

Supplementary online Table 1. Descriptives of studies evaluating the effects of exercise on physical fitness.

Author (year) Acronym	Country	N	Age, mean (SD)	Sex (% female)	Diagnosis	Intervention			Exercise	Outcome	Blinding
						Timing	Delivery mode	Duration (weeks)			
Arbane (2011) [1]	UK	51	64.0 (11.0)	48.1	Lung	Following	Unsupervised	12	F: ? I: moderate T: RE+AE T: ?	Aerobic fitness	+
Cormie (2015) [2]	AUS	64	68.4 (7.1)	0	Prostate	Following ADT	Supervised	12	F: 2x/week I: moderate-vigorous T: RE+AE T: 60 min	LBMS UBMS LBMF Aerobic fitness	-
Courneya (2003) [3] <i>CANHOPE</i>	CAN	102	60.2 (10.8)	41.2	Colorectal	During or following	Unsupervised	16	F: 3-5x/week I: moderate T: AE T: 20-30 min	UBMS Aerobic fitness	-
Courneya (2003) [4] <i>REHAB</i>	CAN	52	58.6 (5.7)	100	Breast	Following	Supervised	15	F: 3x/week I: moderate-vigorous T: AE T: 15-35 min	UBMS	-
Courneya (2007) [5] <i>START</i>	CAN	242	49.2 (9.3)	100	Breast	During CT	Supervised	Median: 17	F: 3x/week I: moderate-vigorous T: AE vs RE T: AE: 15-45 min	LBMS UBMS Aerobic fitness	-
Courneya (2009) [6] <i>HELP</i>	CAN	122	53.2 (14.8)	41.0	Haematological	During or following	Supervised	12	F: 3x/week I: moderate-vigorous T: AE T: 15-45 min	Aerobic fitness	-
Daley (2007) [7]	UK	108	51.1 (8.6)	100	Breast	Following	Supervised	8	F: 3x/week I: moderate-vigorous T: AE T: 50 min	LBMS Aerobic fitness	-
Galvão (2010) [8]	AUS	57	69.8 (7.3)	0	Prostate	During ADT	Supervised	12	F: 2x/week I: moderate T: RE+AE T: 60 min	LBMS UBMS LBMF Aerobic fitness	-

Supplementary online Table 1 (continued)

Author (year) Acronym	Country	N	Age, mean (SD)	Sex (% female)	Diagnosis	Intervention			Exercise FITT	Outcome	Quality Blinding
						Timing	Delivery mode	Duration (weeks)			
Galvão (2014) [9] <i>RADAR-exercise</i>	AUS	100	71.7 (6.4)	0	Prostate	Following ADT	Supervised	24	F: 2x/week I: moderate-vigorous T: RE+AE T: 60 min	LBMS UBMS LBMF Aerobic fitness	-
Griffith (2009) [10]	USA	126	60.2 (10.6)	38.9	Mixed	During CT, RT or both	Unsupervised	Mean: 12.8	F: 5x/week I: low-moderate T: AE T: 25-35min	Aerobic fitness	+
Hayes (2013) [11] <i>Exercise for Health</i>	AUS	194	52.4 (8.5)	100	Breast	During and/or following	Unsupervised	35	F: aim: ≥ 4x/week I: moderate T: RE+AE T: 20-45 min	UBMS Endurance	+
Herrero (2006) [12]	Spain	16	50.9 (8.1)	100	Breast	Following	Supervised	8	F: 3x/week I: moderate-vigorous T: RE+AE T: 90 min	LBMS UBMS LBMF Aerobic fitness	+
Kampshoff (2015) [13] <i>REACT</i>	NL	277	53.5 (11.0)	80.1	Mixed	Following	Supervised	12	F: 2x/week I: moderate vs vigorous T: RE+AE T: 60 min	UBMS LBMF AF	+
Mehnert (2011) [14]	GER	58	51.9 (8.5)	100	Breast	Following	Supervised	10	F: 2x/week I: moderate T: AE + gymnastics + movement games + relaxation T: 90 min	Aerobic fitness	-
Mutrie (2007) [15]	UK	201	51.6 (9.5)	100	Breast	During CT and/or RT	Supervised	12	F: 2 supervised (+ 1 unsupervised) I: low-moderate T: RE+AE T: 45 min	Aerobic fitness	+

Supplementary online Table 1 (continued)

Author (year) Acronym	Country	N	Age, mean (SD)	Sex (% female)	Diagnosis	Intervention			Exercise	Outcome	Quality
						Timing	Delivery mode	Duration (weeks)	FITT		Blinding
Newton (2009) [16];Wall (2017) [17]	AUS	154	69.0 (9.0)	0	Prostate	During ADT	Supervised	24	F: 2x/week I: moderate-vigorous T: RE+AE vs RE+impact T: 60 min	LBMS UBMS LBMF Aerobic fitness	-
Ohira (2006) [18] WTBS	USA	86	52.7 (8.3)	100	Breast	Following	Supervised	24 (13 super- vised)	F: 2x/week I: ? T: RE T: ?	LBMS UBMS	+
Persoon (2017) [19] EXIST	NL	109	52.4 (11.2)	36.7	Haematological	Following SCT	Supervised	18	F: 2x/week I: moderate-vigorous T: RE+AE T: 60 min	LBMS UBMS LBMF Aerobic fitness	+
Schmidt (2015) [20] BEATE	GER	88	52.5 (10.0)	100	Breast	During adjuvant CT	Supervised	12	F: 2x/week I: moderate-vigorous T: RE T: 60 min	LBMS	-
Speck (2010) [21] PAL	USA	295	56.0 (8.8)	100	Breast	Following	Supervised	52 (13 super- vised)	F: 2x/week I: ? T: RE T: 90 min	LBMS UBMS	+
Steindorf (2014) [22]; Wiskemann (2017) [23] BEST	GER	141	56.3 (8.9)	100	Breast	During RT	Supervised	12	F: 2x/week I: moderate-vigorous T: RE T: 60 min	LBMS	-
Thorsen (2005) [24]	NOR	139	39.4 (8.3)	66.9	Mixed	Following	Unsupervised	14	F: 2x/week or more I: moderate-vigorous T: RE+AE T: aim 30min	Aerobic fitness	-
Travier (2015) [25]; van Vulpen (2016) [26] PACT	NL	237	50.7 (8.8)	91.1	Breast and Colorectal	During adjuvant treatment including CT	Supervised	18	F: 2x/week I: moderate-vigorous T: RE+AE T: 60 min	LBMS UBMS Aerobic fitness	+

Supplementary online Table 1 (continued)

Author (year) Acronym	Country	N	Age, mean (SD)	Sex (% female)	Diagnosis	Intervention			Exercise	Outcome	Quality Blinding
						Timing	Delivery mode	Duration (weeks)	FITT		
Van Waart (2015) [27]; van Waart (2017) [28] PACES	NL	253	51.4 (9.5)	95.7	Breast and Colorectal	During CT	Unsupervised vs supervised	Mean: 15.9	F: supervised: 2x/week; unsupervised towards 5x/week I: supervised: moderate-vigorous Unsupervised: moderate T: supervised: RE+AE; unsupervised: AE T: supervised: 60min; unsupervised: aim 30 min	LBMS UBMS LBMF Aerobic fitness	-
Winters-Stone (2012) [29]	USA	106	62.2 (6.7)	100	Breast	Following	Supervised	52	F: 2x/week supervised (+ 1x/week unsupervised) I: moderate-vigorous T: RE+impact T: 60 min	LBMS UBMS LBMF	+
Winters-Stone (2013) [30]	USA	71	46.4 (4.9)	100	Breast	Following	Supervised	52	F: 2x/week supervised (+ 1x/week unsupervised) I: moderate T: RE+impact T: 60 min	LBMS UBMS LBMF	+
Winters-Stone (2015) [31]	USA	51	70.1 (8.6)	0	Prostate	During ADT	Supervised	52	F: 2x/wk supervised (+ 1x/week unsupervised) I: moderate T: RE+impact T: 60 min	LBMS UBMS LBMF	+

Supplementary online Table 1 (continued)

Author (year) Acronym	Country	N	Age, mean (SD)	Sex (% female)	Diagnosis	Intervention			Exercise	Outcome	Quality Blinding
						Timing	Delivery mode	Duration (weeks)	FITT		
Wiskemann (2011) [32]	GER	80	48.4 (14.4)	31.3	Haematological	Pre-during- following	Supervised	Median exercise: 16.4 Control: 15.7	F: 5x/week I: moderate- vigorous T: RE+AE T: AE: 20-40 min	LBMS UBMS	-

*Personal communication with authors. ‡ quality rating could not be performed because paper is not yet published.

F = frequency, I = intensity, T = type/time, min = minutes, ADT= androgen deprivation therapy; AE= aerobic exercise training; CT= chemotherapy; LBMF= lower body muscle function; LBMS= lower body muscle strength;; RE= resistance exercise training; RT= radiotherapy; UBMS= upper body muscle strength.

Blinding: + = blinding of outcome assessor; - = no blinding of outcome assessor

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