Table 11. Systematic Reviews Assessing BWSTT Strategies and/or Balance Interventions for Standing Balance Outcomes in Patients With SCI

Authors Year; Country Date included in the review Number of articles Level of Evidence Type of Study AMSTAR Score	**Method Databases Outcomes Measures**	**Conclusions**
Alashram et al. (2021); Italy Reviewed published articles up to January 2021 N=16 **Level of evidence:** PEDro scale **Type of study:** 13 RCTs 2 clinical controlled trials 1 pilot study **AMSTAR:** 6	**Method:** The present systematic review aimed to provide an overview of the immediate and long-term effects of the Lokomat on various impairments following SCI, to determine the optimal treatment dosage, and to define who most likely would benefit from the intervention. **Database:** PubMed, SCOPUS, PEDro, REHABDATA, MEDLINE, EMBASE, and web of science**.** **Outcome Measures:** Walking speed (10MWT), walking distance (6MWT, 2MWT, SCI-Functional Ambulation Profile [SCI-FAP]), functional ambulation (TUG, Functional Ambulation Category [FAC]), walking capacity (SCI-FAP, 6MWT), balance (BBS, Figure Eight Test, FES-I), functional level (WISCI II, FIM-L, SCIM, SCIM-III – mobility section [SCIM-III-M], Ambulatory Motor Index), leg strength (LEMS), strength (maximum voluntary contraction [MVC]), and agility (Probe Reaction Time).	1. Quality of the included studies: a. The median score on the PEDro scale was 6 (ranged from 2 to 8). b. Overall, 6 studies met 8 criteria, 7 criteria (n=1), 6 criteria (n=3), 5 criteria (n=2), 4 criteria (n=2), 3 criteria (n=1), and 2 criteria (n=1) for low risk of bias. 2. A total of 658 patients with incomplete SCI were included. 3. The included studies did not demonstrate any AEs or uncomfortable issues following the Lokomat intervention. 4. Effects on balance: One study reported a significant improvement in the BBS scores after Lokomat training compared with the control group; however, 2 studies did not show significant differences between groups in the BBS, the Figure Eight Test, and the FES-I scores. 5. Effects on agility: One study reported significant improvements in Probe Reaction Time after RAGT. 6. Effects on functional level and functional ambulation: a. TUG: Two studies showed significant improvements after the RAGT, while one study reported no significant differences between groups.
Nam et al. (2017); South Korea	**Method:** A systematic review and meta-analysis were performed to	1. Of the 502 participants, 263 in four studies were assessed at < 6 months

Reviewed published articles up to January 2016 N=10 **Level of evidence:** PEDro score **Type of study:** RCTs of parallel-groups or cross-over trials **AMSTAR:** 8	assess the effects of RAGT (using Lokomat) on improving walking-related functional outcomes according to time since injury in patients with incomplete SCI. **Database:** MEDLINE, EMBASE, SCOPUS, Web of Science, Cochrane Central Register of Controlled Trials, the World Health Organization International Clinical Trials Registry Platform, and the clinical trials registry and database of the U.S. National Institutes of Health (ClinicalTrials.gov) were searched. **Outcome measures:** Walking speed (10MWT), walking distance (6MWT), leg strength (LEMS), level of functional mobility and independence (WISCI II), independence of gait (FIM-L), functional mobility and balance (TUG test), and spasticity (Modified Ashworth Score).	post-injury and 209 in five studies were assessed at > 12 months post-injury, and the remaining 30 participants in one study (mean 6.3 months post-injury) did not belong to any group. 2. The mean PEDro score of the studies was 5.7 (range, 3 to 8). 3. Among 10 comparisons, 3 investigated RAGT vs. conventional overground gait training, 2 investigated RAGT vs. body-weight supported gait training, 2 investigated RAGT vs. non-gait-specific training (strength or bike), and finally, three trials compared RAGT with no intervention. 4. Effects on balance: a. No trial with acute participants measured recovery of balance. b. Significantly greater improvements in TUG were observed in the chronic RAGT groups compared to the no intervention groups (pooled MD = 9.25, 95% CI 2.76 to 15.73, P=0.005, I2=74%; three trials, 120 participants).