Author Year Country Date included in the review Number of articles Level of Evidence Type of Study AMSTAR Score	Method Databases Outcome measures	Conclusions
Arroyo-Fernández et al. 2024 Spain Reviewed published articles up to December 2023 N = 15 (673 participants) and 14 included in the meta-analysis **Level of evidence:** Risk of bias assessed based on recommendations by the Cochrane organization using Review Manager **Type of study:** RCT **AMSTAR:** 9	**Methods:** The present systematic review and meta-analysis of RCTs aimed to summarize the evidence about the effects of body-weight supported gait training (robot-assisted body weight-supported gait training and manually-assisted body weight-supported gait training) in participants with motor-incomplete SCI versus control, with a particular focus on gait parameters and balance as primary outcomes, as well as other clinical outcomes such as quality of life as a secondary outcome. **Databases:** MEDLINE (via PubMed), Scopus, Web of Science, Cochrane Central Register of Controlled Trials (CENTRAL), and PEDro. **Outcome Measures:** Study outcomes—gait (functionality, endurance, and speed) and balance as primary outcomes, and quality of life as a secondary outcome.	1. Walking functionality: a. Overall, the effectiveness of body-weight supported gait training was not superior compared to control (n = 356, SMD = 1.25, CI 95%: −0.03 to 2.52) with a high level of heterogeneity (I^2 = 96%, *p* < 0.00001). b. In the analysis by subgroups to account for body-weight supported gait training, the results showed that robotic-assisted gait training (RAGT) improved walking functionality when compared to the control group (n = 257, SMD = 1.74, CI 95%: 1.09 to 2.39). However, heterogeneity was high (I^2 = 77%, *p* = 0.002) c. When an analysis based on the time since injury was performed, a beneficial effect was observed for body-weight supported gait training in chronic patients (n = 62, SMD = 1.82, CI 95%: 0.99 to 2.65) but not in sub-acute patients (n = 294, SMD = 0.76, CI 95%: −1.04 to 2.56). 2. Walking endurance: a. The pooled analysis did not show a superior effect of body-weight supported gait training compared to the control (n = 335, MD = 4.87 m; CI 95% = −14.40 to 24.14), with a high level of heterogeneity (I^2 = 81%, *p* < 0.0001). b. In the analysis by subgroups, RAGT interventions significantly improved walking endurance versus the control (n = 231, MD =

		26.59 m, CI 95% = 22.87 to 30.31), with a low heterogeneity value. c. Finally, no significant differences were found globally depending on the time since injury of the participants. 3. Walking speed: a. Body-weight supported gait training did not show a superior effect to that of conventional physical therapy or no intervention (n = 453, SMD = 0.66, CI 95% = −0.20 to 1.51), with a high level of heterogeneity (I^2 = 94%, p < 0.0001). b. In the analysis by subgroups to account for the intervention, neither RAGT (n = 284, SMD = 0.38, CI 95% = −0.98 to 1.75) nor manually assisted body-weight supported gait training (n = 113, SMD = 1.87, CI 95% = −0.04 to 3.79) achieved superior results compared to the control, with high values of heterogeneity (I^2 = 96% and 92%, respectively). c. Finally, in terms of the time since injury, greater effectiveness of the body-weight supported gait training in subacute patients (n = 253, SMD = 2.52, CI 95%: 0.64 to 4.40) was observed.
Huang et al. 2024 China Reviewed published articles up to December 2022 N = 19 were included in the systematic review and 13 (LEMS) and 7 (10MWT) were in the meta-analysis **Level of evidence:** Cochrane	**Methods:** The study aimed to were to evaluate the rehabilitation efficacy of body weight supported training for patients with SCI and to compare the effect differences among three body weight supported training methods (body-weight supported treadmill training [BWSTT], RAGT, and aquatic exercise). **Databases:** PubMed, Web of Science, Cochrane Library, Excerpta Medica, China National Knowledge Infrastructure, China Biology Medicine, China Science and Technology Journal, and Wan Fang databases	1. The meta-analysis showed that body weight supported training could improve LEMS (SMD = 6.38, 95% CI = 3.96–8.80, P < 0.05), walking speed (SMD = 0.77, 95% CI = 0.52–1.02, P < 0.05), and modified Barthel Index scores (MD = 9.85, 95% CI = 8.39–11.30, P < 0.05). 2. The network meta-analysis showed no significant difference among the three BWST methods for improving lower extremity motor scores in patients with SCI. The best probability ranking of the body weight supported training methods for improving lower extremity motor scores in patients

Systematic Review Manual 5.1.0 **Type of study:** RCTs **AMSTAR:** 8	**Outcome Measures:** LEMS, walking speed, and Modified Barthel Index.	with SCI was RAGT (P = 0.60), followed by aquatic exercise (P = 0.21) and body weight supported training (P = 0.19).
Yang et al. 2022 Taiwan Reviewed published articles up to August 2020 N = 15 **Level of evidence:** Cochrane risk of bias 2 tool **Type of study:** RCTs **AMSTAR:** 8	**Method:** This network meta-analysis approached for comparing the effectiveness of three strategies (BWSTT, RAGT and body-weight supported overground training [BWSOGT]) for ambulatory improvements in patients with SCI. Also, a comprehensive literature review was conducted to identify RCTs focusing on gait training for SCI. **Database:** PubMed, Cochrane Library, Scopus, and Embase. **Outcome Measures:** Walking ability, 6MWT, 10MWT, LEMS, and WISCI. *Control intervention: Conventional gait training, such as sit to stand, weight shifting, walking, turning, and stand to sit.	1. The overall risk of bias was uncertain for all studies. 2. The network meta-analysis included 497 participants. 3. The investigated interventions were relatively safe and well tolerated by participants as six studies reported on AEs, four of them did not observe AEs, and two reported that some participants experienced pain. 4. The pooled standard mean differences (SMDs) (95% CIs) of functional scores revealed that RAGT (0.30 [0.11, 0.50]) was significantly more favorable than the control intervention, whereas BWSTT (0.09 [-0.40, 0.58]) and body-weight supported overground training (0.09 [-0.55, 0.73]) did not result in significant differences compared with the control intervention. 5. The ranking probabilities indicated that RAGT was the most effective, followed by BWSOGT, BWSTT, and the control intervention. 6. There was no significant inconsistency between the results of direct and indirect comparisons. Furthermore, the differences between the traditional pairwise meta-analyses and network meta-analyses were determined and none of the differences were significant.
Mehrholz et al. 2017 Germany Reviewed published articles	**Method:** A systematic review and meta-analysis were performed to update the Mehrholz et al. (2012) review. Specifically, the aim was to compare the effectiveness of	1. Thirteen RCTs involving 586 patients were included in the analysis. 2. Risk of bias:

up to September 2016 N = 13 **Level of evidence:** Cochrane Risk of Bias Tool **Type of study:** RCTs of parallel-groups or cross-over trials **AMSTAR:** 9	BWSTT and RAGT with OGT and other forms of physiotherapy on walking speed and walking distance in people with traumatic SCI: • Comparison no. 1: BWSTT vs. OGT and other forms of physiotherapy (not including RAGT). • Comparison no. 2: RAGT vs. OGT and other forms of physiotherapy (not including BWSTT). **Database:** Cochrane Injuries Group's Specialised Register; Cochrane CENTRAL; MEDLINE; EMBASE; CINAHL; Allied and Complementary Medicine Database; SPORTDiscus; PEDro; COMPENDEX; INSPEC. Online trials databases Current Controlled Trials (www.controlled-trials.com/isrctn) and Clinical Trials (www.clinicaltrials.gov) was searched. **Outcome Measures:** Walking speed, walking distance and AEs.	a. Six trials were rated as low risk of bias for random sequence generation, five trials were rated as low risk of bias for concealed allocation and eight trials were rated as low risk of bias for blinding of assessors. b. Two and five trials were rated as high risk of bias for concealed allocation and blinding of assessors, respectively. 3. Comparison no. 1: a. Walking speed: The pooled MD was − 0.03 $m{\cdot}s^{-1}$ favoring OGT (95% CI, − 0.10 to 0.04; P = 0.37; I^2 = 0%). Few clinicians or patients would consider a possible increase of 0.04 $m{\cdot}s^{-1}$ as clinically meaningful. Therefore, these results indicate that BWSTT does not have clinically important effects on walking speed when compared to OGT. b. Walking distance: The pooled MD was − 7 m favoring OGT (95% CI − 45 to 31; P = 0.73; I2 = 71%). Most would consider a possible increase of 31 m as clinically meaningful. Therefore, these results indicate that BWSTT may have clinically important effects on walking distance when compared to OGT, but these results are not certain because the 95% CI spans down to − 45 m, favoring overground training. c. AEs (Five trials involving a total of 309 participants): The rates of AEs were between 0 (n = 3) and 4% (n = 2). The risk difference (95% CI) of an AE was 0.03 (−0.01 to 0.07; P = 0.21; I^2 = 0%). 4. Comparison no. 2: a. Walking speed: The pooled MD was − 0.04 $m{\cdot}s^{-1}$ favoring OGT (95% CI − 0.21 to 0.13; P = 0.66; I^2 = 57%). Few would consider a possible increase of 0.13 $m{\cdot}s^{-1}$ as

		clinically meaningful. Therefore, these results indicate that RAGT does not have clinically important effects on walking speed when compared to OGT. b. Walking distance: The pooled MD was − 6 m favoring OGT (95% CI − 86 to 74; $P = 0.88$; $I^2 = 68\%$). Most would consider a possible increase of 74 m as clinically meaningful. Therefore, these results indicate that RAGT may have clinically important effects on walking distance when compared to OGT, but these results are not certain because the 95% CI spans down to − 86 m, favoring overground training. c. AEs (four trials involving a total of 136 participants): The risk difference (95% CI) of an AE was 0.01 (−0.06 to 0.08; $P = 0.79$; $I^2 = 0\%$).