Text summary of appendix A3: Appendix four contains the overall results of the risk of bias of included studies.

## **Appendix A3: Risk of bias of the included studies**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Structural validity** | **Internal consistency** | **Cross cultural validity** | **Reliability** | **Measurement error** | **Criterion validity** | **Hypothesis testing** | **Responsiveness** |
| Fronhofen et al. 2009, Germany [ESS] |  |  |  |  |  |  |  |  |
| Gronewold et al. 2021, Germany [ESS] |  |  |  |  |  |  |  |  |
| Gronewold et al. 2021, Germany [ESS-ALT] |  |  |  |  |  |  |  |  |
| Curcio et al. 2013 [PSQI] |  |  |  |  |  |  |  |  |
| Cohen-Mansfiled et al. 1990, USA [OSAI] |  |  |  |  |  |  |  |  |
| Manni et al. 2015, Italy [SCADS] |  |  |  |  |  |  |  |  |
| Manni et al. 2013, Italy [SCADS] |  |  |  |  |  |  |  |  |
| Hjetland et al. 2020, Norway [SDI] |  |  |  |  |  |  |  |  |
| Tractenberg er al. 2003, USA [SDI] |  |  |  |  |  |  |  |  |
| Ancoli-Israel et al. 1997, USA [Actigraphy] |  |  |  |  |  |  |  |  |
| Gibson et al. 2018, New Zealand [Actigraphy] |  |  |  |  |  |  |  |  |
| Nijhof et al. 2012, Netherlands [Actigraphy] |  |  |  |  |  |  |  |  |
| Van Someren 2006, Netherlands [Actigraphy] |  |  |  |  |  |  |  |  |

ESS: Epworth Sleepiness Scale, ESS-ALT: Epworth-Sleepiness Scale Alternative Version, PSQI: Pittsburgh Sleep Quality Index, OSAI: Observational Sleep Assessment Instrument, SCADS: Sleep continuity scale in Alzheimer’s disease, SDI: Sleep Disorders Inventory; According to the COSMIN risk of bias checklist (2018) ([Mokkink *et al.*, 2018](#_ENREF_45))

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Overall very good | Overall adequate | Overall doubtful | Overall inadequate | Overall not applicable |