (2004)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Louis et al. (2010)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Montero-Odasso et al. (2016)** | \*\*\*\* | \*\* | \* | 7 |
| **Shill et al. (2014)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Taaffe et al. (2008)** | \*\*\* | \* | \*\* | 6 |
| **Thawani et al. (2009)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Verghese et al. (2002)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Verghese et al. (2007)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Verghese et al. (2007)** | \*\*\*\* | \*\* | \* | 7 |
| **Verghese et al. (2013)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Verghese et al. (2014)** | \*\*\*\* | \*\* | \*\* | 8 |
| **Waite et al. (2005)** | \*\*\* |  | \*\*\* | 6 |
| **Wang et al. (2006)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Welmer et al. (2014)** | \*\*\*\* | \*\* | \*\*\* | 9 |
| **Wilson et al. (2003)** | \*\*\* | \*\* | \*\*\* | 8 |
| **Zhu et al. (2014)** | \*\*\*\* |  | \*\* | 6 |
| **CASE-CONTROL STUDY** | **Selection (max 4\*)** | **Comparability (max 2\*)** | **Exposure (max 3\*)** | **Total (/9)** |
| **Ramakers et al. (2007)** | \*\*\* | \*\* | **\*** | 6 |

**Table 2S.** Newcastle-Ottawa Quality assessment scale ratings for all included studies.



**Figure 1S.** Funnel plot to assess publication bias for meta analysis of overall parkinsonism measured as a dichotomous exposure.



**Figure 2S.** Funnel plot to assess publication bias for meta analysis of tremor measured as a dichotomous exposure.



**Figure 3S**. Funnel plot to assess publication bias for gait velocity measured as a dichotomous exposure.