Supplementary material to article by C.-L. Hsieh et al. "The diverse constructs use of activities of daily living measures in stroke randomized controlled trials in the years 2005–2009"

APPENDIX SI. Main characteristics of the response studies

		Participants		Outcome	ADL	
Author	Year	n	Intervention	measure(s)	construct(s) used	Mode(s) of administration
Chae et al. (1)	2005	61	Intramuscular electrical stimulation vs cuff-type sling	FIM^{TM}	Ability	Observation
Davidson et al. (2)	2005	41	With or without received additional exercise at the weekend	BI-20	Actual performance	Proxy-administered questionnaire
Desrosiers et al. (3)	2005	51	Repetition of unilateral and symmetrical bilateral task training vs usual arm therapy	FIM TM	Ability	Observation Face-to-face interview
Dey et al. (4)	2005	308	With vs without early assessment by a mobile stroke team	BI-20	Actual performance	Face-to-face interview
Katz et al. (5)	2005	19	Computer desktop-based virtual reality street crossing training vs computer based visual scanning tasks	ADL Checklist	Actual performance	Observation
van Vliet et al. (6)	2005	120	Bobath based vs movement science based	BI-20	Capability Actual performance	Face-to-face interview
CI (7)	2006	50	W. I. I	NEADL	Capability Actual performance	Face-to-face interview
Chan et al. (7)	2006	52	Motor relearning programme vs conventional therapy programme	FIM TM	Ability Actual performance	Observation Observation
Church et al. (9)	2006	176	Surface neuromuscular electrical	Lawton IADL NEADL	Actual performance	Face-to-face interview
Church et al. (8) Gosney et al. (9)		203	stimulation vs placebo Selective decontamination of	BI-100	Actual performance	Patient-administered
Gustafsson et al.		32	the digestive tract oral gel vs placebo With vs without static positional stretch		Ability	questionnaire Observation
(10) Gustafsson et al.		32	and armrest support With vs without static positional stretch		Ability	Observation
(11)	2000	32	with vs without static positional stretch	WIDI	,	Face-to-face interview
de Jong et al. (12)	2006	17	Contracture preventive positioning procedure vs conventional	BI-20	Actual performance Perceived difficulty	•
Kwok et al. (13)	2006	180	rehabilitation treatment With vs without bed-chair pressure sensors	MBI	Actual performance	Face-to-face interview Proxy-administered questionnaire
Ryan et al. (14)	2006	89	Intensive vs non-intensive home-based rehabilitation	BI-20 FAI	1	Face-to-face interview Face-to-face interview
Rydwik et al. (15)	2006	18	With vs without an ankle-exercise intervention programme with Stimulo	FIM TM IAM	Actual performance	Face-to-face interview Face-to-face interview
Sackley et al. (16)	2006	118	With vs without occupational therapy intervention	BI-20	Perceived difficulty	Patient-administered questionnaire Proxy-administered questionnaire Face-to-face interview
Sprigg et al. (17)	2006	36	Granulocyte-colony– stimulating factor vs placebo	BI-100	Ability	Proxy-administered questionnaire Face-to-face interview
Tong et al. (18)	2006	50	Conventional gait training vs gait training using an electromechanical gait trainer vs gait training using an	BI-100	Ability Capability Actual performance Perceived difficulty	Proxy-administered questionnaire Face-to-face interview
			electromechanical gait trainer with functional electric stimulation	FIM^{TM}	Ability Capability	Proxy- administered questionnaire Face-to-face interview
van Nes et al. (19)	2006	53	Whole-body vibration therapy vs exercise therapy on music	BI-20	Actual performance	Observation
Braun et al. (20) ^b Ertel et al. (21)	2007 2007	36 291	With vs without mental practice Psychosocial intervention vs usual care	BI-20 Augmented BI		Face-to-face interview Face-to-face interview

				-		
Fong et al. (22)	2007	60	Daily experimental training in voluntary trunk rotation vs daily experimental training in voluntary trunk rotation with half-field eye- patching vs conventional training	FIM TM	Ability	Observation
Hsieh et al. (23)	2007	63	With vs without electroacupuncture	FIM TM	Ability Capability Actual performance Perceived difficulty	Observation Patient-administered questionnaire Face-to-face interview
Langham-Mer et al. (24)	2007	75	Intensive exercise groups with scheduled interview training vs regular exercise with self-initiated training	BI-100		Face-to-face interview
Eser et al. (25)	2008	41	With vs without force platform biofeedback balance training	FIM TM	Ability Perceived difficulty	Observation Face-to-face interview Proxy-administered questionnaire
LanghamMer et al. (26)	2008	75	Physiotherapy with focus on intensive exercises vs regular exercise	BI-100	Perceived difficulty	Face-to-face interview
Mayo et al. (27)	2008	190	Case-management intervention vs usual post-stroke care	BI-100	Actual performance	Observation Patient-administered questionnaire
Morris et al. (28)	2008	106	Bilateral task training vs unilateral task training	MBI	Actual performance	Proxy-administered questionnaire Face-to-face interview
Myint et al. (29)	2008	43	Constraint-induced movement therapy vs conventional rehabilitation therapy	MBI	Ability Actual performance	Observation
Ng et al. (30)	2008	54	Gait training using an electromechanical gait trainer with vs without functional electric stimulation	BI-100	Ability Capability Actual performance Perceived difficulty	Proxy-administered questionnaire Face-to-face interview
				FIM^{TM}	Ability Capability Actual performance Perceived difficulty	Proxy-administered questionnaire Face-to-face interview
Dromerick et al. (31)	2009	52	Standard constraint- induced movement therapy (CIMT) vs high-intensity CIMT vs traditional occupational therapy	FIM TM	Ability	Observation Face-to-face interview
Tsang et al. (32) Torres- Arreola et al. (33)	2009 2009	35 110	With vs without eye-patching Physiotherapy plus caregiver education in rehabilitation vs education alone	FIM TM BI-100	Ability Ability Capability Actual performance Perceived difficulty	Observation Observation Patient-administered questionnaire Face-to-face interview
				FAI	Ability Capability Actual performance Perceived difficulty	Observation Patient-administered questionnaire Face-to-face interview
Wang et al. (34)	2009	465	Minimally invasive craniopuncture Therapy vs conservative treatment	BI-100	Ability Capability Actual performance	Observation Face-to-face interview Telephone interview

bWe provided the year 2012 reference for Braun et al.'s study because the article we previously found was a study protocol. The study had been carried out and published in 2012.

BI: Barthel Index; MBI: Modified Barthel Index; FIMTM: 13-item Functional Independence Measure; FAI: Frenchay Activities Index; IAM: Instrumental Activities Measure; NEADL: Nottingham Extended Activities of Daily Living.

REFERENCES

- Chae J, Yu DT, Walker ME, Kirsteins A, Elovic EP, Flanagan SR, Harvey RL, et al. Intramuscular electrical stimulation for hemiplegic shoulder pain: a 12-month follow-up of a multiplecenter, randomized clinical trial. Am J Phys Med Rehabil 2005; 84: 832–842.
- Davidson I, Hillier VF, Waters K, Walton T, Booth J. A study to assess the effect of nursing interventions at the weekend for people with stroke. Clin Rehabil 2005; 19: 126–137.
- Desrosiers J, Bourbonnais D, Corriveau H, Gosselin S, Bravo G. Effectiveness of unilateral and symmetrical bilateral task training for arm during the subacute phase after stroke: a randomized controlled trial. Clin Rehabil 2005; 19: 581–593.
- Dey P, Woodman M, Gibbs A, Steele R, Stocks SJ, Wagstaff S, et al. Early assessment by a mobile stroke team: a randomised controlled trial. Age Ageing 2005; 34: 331–338.
- Katz N, Ring H, Naveh Y, Kizony R, Feintuch U, Weiss PL. Interactive virtual environment training for safe street crossing of right hemisphere stroke patients with unilateral spatial neglect. Disabil Rehabil 2005; 27: 1235–1243.
- van Vliet PM, Lincoln NB, Foxall A. Comparison of Bobath based and movement science based treatment for stroke: a randomised controlled trial. J Neurol Neurosurg Psychiatry 2005; 76: 503-508.
- Chan DY, Chan CC, Au DK. Motor relearning programme for stroke patients: a randomized controlled trial. Clin Rehabil 2006; 20: 191–200
- Church C, Price C, Pandyan AD, Huntley S, Curless R, Rodgers H. Randomized controlled trial to evaluate the effect of surface neuromuscular electrical stimulation to the shoulder after acute stroke. Stroke 2006; 37: 2995–3001.
- Gosney M, Martin MV, Wright AE. The role of selective decontamination of the digestive tract in acute stroke. Age Ageing 2006; 35: 42–47.
- Gustafsson L, McKenna K. Long-term effects of static positional stretches of the patient's stroke-affected shoulder. Int J Therapy Rehab 2006; 13: 159–165.
- Gustafsson L, McKenna K. A programme of static positional stretches does not reduce hemiplegic shoulder pain or maintain shoulder range of motion – a randomized controlled trial. Clin Rehabil 2006; 20: 277–286.
- de Jong LD, Nieuwboer A, Aufdemkampe G. Contracture preventive positioning of the hemiplegic arm in subacute stroke patients: a pilot randomized controlled trial. Clin Rehabil 2006; 20: 656–667.
- Kwok T, Mok F, Chien WT, Tam E. Does access to bed-chair pressure sensors reduce physical restraint use in the rehabilitative care setting? J Clin Nurs 2006; 15: 581–587.
- Ryan T, Enderby P, Rigby AS. A randomized controlled trial to evaluate intensity of community-based rehabilitation provision following stroke or hip fracture in old age. Clin Rehabil 2006; 20: 123-131
- Rydwik E, Eliasson S, Akner G. The effect of exercise of the affected foot in stroke patients--a randomized controlled pilot trial. Clin Rehabil 2006; 20: 645–655.
- Sackley C, Wade DT, Mant D, Atkinson JC, Yudkin P, Cardoso K, et al. Cluster randomized pilot controlled trial of an occupational therapy intervention for residents with stroke in UK care homes. Stroke 2006; 37: 2336–2341.
- 17. Sprigg N, Bath PM, Zhao L, Willmot MR, Gray LJ, Walker MF, et al. Granulocyte-colony-stimulating factor mobilizes bone marrow stem cells in patients with subacute ischemic stroke: the Stem cell Trial of recovery EnhanceMent after Stroke (STEMS) pilot randomized, controlled trial (ISRCTN 16784092). Stroke 2006; 37: 2979–2983.
- 18. Tong RK, Ng MF, Li LS. Effectiveness of gait training using an

- electromechanical gait trainer, with and without functional electric stimulation, in subacute stroke: a randomized controlled trial. Arch Phys Med Rehabil 2006: 87: 1298–1304.
- 19. van Nes IJ, Latour H, Schils F, Meijer R, van Kuijk A, Geurts AC. Long-term effects of 6-week whole-body vibration on balance recovery and activities of daily living in the postacute phase of stroke: a randomized, controlled trial. Stroke 2006; 37: 2331–2335.
- 20. Braun SM, Beurskens AJ, Kleynen M, Oudelaar B, Schols JM, Wade DT. A multicenter randomized controlled trial to compare subacute 'treatment as usual' with and without mental practice among persons with stroke in Dutch nursing homes. J Am Med Dir Assoc 2012; 13: 85 e81–e87.
- Ertel KA, Glymour MM, Glass TA, Berkman LF. Frailty modifies effectiveness of psychosocial intervention in recovery from stroke. Clin Rehabil 2007; 21: 511–522.
- 22. Fong KN, Chan MK, Ng PP, Tsang MH, Chow KK, Lau CW, et al. The effect of voluntary trunk rotation and half-field eye-patching for patients with unilateral neglect in stroke: a randomized controlled trial. Clin Rehabil 2007; 21: 729–741.
- Hsieh RL, Wang LY, Lee WC. Additional therapeutic effects of electroacupuncture in conjunction with conventional rehabilitation for patients with first-ever ischaemic stroke. J Rehabil Med 2007; 39: 205–211.
- Langhammer B, Lindmark B, Stanghelle JK. Stroke patients and long-term training: is it worthwhile? A randomized comparison of two different training strategies after rehabilitation. Clin Rehabil 2007; 21: 495–510.
- Eser F, Yavuzer G, Karakus D, Karaoglan B. The effect of balance training on motor recovery and ambulation after stroke: a randomized controlled trial. Eur J Phys Rehabil Med 2008; 44: 19–25.
- Langhammer B, Stanghelle JK, Lindmark B. Exercise and healthrelated quality of life during the first year following acute stroke. A randomized controlled trial. Brain Inj 2008; 22: 135–145.
- 27. Mayo NE, Nadeau L, Ahmed S, White C, Grad R, Huang A, et al. Bridging the gap: the effectiveness of teaming a stroke coordinator with patient's personal physician on the outcome of stroke. Age Ageing 2008; 37: 32–38.
- 28. Morris JH, van Wijck F, Joice S, Ogston SA, Cole I, MacWalter RS. A comparison of bilateral and unilateral upper-limb task training in early poststroke rehabilitation: a randomized controlled trial. Arch Phys Med Rehabil 2008; 89: 1237–1245.
- Myint JM, Yuen GF, Yu TK, Kng CP, Wong AM, Chow KK, et al. A study of constraint-induced movement therapy in subacute stroke patients in Hong Kong. Clin Rehabil 2008; 22: 112–124.
- 30. Ng MF, Tong RK, Li LS. A pilot study of randomized clinical controlled trial of gait training in subacute stroke patients with partial body-weight support electromechanical gait trainer and functional electrical stimulation: six-month follow-up. Stroke 2008; 39: 154–160.
- Dromerick AW, Lang CE, Birkenmeier RL, Wagner JM, Miller JP, Videen TO, et al. Very Early Constraint-Induced Movement during Stroke Rehabilitation (VECTORS): a single-center RCT. Neurology 2009; 73: 195–201.
- Tsang MH, Sze KH, Fong KN. Occupational therapy treatment with right half-field eye-patching for patients with subacute stroke and unilateral neglect: a randomised controlled trial. Disabil Rehabil 2009; 31: 630–637.
- Torres-Arreola Ldel P, Doubova Dubova SV, Hernandez SF, Torres-Valdez LE, Constantino-Casas NP, Garcia-Contreras F, et al. Effectiveness of two rehabilitation strategies provided by nurses for stroke patients in Mexico. J Clin Nurs 2009; 18: 2993–3002.
- 34. Wang WZ, Jiang B, Liu HM, Li D, Lu CZ, Zhao YD, et al. Minimally invasive craniopuncture therapy vs conservative treatment for spontaneous intracerebral hemorrhage: results from a randomized clinical trial in China. Int J Stroke 2009; 4: 11–16