**Appendix S5. Summary of findings table-GRADE levels of evidence for studies comparing VR-based exercise with other treatments.**

| **VR-based exercise compared to other treatments for stroke** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Patient or population:** people receiving stroke rehabilitation **Settings:** hospital **Intervention:** VR-based exercise **Comparison:** conventional therapies | | | | | | | | | | |
| **Certainty assessment** | | | | | | | **№ of patients** | | **Effect** | | | **Certainty** |
| **№ of studies** | **Study design** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Other considerations** | **VR-based balance training** | **other training** | **Relative (95% CI)** | **Absolute (95% CI)** | |
| **BBS (follow up: mean 5.18 weeks)** | | | | | | | | | | | | |
| 11 | RCT | serious1 | serious2 | not serious3 | not serious | strongly suspected 4 | 155 | 149 | - | MD **1.35 higher** (0.85 higher to 1.86 higher) | | ⨁⨁◯◯ LOW |
| **TUG** **(follow up: mean 5.67 weeks)** | | | | | | | | | | | | |
| 9 | RCT | very serious6 | not serious | not serious3 | not serious | none | 149 | 139 | - | MD **0.81 lower** (1.18 lower to 0.44 lower) | | ⨁⨁◯◯ LOW |
| **10MWT (follow up: mean 5.50 weeks)** | | | | | | | | | | | | |
| 4 | RCT | very serious6 | not serious | not serious3 | serious5 | none | 56 | 56 | - | MD **1.53 lower** (2.92 lower to 0.13 lower) | | ⨁◯◯◯ VERY LOW |
| **FRT** **(follow up: mean 5.33 weeks)** | | | | | | | | | | | | |
| 3 | RCT | very serious6 | not serious | not serious3 | serious5 | none | 53 | 48 | - | MD **3.06 higher** (1.31 higher to 4.80 higher) | | ⨁◯◯◯ VERY LOW |
| **MBI (follow up: mean 5.33 weeks)** | | | | | | | | | | | | |
| 3 | RCT | very serious6 | not serious | not serious3 | serious5 | none | 43 | 38 | - | MD **5.26 higher** (1.70 higher to 8.82 higher) | | ⨁◯◯◯ VERY LOW |
| \*The basis for the **assumed risk** (e.g. the median control group risk across studies) is provided in footnotes. The **corresponding risk** (and its 95% confidence interval) is based on the assumed risk in the comparison group and the **relative effect** of the intervention (and its 95% CI). **CI:** Confidence interval; | | | | | | | | | | | | |
| GRADE Working Group grades of evidence **High quality:** Further research is very unlikely to change our confidence in the estimate of effect.  **Moderate quality:** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate. **Low quality:** 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. **Very low quality:** We are very uncertain about the estimate. | | | | | | | | | | | | |
| 1 >25% of participants were from studies with moderate risk of bias (inadequate concealment). 2 *I2* >40%.  3 Participants in all the pooled studies are adolescents or adults.  4 The funnel plot had an asymmetrical distribution. 5 There were less than 200 participants in total.  6 >25% of participants were from studies with high risk of bias (lack of double-blinding and inadequate concealment). | | | | | | | | | | | | |

*GRADE: Grading of Recommendations, Assessment, Development and Evaluations; VR: virtual reality; CI: confidence interval; MD: mean difference; RCT: randomized controlled trial.*