

Appendix 1

Effects of adding exercise to usual care on functional capacity and body weight in people with hypertension, type 2 diabetes or cardiovascular disease: a systematic review with meta-analysis and trial sequential analysis

Text S1: Detail Search strategy

MEDLINE assessed via OVID

Cardiovascular diseases

#1 exp Cardiovascular Disease/
#2 exp Coronary Disease/
#3 exp Myocardial Ischemia/
#4 exp Heart Disease/
#5 exp Acute Coronary Syndrome/
#6 exp Angina Pectoris/
#7 exp Myocardial Infarction/
#8 (isch?emi* adj heart).tw.
#9 (myocard* adj (infarct* or re?vascular* or ischemi* or ischaem*)).tw.
#10 (coronary adj disease*).tw.
#11 ((coronary or cardiovascular or ischemic) adj event*).tw.
#12 (heart adj (disease* or attack* or infarct*)).tw.
#13 (cardiac adj disease).tw.
#14 (morbidity adj (heart* or cardiovascular* or coronary* or isch?em* or myocard*)).tw.
#15 angina or MI.tw.
#16 chd or cad.tw.
#17 exp Stroke/
#18 (stroke or stokes or cerebrovasc* or cerebral vascular or apoplexy or (brain adj accident*)).tw.
#19 (brain* or cerebral or lacunar) adj infarct*).tw.
#20 or/1-19

Hypertension

#21 exp Hypertension/
#22 ((systolic or diastolic) adj blood pressure).tw
#23 21 or 22

Type 2 Diabetes

#24 exp Diabetes Mellitus, Type 2/
#25 (('adult onset' or 'type 2' or 'type ii' or 'non-insulin dependent' or 'noninsulin dependent' or 'insulin independent') adj diabet*).tw
#26 24 or 25
#27 20 or 23 or 26

Exercise

#28 exp Exercise/ or exp Exercise Therapy/

#29 exp Sports/

#30 exp Physical Exertion/

#31 exp Physical Fitness/

#32 exp Yoga/

#33 exp Tai Ji/

#34 (physical adj (fit* or train* or therap* or activit* or exert*)).tw.

#35 (exercise adj (intervention or program* or rehabilitation)).tw.

#36 ((aerobic or endurance or combined or resistance or isometric) adj exercise).tw.

#37 (sports or 'weight lifting').tw.

#38 or/28-37

#39 27 and 38

#40 (random* or blind* or placebo*).mp.

#41 exp animals/ not humans.sh.

#42 39 and 40

#43 42 not 41

EMBASE via OVID

Cardiovascular Disease

#1exp cardiovascular disease/

#2exp heart disease/

#3exp Coronary Disease/

#4exp heart infarction/

#5exp Myocardial Ischemia/

#6exp angina pectoris/

#7(isch?emi* adj heart).tw.

#8(myocard* adj (infarct* or re?vascular* or ischemi* or ischaem*)).tw.

#9(coronary adj disease*).tw.

#10((coronary or cardiovascular or ischemic) adj event*).tw.

#11(heart adj (disease* or attack* or infarct*)).tw.

#12(cardiac adj disease).tw.

#13(morbid adj (heart* or cardiovascula* or coronary* or isch?em* or myocard*)).tw.

#14angina.tw.

#15MI.tw.

#16CHD or CAD.tw.

#17exp Stroke/

#18(stroke or stokes or cerebrovasc* or cerebral vascular or apoplexy or (brain adj accident*).tw.

#19(brain* or cerebral or lacunar) adj infarct*).tw.

#20or/1-19

Hypertension

#21exp hypertension/

#22(blood pressure or systolic blood pressure or diastolic blood pressure).sh

#2321 or 22

Type 2 Diabetes

#24exp non insulin dependent diabetes mellitus/

#25(('adult onset' or 'type 2' or 'type ii' or 'non-insulin dependent' or 'noninsulin dependent' or 'insulin independent') adj diabet*).tw.

#2624 or 25

#2720 or 23 or 26

Exercise

#28exp exercise/

#29exp training/

#30exp fitness/

#31exp sport/

#32exp yoga/

#33exp Tai Chi/

#34((aerobic or endurance or combined or resistance or strength or circuit weight) adj exercise).tw.

#35(physical adj (fit* or train* or therap* or activit* or exert*).tw.

#36(sports or 'weight lifting').tw.

#3728 or 29 or 30 or 31 or 32 or 33 or 35 or 36

#3827 and 37

#39 limit 38 to human

#40(random* or blind* or placebo*).mp.

#41 39 and 40

CENTRAL

- #1 MeSH descriptor: [Cardiovascular Diseases] explode all trees
- #2 MeSH descriptor: [Myocardial Ischemia] explode all trees
- #3 MeSH descriptor: [Heart Diseases] explode all trees
- #4 MeSH descriptor: [Acute Coronary Syndrome] explode all trees
- #5 MeSH descriptor: [Angina Pectoris] explode all trees
- #6 MeSH descriptor: [Coronary Disease] explode all trees
- #7 MeSH descriptor: [Myocardial Infarction] explode all trees
- #8 MeSH descriptor: [Diabetes Mellitus, Type 2] explode all trees
- #9 MeSH descriptor: [Hypertension] explode all trees
- #10 (myocard* near (infarct* or ischemi* or revascular*)):ti,ab,kw
- #11 (coronary near disease*):ti,ab,kw
- #12 ((coronary or cardiovascular or ischemic) near event*):ti,ab,kw
- #13 (heart near (disease* or attack or infarct*)):ti,ab,kw
- #14 (cardiac near disease*):ti,ab,kw
- #15 (chd or cad):ti,ab,kw
- #16 (angina or MI):ti,ab,kw
- #17 MeSH descriptor: [Stroke] explode all trees
- #18 ((stroke or cerebrovasc* or cerebral vascular or apoplexy or brain) near accident*):ti,ab,kw
- #19 ((systolic or diastolic) near blood pressure):ti,ab,kw
- #20 (("adult onset" or "type 2" or "type ii" or "non-insulin dependent" or "noninsulin dependent" or "insulin independent") near diabet*):ti,ab,kw
- #21 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20
- #22 MeSH descriptor: [Exercise] explode all trees
- #23 MeSH descriptor: [Physical Fitness] 1 tree(s) exploded
- #24 MeSH descriptor: [Physical Exertion] explode all trees
- #25 MeSH descriptor: [Yoga] explode all trees
- #26 MeSH descriptor: [Sports] explode all trees
- #27 MeSH descriptor: [Tai Ji] explode all trees
- #28 (physical near (fit* or train* or therap* or activit* or exert*)):ti,ab,kw
- #29 (exercise adj (intervention or program* or rehabilitation)):ti,ab,kw
- #30 ((aerobic or endurance or combined or resistance or isometric) near exercise):ti,ab,kw
- #31 (sports or "weight lifting"):ti,ab,kw
- #32 #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31
- #33 #21 and #32 in Trials

BIOSIS/ Science Citation Index Expanded on Web of Science

#1 (TI= ("Cardiovascular disease*" OR "myocard* infarct*" OR "heart disease" OR "heart attack" OR "heart attack" OR "cardiac disease*" OR "coronary disease*" OR stroke OR

angina OR MI OR chd OR cad OR "myocard* ischemi*" OR "acute coronary syndrome"
OR hypertension OR "systolic blood pressure" OR "diastolic blood pressure" OR "type II
diabetes" OR "type 2 diabetes" OR "non-insulin dependent diabetes" OR "adult onset
diabetes")) AND DOCUMENT TYPES: (Article)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years

#2 (TI=(exercise OR "physical fit*" OR "physical exertion" OR sports OR yoga OR "tai
chi" OR "tai-chi" OR training OR "physical therapy" OR " physical activit*" OR "aerobic
exercise" OR "resistance exercise" OR "endurance exercise" OR "combined exercise" OR
"circuit weight exercise" OR "exercise therapy" OR "exercise rehabilitation" OR "exercise
program")) AND DOCUMENT TYPES: (Article)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years

#3 #1 AND #2

#4 TS=(random* OR blind* OR placebo* OR meta-analysis)

Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, ESCI Timespan=All years

#5 #3 AND #4

Text S2: Other functional capacity

Berg Balance Scale

A total of 36 trials randomising 1739 participants reported on Berg Balance Scale with median follow up of 2.75 months (IQR: 1.125 to 2.75 months). Meta-analysis showed that exercise significantly improve balance (MD=2.90; 95%CI 2.01 3.79; $p=0.0000$). Visual inspection of forest plot and I^2 statistics indicated substantial signs of heterogeneity which could not be resolve ($I^2=86.27\%$). There was not enough information to conduct trial sequential analysis. Funnel plot indicated no small study bias (figure S10). We assessed this outcome result as high risk of bias.

Timed Up and Go Test (TUGT)

A total of 15 trials randomising 476 participants reported on TUGT with median follow up of 1.5 months (IQR: 1 to 3 months). Meta-analysis showed that exercise did not significantly improve functional capacity as measured by TUGT (MD=-1.88; 95%CI -3.86 0.09; $p=0.062$). Visual inspection of forest plot and I^2 statistics showed significant signs of heterogeneity which could not be resolve $I^2=97.89\%$. There was not enough information to conduct trial sequential analysis. Funnel plot indicated no small study bias (figure S11). We assessed this outcome result as high risk of bias.

Exercise Capacity, W

A total of 8 trials randomising 495 participants with median follow-up of 5 months (IQR: 2 to 7.5 months). Metanalysis showed that exercise significantly improved exercise capacity (MD= 23.76 W; 95%CI 16.87 30.64; $p= 0.00$; $I^2=90\%$) (figure S12).

Exercise capacity, MET

A total of 6 trials randomising 457 participants with median follow-up of 2 months (IQR: 1.75 to 2.5 months). Meta-nalaysis showed that exercise significantly improved exercise capacity (MD=1.24; 95%CI 0.67 1.82; $p=0.038$; $I^2=57.16\%$) (figure S13).

There was not enough information to conduct trial sequential analysis for exercise capacity. We assessed this outcome result as high risk of bias.

Table S1: Characteristics of included studies

Trial id	Year	Region	Gen der	Type of exercise	Control	Type of participants	Interven tion period	Max follow-up	No. Of parti cipa nts	Scale	Volinw eek	Intensity
Balducci 2010a	2010	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Type II diabetes	12	12	28	VO2max,BW	NA	NA
Balducci 2010b	2010	HICs		Combined Exercise	No Intervention (sedentary control)	Type II diabetes	12	12	30	VO2max,BW	NA	NA
Belardinelli R 1995	1995	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Chronic Heart Failure	2	2	27	VO2max	NA	NA
Belardinelli 2008a	2008	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Chronic Heart Failure	2	2	65	VO2max	63	Vigorous
Belardinelli 2008b	2008	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Chronic Heart Failure	2	2	65	VO2max	180	Vigorous
Belardinelli 2001	2001	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Chronic Heart Failure	6	6	118	VO2max	NA	NA
Belli T 2011	2011	LMICs	Fem ale	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Type II diabetes	3	3	17	VO2max,BW	NA	NA
Beniaminovitz A 2002	2002	HICs	Both	Dynamic Aerobic Exercise	No Intervention (Relaxation)	Chronic Heart Failure	3	3	25	VO2max, 6MWT	NA	NA
Bjorgass N 2005	2005	HICs	Male	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Type II diabetes	3	3	22	VO2max,BW	NA	NA
Blumenthal J 1991a	1991	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Mild Hypertension/Stage 1 -2 Hypertension	4	4	50	VO2max,BW	NA	NA
Blumenthal J 1991b	1991	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Mild Hypertension/Stage 1 -2 Hypertension	4	4	42	VO2max,BW	NA	NA
Boudou P 2000	2000	HICs	Male	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Type II diabetes	2	2	16	VO2max,BW	NA	NA
Braith RW 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Chronic Heart Failure	4	4	19	VO2max		
Brubaker 2009	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	4	4	44	VO2max, 6MWT	90	Moderate
NCT00458133 a	2010	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	9	9	85	VO2max,BW	150	Moderate
NCT00458133 b	2010	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	9	9	87	VO2max,BW	150	Moderate
NCT00458133 c	2010	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	9	9	90	VO2max,BW	150	Moderate
Cider A 2003	2003	HICs	Both	Combined Exercise	No Intervention	Chronic Heart Failure	2	2	25	VO2max, 6MWT, exercise capacity (W)	NA	NA
Coats AJ 1992	1990	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	2	2	11	VO2max	NA	NA

de Mello 2006	2006	LMICs	Both	Combined Exercise	No Intervention (sedentary control)	Heart Failure	4	4	22	VO2max	60	NA
Dracup K 2007	2007	HICs	Both	Combined Exercise	No Intervention	Heart Failure	6	6	173	VO2max, 6MWT	180	Low
Dugmore LD 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Myocardial Infarction	4	4	51	VO2max		
Duncan JJ 1985	1985	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Hypertension	4	4	51	VO2max,BW	NA	NA
Duncan P 2003	2003	HICs	Both	Combined Exercise	Usual Care	Stroke	3	3	92	VO2max, 6MWT, 10MWT	180	NA
NCT00176384	2010	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	34	VO2max	100	Vigorous
Hambrecht R 2000+Erb S 2003	2003	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	64	VO2max	80	Vigorous
Fletcher BJ 1994	1994	HICs	Male	Dynamic Aerobic Exercise	No Intervention (co intervention diet)	Coronary Artery Disease	6	6	35	VO2max	100	NA
Giallauria F 2008	2008	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Myocardial Infarction	6	6	61	VO2max	120	Vigorous
Giannuzzi P 2003/ELVD-CHF	2003	HICs	Female	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	89	VO2max, 6MWT, exercise capacity (W)	90	Vigorous
Gielen S 2003	2003	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	20	VO2max		
NCT00176319	2012	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	1	1	60	VO2max, exercise capacity (W)	NA	NA
NCT00614224	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Conventional Physiotherapy)	Stroke	3	3	36	VO2max, 6MWT, 10MWT, BBS	150	High
Gottlieb S 1999	1999	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Congestive Heart Failure	6	6	25	VO2max, 6MWT	NA	Moderate
Hambrecht R 1998	1998	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	18	VO2max	130	Vigorous
Hambrecht R 1995	1995	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	18	VO2max	130	Vigorous
Hambrecht R 2004	2004	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Coronary Artery Disease	12	12	80	VO2max	60	NA
Harjola VP 2006	2006	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	17	VO2max		
Harris KA 1987	1987	HICs	Male	Dynamic Resistance Exercise	No Intervention	Hypertension	2.25	2.25	26	VO2max,BW	NA	NA
Hsieh PL 2018	2018	HICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	3	3	30	VO2max,BW	NA	NA
NCT00891514	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	6	6	53	VO2max, 6MWT, BBS	135	Moderate
Jin H 2013	2013	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Stroke	3	3	128	VO2max, 6MWT	NA	NA

Jonsdottir 2006	2006	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	5	5	40	VO2max	100	Moderate
Jorge M 2011a	2011	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	16	VO2max,BW	NA	NA
Jorge M 2011b	2011	LMICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	16	VO2max,BW	NA	NA
Jorge M 2011c	2011	LMICs	Both	Combined Exercise	No Intervention	Type II diabetes	3	3	16	VO2max,BW	NA	NA
Kadoglou NPE 2007	2007	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	6	6	56	VO2max,BW	NA	NA
NCT00306176 a	2007	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	8	8	50	VO2max	NA	NA
NCT00306176 b	2007	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	8	8	50	VO2max	NA	NA
Kadoglou NPE 2012	2012	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	47	VO2max	NA	NA
Keteyian SJ 1999	1999	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	6	6	43	VO2max, exercise capacity (W)	NA	NA
Klecha A 2007	2007	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	50	VO2max	NA	NA
Koukouvou G 2004	2004	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	6	6	26	VO2max	NA	NA
Kulcu DG 2007	2007	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	2	2	44	VO2max		
Lamina S 2010	2010	LMICs	Male	Dynamic Aerobic Exercise	No Intervention	Hypertension	2	2	357	VO2max	NA	NA
Laoutaris ID 2011	2011	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Heart Transplantation	2.5	2.5	15	VO2max, 6MWT	135	Moderate to Vigorous
Loimaala A 2009	2009	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	12	24	48	VO2max,BW	NA	NA
MacKay-Lyons M 2013	2013	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	3	12	37	VO2max, 6MWT, 10MWT, BBS	300	Low to Moderate
Maiorana A 2011	2011	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	17	VO2max	NA	NA
Maiorana A 2011	2011	HICs	Both	Dynamic Resistance Exercise	No Intervention	Chronic Heart Failure	3	3	15	VO2max	NA	NA
Meyer K 1996	1996	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	0.75	0.75	18	VO2max	NA	NA
Middlebrooke AR 2005	2005	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Dynamic Aerobic Exercise	6	6	52	VO2max,BW	NA	NA
Moghadasi M 2013	2013	LMICs	Male	Dynamic Aerobic Exercise	No Intervention	Dynamic Aerobic Exercise	3	3	16	VO2max	NA	NA
Moore JL 2010	2010	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Stroke	3	3	20	VO2max, 10MWT, BBS	NA	NA
Morton RD 2010	2010	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	1.75	1.75	27	VO2max,BW	NA	NA
Oka RK 2000	2000	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	24	VO2max	NA	NA

Okada S 2010	2010	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	3	3	38	VO2max	225	NA
Passino C 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	9	9	90	VO2max, exercise capacity (W)	NA	NA
Passino C 2006	2006	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	9	9	85	VO2max, exercise capacity (W)	90	Vigorous
Patwala A 2009	2009	HICs	Both	Dynamic Aerobic Exercise	No Intervention (passive range motion)	Chronic Heart Failure	6	6	50	VO2max	90	Vigorous
Potempa K 1995	1995	HICs	Both	Dynamic Aerobic Exercise	No Intervention (passive range motion)	Stroke	2.5	2.5	42	VO2max,BW	NA	NA
Pu CT 2001	2001	HICs	Fem ale	Dynamic Resistance Exercise	No Intervention (stretching)	Chronic Heart Failure	2.5	2.5	16	VO2max, 6MWT,BW	NA	NA
Ribeiro I 2008	2008	LMICs	Both	Dynamic Aerobic Exercise	No Intervention (stretching)	Type II diabetes	4	4	21	VO2max,BW	NA	NA
Roveda F 2003	2003	LMICs	Both	Dynamic Aerobic Exercise	No Intervention (stretching)	Chronic Heart Failure	4	4	16	VO2max	NA	NA
Sarullo FM 2006	2006	HICs	Both	Dynamic Aerobic Exercise	No Intervention (stretching)	Chronic Heart Failure	3	3	60	VO2max	90	Vigorous
Seki E 2003	2003	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	6	6	38	VO2max	NA	NA
Senden P 2005	2005	HICs	Both	Combined Exercise	No Intervention	Chronic Heart Failure	4.5	6.5	61	VO2max,BW	NA	NA
Servantes DM 2012a	2012	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	22	VO2max	135	Low to Moderate
Servantes DM 2012b	2012	LMICs	Both	Combined Exercise	No Intervention	Chronic Heart Failure	3	3	23	VO2max	NA	Low to Moderate
Sturm B 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	23	VO2max		
Tynni-Lenne R 1997	1997	HICs	Fem ale	Dynamic Resistance Exercise	No Intervention	Chronic Heart Failure	2	2	16	VO2max,6MW T,Exercise capacity(W)	NA	NA
Verity LS 1989	1989	HICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	4	4	10	VO2max,BW	NA	NA
Wielenga RP 1998	1998	HICs	Male	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	67	VO2max	NA	NA
Willenheimer R 1998	1998	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	4	4	37	VO2max	135	Moderate
ISRCTN1646 6697	2015	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	6.25	6.25	102	VO2max	90	NA
NCT00614224	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Conventional Physiotherapy)	Stroke	3	3	36	VO2max,6MW T,10MWT	150	Vigorous
NCT00678821	2013	HICs	Both	Dynamic Aerobic Exercise	No Intervention (Education)	Hypertension	2.5	2.5	23	VO2max,6MW T	112	Moderate
Brun JF 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	12	12	25	VO2max,6MW T	NA	NA
IRCT2015100 423002N2	2020	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3	3	59	VO2max,BW	NA	NA
IRCT2016121 831443N1	2018	LMICs		Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2	2	28	VO2max,6MW T	NA	NA

ISRCTN4252 4037	2011	HICs	Both	Combined Exercise	Usual Care	Heart Failure	3	3	64	VO2max,6MW T	64	NA
ISRCTN9786 5321a	2017	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	6	6	26	VO2max,BW	NA	NA
ISRCTN9786 5321b	2017	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	6	6	25	VO2max,BW	NA	NA
NCT00959660	2016	HICs	Both	Dynamic Aerobic Exercise		Usual Care(Attention control: telephone)	4.5	4.5	92	VO2max,6MW T	180	Moderate
Yeh G 2004	2004	HICs	Both	Tai Chi	Usual Care(waitlist)	Heart Failure	3	3	30	VO2max,6MW T	180	NA
NCT00628277	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Heart Disease	4	5	71	VO2max,BW	NA	NA
NCT00837603	2013	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Heart Failure	6	6	40	VO2max	45	Vigorous
NCT00955201 a	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3	3	13	VO2max	NA	Moderate to Vigorous
NCT00955201 b	2019	HICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	3	3	11	VO2max	NA	Vigorous
NCT00955201 c	2019	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	3	3	10	VO2max	NA	Moderate to Vigorous
NCT01091194	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Heart Transplant	12	60	41	VO2max,BW	NA	Vigorous
NCT01113840	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Heart Failure	4	4	46	VO2max,6MW T	NA	Low to Vigorous
NCT01246570	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Heart Disease	12	12	49	VO2max,BW	NA	Vigorous
NCT01325675	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Atrial Fibrillation	3	3	51	VO2max	NA	Vigorous
NCT01432639	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	2	2	92	VO2max	NA	NA
Ribeiro F 2012	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	2	2	38	VO2max	165	Moderate
NCT01935297	2016	HICs	Both	Combined Exercise	Usual Care	Aortic stenosis	2	12	17	VO2max,6MW T	NA	NA
NCT02048696	2019	HICs	Both	Combined Exercise	Usual Care	Myocardial Infarction	3	3	19	VO2max	NA	NA
NCT02144480	2017	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	1	1	40	VO2max,6MW T	NA	NA
NCT02224495	2015	HICs	Both	Combined Exercise	Usual Care	Myocardial Infarction	2	2	175	VO2max	210	Vigorous
NCT02283047 a	2020	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Attention control: simple recommendation)	Hypertension	4	4	76	VO2max	90	Moderate
NCT02283047 b	2020	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Attention control: simple recommendation)	Hypertension	4	4	77	VO2max	90	Vigorous
NCT02283047 c	2020	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Attention control: simple recommendation)	Hypertension	4	4	78	VO2max	40	Vigorous

NCT02288442	2017	HICs	Both	Combined Exercise	Usual Care	Hypertension	2	2	39	VO2max,6MW T	NA	NA
NCT02413151	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	6	6	37	VO2max	NA	Vigorous
Tanaka Y 2018	2018	HICs	Male	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	6	6	30	VO2max,BW		
NCT00107068 a	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care(sham exercise)	Stroke	3	3	16	VO2max,6MW T,10MWT	NA	NA
NCT00107068 b	2009	HICs	Both	Dynamic Resistance Exercise	Usual Care(sham exercise)	Stroke	3	3	16	VO2max,6MW T,10MWT	NA	NA
NCT00107068 c	2009	HICs	Both	Combined Exercise	Usual Care(sham exercise)	Stroke	3	3	16	VO2max,6MW T,10MWT	NA	NA
Moholdt T 2011	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	3	3	89	VO2max,BW		
Ezema C 2015	2015	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2	2	54	VO2max	158	Moderate to Vigorous
Chrysohoou C 2014	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	72	VO2max,6MW T	135	Vigorous
Benetti M 2010a	2010	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	3	3	43	VO2max	NA	NA
Benetti M 2010b	2010	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	3	3	44	VO2max	NA	NA
ISRCTN7869 8481	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3	3	26	VO2max,BW	NA	NA
Chou C 2019	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	30	VO2max	36	Vigorous
deSousa MV 2019	2019	LMICs	Both	Dynamic Aerobic Exercise	Usual Care(Cointervention:Diet)	Type II diabetes	3	3	41	VO2max,BW	120	NA
Rezaei S 2017	2017	LMICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	2.5	2.5	20	VO2max	NA	NA
ISRCTN4102 6907	2012	HICs	Both	Combined Exercise	Usual Care(Home stretching)	Stroke	4.75	4.75	40	VO2max,6MW T,10MWT,BBS , TUGT	158	Moderate
Spee RF 2016	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Conventional Therapy)	Chronic Heart Failure	3	3	26	VO2max	51	Vigorous
dos Santos M 2016	2016	LMICs	Male	Combined Exercise	No Intervention (cointervention: Testosterone)	Chronic Heart Failure	4	4	26	VO2max	60	Moderate to Vigorous
Hordern M 2015	2015	HICs	Both	Dynamic Aerobic Exercise	No Intervention (cointervention: Testosterone)	Type II diabetes	36	36	223	VO2max	NA	NA
Vinetti G 2015	2015	HICs	Male	Combined Exercise	Usual Care	Type II diabetes	12	12	20	VO2max	140	Moderate to Vigorous
Aksoy S 2015a	2015	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	2.5	2.5	22	VO2max,6MW T,BW	105	Moderate to Vigorous
Aksoy S 2015b	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	2.5	2.5	23	VO2max,6MW T,BW	105	Moderate to Vigorous
Cardozo C 2015a	2015	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Heart Disease	4	4	47	VO2max	120	Vigorous
Cardozo C 2015b	2015	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Heart Disease	4	4	47	VO2max	120	Moderate

NCT02000479	2015	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	22	VO2max	NA	NA
Emerenziani G 2015	2015	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	30	VO2max	NA	NA
Yavari A 2012a	2012	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	12	12	20	VO2max,BW	45	Moderate
Yavari A 2012b	2012	LMICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	12	12	20	VO2max,BW	NA	NA
Yavari A 2012c	2012	LMICs	Both	Combined Exercise	Usual Care	Type II diabetes	12	12	20	VO2max,BW	NA	NA
Rosety-Rodriguez M 2014	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3.5	3.5	60	VO2max	NA	NA
deMeirelles LR 2014	2014	LMICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	6	6	30	VO2max	270	Moderate
Kaltsatou A 2014a	2014	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	8	8	26	VO2max,BBS	50	Moderate
Kaltsatou A 2014b	2014	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	8	8	25	VO2max,BBS	180	Moderate
PACTR20111 2000341237	2013	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Hypertension	2	2	217	VO2max	158	Vigorous
Nishitani-Yokoyama M 2019	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Acute Coronary Syndrome	8	8	32	VO2max	NA	NA
Kour H 2019	2019	LMICs	Both	Combined Exercise	Usual Care	Type II diabetes	6	6	136	VO2max		
NCT03546270	2019	HICs	Female	Dynamic Aerobic Exercise	Usual Care	Hypertension	4.5	4.5	100	VO2max	120	Moderate
Taghizadeh M 2018	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2	2	20	VO2max	NA	NA
He Li 2018	2018	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	40	VO2max	180	Moderate
NCT02047942	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	3	12	54	VO2max	135	Vigorous
NCT02001766	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2.75	2.75	32	VO2max	NA	NA
Hseih PL 2018	2018	HICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	3	3	30	VO2max	NA	NA
Doletsky A 2018	2018	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure		3	35	VO2max,6MW T	NA	Moderate
Snel M 2012	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Cointervention:very low caloric diet)	Type II diabetes	4	4	27	VO2max	180	Vigorous
ChiCTR18000 15823	2018	LMICs	Both	Qi gong	Usual Care	Coronary Artery Disease	3	3	59	VO2max	150	Moderate
Selig S 2004	2004	HICs	Both	Dynamic Resistance Exercise	Usual Care	Chronic Heart Failure	3	3	33	VO2max	NA	NA
Wood R 2006	2006	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Peripheral Artery Disease	1.5	1.5	13	VO2max	NA	NA
Sixt S 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Disease	1	1	23	VO2max	NA	NA

Piotrowicz R 2015	2015	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	2	2	51	VO2max, 6MWT	NA	NA
Stolinski M 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Unsupervised)	Type II diabetes	6	6	17	VO2max	NA	NA
Maria Sarullo F 2006	2006	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	60	VO2max	90	Vigorous
Macko RF 2005	2005	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Conventional Therapy)	Stroke	6	6	45	VO2max, 6MWT	NA	NA
Williams A 2007	2007	HICs	Both	Dynamic Resistance Exercise	Usual Care	Chronic Heart Failure	2.75	2.75	11	VO2max	NA	NA
Safiyari-Hafizi H 2016	2016	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	29	VO2max, 6MWT	NA	Vigorous
Berg-Emons R 2004	2004	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	34	VO2max, 6MWT	120	Moderate
Vona M 2009a	2009	HICs	Both	Dynamic Aerobic Exercise	No intervention	Myocardial Infarction	31	1	69	VO2max	240	Vigorous
Vona M 2009b	2009	HICs	Both	Dynamic Resistance Exercise	No intervention	Myocardial Infarction	1	1	70	VO2max	44	Moderate to Vigorous
Vona M 2009c	2009	HICs	Both	Combined Exercise	No intervention	Myocardial Infarction	1	1	70	VO2max	120	NA
Mandic S 2008a	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	18	VO2max	NA	Moderate
Mandic S 2008a	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	19	VO2max	NA	Moderate
Zheng H 2008	2008	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	6	6	57	VO2max	NA	NA
Malfatto G 2009	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	54	VO2max	NA	NA
Knoepfli-Lenzin C 2010a	2010	HICs	Male	Dynamic Aerobic Exercise	No intervention	Hypertension	3	3	23	VO2max	NA	NA
Knoepfli-Lenzin C 2010b	2010	HICs	Male	Dynamic Aerobic Exercise	No intervention	Hypertension	3	3	24	VO2max	NA	NA
Yamamoto A 1998	1998	HICs	Both	Dynamic Aerobic Exercise	No intervention	Myocardial Infarction	3	3	70	VO2max	NA	NA
Oya M 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No intervention	Myocardial Infarction	1	1	28	VO2max	NA	NA
Pullen P 2010	2010	HICs	Both	Yoga	Usual Care	Chronic Heart Failure	2	2	34	VO2max	120	NA
Tan S 2012	2012	LMICs	Both	Combined Exercise	Usual Care	Type II diabetes	6	6	30	VO2max, 6MWT	150	Moderate to Vigorous
Legramante J 2007	2007	HICs	Both	Dynamic Aerobic Exercise	No intervention	Myocardial Infarction	0.5	0.5	82	VO2max	180	Vigorous
Kubo N 2004	2004	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	3	3	44	VO2max	120	Moderate
Mimura J 2005	2005	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	1	1	30	VO2max	160	Vigorous
Mameletzi D 2011	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	7	7	20	VO2max	150	Vigorous

Wright DJ 2002	2002	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronay Bypass Surgery	1.5	1.5	22	VO2max	NA	Vigorous
Vasiliauskas D 2007	2007	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Heart Disease	6	12	154	VO2max, 6MWT, Exercise capacity (MET)	NA	NA
Alam S 2004	2004	HICs	Both	Dynamic Aerobic Exercise	Usual care(Unsupervised)	Type II diabetes	6	6	18	VO2max	NA	NA
Linke A 2005	2005	HICs	Both	Dynamic Aerobic Exercise	No intervention	Chronic Heart Failure	6	6	23	VO2max	NA	NA
Tokmakidis SP 2003	2003	HICs	Both	Dynamic Aerobic Exercise	Usual care(Unsupervised)	Coronary Artery Disease	4	8	27	VO2max	NA	NA
Beckers P 2010a	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	12	16	VO2max	NA	NA
Beckers P 2010b	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	12	19	VO2max	NA	NA
Beckers P 2010c	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	12	14	VO2max	NA	NA
Mereles D 2006	2006	HICs	Both	Combined Exercise	Usual Care	Hypertension	3.75	3.75	30	VO2max	NA	NA
Pozehl B 2003	2003	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	21	VO2max, 6MWT	150	Vigorous
Bilinska M 2013	2013	HICs	Male	Dynamic Aerobic Exercise	Usual Care	Coronay Bypass Surgery	1.5	1.5	100	VO2max		
Dimeo F 2012	2012	HICs	Both	Dynamic Aerobic Exercise	Usual care(Unsupervised)	Hypertension	3	3	47	VO2max,BW	NA	Moderate
Asa C 2012	2012	HICs	Both	Dynamic Aerobic Exercise	No intervention	Chronic Heart Failure+Type II diabetes	2	2	17	VO2max, 6MWT	135	NA
Ascione A 2012	2012			Combined Exercise	Usual Care	Chronic Heart Failure+Type II diabetes	3	3	44	VO2max	NA	NA
Crowther R 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Peripheral Artery Disease	12	12	21	VO2max	NA	NA
Crowther R 2012	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Peripheral Artery Disease	6	6	16	VO2max	NA	NA
Guazzi M 2012	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure+Type II diabetes	6	6	28	VO2max	NA	NA
NCT00212303	2012	HICs	Both	Combined Exercise	Usual Care	Type II diabetes+Hypertension	6	6	114	VO2max	135	Vigorous
NCT00218972 a	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	38	VO2max	114	Vigorous
NCT00218972 b	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	35	VO2max	141	Vigorous
ACTRN12609 000742279	2012	HICs	Both	Dynamic Resistance Exercise	Usual Care	Patient with Left ventricular assist device	2	2	14	VO2max, 6MWT	NA	NA
Edwards KM 2011	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	40	VO2max	150	Moderate

Bronas U 2011a	2011	HICs	Both	Isometric Resistance Exercise	Usual Care	Peripheral Artery Disease	3	3	14	VO2max	NA	NA
Bronas U 2011b	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Peripheral Artery Disease	3	3	14	VO2max	NA	NA
Chung C 2010	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	2	2	87	VO2max	150	Low to Moderate
Brehm M 2009	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	0.75	0.75	37	VO2max		
Bernardi L 2007	2007	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Heart Transplant	6	6	24	VO2max	150	Vigorous
Sabelis LW 2004	2004	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	6	6	61	VO2max	NA	NA
Hiatt WR 1996a	1996	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Peripheral Artery Disease	3	3	14	VO2max	NA	NA
Hiatt WR 1996b	1996	HICs	Both	Dynamic Resistance Exercise	No Intervention	Peripheral Artery Disease	3	3	12	VO2max	NA	NA
Scordo K 1991	1991	HICs	Female	Dynamic Aerobic Exercise	Usual Care	Mitral Valve Prolapse	3	3	32	VO2max	NA	NA
Liang C 2019a	2019	LMICs	Both	Combined Exercise	Usual Care	Coronary Heart Disease	3	3	56	VO2max,BW	300	Vigorous
Liang C 2019b	2019	LMICs	Both	Tai Chi	Usual Care	Coronary Heart Disease	3	3	56	VO2max,BW	300	Vigorous
NCT02876952 a	2019	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Myocardial Infarction	4	4	29	VO2max	80	Vigorous
NCT02876952 b	2019	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Myocardial Infarction	4	4	26	VO2max	40	Vigorous
Froelicher V 1985	1985	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Bypass Surgery	12	12	48	VO2max	135	Vigorous
Acanfora D 2016	2016	HICs	Both	Dynamic Resistance Exercise	No Intervention	Chronic Heart Failure	1	1	72	VO2max	360	Vigorous
Acar S 2014	2014	LMICs	Both	Combined Exercise	Usual Care	Type II diabetes+Hypertension	3	3	16	VO2max	NA	NA
Ahmed A 2019	2019	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes+Hypertension	3	3	40	VO2max	NA	NA
Ajiboye OA 2015	2015	LMICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	51	VO2max, 6MWT	240	Vigorous
Anomasiri W 2005	2005	LMICs	Male	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	2	2	30	VO2max		
Dressendorfer RH 1993	1993	HICs	Male	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	2	2	32	VO2max, 6MWT	90	Vigorous
Evangelista LS 2006	2006	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	6	6	99	VO2max	NA	NA
Ferrier KE 2001	2001	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	2	2	20	VO2max, exercise capacity (W)	NA	NA
Georgiades A 2000	2000	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	6	6	55	VO2max	180	Vigorous
NCT02550015	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	2	12	56	VO2max	114	Vigorous

Iellamo F 2000	2000	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	0.5	0.5	86	VO2max	360	Vigorous
Palevo G 2009	2009	HICs	Both	Dynamic Resistance Exercise	Usual Care	Chronic Heart Failure	0.5	0.5	44	VO2max,6MW T		
Ronnemma T 1986	1986	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes+Hypertension	4	4	25	VO2max,BW	NA	NA
Takeyama J 2000	2000	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Bypass Surgery	12	12	28	VO2max	NA	NA
Wilson GA 2019	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes+Hypertension	3	3	16	VO2max, exercise capacity (W)	NA	NA
NCT01597960	2019	HICs	Both	Yoga	Usual Care	Acute coronary event	3	3	41	VO2max,6MW T	NA	NA
NCT01234155a	2013	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes+Hypertension	4	4	16	VO2max,BW	NA	NA
NCT01234155b	2013	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes+Hypertension	4	4	16	VO2max,BW	NA	NA
Sutbeyaz ST 2010a	2010	LMICs	Both	Breathing Retraining	Usual Care	Stroke	1.5	1.5	22	VO2max	NA	NA
Sutbeyaz ST 2010b	2010	LMICs	Both	Inspiratory Muscle Training	Usual Care	Stroke	1.5	1.5	23	VO2max	NA	NA
Nechwatal RM 2002a	2002	HICs	Both	Steady state exercise	Usual Care	Chronic Heart Failure	0.75	0.75	25	VO2max,BBS	NA	NA
Nechwatal RM 2002b	2002	HICs	Both	Interval exercise	Usual Care	Chronic Heart Failure	0.75	0.75	25	VO2max,BBS	NA	NA
Liu SX 2017	2017	LMICs	Both	Combined Exercise	Usual Care	Coronary Artery Disease	3	3	63	VO2max	NA	NA
Adamopoulos S 2013	2013	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	22	VO2max	NA	NA
NCT00634296	2009	LMICs	Both	Inspiratory Muscle Training	No Intervention(Aerobic Exercise)	Chronic Heart Failure	3	3	24	VO2max,6MW T	210	Moderate
NCT02885077	2019	LMICs	Both	Inspiratory Muscle Training	Usual Care(Aerobic+Resistance CPT)	Coronary Bypass Surgery	3	3	24	VO2max	60	Moderate to Vigorous
Ascione A 2012	2012	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	3	3	44	VO2max	NA	NA
Eder B 2010	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Standard cardiac rehabilitation)	Heart Surgery	1	1	60	VO2max	90	Vigorous
ISRCTN8195 2488	2016	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	83	VO2max,BW	135	Moderate to Vigorous
NCT01747395	2020	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Heart Failure	4	4	22	VO2max	180	NA
NCT01883258a	2018	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	2	2	26	VO2max	NA	NA
NCT01883258b	2019	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2	2	24	VO2max	NA	NA
Belardinelli R 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	14	14	99	VO2max	120	Vigorous

ACTRN12607 000227493a	2013	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Stroke	4	12	51	6MWT,10MW T	90	NA
ACTRN12607 000227493b	2013	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Stroke	4	12	51	6MWT,10MW T	90	NA
NCT00666744	2011	HICs	Both	Dynamic Resistance Exercise	Usual Care	Stroke	3	3	40	6MWT,BBS	245	NA
Butterfield JA 2008	2008	HICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	4	4	19	6MWT	315	Moderate to Vigorous
Eich HJ 2004	2004	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	4.5	4.5	49	6MWT,10MWT		
Flansbjer UB 2012	2012	HICs	Both	Dynamic Resistance Exercise	No Intervention	Chronic Stroke	2.5	48	18	6MWT,10MWT		
Kang HK 2012	2012	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	1	1	20	6MWT,10MW T	180	Vigorous
Kim M 2014	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	1	1	22	6MWT,10MWT,BW		NA
Kobayashi N 2003	2003	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	28	6MWT		
ACTRN12607 000412437	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	4.5	4.5	24	6MWT,10MWT		
Lambers S 2008a	2008	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	3	3	22	6MWT,BW	180	Moderate to Vigorous
Lambers S 2008b	2008	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	24	6MWT,BW	180	Moderate to Vigorous
EXERT Trial/NCT008 95635	2002	HICs	Both	Combined Exercise	No Intervention	Chronic Heart Failure	12	12	139	6MWT		Vigorous
Nilsson BB 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	4	4	80	6MWT,Exercis e capacity(W)	120	Vigorous
NCT00489801 / HOME- BASE	2012	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	12	12	36	6MWT	180	Moderate
Orr R 2006	2006	HICs	Both	TaiChi	No Intervention	Type II diabetes	4	4	35	6MWT,10MWT,BW		NA
Owen A 2000	2000	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Chronic Heart Failure	3	3	24	6MWT	25	NA
Lam P 2008	2008	HICs	Both	TaiChi	No Intervention	Type II diabetes	6	6	46	6MWT	120	NA
Park HJ 2011	2011	HICs	Both	Dynamic Aerobic Exercise	No Intervention(CPT)	Stroke	1	1	25	6MWT,10MWT		
Parnell MM 2002	2002	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Congestive Heart Failure	2	2	21	6MWT	NA	NA
ACTRN01260 5000715673	2007	HICs	Both	TaiChi	No Intervention	Type II diabetes	4	4	37	6MWT,10MW T,BW	120	NA
Tynni-Lenne R 2001	2001	HICs	Both	Dynamic Resistance Exercise	No Intervention	Chronic Heart Failure	2	2	24	6MWT,10MW T	NA	NA
NTR1534	2009	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	6	6	242	6MWT,10MW T	180	Low to Moderate
Xiao CM 2015	2015	LMICs	Male	TaiChi	No Intervention	Type II diabetes	3	3	32	6MWT,BBS		NA
Yang HC 2014	2014	HICs	Male	Dynamic Aerobic Exercise	Usual Care (conventional Therapy)	Stroke	3	3	30	6MWT,10MWT		NA

Yang YR 2006	2006	HICs	Both	Dynamic Resistance Exercise	No Intervention	Stroke	1	1	48	6MWT,10MWT	NA	
NTR2704	2012	HICs	Both	Combined Exercise	Usual Care (Cointervention: Cognitive therapy)	Stroke	6	6	68	6MWT	240	Low to Moderate
ACTRN1261000096055	2015	HICs	Both	Circuit Class Therapy	Usual Care(Physiotherapy 5 days)	Stroke	1	1	173	6MWT,10MW T	900	Low to Moderate
IRCT20161117030942N2	2020	LMICs	Both	Combined Exercise	No Intervention	Type II diabetes	2	2	28	6MWT	360	Moderate
NCT01109602	2012	HICs	Both	Yoga	Usual Care(Waitlist)	Stroke	2	2	47	6MWT	NA	NA
NCT01115205	2010	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	4	4	41	6MWT,BW	NA	NA
NCT01197313	2011	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	2	2	41	6MWT	90	Low
NCT01467206	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	18	18	380	6MWT,10MW T,BBS	45	Vigorous
NCT01789853	2015	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	2	2	32	6MWT,10MW T	240	Moderate
NCT02107768	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	3	3	56	6MWT,10MW T,BBS	NA	NA
NCT02655627	2018	LMICs	Both	Combined Exercise	Usual Care(Broucher for PA)	Type II diabetes	2	2	44	6MWT	NA	NA
NCT03538249	2020	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	20	6MWT	90	Vigorous
Gary R 2012	2012	HICs	Both	Combined Exercise	Usual Care(Attention Control)	Chronic Heart Failure	3	3	24	6MWT		Low to Moderate
Babu A 2019	2019	LMICs	Both	Combined Exercise	Usual Care	Hypertension	3	3	67	6MWT	NA	NA
Chung S 2019	2019	HICs	Both	Task-specific lower extremity training+conventional therapy	Usual Care(Conventional therapy)	Stroke	1.25	1.25	35	6MWT,10MW T,BBS,TUGT	300	NA
Ricca-Mallada 2017	2017	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	6	6	34	6MWT	180	Low to Moderate
Kim S 2016	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	1	1	20	6MWT,BBS		
Shen D 2015	2015	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	1.25	1.25	40	6MWT,BBS	NA	NA
Borland M 2014	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	48	6MWT	120	NA
NCT01161329	2017	HICs	Both	Dynamic Resistance Exercise	Usual Care	Stroke	3	15	67	6MWT,10MW T,BBS	90	Low to Moderate
ISRCTN50570295	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care(normal gait re-education)	Stroke	6	6	40	6MWT,10MW T,TUGT	NA	NA
Zhang Y 2018	2018	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Myocardial Infarction	12	12	130	6MWT	90	Moderate
Teng HC 2018	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	3	3	84	6MWT	NA	NA
ACTRN12609000437268	2018	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Chronic Heart Failure	6	6	132	6MWT	NA	NA

IRCT2016111630930N1	2018	LMICs	Both	Combined Exercise	Usual Care	Chronic Heart Failure	3	3	48	6MWT	90	Low
Gary R 2010a	2010	HICs	Both	Dynamic Aerobic Exercise	Usual care	Chronic Heart Failure	6	6	31	6MWT	180	Moderate
Gary R 2010b	2010	HICs	Both	Dynamic Aerobic Exercise	No intervention(Cognitive Therapy)	Chronic Heart Failure	6	6	31	6MWT	180	Moderate
NCT00733161	2012	HICs	Both	Dynamic Aerobic Exercise	Usual care	Chronic Heart Failure	0.5	0.5	27	6MWT	105	Low
Plevo G 2009	2009	HICs	Both	Dynamic Resistance Exercise	Usual care	Chronic Heart Failure	2	2	16	6MWT	NA	NA
Olawale OA 2011a	2011	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	3	3	30	6MWT,10MWT	NA	NA
Olawale OA 2011b	2011	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	3	3	30	6MWT,10MWT	NA	NA
NCT00243919a	2013	HICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	6	6	196	6MWT,10MW T,BBS	270	NA
NCT00243919b	2013	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	6	6	188	6MWT,10MW T,BBS	270	NA
Gary R 2004	2004	HICs	Female	Dynamic Aerobic Exercise	Usual care	Chronic Heart Failure	3	3	32	6MWT,10MWT,BBS	NA	NA
Brunelli S 2019	2019	HICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	1	1	34	6MWT	200	NA
McGuigan MR 2001	2001	HICs	Both	Dynamic Resistance Exercise	Usual care	Peripheral Artery Disease	4	4	20	6MWT	NA	NA
Ozdirenc M 2004	2004	LMICs	Both	Combined Exercise	Usual care	Type II diabetes+Hypertension	0.5	0.5	44	6MWT	100	Vigorous
NCT00214513	2009	HICs	Both	Combined Exercise	Usual care	Chronic Heart Failure	12	14	43	6MWT,Exercise capacity(W)	180	Vigorous
NCT01597960	2019	HICs	Both	Yoga	Usual care	Acute coronary event	3	3	58	6MWT	NA	NA
ANZCTR12609000457246a	2013	HICs	Both	Dynamic Resistance Exercise	Usual care	Peripheral Arterial Disease	6	6	11	6MWT	90	Low
ANZCTR12609000457246b	2013	HICs	Both	Dynamic Resistance Exercise	Usual care	Peripheral Arterial Disease	6	6	11	6MWT	90	Low
Jung NJ 2017	2017	HICs	Both	Inspiratory Muscle Training	Usual care	Stroke	1.5	1.5	20	6MWT	NA	NA
Parreiras de Menezes 2019	2019	LMICs	Both	Respiratory Muscle Training	Usual care	Stroke	3	3	38	6MWT	NA	NA
ACTRN12616001204437	found a thesis not a paper	HICs	Both	Tai Chi	Usual care	Coronary Heart Disease/Hypertension	6	6	102	6MWT	240	Moderate
Szilagyi B 2019	2019	HICs	Both	Combined Exercise	Usual care	Type II diabetes	6	6	208	6MWT,BW	NA	NA
Kwakkel G 2001a	2001	HICs	Both	Upper limb training	Usual care	Stroke	5	13	52	10MWT	150	NA
Kwakkel G 2001b	2001	HICs	Both	Upper limb training	Usual care	Stroke	5	13	49	10MWT	150	NA
Blae M 2008	2008	HICs	Both	Isometric Resistance Exercise	Usual care	Stroke	1	1	18	10MWT	NA	NA

Kim CM 2001	2001	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	1.5	1.5	20	10MWT	NA	NA
Oullette MM 2004	2004	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	3	3	42	10MWT	NA	NA
NCT00184431	2010	HICs	Both	Intensive motor training	Usual care	Stroke	1	6.5	62	10MWT	37.5	Moderate
NCT03021044	2020	HICs	Both	Dynamic Aerobic Exercise	Usual care	Myocardial Infarction	4	12	222	10MWT	60	Moderate
Kim N 2016	2016	HICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	1	1	17	10MWT	NA	NA
Zhu Y 2016	2016	LMICs	Both	modified constrained induced movement therapy	Usual care	Stroke	1	1	22	10MWT	NA	NA
Srivastava A 2016	2016	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	1	1	40	10MWT	NA	NA
Lee YH 2015	2015	HICs	Both	Combined Exercise	Usual care	Stroke	4	4	26	10MWT	180	Low
Iqbal M 2020	2020	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	1	1	64	10MWT	NA	NA
Cha HG 2017	2017	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	2	2	20	10MWT	NA	NA
Langhammer B 2007	2007	HICs	Both	Combined Exercise	Usual care	Stroke	12	12	63	BBS	80	Vigorous
ACTRN12610 000902099	2014	HICs	Both	Yoga	Usual care	Stroke	2.5	2.5	22	BBS	120	Vigorous
Shin Ji 2016	2016	HICs	Both	Bilateral upper extremity activities	Usual care	Stroke	1	1	30	BBS	NA	NA
Choi J 2015	2015	HICs	Both	Task Oriented Training	Usual care	Stroke	2	2	24	BBS	150	NA
Son S 2014	2014	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	1.5	1.5	28	BBS	NA	NA
Shenoy S 2009a	2009	LMICs	Both	Dynamic Resistance Exercise	Usual care	Type II diabetes	4	4	15	BBS	NA	Vigorous
Shenoy S 2009b	2010	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Type II diabetes	4	4	15	BBS	90	Low
Kunkel D 2013	2013	HICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	1	1	10	BBS	NA	NA
Chen X 2020	2020	LMICs	Both	Dynamic Resistance Exercise	Usual care	Stroke	2	2	180	BBS	NA	NA
IRCT2018051 3039626N1	2018	LMICs	Male	Dynamic Aerobic Exercise	Usual care	Stroke	1.5	1.5	36	BBS	90	Moderate
Tripp F 2014	2014	HICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	0.5	0.5	27	BBS	NA	NA
Tung FL 2010	2010	HICs	Both	Sit to stand training	Usual care	Stroke	1	1	32	BBS	NA	NA
Yen CL 2008	2008	HICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	1	1	14	BBS	NA	NA
Kim Y 2015	2015	HICs	Both	Isometric Resistance Exercise	Usual care	Stroke	1.5	1.5	20	BBS	150	NA
Shin W 2011	2011	HICs	Both	Combined Exercise	Usual care	Stroke	1	1	21	BBS	NA	NA
Madhuranga P 2019	2019	LMICs	Both	Wobble board exercise	Usual care	Stroke	1.5	1.5	29	BBS	NA	NA

Dong-Hyun K 2019	2019	HICs	Fem ale	Dynamic Aerobic Exercise	Usual care	Hypertension	3	3	36	TUGT	180	Vigorous
Qurat ul Ain 2018	2018	LMICs	Both	Combined Exercise	Usual care	Stroke	1.5	1.5	30	TUGT	NA	NA
Luk TH 2012	2012	LMICs	Both	Dynamic Aerobic Exercise	Usual care	Stroke	2	2	64	Exercise Capacity(MET)	180	Vigorous
Murugesan R 2000	2000	LMICs	Both	Yoga	Usual Care	Hypertension	2.75	2.75	22	BW	NA	NA
Mourier A 1997	1997	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	2	2	21	BW	NA	NA
IRCT2017050 833869N1a	2017	LMICs	Fem ale	Aerobic exercise	No Intervention	Type II diabetes	3	3	17	BW	135	Moderate
IRCT2017050 833869N1b	2017	LMICs	Fem ale	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	17	BW	NA	Moderate
IRCT2017050 833869N1c	2017	LMICs	Fem ale	Combined Exercise	No Intervention	Type II diabetes	3	3	18	BW	NA	Moderate to Vigorous
Ballantyne FC 1982	1982	HICs	Male	Aerobic exercise	No Intervention	Myocardial Infarction	6	6	42	BW	NA	NA
Castaneda C 2002	2002	HICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	4	4	62	BW	135	Vigorous
Choi KM 2012	2012	HICs	Fem ale	Aerobic Exercise	No Intervention	Type II diabetes	3	3	75	BW	NA	NA
Cohen BE 2008	2008	HICs	Both	Yoga	No Intervention	Hypertension, Diabetes	2.5	2.5	24	BW	NA	NA
Dunstan DW 2002	2002	HICs	Both	Dynamic Resistance Exercise	No Intervention (co intervention Weight Loss)	Type II diabetes	6	6	29	BW	NA	NA
Dunstan DW 1998	1998	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	2	2	21	BW	NA	NA
Hameed UA 2012	2012	LMICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes		2	48	BW	NA	NA
Higashi Y 1999	1999	HICs	Both	Dynamic Aerobic Exercise	No Intervention (sedentary control)	Hypertension	3	3	27	BW	NA	NA
KU YH 2010a	2010	HICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	23	BW	NA	NA
KU YH 2010b	2010	HICs	Fem ale	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	21	BW	NA	NA
Lehmann R 1995	1995	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	29	BW	NA	NA
Martin JE 1990	1990	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Hypertension	3	3	43	BW	NA	NA
ANZCTR N 126060004365 72	2013	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	12	12	86	BW	NA	Vigorous
Mitranun W 2013	2013	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	43	BW	NA	NA
Moreau KL 2001	2001	HICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Hypertension	6	6	24	BW	NA	NA
Motahari- Tabari N 2014	2014	LMICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	2	2	50	BW	NA	NA
NCT00221208	2010	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	4	4	48	BW	NA	Vigorous

Sakai T 1998	1998	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Hypertension	1	1	35	BW	NA	NA
NCT00195884 a	2007	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	5.5	6	81	BW	135	Moderate
NCT00195884 b	2007	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	5.5	6	85	BW	NA	NA
NCT00195884 c	2007	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	5.5	6	85	BW	NA	NA
Tessier D 2000	2000	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	4	4	33	BW	NA	NA
van Montfrans GA 1990	1990	HICs	Both	Yoga	Usual Care	Hypertension	12	12	35	BW	NA	NA
Wosornu D 1996a	1996	HICs	Male	Dynamic Aerobic Exercise	No Intervention	Coronary artery bypass surgery	6	6	41	BW	NA	NA
Wosornu D 1996b	1996	HICs	Male	Dynamic Resistance Exercise	No Intervention	Coronary artery bypass surgery	6	6	40	BW	NA	NA
Youngwanichsetha S 2013	2013	LMICs	Fem ale	Tai Chi	No Intervention	Type II diabetes	3	3	64	BW	NA	NA
IRCT20141118019995N10a	2019	LMICs	Fem ale	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	2.5	2.5	21	BW	75	Moderate to Vigorous
IRCT20141118019995N10b	2019	LMICs	Fem ale	Comined Exercise	Usual Care	Type II diabetes	2.5	2.5	21	BW	39	NA
ACTRN12608000206325	2014	HICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	4	4	84	BW	90	Moderate
IRCT2017012032066N1	2018	LMICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	24	BW	90	Moderate
IRCT20190204042621N1a	2019	LMICs	Both	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	24	BW	180	Moderate
IRCT20190204042621N1b	2019	LMICs	Both	Dynamic Resistance Exercise	No Intervention(cointervention :Vit D)	Type II diabetes	3	3	24	BW	180	Moderate
Theodorou A 2016a	2016	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Coronary Artery Disease	8	8	20	BW	NA	NA
Theodorou A 2016b	2016	HICs	Both	Dynamic Resistance Exercise	Usual Care	Coronary Artery Disease	8	8	16	BW	NA	NA
Theodorou A 2016c	2016	HICs	Both	Combined Exercise	Usual Care	Coronary Artery Disease	8	8	20	BW	NA	NA
Arca E 2014a	2014	LMICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Hypertension	3	3	33	BW	150	Moderate
Arca E 2014b	2014	LMICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Hypertension	3	3	33	BW	150	Moderate
Gulsin GS 2019	2019			Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3	3	52	BW	150	Moderate
Ruangthai R 2019a	2019	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	3	6	16	BW	180	Moderate to Vigorous
Ruangthai R 2019b	2019	LMICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	3	6	17	BW	180	Moderate to Vigorous

Ruangthai R 2019c	2019	LMICs	Both	Combined Exercise	Usual Care	Hypertension	3	6	17	BW	180	Moderate to Vigorous
Zhang G 2020	2020	LMICs	Both	Tai Chi	Usual Care	Coronary Heart Disease	3	3	30	BW	90	Moderate
KCT0004671	2020	HICs	Fem ale	Combined Exercise	Usual Care	Type II diabetes	3	3	35	BW	NA	Low to Moderate
Masroor S 2018	2018	LMICs	Fem ale	Combined Exercise	Usual Care	Hypertension	3	1	28	BW	90	Moderate to Vigorous
Masuo K 2012	2012	HICs	Male	Dynamic Aerobic Exercise	Usual Care	Hypertension		6	60	BW	NA	NA
Shabani R 2015	2015		Fem ale	Dynamic Resistance Exercise	Usual Care	Type II diabetes	1.5	1.5	20	BW		
Krustrup P 2017	2017	HICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Hypertension	12	12	31	BW	60	Vigorous
Acheampong IK 2018	2018	LMICs	Both	Combined Exercise	Usual Care	Stroke	2.5	2.5	21	BW	NA	NA
Aylin K 2009	2009	LMICs	Both	Combined Exercise	No Intervention	Type II diabetes	2	2	36	BW	NA	NA
Shaw I 2006	2006	LMICs	Male	Dynamic Resistance Exercise	No Intervention	Coronary Artery Disease	2	2	28	BW	NA	NA
Ferrer-García JC 2011	2011	HICs	Both	Combined Exercise	Usual Care	Type II diabetes	2	6	74	BW	NA	NA
Bahmanbeglo u NA 2019a	2019	LMICs	Male	Dynamic Aerobic Exercise	Usual Care	Hypertension	2	2	15	BW	NA	NA
Bahmanbeglo u NA 2019b	2019	LMICs	Male	Dynamic Aerobic Exercise	Usual Care	Hypertension	2	2	15	BW	NA	NA
Akindele M 2016	2016	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	1.5	1.5	27	BW	60	NA
Daly RM 2005	2005	HICs	Both	Dynamic Resistance Exercise	Usual Care	Type II diabetes	6	6	29	BW	NA	NA
ACTRN12607 000528459	2013	HICs	Both	Tai Chi	Usual Care	Type II diabetes	3	3	40	BW	180	Moderate
Esmaili M 2018	2018	LMICs	Fem ale	Combined Exercise	Usual Care	Type II diabetes	2	2	16	BW	NA	NA
NCT00011193	2009	HICs	Fem ale	Dynamic Aerobic Exercise	No Intervention	Hypertension	6	6	349	BW	NA	NA
Cuff DJ 2003a	2003	HICs	Fem ale	Dynamic Aerobic Exercise	Usual care	Type II diabetes	4	4	14	BW	NA	NA
Cuff DJ 2003b	2003	HICs	Fem ale	Combined Exercise	Usual care	Type II diabetes	4	4	14	BW	NA	NA
Bethell H 1990	1990	HICs	Male	Dynamic Aerobic Exercise	Usual care	Myocardial Infarction	3	3	193	BW	NA	NA
Giannopoulou I 2005	2005	HICs	Fem ale	Dynamic Aerobic Exercise	Usual Care(Cointervention:Diet	Type II diabetes	3.5	3.5	22	BW	NA	NA
Gordon NF 1997	1997	HICs	Both	Dynamic Aerobic Exercise	No Intervention (Diet)	Hypertension	3	3	34	BW	NA	NA
NCT01085773 a	2010	HICs	Both	Combined Exercise	No Intervention	Type II diabetes	4	12	34	BW	NA	NA
NCT01085773 b	2010	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	4	12	31	BW	NA	NA
Kokkinos PF 1995	1995	HICs	Male	Dynamic Aerobic Exercise	Usual care (Drug)	Hypertension	4	8	43	BW	NA	NA

Kwon HR 2011a	2011	HICs	Female	Dynamic Aerobic Exercise	No Intervention	Type II diabetes	3	3	20	BW	NA	NA
Kwon HR 2011b	2011	HICs	Female	Dynamic Resistance Exercise	No Intervention	Type II diabetes	3	3	19	BW	NA	NA
Maiorana A 2000	2000	HICs	Male	Combined Exercise	No Intervention	Chronic Heart Failure	2	2	13	BW	NA	NA
Shantakumari N 2012	2012	LMICs	Both	Yoga	No Intervention (medication)	Type II diabetes	3	3	100	BW	NA	NA
Urata H 1987	1987	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Hypertension	2.5	2.5	20	BW	NA	NA
Wang Z 2014	2014	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Stroke	1.5	1.5	45	BW	NA	NA
Wilhelmsen L 1975	1975	HICs	Both	Dynamic Aerobic Exercise	No Intervention	Myocardial Infarction	3	48	286	BW	90	Vigorous
ISRCTN9216 2869	2014	HICs	Both	Dynamic Aerobic Exercise	Usual Care(Cointervention:Diet	Type II diabetes	6	12	486	BW	NA	NA
NCT02061618	2015	HICs	Female	Dynamic Aerobic Exercise	Usual Care(Waitlist)	Type II diabetes	2	2	23	BW	120	Moderate
NCT02320526 a	2017	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	0.5	0.5	20	BW	300	NA
NCT02320526 b	2017	HICs	Both	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	0.5	0.5	20	BW	300	NA
NCT03919201	2020	HICs	Female	Combined Exercise	No Intervention	Hypertension	3	3	25	BW	NA	NA
Punita P 2016	2016	LMICs	Both	Yoga	Usual Care	Hypertension	3	3	55	BW	NA	NA
Ramos RM 2018	2018	LMICs	Both	Dynamic Aerobic Exercise	Usual Care	Hypertension	3	3	24	BW	NA	NA
Alvarez C 2016	2016	LMICs	Female	Dynamic Aerobic Exercise	Usual Care	Type II diabetes	4	4	23	BW	NA	NA
NCT03254251	2018	HICs	Female	Dynamic Aerobic Exercise	No Intervention	Hypertension	3	3	41	BW	NA	NA
Marra S 1985	1985	HICs	Both	Isometric Resistance Exercise	Usual Care	Myocardial Infarction	2	55	161	BW	NA	NA
Kang SY 2016	2016	HICs	Female	Combined Exercise	Usual Care	Type II diabetes	3	3	16	BW	NA	NA

BW: Body Weight, LMICs: Low-and Middle-Income Countries, HICs: High Income Countries, 6MWT: Six minute walk test, 10MWT: Ten minute walk test, NA: Not Available, BBS: Berg Balance Scale, TUGT: Time Up and Go Test

Text S3: Sensitivity Analysis (Fixed Model; Inverse Variance)

VO₂max: MD:1.46 ml/kg/min; 95%CI 1.41 1.51; p=0.000; I² = 94.1%

6MWT: MD: 15.17 m; 95%CI 13.93 16.40; p=0.000; I² = 91.8%

10MWT: MD: -0.04 m/s; 95%CI -0.052 -0.037; p= 0.000; I² = 90.6%

Body weight: MD: -1.86 kg; 95%CI -1.98 to -1.75; p < 0.01; I² = 86.8%

Table S2: Subgroup analysis for VO₂ max for age and baseline BMI

Subgroups	No. of Studies	MD ml/kg/min (95% CI)	I ² %	p-value
Age				
≤median age (≤59 years)	118	2.83 (2.31 to 3.36)	96.6	< 0.01
>Median age (> 59 years)	103	2.49 (2.02 to 1.97)	94.9	< 0.01
Overall: 2.67 ml/kg/min (2.32 to 3.03); Q = 0.35; p = 0.86				
Baseline BMI				
Normal	12	2.86 (2.31 to 3.42)	20.6	< 0.01
Overweight	51	2.29 (1.49 to 3.09)	96.8	< 0.01
Obese	34	2.54 (1.54 to 3.53)	91.7	< 0.01
Overall: 2.41 ml/kg/min (1.85 to 2.97); Q =1.35; p = 0.51				
Size of trials				
>100 participants	11	3.96 (2.25 to 5.66)	97.1	< 0.01
≤ 100 participants	240	2.65 (2.31 to 3.00)	96.5	< 0.01
Overall: 2.72 ml/kg/min (2.38 to 3.06); Q = 2.14; p = 0.14				
Type of control				
Usual Care	155	2.58 (2.15 to 3.02)	97.3	< 0.01
No Intervention	89	2.99 (2.42 to 3.55)	93.6	< 0.01
Co-intervention (as same to intervention and control group)	7	2.26 (0.40 to 4.13)	86.2	< 0.05
Overall: 2.72 ml/kg/min (2.38 to 3.06); Q=1.43; p=0.49				

Table S3: Subgroup analysis for 6MWT for age and baseline BMI

Subgroups	No. of Studies	MD m (95% CI)	I ² %	p-value
Age				
≤median age (≤59 years)	86	42.46 (33.51 to 51.42)	88.6	< 0.01
>Median age (> 59 years)	19	39.61 (18.97 to 60.24)	84.3	< 0.01
Overall: 2.67 m (2.32 to 3.03); Q=0.35; p=0.86				
Baseline BMI				
Normal	9	20.96 (1.52 to 40.40)	10.5	< 0.05
Overweight	10	50.01 (32.34 to 67.86)	83.2	< 0.01
Obese	25	57.40 (29.74 to 85.06)	88.1	< 0.01
Overall: 46.22 m (33.21 to 59.24); Q = 6.44; p < 0.05				
Size of trials				
>100 participants	14	44.52 (20.24 to 68.80)	99.0	< 0.01
≤ 100 participants	103	41.73 (34.05 to 49.40)	81.1	< 0.01
Overall: 42.5 m (34.95 to 50.06) Q = 0.05; p = 0.83				
Type of control				
Usual Care	89	43.52 (34.63 to 52.41)	41.43	< 0.01
No Intervention	25	36.39 (21.61 to 51.17)	83.80	< 0.01
Co-intervention (as same to intervention and control group)	3	56.72 (11.47 to 101.97)	41.43	= 0.19
Overall: 42.5 m (34.95 to 50.06); Q = 1.07; p=0.59				

Table S4: Subgroup analysis for 10MWT for age, baseline BMI and size of trials

Subgroups	No. of Studies	MD m/s (95% CI)	I ² %	p-value
Age				
≤median age (≤59 years)	16	0.10 (0.05 to 0.15)	61.8	< 0.01
>Median age (> 59 years)	19	0.04 (-0.02 to 0.09)	92.3	= 0.21
Overall: 0.07 m/s (0.03 to 0.11); Q=2.98; p=0.08				
Baseline BMI	Only 5 trials reported on baseline BMI, so the subgroup analysis was not conducted			

Size of trials				
>100 participants	7	0.09(-0.00 to 0.19)	93.3	= 0.06
≤ 100 participants	32	0.06(0.01 to 0.10)	72.3	< 0.05
Overall: 0.06 m/s (0.03 to 0.10); Q = 0.50; p = 0.48;				
Type of control				
Usual Care	30	0.08 (0.04 to 0.12)	91.38	< 0.01
No Intervention	9	0.02 (-0.06 to 0.09)	63.81	=0.66
Co-intervention (as same to intervention and control group)	0	-	-	-
Overall: 0.06 m/s (0.03 to 0.10); Q = 1.93; p =0.16				

Table S5: Subgroup analysis for body weight for age and baseline BMI

Subgroups	No. of Studies	MD kg (95% CI)	I ² %	p-value
Age				
≤median age (≤59 years)	22	-1.88 (-2.99 to -0.77)	25.3	< 0.01
>Median age (> 59 years)	84	-1.41 (-2.14 to -0.69)	90.4	< 0.01
Overall: -1.54 (-2.17 -0.92); Q = 0.47; p = 0.49				
Baseline BMI				
Normal	8	-3.09 (-5.53 to -0.65)	0.0	< 0.05
Overweight	29	-2.97 (-4.38 to -1.57)	85.0	< 0.01
Obese	21	0.35 (-0.96 to 1.65)	74.1	=0.06
Overall: -1.65 kg (-2.68 to -0.61); Q=12.96; p < 0.05				
Size of trials				
>100 participants	8	-2.38 (-3.38 to -1.38)	49.6	< 0.01
≤ 100 participants	161	-1.35 (-1.88 to -0.82)	87.0	< 0.01
Overall: -1.42 kg (-1.91 to -0.92); Q= 3.20; p = 0.07				
Type of control				
Usual Care	82	-1.71 (-2.41 to -1.00)	87.08	< 0.01
No Intervention	75	-1.54 (-2.37 to -0.71)	82.19	< 0.01

Co-intervention (as same to intervention and control group)	12	-0.15 (-2.12 to 1.81)	70.27	0.88
Overall: -1.42 kg (-1.91 to -0.92); Q = 2.13; p = 0.35				

Table S6: Meta-regression on effect of exercise on VO₂max

Covariates	Univariate			Adjusted Model		
	Coefficient	CI	Univariable significance level	Coefficient	CI	Significance level in final model ^a
Type of Exercise (ref: Aerobic Exercise)						
Dynamic Resistance Exercise	-1.64	-2.90 to -0.37	0.01	-1.21	-2.51 to -0.08	0.06
Combined Exercise	-0.99	-1.88 to -0.100	0.03	-0.82	-1.78 to 0.13	0.09
Inspiratory Muscle training	-0.231	-4.73 to 0.088	0.06	-2.09	-4.43 to 0.25	0.08
Body-Mind Therapies	-0.38	-2.84 to 2.08	0.76	-0.14	-2.55 to 2.26	0.91
Isometric Resistance Exercise	-1.23	-6.25 to 3.78	0.63	-0.72	-5.61 to 4.16	0.77
Type of Participants (ref: People with hypertension)						
Type 2 Diabetes	-1.36	-2.77 to 0.05	0.06	-0.63	-2.22 to 0.96	0.44
Hypertension/Type 2 Diabetes/Cardiovascular Disease	0.04	-2.02 to 2.10	0.97	0.68	-1.57 to 2.93	0.55
Cardiovascular Disease	-1.04	-2.31 to 0.22	0.11	-0.52	-1.94 to 0.89	0.46
Age (years)	-0.05	-0.09 to -0.01	0.02	-0.04	-0.09 to 0.00	0.09
BMI (kg/m²)	-0.04	-0.14 to 0.06	0.42			
Length of exercise (months)	-0.04	-0.11 to 0.03	0.29			
Volume of exercise (min/week)	-0.00	-0.01 to 0.01	0.89			

a= No. of observations:221; I²: 93.9%; Wald test: 16.38; p:0.06

Table S7: Meta-regression on effect of exercise on 6MWT

Covariates	Univariate			Adjusted Model		
	Coefficient	CI	Univariable significance level	Coefficient	CI	Significance level in final model ^a
Type of Exercise (ref: Aerobic Exercise)						
Dynamic Resistance Exercise	-10.60	-39.91 to 18.70	0.48	-10.60	-39.91 to 18.70	0.48
Combined Exercise	-1.56	-19.58 to 16.45	0.86	-1.56	-19.58 to 16.45	0.86
Body-Mind Therapies	-28.33	-59.18 to 2.51	0.07	-28.33	-59.18 to 2.51	0.07
Stroke Functional Exercise	-22.90	-86.61 to 40.81	0.48	-22.90	-86.61 to 40.81	0.48
Inspiratory Muscle Training (empty)	9.81	-32.00 to 51.62	0.65	9.81	-32.00 to 51.62	0.65
Type of Participants (ref: People with hypertension)						
Type 2 Diabetes	-11.26	-56.93 to 34.41	0.63			
Hypertension/Type 2 Diabetes/Cardiovascular Disease	-27.38	-91.95 to 37.17	0.41			
Cardiovascular Disease	-15.21	-56.97 to 26.54	0.47			
Age (years)	-0.15	-0.54 to -0.24	0.45			
BMI (kg/m²)	-0.29	-0.23 to 0.82	0.28			
Length of exercise (months)	-0.64	-2.38 to 1.10	0.47			
Volume of exercise (min/week)	-0.02	-0.10 to 0.06	0.68			

a=No. of observation:117; I²:91.47; Wald test; p:0.50

Table S8: Meta-regression on effect of exercise on 10MWT

Covariates	Univariate			Adjusted Model		
	Coefficient	CI	Univariable significance level	Coefficient	CI	Significance level in final model ^a
Type of Exercise (ref: Aerobic Exercise)						
Dynamic Resistance Exercise	0.01	-0.08 to 0.11	0.75	0.01	-0.08 to 0.11	0.75
Combined Exercise	-0.04	-0.16 to 0.08	0.51	-0.04	-0.16 to 0.08	0.51
Body-Mind Therapies	-0.16	-0.38 to 0.58	0.15	-0.16	-0.38 to 0.58	0.15
Stroke Functional Exercise	0.12	-0.01 to 0.25	0.07	0.12	-0.01 to 0.25	0.07
Isometric Resistance Exercise	-0.16	-0.46 to 0.14	0.29	-0.16	-0.46 to 0.14	0.29
Type of Participants (ref: People with CVD/stroke)						
Type 2 Diabetes	-0.12	-0.28 to 0.03	0.13			
Age (years)	0.00	-0.00 to -0.00	0.74			
BMI (kg/m²)	0.00	-0.00 to 0.00	0.43			
Length of exercise (months)	0.00	-0.07 to 0.79	0.98			
Volume of exercise (min/week)	10 observations only					

a=No. of observation:39; I²: 74.7%; Wald test:7.85; p:0.16

Table S9: Meta-regression on effect of exercise on body weight

Covariates	Univariate			Adjusted Model		
	Coefficient	CI	Univariable significance level	Coefficient	CI	Significance level ^a
Type of Exercise (ref: Aerobic Exercise)						
Dynamic Resistance Exercise	1.32	-0.24 to 2.88	0.09	1.32	-0.24 to 2.88	0.09
Combined Exercise	-0.12	-1.49 to 1.25	0.86	-0.12	-1.49 to 1.25	0.86
Body-Mind Therapies	0.08	-1.97 to 2.13	0.94	0.08	-1.97 to 2.13	0.94
Isometric Resistance Exercise	-0.93	-6.33 to 4.46	0.73	-0.93	-6.33 to 4.46	0.73
Type of Participants (ref: People with Type 2 Diabetes)						
Hypertension	0.24	-1.10 to 1.58	0.73			
Hypertension/Type 2 Diabetes/Cardiovascular Disease	-1.45	-5.41 to 2.52	0.47			
Cardiovascular Disease	0.82	-0.56 to 2.19	0.24			
Age (years)	-0.00	-0.02 to -0.02	0.99			
BMI (kg/m²)	-0.00	-0.04 to 0.04	0.92			
Length of exercise (months)	-0.03	-0.08 to 0.14	0.61			
Volume of exercise (min/week)	-0.00	-0.02 to 0.02	0.97			

a=No. of observation:169; I²: 86.9%; Wald test: 3.23; p:0.52