Table 1: Characteristics of studies indicating advantages of treadmill training in comparison to conventional gait training.

References	RCS	Subjects: N/Mean Age/Sex(females-F/ males-M)	Interventions and training modalities	Main outcomes measures
Yen et al, 2008[29]	Yes	N =14 (Exp =7; Con =7) Age =Exp 57.30; Con 56.05 Sex =M9/F5 Time since stroke (years) =1.96	Exp =BWSTT + general physical therapy (stretching, strengthening, balance, and overground walking training) Frequency general physical therapy =50 min x 2-5/wk x 4/wk Frequency BWSTT =30 min x 3/wk x 4/wk Con = general physical therapy (stretching, strengthening, balance, and overground walking training) Frequency =50 min x 2-5/wk x 4/wk	Corticomotor activity =focal transcranial magnetic stimulation, motor threshold, map size, the motor map for the tibialis anterior and abductor halluces muscles; Balance =BBS Spatial parameters of gait =GAITRite system (walking speed, cadence, step length) Follow-up =0, 4 wk
Yang et al, 2010[28]	Yes	N =18 (Exp =9; Con =9) Age =Exp 57.15; Con 54.95 Sex =M10/F8 Time since stroke (years) =1.4	Exp =BWSTT + general exercise program (stretching, strengthening, endurance, and overground walking training) Frequency BWSTT =30 min x 3/wk x 4/wk Frequency general exercise program =20 min x 3/wk x 4/wk Con = general exercise program ((stretching, strengthening, endurance, and overground walking training) Frequency =50 min x 3/wk x 4/wk	Corticomotor activity =motor threshold and map size of the abductor hallucis muscle in the ipsilesional hemisphere Lower extremity motor function =FMA Follow-up =0, 4 wk
Dean et al, 2010[40]	Yes	N =126 Age =Exp 70; Con 71 Sex =M71/F55 Time since stroke (week) =2.4	Exp =BWSTT + assisted overground walking Frequency =30 min x 5/wk until discharge Con =assisted overground walking Frequency =30 min x 5/wk until discharge	Ability to walk independently =15 m, no aid Speed =10-m Walk Test (comfortable, no aids) Capacity =6-min Walk Test Follow-up =1/wk until discharge, 26 wk
Kuys et al, 2011[39]	Yes	N =30 (Exp =15; Con =15) Age =Exp 63; Con 72 Sex =M12/F18 Time since stroke (months) =1.7	Exp =high-intensity treadmill training + usual physiotherapy Frequency =30 min x 3/wk × 6 wk Con =usual physiotherapy Frequency (both) =60 min x 3/wk × 6 wk	Speed =10-m walk test Distance =6-min walk test Follow-up =0, 6, 18 wk
MacKay-Lyons et al, 2013[43]	Yes	N =50 (Exp =24; Con =26) Age =Exp 62; Con =59 Sex =M29/F21 Time since stroke (days) =23	Exp =BWSTT + usual care (active/ passive stretching exercises, upper/lower extremity training, overground gait training) Frequency (inpatients) =60 min x 5/wk x 6/wk Frequency (outpatients) =60 min x 3/wk x 6/wk Con =usual care (active/ passive stretching exercises, upper/lower extremity training, overground gait training) Frequency (inpatients) =60 min x 5/wk x 6/wk Frequency (outpatients) =60 min x 3/wk x 6/wk	Peak oxygen consumption =VO2peak Speed =10-m walk test Capacity =6-min Walk Test Balance =BBS Motor impairment = Chedoke-McMaster Stages of Recovery, Leg and Foot Follow-up =0, 6, 24, 48 wk
Ochi et al, 2015[44]	Yes	N =26 (Exp =13; Con =13) Age =Exp 61.8; Con =55.5 Sex =M20/F6 Time since stroke (days) =24.5	Exp =gait training with a gait-assistance robot + standard physical therapy Frequency =20 min x 5/wk x 4/wk Con =overground gait training + standard physical therapy Frequency =20 min x 5/wk x 4/wk Frequency standard physical therapy (both) =60 min x 5/wk x 4/wk	Walking ability =FAC; Muscle torque =servo-dynamically controlled ergometer; Speed =10-m walk test; Lower extremity motor function =FMA Functional Independence = FIM Follow-up =0, 4 wk
Mao et al, 2015[42]	Yes	N =24 (Exp =12; Con =12) Age =Exp 59.55; Con 60.82 Sex =M5/F19 Time since stroke (days) =48.46	Exp =BWSTT Frequency =30 min x 5/wk x 3/wk Con =assisted overground walking Frequency =30 min x 5/wk x 3/wk	Balance =Brunel balance assessment Lower extremity motor function =FMA Kinematic data =gait capture system; Follow-up =0, 3 wk
Han et al, 2016[45]	Yes	N =56 (Exp =30; Con =26) Age =Exp 67.89; Con =63.2 Sex =M32/24 Time since stroke (days) =19.83	Exp =robot-assisted gait therapy + rehabilitation therapy Frequency robot-assisted gait therapy =30 min x 5/wk x 4/wk Frequency rehabilitation therapy =30 min x 5/wk x 4/wk Con =rehabilitation therapy Frequency =60 min x 5/wk x 4/wk	Brachial–ankle pulse wave velocity, cardiopulmonary fitness =oscillometric method Functional Independence =Modified Barthel Index; Walking ability =FAC; Lower extremity motor function =FMA; Balance =BBS; Follow-up =0, 4 wk

RCS: Randomized controlled study, Exp: experimental group, Con: control group, BWSTT: body weight supported treadmill training, FAC: Functional Ambulation Category, FMA: Fugl-Meyer assessment scale, BBS: Berg Balance Scale, FIM: Functional Independence Measure.