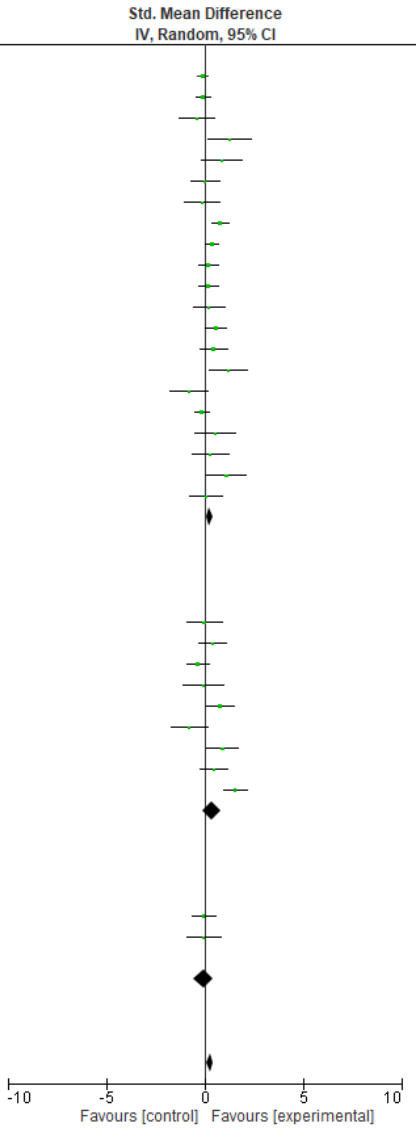
SUPPLEMENTARY DIGITAL MATERIAL 8

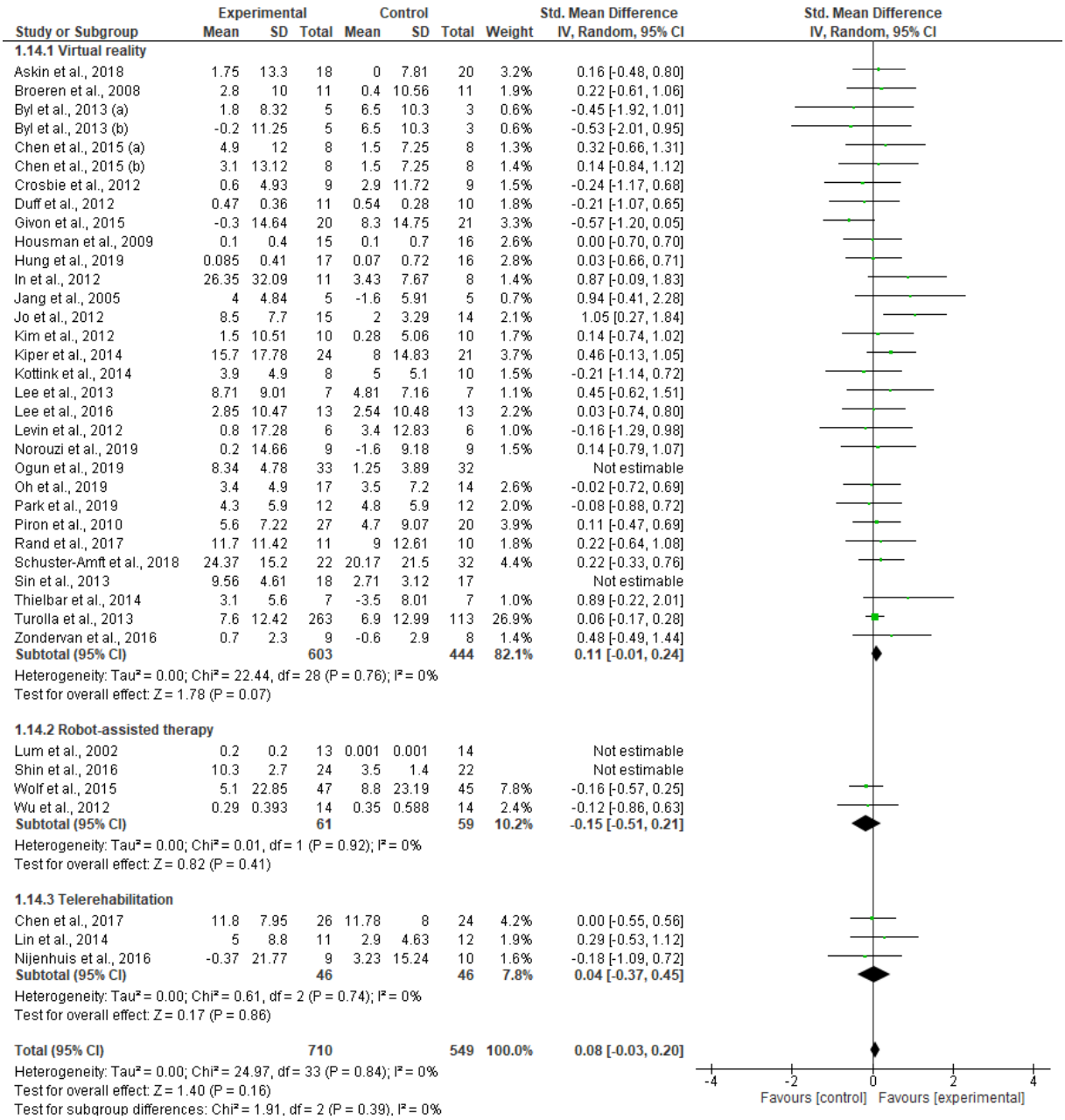
Detailed forest-plot regarding new technologies effect on activity after stroke

Supplementary Table XXXII.—Forest-plot regarding the effect of new-technologies on activity in patients with subacute stroke.

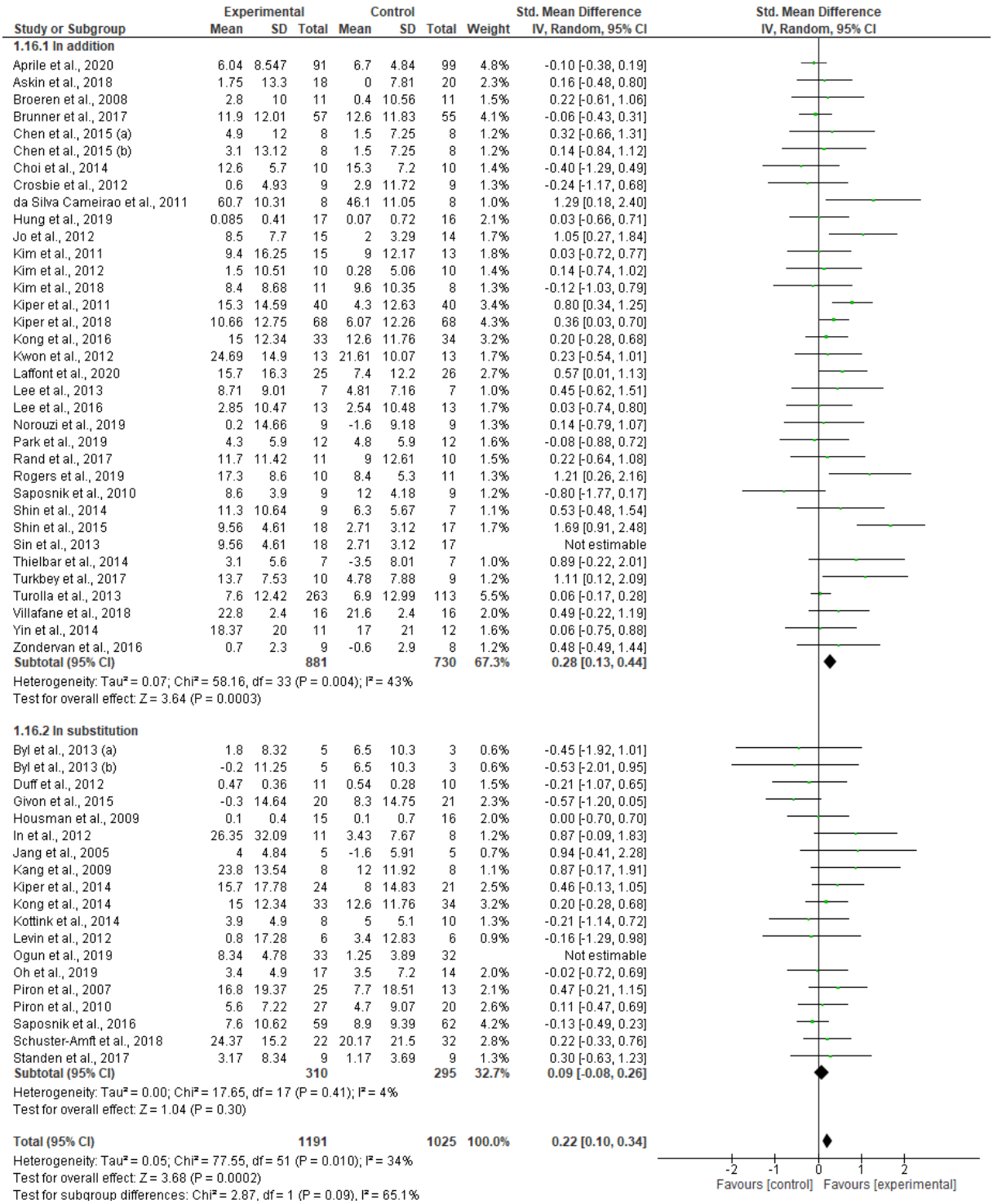
Study or Subgroup	Experimental Mean	SD	Total	Control Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
1.13.1 Virtual reality								
Aprile et al., 2020	6.04	8.547	91	6.7	4.84	99	5.3%	-0.10 [-0.38, 0.19]
Brunner et al., 2017	11.9	12.01	57	12.6	11.83	55	4.8%	-0.06 [-0.43, 0.31]
Choi et al., 2014	12.6	5.7	10	15.3	7.2	10	2.4%	-0.40 [-1.29, 0.49]
da Silva Cameirao et al., 2011	60.7	10.31	8	46.1	11.05	8	1.8%	1.29 [0.18, 2.40]
Kang et al., 2009	23.8	13.54	8	12	11.92	8	2.0%	0.87 [-0.17, 1.91]
Kim et al., 2011	9.4	16.25	15	9	12.17	13	2.9%	0.03 [-0.72, 0.77]
Kim et al., 2018	8.4	8.68	11	9.6	10.35	8	2.3%	-0.12 [-1.03, 0.79]
Kiper et al., 2011	15.3	14.59	40	4.3	12.63	40	4.4%	0.80 [0.34, 1.25]
Kiper et al., 2018	10.66	12.75	68	6.07	12.26	68	5.0%	0.36 [0.03, 0.70]
Kong et al., 2014	15	12.34	33	12.6	11.76	34	4.2%	0.20 [-0.28, 0.68]
Kong et al., 2016	15	12.34	33	12.6	11.76	34	4.2%	0.20 [-0.28, 0.68]
Kwon et al., 2012	24.69	14.9	13	21.61	10.07	13	2.8%	0.23 [-0.54, 1.01]
Laffont et al., 2020	15.7	16.3	25	7.4	12.2	26	3.8%	0.57 [0.01, 1.13]
Piron et al., 2007	16.8	19.37	25	7.7	18.51	13	3.2%	0.47 [-0.21, 1.15]
Rogers et al., 2019	17.3	8.6	10	8.4	5.3	11	2.2%	1.21 [0.26, 2.16]
Saposnik et al., 2010	8.6	3.9	9	12	4.18	9	2.2%	-0.80 [-1.77, 0.17]
Saposnik et al., 2016	7.6	10.62	59	8.9	9.39	62	4.9%	-0.13 [-0.49, 0.23]
Shin et al., 2014	11.3	10.64	9	6.3	5.67	7	2.0%	0.53 [-0.48, 1.54]
Standen et al., 2017	3.17	8.34	9	1.17	3.69	9	2.3%	0.30 [-0.63, 1.23]
Turkbey et al., 2017	13.7	7.53	10	4.78	7.88	9	2.1%	1.11 [0.12, 2.09]
Yin et al., 2014	18.37	20	11	17	21	12	2.7%	0.06 [-0.75, 0.88]
Subtotal (95% CI)			**554**			**548**	**67.7%**	**0.25 [0.07, 0.44]**
Heterogeneity: Tau² = 0.08; Chi² = 39.10, df = 20 (P = 0.006); I² = 49%								
Test for overall effect: Z = 2.66 (P = 0.008)								
1.13.2 Robot-assisted therapy								
Aisen et al., 1997	25.6	7.23	10	25.7	12.25	10	2.4%	-0.01 [-0.89, 0.87]
Dehem et al., 2019	6.5	9.14	15	3.1	7.26	17	3.1%	0.40 [-0.30, 1.11]
Hesse et al., 2014	9.2	10.8	25	13	10.76	25	3.8%	-0.35 [-0.91, 0.21]
Lum et al., 2006	3.1	1.4	10	3.2	1.4	6	2.0%	-0.07 [-1.08, 0.94]
Masiero et al., 2007	32.76	7.2	17	25.5	10.5	18	3.2%	0.78 [0.09, 1.47]
Rabadi et al., 2008	-0.59	7.33	10	3.94	3.2	10	2.3%	-0.77 [-1.68, 0.15]
Tomic et al., 2017	14.1	7.9	13	6.7	7.8	13	2.7%	0.91 [0.10, 1.73]
Villafane et al., 2018	22.8	2.4	16	21.6	2.4	16	3.1%	0.49 [-0.22, 1.19]
Volpe et al., 2000	25	3.5	30	19.5	3.5	26	3.6%	1.55 [0.95, 2.15]
Subtotal (95% CI)			**146**			**141**	**26.3%**	**0.36 [-0.13, 0.85]**
Heterogeneity: Tau² = 0.41; Chi² = 31.45, df = 8 (P = 0.0001); I² = 75%								
Test for overall effect: Z = 1.43 (P = 0.15)								
1.13.3 Telerehabilitation								
Chumbler et al., 2012	0.2	6.147	24	0.6	7.622	19	3.6%	-0.06 [-0.66, 0.54]
Duncan et al., 1998	13	5.16	10	13.3	5.27	10	2.4%	-0.06 [-0.93, 0.82]
Duncan et al., 2003	0.36	0.1	44	-1.42	1.34	49		Not estimable
Subtotal (95% CI)			**34**			**29**	**6.0%**	**-0.06 [-0.55, 0.44]**
Heterogeneity: Tau² = 0.00; Chi² = 0.00, df = 1 (P = 1.00); I² = 0%								
Test for overall effect: Z = 0.22 (P = 0.82)								
Total (95% CI)			**734**			**718**	**100.0%**	**0.28 [0.10, 0.45]**
Heterogeneity: Tau² = 0.13; Chi² = 74.32, df = 31 (P < 0.0001); I² = 58%								
Test for overall effect: Z = 3.07 (P = 0.002)								
Test for subgroup differences: Chi² = 1.60, df = 2 (P = 0.45), I² = 0%								



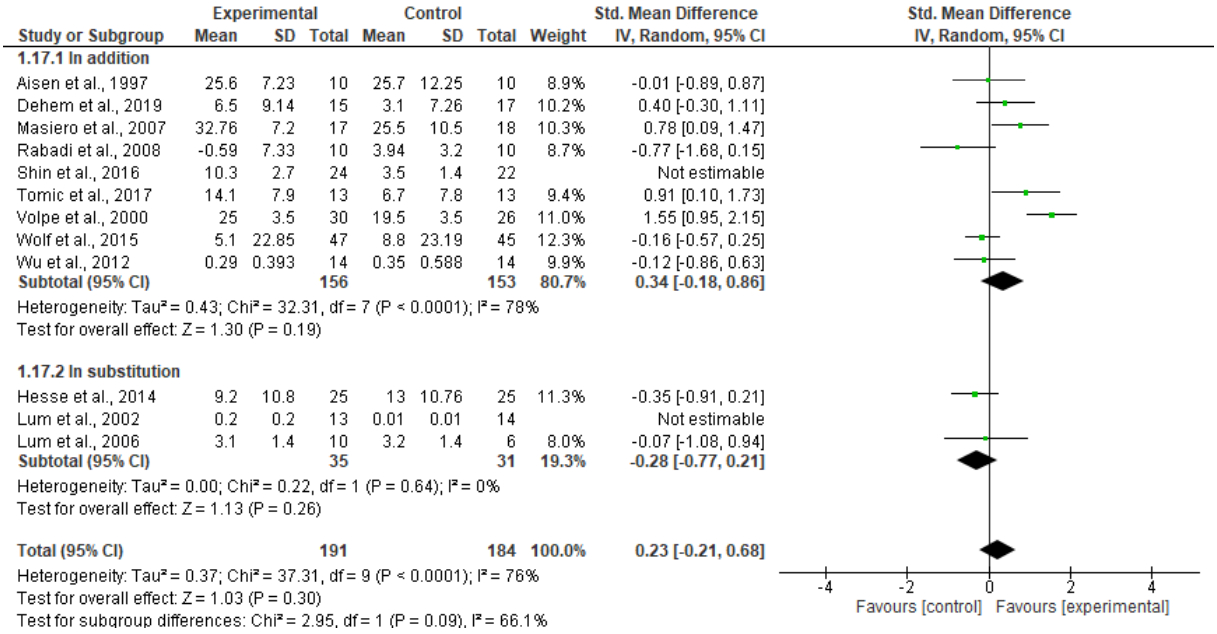
Supplementary Table XXXIII.—Forest-plot regarding the effect of new-technologies on activity in patients with chronic stroke.



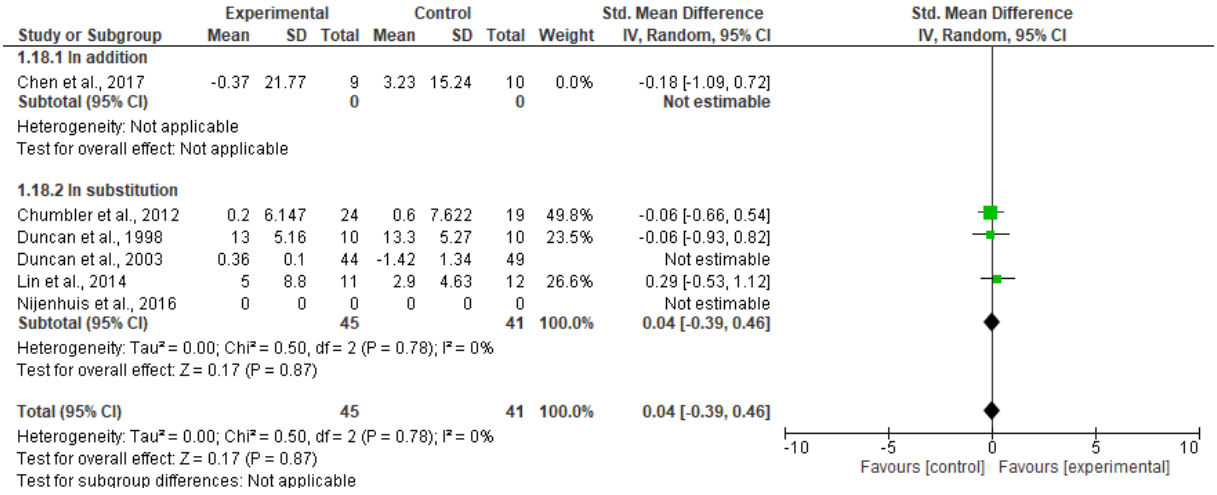
Supplementary Table XXXIV.—Forest-plot regarding the effect of new-technologies on activity in patients with chronic stroke when provided in addition vs in substitution of conventional therapy - virtual reality.



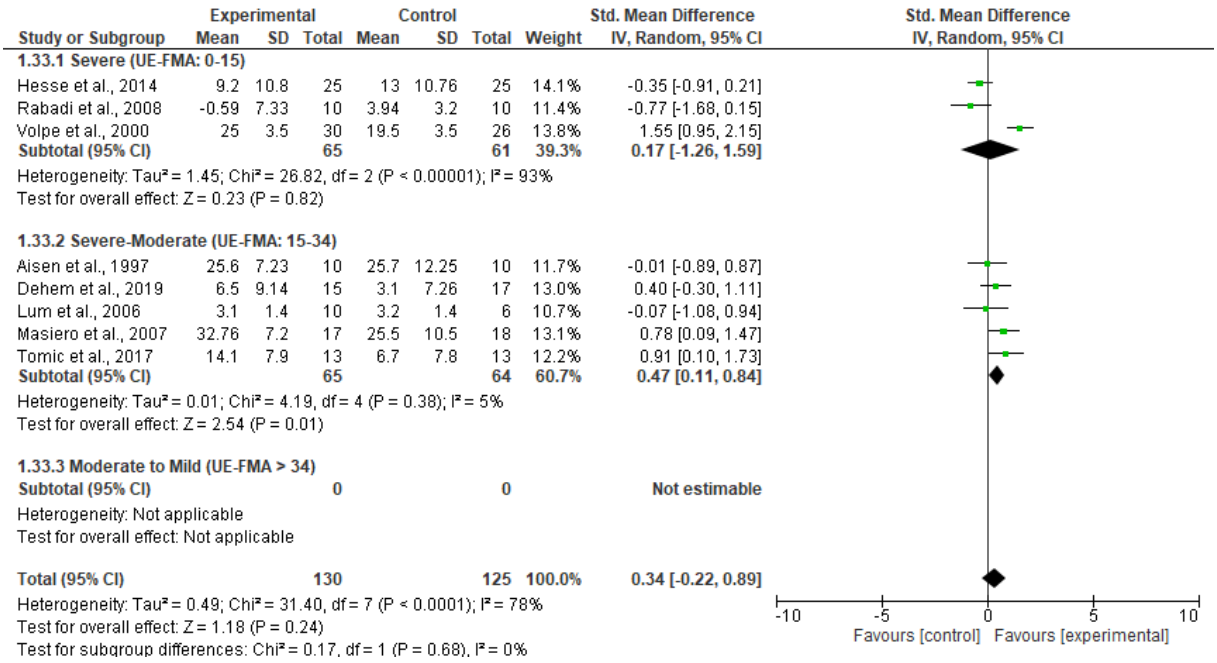
Supplementary Table XXXV.—Robot-assisted therapy.



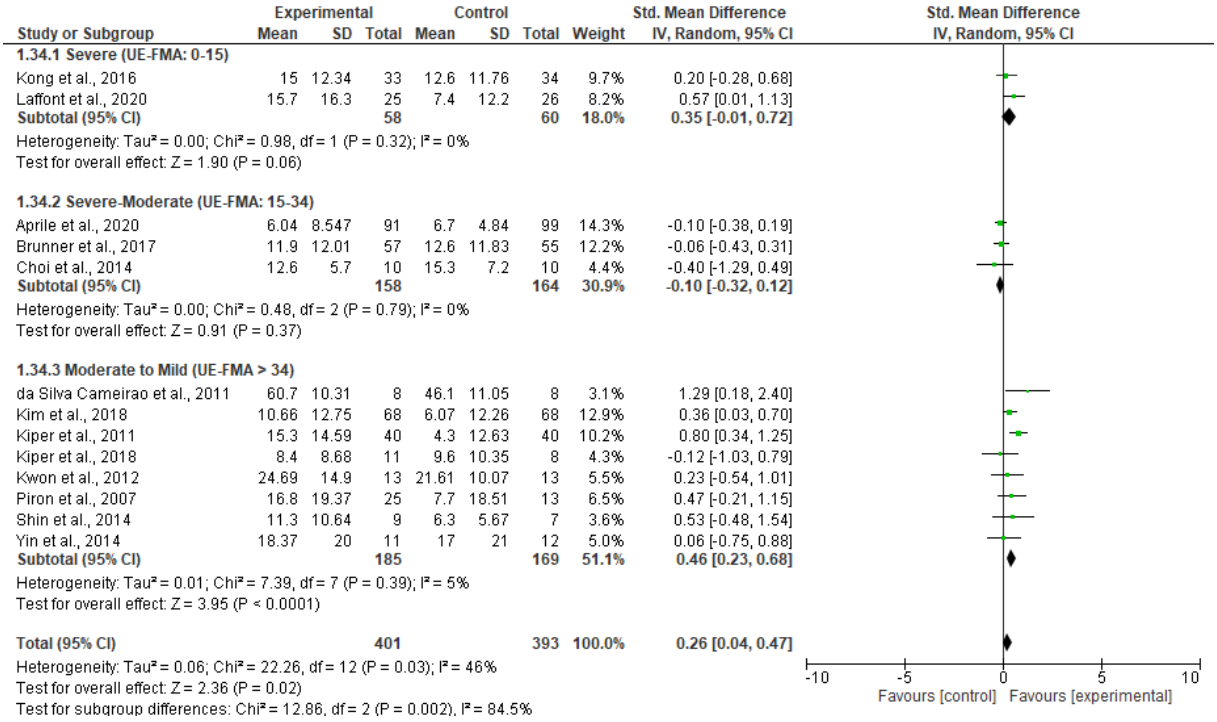
Supplementary Table XXXVI.—Telerehabilitation.



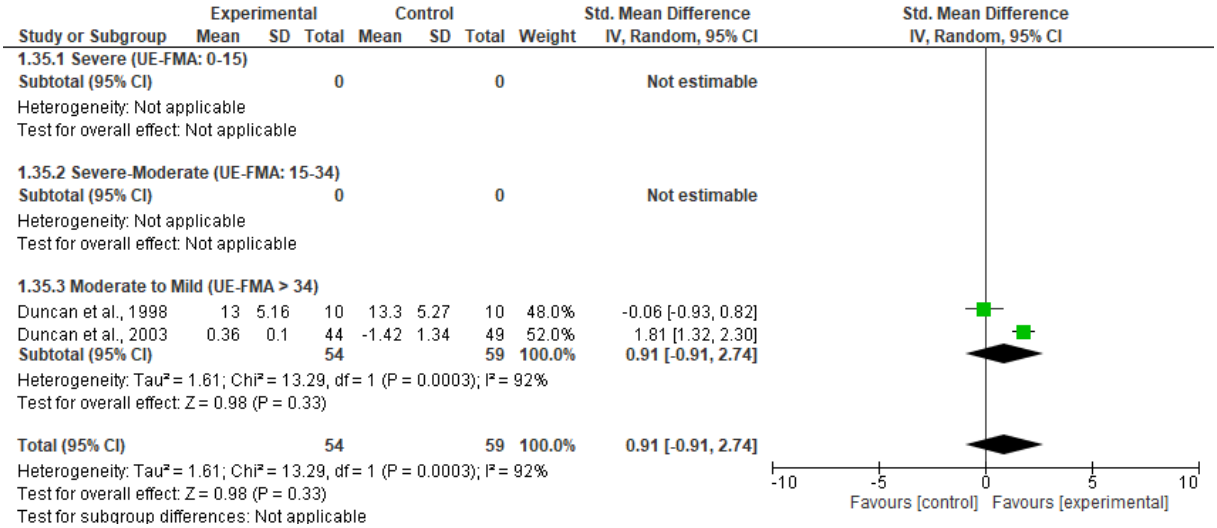
Supplementary Table XXXVII.—Forest-plot regarding the effect of new-technologies on activity in patients with subacute stroke according to the impairment severity - robot-assisted therapy.



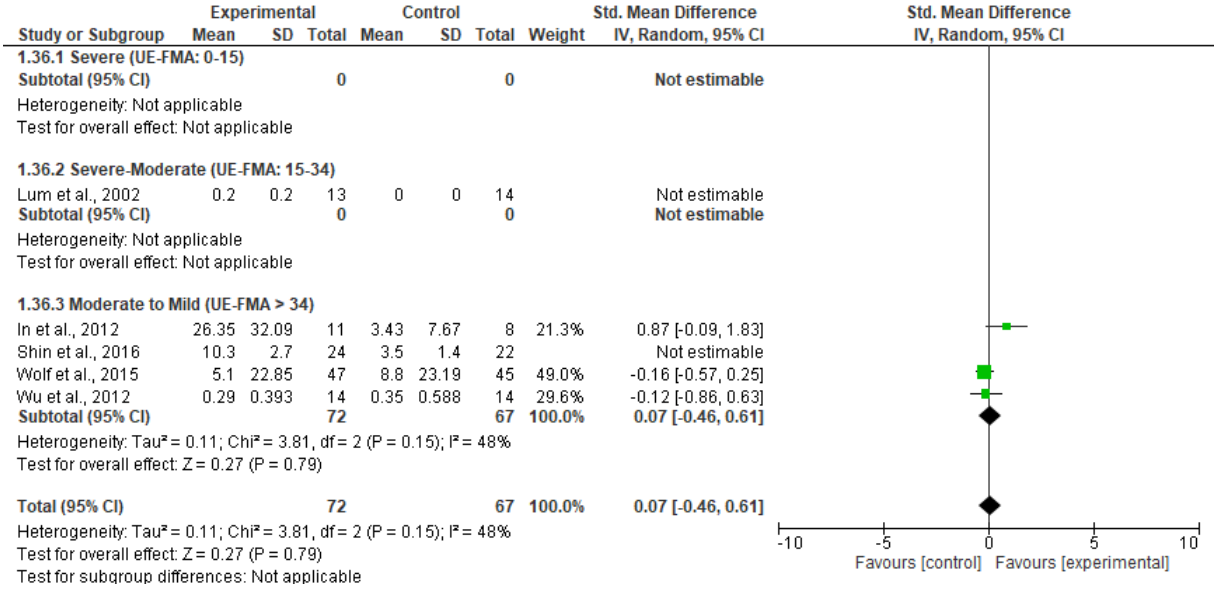
Supplementary Table XXXVIII.—Virtual reality.



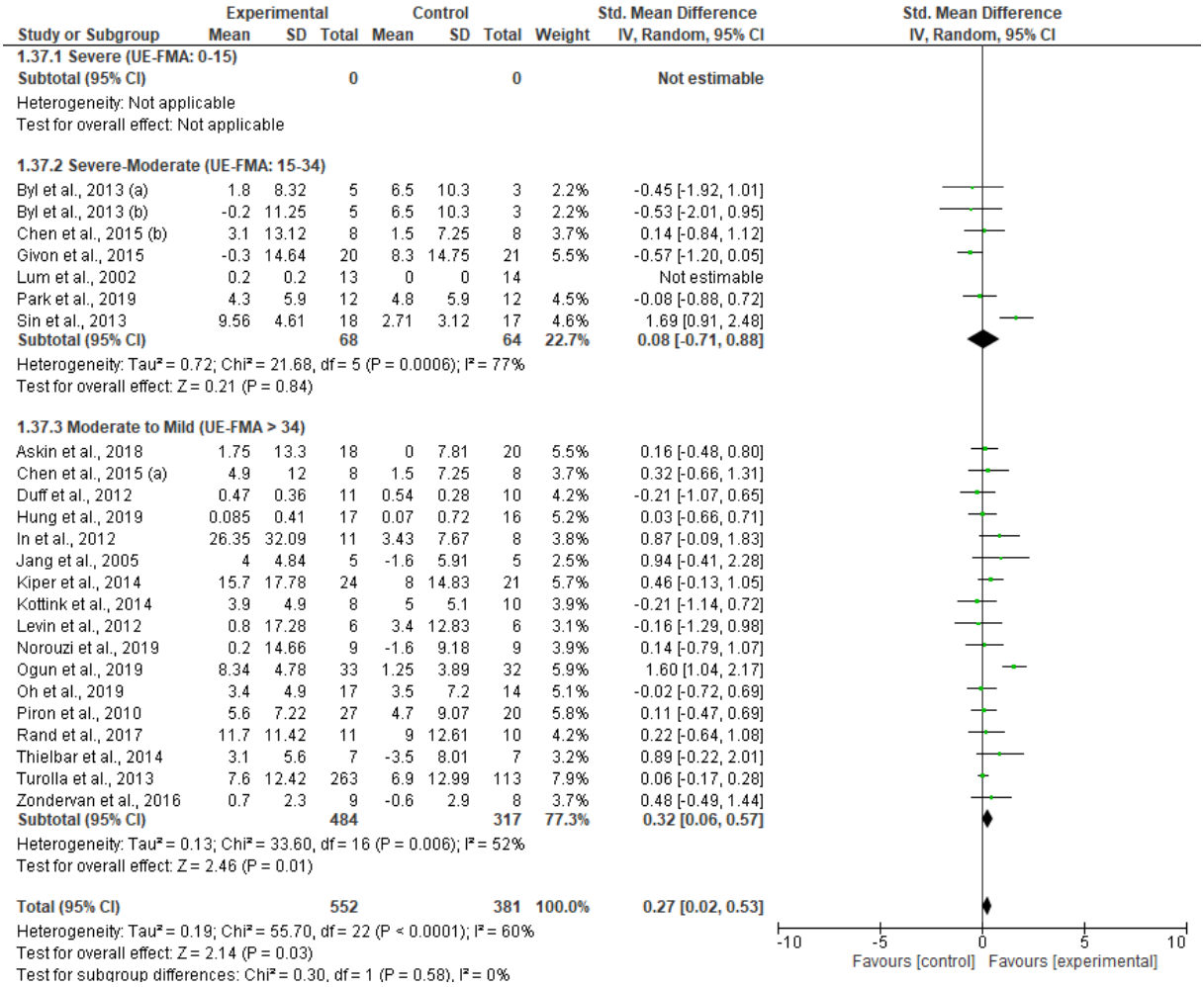
Supplementary Table XXXIX.—Telerehabilitation.



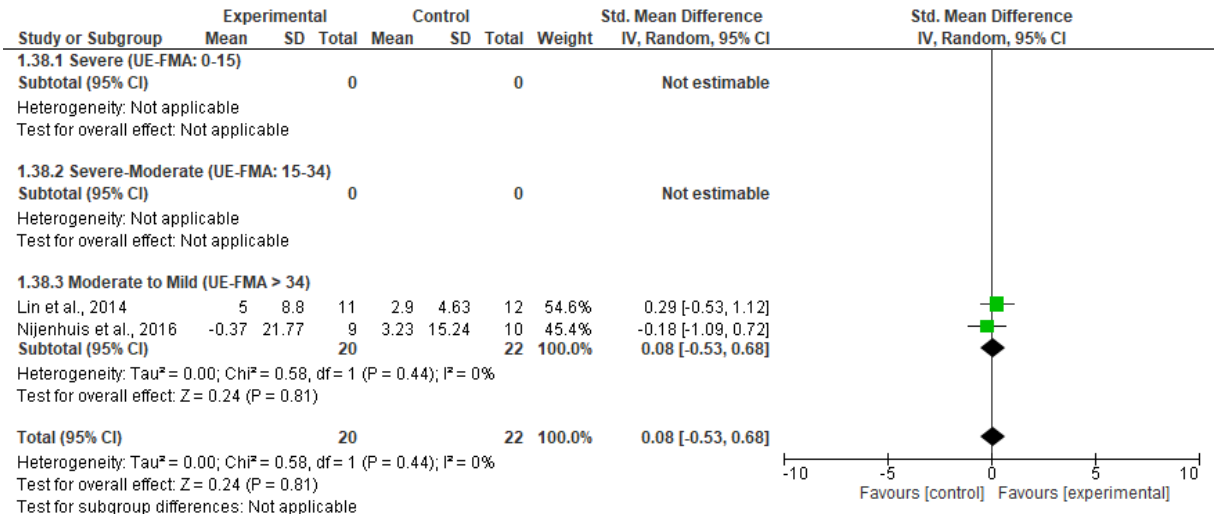
Supplementary Table XL.—Forest-plot regarding the effect of new-technologies on activity in patients with chronic stroke according to the impairment severity - robot-assisted therapy.



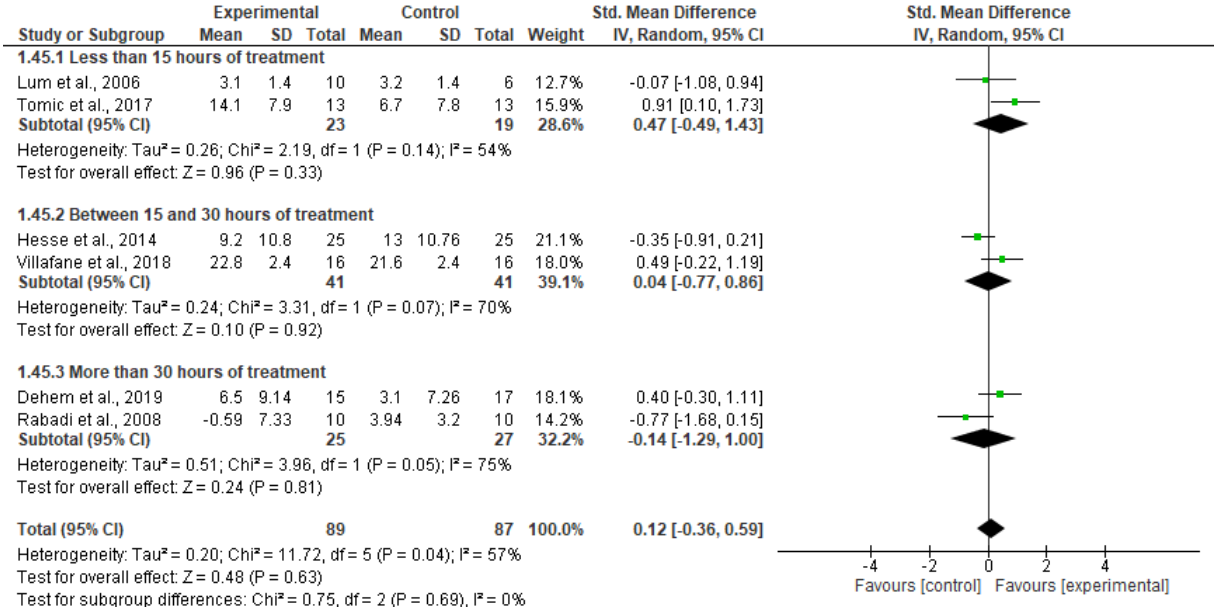
Supplementary Table XLI.—Virtual reality.



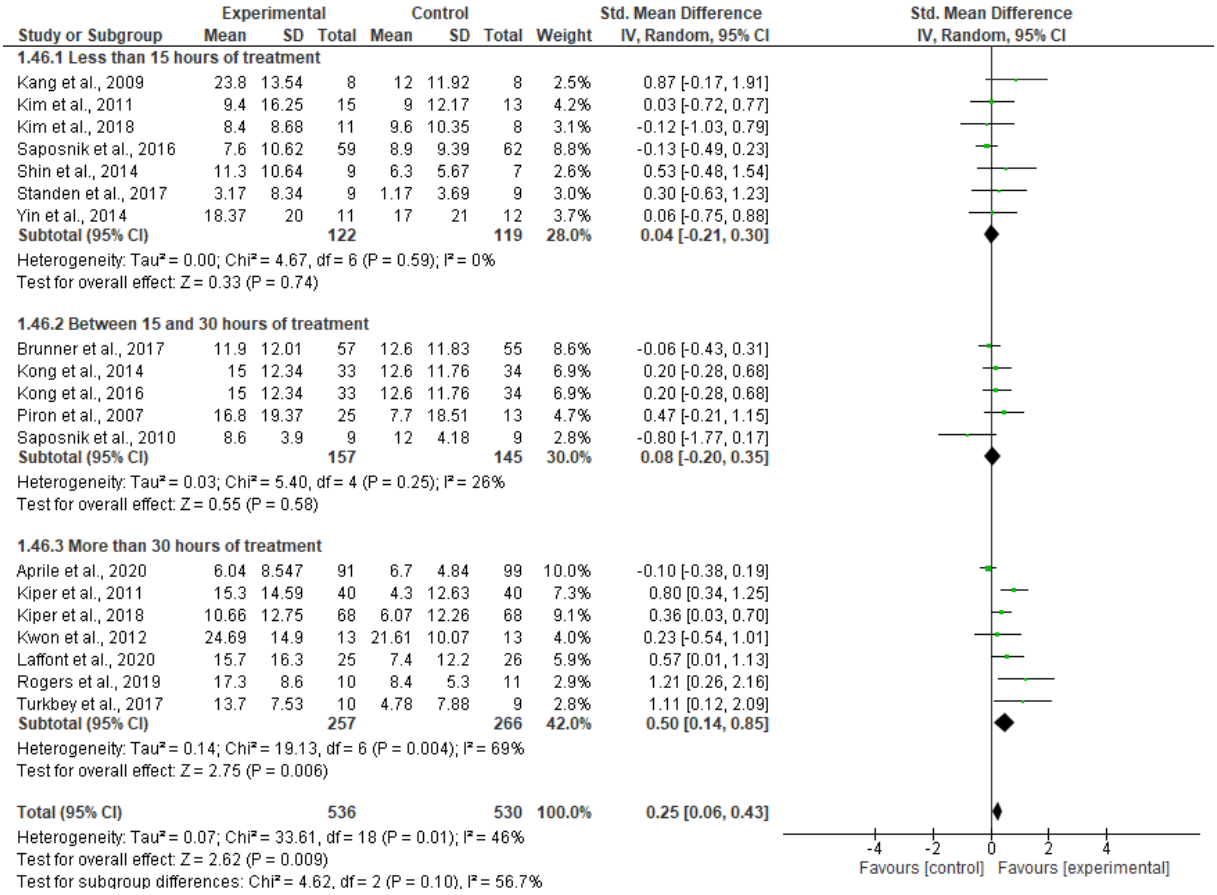
Supplementary Table XLII.—Telerehabilitation.



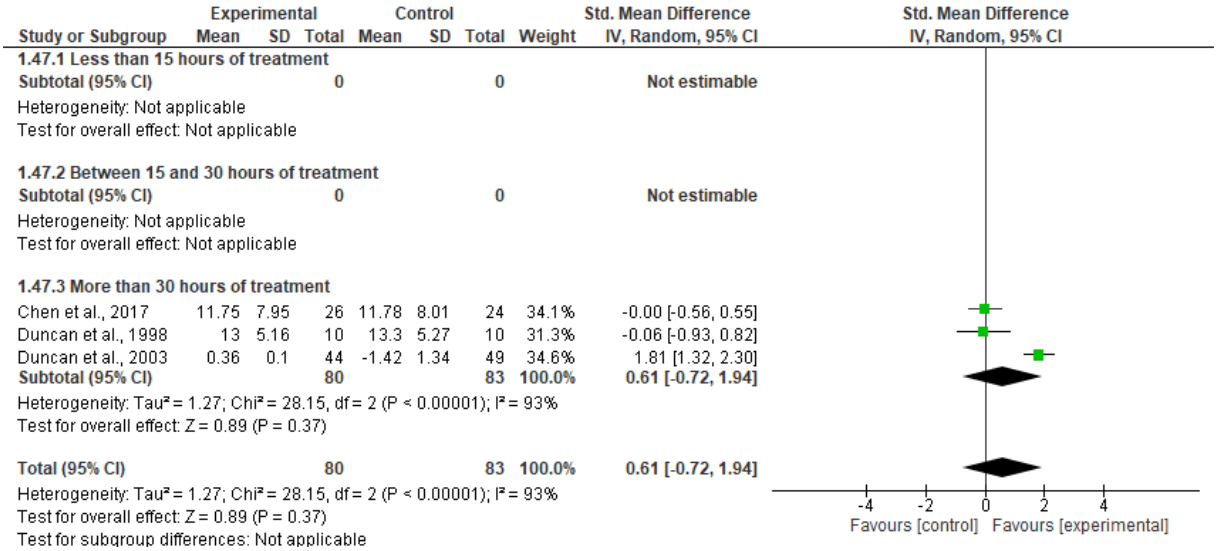
Supplementary Table XLIII.—Forest-plot regarding the effect of new-technologies on activity in patients with subacute stroke according to the treatment intensity – robot-assisted therapy.



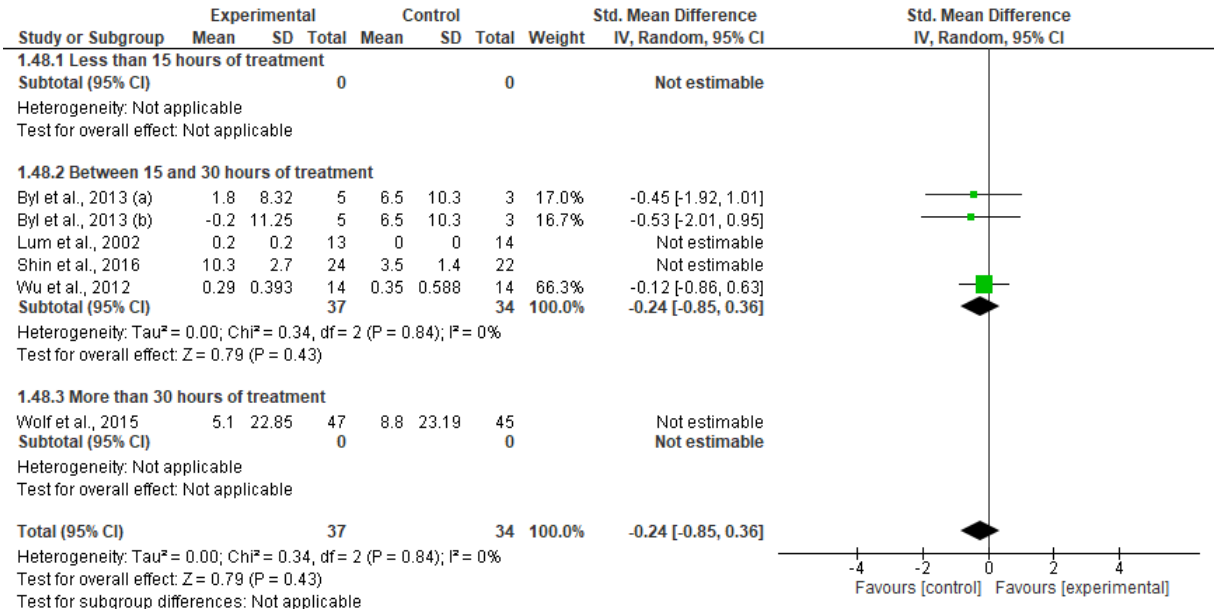
Supplementary Table XLIV.—Virtual reality.



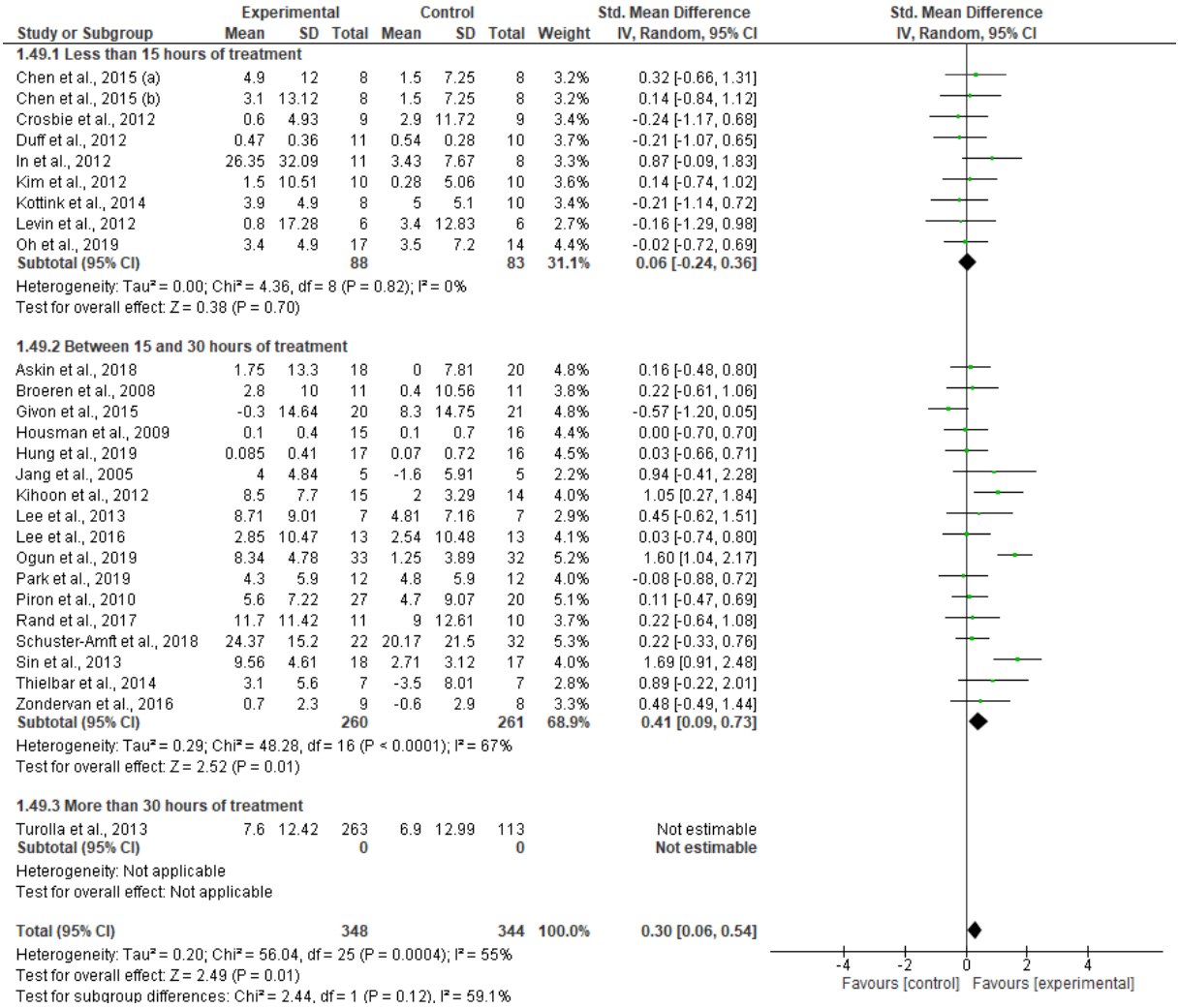
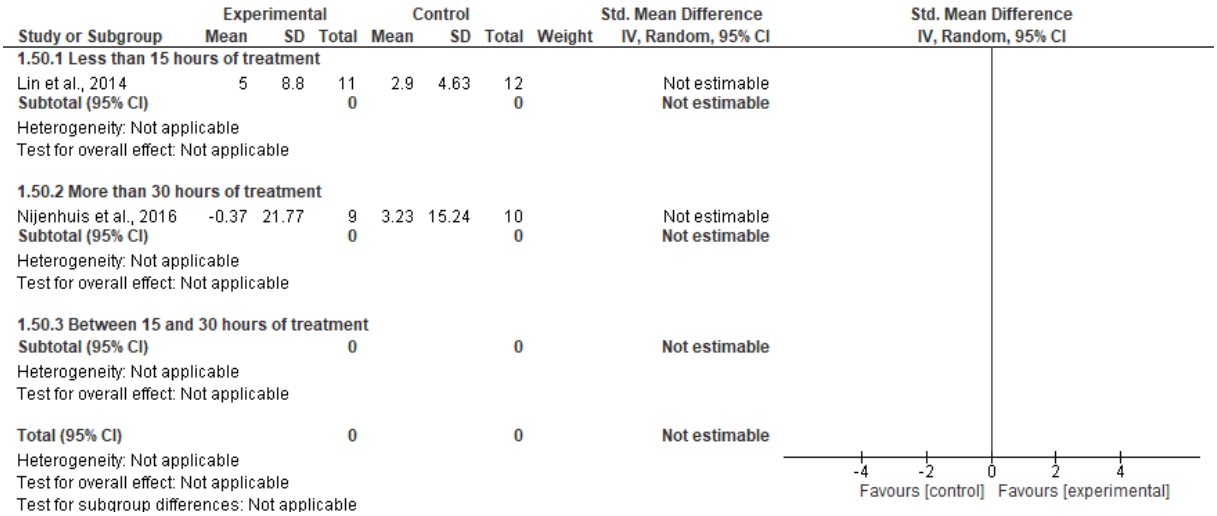
Supplementary Table XLV.—Telerehabilitation.



Supplementary Table XLVI.—Forest-plot regarding the effect of new-technologies on activity in patients with chronic stroke according to the treatment intensity - robot-assisted therapy.



Supplementary Table XLVII.—Virtual reality.



Supplementary Table XLVIII.—Telerehabilitation.