

**Online supplemental Table 1. Characteristics of included studies.**

Author	Study design	Sample size (R/C)	Mean age (R/C)	Type of robot	Inclusion and exclusion criteria	Intervention	Control	Outcomes	Follow up
Lingxin Liu, 2022	RCT	20/20	51.49/50.50	GaitMotus (With different walking training modes such as following, active and resistance)	<b>Inclusion:</b> Stroke (duration≤6 months) confirmed by head computed tomography or magnetic resonance imaging, aged 18-70 years, stable control of blood pressure, no serious cognitive impairment, can cooperate with scale evaluators, ashworth grade of lower extremity of affected side ≤2, the affected lower extremity muscle strength≥3, Brunnstrom stage≥3, patients can complete cardiopulmonary exercise test. <b>Exclusion:</b> Patients with severe cognitive impairment and speech dysfunction, cardiovascular disease, severe joint disease or deep venous thrombosis, over weight ≥100kg.	40min (RT+Respiratory training)	40min Respiratory training	④	4 weeks
Anlong Hu, 2018	RCT	16/16	61.91/63.63	Flexbot (With gait training, weight support and virtual interaction )	<b>Inclusion:</b> Patients with Stroke confirmed by head computed tomography or magnetic resonance imaging examination, hemiplegia within 1 month after the onset of the first stroke, stable vital signs, no myocardial infarction, angina pectoris, etc, unilateral limb motor dysfunction, aged 45-75 years. <b>Exclusion:</b> Patients with disturbance of consciousness, severe infectious diseases, cardiovascular diseases, stiff Hip, knee, ankle joint, history of mental illness, vascular disease or malignancy of the lower extremities.	120min CT +30min RT	120min CT	①④	8 weeks

R: Lower limb rehabilitation robot group, C: Control group, RT: therapy of lower limb rehabilitation robot, CT: Conventional therapy, RCT: Randomized controlled trial, ①: heart rate at rest, ②: peak of systolic blood pressure, ③: peak of diastolic blood pressure, ④: peak of oxygen consumption

**Online supplemental Table 1. Characteristics of included studies(continued).**

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Chanhe e Park, 2020	RCT	7/7	76.29/69 .86	Walkbot (An innovative hip-knee- ankle interlimb coordinati on training robot)	<b>Inclusion:</b> Patient with acute cortical/subcortical ischemic stroke (2-weeks post-stroke onset), be able to follow a two-step command, fugal-meyer sensory score>2, suitability for gait training as assessed clinically (ability to ambulate at least one step with a device/assistance), height: 132-200 cm, hip-knee joint length: 33-48 cm, knee joint-foot length: 33-48 cm, aged 18-99 years. <b>Exclusion:</b> Patient with cerebellar/brainstem stroke, weight over 135 kg, uncontrolled hypertension (stage 2), blood pressure over 160/100 mmHg, cardiopulmonary impairments affecting the ambulation test, integumentary impairment, significant and persistent mental illness, lower extremity fixed contracture or deformity, joint instability, neurodegenerative disorders, modified Ashworth scale over 3 in the affected leg, significant pain and sensory deficit, aphasia and dysarthria communicate discomfort.	60min CT +30min RT	90min CT	①	2 weeks

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**Online supplemental Table 1. Characteristics of included studies(continued).**

Author	Study design	Sample size (R/C)	Mean age (R/C)	Type of robot	Inclusion and exclusion criteria	Intervention	Control	Outcomes	Follow up
Won Hyuk Chang, 2012	RCT	20/17	55.50/59.70	Lokomat (A robotic-driven gait orthosis that includes posture control, a weight support system, and a treadmill)	<b>Inclusion:</b> First time stroke (within 1 month), supratentorial lesion, functional ambulation category< 2, aged 20-65 years. <b>Exclusion:</b> Patients who meet criteria for absolute and relative contraindications to exercise testing established by the American College of Sports Medicine, contraindications for Lokomat therapy or musculoskeletal disease involving the lower limbs.	40min RT +60min CT	100min CT	①②③④	2 weeks
Eun Young Han, 2016	RCT	30/26	67.89/63.20	Lokomat (A robotic-driven gait orthosis that includes posture control, a weight support system, and a treadmill)	<b>Inclusion:</b> Patients with first time stroke ( less than 3 months), functional ambulation category<2, sufficient cognition to understand procedures. <b>Exclusion:</b> Patient with contraindications for robot therapy, cerebellar or brainstem lesions may affect autonomic or balance function, musculoskeletal disease involving the lower limbs and other concurrent neurological diseases.	30min RT +60min CT	90min CT	①②③④	4 weeks

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