

## **Supplementary material | Table of Contents**

<b>Supplementary Table S1.</b> Search strategy for PubMed database.....	2
<b>Supplementary Table S2.</b> Search strategy for Cochrane Library database.....	4
<b>Supplementary Table S3.</b> Search strategy for EMBASE database.....	6
<b>Supplementary Table S4.</b> Search strategy for Web of Science database.....	8
<b>Supplementary Table S5.</b> Search strategy for CNKI database.....	9
<b>Supplementary Table S6.</b> Search strategy for Wanfang database.....	10
<b>Supplementary Table S7.</b> Search strategy for VIP database.....	11
<b>Supplementary Table S8.</b> Search strategy for SinoMed database.....	12
<b>Supplementary Table S9.</b> Risk of bias assessment using ROB 2.0 tool.....	13
<b>Supplementary Figure S1.</b> Results of pairwise comparison on PSQI.....	16
<b>Supplementary Figure S2.</b> Results of pairwise comparison on TST.....	17
<b>Supplementary Figure S3.</b> Results of pairwise comparison on SE.....	18
<b>Supplementary Figure S4.</b> Results of pairwise comparison on SL.....	19
<b>Supplementary Figure S5.</b> Funnel plots for PSQI, TST, SE, and SL.....	20
<b>Supplementary Figure S6.</b> Average SUCRA values for PSQI.....	21
<b>Supplementary Figure S7.</b> Average SUCRA values for TST.....	21
<b>Supplementary Figure S8.</b> Average SUCRA values for SE.....	22
<b>Supplementary Figure S9.</b> Average SUCRA values for SL.....	22
<b>Supplementary Figure S10.</b> Sensitivity analysis results.....	23
<b>Supplementary Figure S11.</b> Subgroup analysis based on treatment duration.....	24
<b>Supplementary Figure S12.</b> Subgroup analysis based on disease course.....	25

**Supplementary Table S1.** Search strategy for PubMed database

No.	Search terms	Results
#1	"Sleep Initiation and Maintenance Disorders"[MeSH Terms]	17772
#2	"primary insomnia"[Title/Abstract] OR "DIMS"[Title/Abstract]	1362
#3	#1 OR #2	18336
#4	"Cognitive Behavioral Therapy"[MeSH Terms] OR "Behavior Therapy"[MeSH Terms]	89349
#5	"relaxation"[Title/Abstract] OR "biofeedback"[Title/Abstract] OR "mindfulness"[Title/Abstract]	154694
#6	#4 OR #5	228213
#7	"Benzodiazepines"[MeSH Terms]	69671
#8	"benzodiazepine compounds"[Title/Abstract] OR "BZ"[Title/Abstract] OR "BZRAs"[Title/Abstract] OR "NBZRAs"[Title/Abstract]	4596
#9	#7 OR #8	73538
#10	"antidepressant"[Title/Abstract]	52990
#11	"Melatonin"[Title/Abstract]	29867
#12	"antihistamine"[Title/Abstract]	6179
#13	"orexin"[Title/Abstract]	5329
#14	#10 OR #11 OR #12 OR #13	93650
#15	"Phototherapy"[MeSH Terms]	53356
#16	"light therapy"[Title/Abstract] OR "photoradiation therapy"[Title/Abstract]	2986
#17	#15 OR #16	54761
#18	"Exercise Therapy"[MeSH Terms] OR "Exercise"[MeSH Terms]	283705
#19	"physical exercise"[Title/Abstract]	20668
#20	#18 OR #19	293854
#21	"Acupuncture Therapy"[MeSH Terms] OR "Acupuncture"[MeSH Terms]	29941
#22	"acupuncture ear"[Title/Abstract] OR "Electroacupuncture"[Title/Abstract] OR "fire needle"[Title/Abstract] OR "dry needle"[Title/Abstract]	6962
#23	#21 OR #22	31388
#24	"Acupressure"[Title/Abstract]	1556
#25	"Aromatherapy"[Title/Abstract]	1663
#26	"foot reflexology"[Title/Abstract]	137
#27	"Homeopathy"[Title/Abstract]	3728
#28	"meditative movement therapy"[Title/Abstract]	3
#29	"Moxibustion"[Title/Abstract]	3674
#30	#24 OR #25 OR #26 OR #27 OR #28 OR #29	10554
#31	"Music Therapy"[MeSH Terms]	4312

#32	"Musicotherapy"[Title/Abstract] OR "melodiotherapy"[Title/Abstract]	19
#33	#31 OR #32	4325
#34	"Yoga"[MeSH Terms] OR "Muscle Stretching Exercises"[MeSH Terms]	5799
#35	"relaxed stretching"[Title/Abstract]	1
#36	#34 OR #35	5799
#37	"random*"[Title/Abstract]	1443118
#38	"randomized controlled trial"[Publication Type]	599205
#39	#40 OR #41	1573279
#40	#6 OR #9 OR #14 OR #17 OR #20 OR #23 OR #30 OR #33 OR #36 OR #39	837904
#41	#3 AND #39 AND #40	1782

**Supplementary Table S2.** Search strategy for Cochrane Library database

No.	Search terms	Results
#1	MeSH descriptor: [Sleep Initiation and Maintenance Disorders] explode all trees	3302
#2	(primary insomnia):ti,ab,kw OR (DIMS):ti,ab,kw	5750
#3	#1 OR #2	8132
#4	MeSH descriptor: [Cognitive Behavioral Therapy] explode all trees	12999
#5	MeSH descriptor: [Behavior Therapy] explode all trees	23140
#6	(relaxation):ti,ab,kw OR (biofeedback):ti,ab,kw OR (mindfulness):ti,ab,kw	26582
#7	#4 OR #5 OR #6	44087
#8	MeSH descriptor: [Benzodiazepines] explode all trees	10606
#9	(benzodiazepine compounds):ti,ab,kw OR (BZ):ti,ab,kw OR (BZRAs):ti,ab,kw OR (NBZRAs):ti,ab,kw	306
#10	#8 OR #9	10781
#11	antidepressant	12276
#12	Melatonin	3794
#13	antihistamine	2046
#14	orexin	455
#15	#11 OR #12 OR #13 OR #14	18374
#16	MeSH descriptor: [Phototherapy] explode all trees	4432
#17	(light therapy):ti,ab,kw OR (photoradiation therapy):ti,ab,kw	11316
#18	#17 OR #18	13122
#19	MeSH descriptor: [Exercise Therapy] explode all trees	19663
#20	MeSH descriptor: [Exercise] explode all trees	38402
#21	(physical exercise):ti,ab,kw	50659
#22	#19 OR #20 OR #21	77156
#23	MeSH descriptor: [Acupuncture Therapy] explode all trees	6450
#24	MeSH descriptor: [Acupuncture] explode all trees	713
#25	MeSH descriptor: [Electroacupuncture] explode all trees	1158
#26	MeSH descriptor: [Acupuncture, Ear] explode all trees	241
#27	(dry needle):ti,ab,kw OR (fire needle):ti,ab,kw	626
#28	#23 OR #24 OR #25 OR #26 OR #27	7560
#29	Acupressure	2155
#30	Aromatherapy	1513
#31	foot reflexology	488
#32	Homeopathy	1041
#33	meditative movement therapy	29
#34	Moxibustion	6443
#35	#29 OR #30 OR #31 OR #32 OR #33 OR #34	11419
#36	MeSH descriptor: [Music Therapy] explode all trees	1233
#37	(Musicotherapy):ti,ab,kw OR (melodiotherapy):ti,ab,kw	14

#38	#36 OR #37	1247
#39	MeSH descriptor: [Yoga] explode all trees	1210
#40	MeSH descriptor: [Muscle Stretching Exercises] explode all trees	785
#41	(relaxed stretching):ti,ab,kw	75
#42	#39 OR #40 OR #41	2048
#43	MeSH descriptor: [Randomized Controlled Trial] explode all trees	25743
#44	(random*):ti,ab,kw	1256032
#45	#43 OR #44	1256032
#46	#7 OR #10 OR #15 OR #18 OR #28 OR #35 OR #38 OR #42 OR #45	178247
#47	#3 AND #45 AND #46	2118

**Supplementary Table S3.** Search strategy for EMBASE database

No.	Search terms	Results
#1	'primary insomnia'/exp	799
#2	'sleep initiation and maintenance disorders':ti,kw,ab OR 'dims':ti,ab,kw	900
#3	#1 OR #2	1691
#4	'cognitive behavioral therapy'/exp	27343
#5	'behavior therapy'/exp	76513
#6	'relaxation':ab,ti OR 'biofeedback':ab,ti OR 'mindfulness':ab,ti	174018
#7	#4 OR #5 OR #6	245716
#8	'benzodiazepine'/exp	32071
#9	'benzodiazepine compounds':ab,ti OR 'bz':ti,ab OR 'bzras':ti,ab	5461
#10	#8 OR #9	37259
#11	'antidepressant':ti,ab	73489
#12	'melatonin':ti,ab	36580
#13	'antihistamine':ti,ab	9262
#14	'orexin':ti,ab	6976
#15	#11 OR #12 OR #13 OR #14	125309
#16	'chinese medicine'/exp	73693
#17	'drugs, chinese herbal':ti,ab OR 'medicine, chinese traditional':ti,ab OR 'chinese drugs, plant':ti,ab OR 'chinese herbal medicine':ti,ab	6292
#18	#16 OR #17	76493
#19	'phototherapy'/exp	115423
#20	'light therapy':ti,ab OR 'photoradiation therapy':ti,ab	3614
#21	#19 OR #20	116040
#22	'exercise'/exp	442682
#23	'exercise therapy':ab,ti OR 'physical exercise':ab,ti	33020
#24	#22 OR #23	452967
#25	'acupuncture'/exp	57395
#26	'electroacupuncture':ab,ti OR 'dry needle':ab,ti OR 'fire needle':ab,ti OR 'acupoint':ab,ti	12425
#27	#25 OR #26	58592
#28	'acupressure':ab,ti	2020
#29	'aromatherapy':ab,ti	2324
#30	'foot reflexology':ab,ti	215
#31	'homeopathy':ab,ti	4754
#32	'meditative movement therapy':ab,ti	2
#33	'moxibustion':ab,ti	4632
#34	#28 OR #29 OR #30 OR #31 OR #32 OR #33	13648
#35	'music therapy'/exp	9000
#36	'musicotherapy':ti,ab OR ':melodiotherapy':ti,ab	85
#37	#35 OR #36	9024

#38	'yoga'/exp OR 'muscle stretching exercises'/exp	16083
#39	'relaxed stretching':ti,ab	0
#40	#38 OR #39	16083
#41	'randomized controlled trial'/exp	780683
#42	'random*':ab,ti	1957635
#43	#41 OR #42	2074075
#44	#7 OR #10 OR #15 OR #18 OR #21 OR #24 OR #27 OR #34 OR #37 OR #40	1094934
#45	#3 AND #43 AND #44	171

**Supplementary Table S4.** Search strategy for Web of Science database

No.	Search terms	Results
#1	TS=((primary insomnia) OR (sleep initiation and maintenance disorders) OR (DIMS))	30667
#2	TS=((Behavior Therapy) OR (Cognitive Behavioral Therapy) OR (relaxation) OR (biofeedback) OR (mindfulness))	626350
#3	TS=((benzodiazepine) OR (benzodiazepine compounds) OR (BZ) OR (BZRAs) OR (NBZRAs))	39115
#4	TS=(antidepressant )	89276
#5	TS=(melatonin )	43307
#6	TS=(antihistamine )	11860
#7	TS=(orexin )	7737
#8	TS=((phototherapy ) OR (light therapy) OR (photoradiation therapy))	82500
#9	TS=((Exercise) OR (Exercise Therapy) OR (physical exercise))	570837
#10	TS=((Acupuncture) OR (Acupuncture Therapy) OR (Acupuncture, Ear) OR (Electroacupuncture) OR (dry needle) OR (fire needle) OR (acupoint) )	34841
#11	TS=(acupressure )	1873
#12	TS=(aromatherapy )	2222
#13	TS=(foot reflexology )	270
#14	TS=(homeopathy )	3729
#15	TS=(meditative movement therapy )	45
#16	TS=(moxibustion )	2295
#17	TS=((music therapy ) OR (musicotherapy) OR (melodiotherapy))	8389
#18	TS=((yoga ) OR (muscle stretching exercises) OR (relaxed stretching))	15024
#19	TS=((random*) OR (Randomized Controlled Trial))	2335009
#20	#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	1543165
#21	#1 AND #19 AND #20	1484

**Supplementary Table S5.** Search strategy for CNKI database

No.	Search terms	Results
#1	TKA='原发性失眠' OR TKA='特发性失眠' OR TKA='心理生理性失眠' OR TKA='老年性失眠' OR TKA='睡眠障碍'	75459
#2	TKA = '行为治疗' OR TKA = '行为疗法' OR TKA = '认知疗法' OR TKA = '放松疗法' OR TKA = '放松训练' OR TKA = '生物反馈' OR TKA = '正念减压'	65097
#3	TKA = '苯二氮卓' OR TKA = 'BZ' OR TKA = 'BZRAs' OR TKA = '抗抑郁' OR TKA = '抗组胺' OR TKA = '褪黑素' OR TKA = '食欲素'	41996
#4	TKA = '运动疗法' OR TKA = '运动'	2905797
#5	TKA = '光照疗法' OR TKA = '光照'	145233
#6	TKA = '针灸' OR TKA = '针刺' OR TKA = '针法' OR TKA = '火针' OR TKA = '耳针' OR TKA = '电针' OR TKA = '干针' OR TKA = '穴位按摩' OR TKA = '推拿'	284289
#7	TKA = '芳香疗法' OR TKA = '精油' OR TKA = '香薰' OR TKA = '薰洗'	11204
#8	TKA = '足部反射疗法' OR TKA = '足部穴位' OR TKA = '足部按摩'	766
#9	TKA = '顺势疗法' OR TKA = '冥想运动疗法' OR TKA = '功法' OR TKA = '太极' OR TKA = '八段锦'	13000
#10	TKA = '艾灸' OR TKA = '隔物灸' OR TKA = '艾条灸' OR TKA = '雀啄灸' OR TKA = '回旋灸' OR TKA = '麦粒灸' OR TKA = '瘢痕灸' OR #12 TKA = '悬起灸' OR TKA = '艾炷灸' OR TKA = '热敏灸'	19052
#11	TKA = '音乐疗法' OR TKA = '音乐'	342381
#12	TKA = '瑜伽' OR TKA = '舒展运动' OR TKA = '放松'	50437
#13	TKA = '随机对照' OR TKA = '随机' OR TKA = 'RCT'	3649722
#14	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	4876877
#15	#1 AND #13 AND #14	1554

**Supplementary Table S6.** Search strategy for Wanfang database

No.	Search terms	Results
#1	题名或关键词:(原发性失眠 OR 特发性失眠 OR 心理生理 性失眠 OR 老年性失眠 OR 睡眠障碍 )	13014
#2	主题:(行为治疗 OR 行为疗法 OR 认知疗法 OR 放松疗法 OR 放松训练 OR 生物反馈 OR 正念减压 )	26645
#3	主题:(苯二氮卓 OR BZ OR BZAs OR 抗抑郁 OR 抗组 胺 OR 褪黑素 OR 食欲素 )	47463
#4	主题:(运动疗法 OR 运动 )	790
#5	主题:(光照疗法 OR 光照 )	92049
#6	主题:(针灸 OR 针刺 OR 针法 OR 火针 OR 耳针 OR 电 针 OR 干针 OR 穴位)	622441
#7	主题:(芳香疗法 OR 精油 OR 香薰 OR 薰洗)	35577
#8	主题:(足部反射疗法 OR 足部穴位 OR 足部按摩)	2021
#9	主题:(顺势疗法 OR 冥想运动疗法 OR 功法 OR 太极 OR 八段锦)	2910528
#10	主题:(艾灸 OR 隔物灸 OR 艾条灸 OR 雀啄灸 OR 回旋 灸 OR 麦粒灸 OR 瘢痕灸 OR 悬起灸 OR 艾炷灸 OR 热 敏灸)	18836
#11	主题:(音乐疗法 OR 音乐)	674747
#12	主题:(瑜伽 OR 舒展运动 OR 放松)	73356
#13	主题:(随机对照 OR 随机 OR RCT)	2720724
#14	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12	4792067
#15	#1 AND #13 AND #14	1648

**Supplementary Table S7.** Search strategy for VIP database

No.	Search terms	Results
#1	M=(原发性失眠 OR 特发性失眠 OR 心理生理性失眠 OR 老年性失眠 OR 睡眠障碍 )	13,491
#2	M=(行为治疗 OR 行为疗法 OR 认知疗法 OR 放松疗法 OR 放松训练 OR 生物反馈 OR 正念减压 )	17,652
#3	M=(苯二氮卓 OR BZ OR BZRAs OR 抗抑郁 OR 抗组胺 OR 褪黑素 OR 食欲素 )	15,321
#4	M=(运动疗法 OR 运动 )	6,714
#5	M=(光照疗法 OR 光照 )	21,638
#6	M=(针灸 OR 针刺 OR 针法 OR 火针 OR 耳针 OR 电针 OR 干针 OR 穴位)	209,101
#7	M=(芳香疗法 OR 精油 OR 香薰 OR 薰洗)	8,926
#8	M=(足部反射疗法 OR 足部穴位 OR 足部按摩)	902
#9	M=(顺势疗法 OR 冥想运动疗法 OR 功法 OR 太极 OR 八段锦)	27,880
#10	M=(艾灸 OR 隔物灸 OR 艾条灸 OR 雀啄灸 OR 回旋灸 OR 麦粒灸 OR 瘢痕灸 OR 悬起灸 OR 艾炷灸 OR 热敏灸)	13,140
#11	M=(音乐疗法 OR 音乐)	402,976
#12	M=(瑜伽 OR 舒展运动 OR 放松)	19,709
#13	U=(随机对照 OR 随机 OR RCT)	2,272,274
#14	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13	1,009,937
#15	#1 AND #13 AND #14	815

**Supplementary Table S8. Search strategy for SinoMed database**

No.	Search terms	Results
#1	"入睡和睡眠障碍"[加权:扩展] OR "原发性失眠"[常用字段:智能] OR "特发性失眠"[常用字段:智能] OR "心理生理性失眠"[常用字段:智能] OR "老年性失眠"[常用字段:智能]	37120
#2	"行为疗法"[加权:扩展] OR "认知疗法"[加权:扩展] OR "行为治疗"[常用字段:智能] OR "放松疗法"[常用字段:智能] OR "放松训练"[常用字段:智能] OR "生物反馈"[常用字段:智能] OR "正念减压"[常用字段:智能]	20294
#3	"苯二氮卓"[常用字段:智能] OR "BZ"[常用字段:智能] OR "BZRAs"[常用字段:智能] OR "抗抑郁"[常用字段:智能] OR "抗组胺"[常用字段:智能] OR "褪黑素"[常用字段:智能] OR "食欲素"[常用字段:智能]	22503
#4	"运动疗法"[加权:扩展] OR "运动"[常用字段:智能]	318397
#5	"光疗法"[加权:扩展] OR "光照"[常用字段:智能]	18398
#6	"针灸疗法"[加权:扩展] OR "针灸"[常用字段:智能] OR "针刺"[常用字段:智能] OR "针法"[常用字段:智能] OR "火针"[常用字段:智能] OR "耳针"[常用字段:智能] OR "电针"[常用字段:智能] OR "干针"[常用字段:智能] OR "穴位"[常用字段:智能]	299663
#7	"芳香疗法"[加权:扩展] OR "精油"[常用字段:智能] OR "香薰"[常用字段:智能] OR "薰洗"[常用字段:智能]	14065
#8	"足部反射疗法"[加权:扩展] OR "足部穴位"[常用字段:智能] OR "足部按摩"[常用字段:智能]	283
#9	"顺势疗法"[加权:扩展] OR "冥想运动疗法"[加权:扩展] OR "太极"[常用字段:智能] OR "八段锦"[常用字段:智能] OR "功法"[常用字段:智能]	4928
#10	"灸法"[加权:扩展] OR "艾灸"[常用字段:智能] OR "隔物灸"[常用字段:智能] OR "艾条灸"[常用字段:智能] OR "雀啄灸"[常用字段:智能] OR "回旋灸"[常用字段:智能] OR "麦粒灸"[常用字段:智能] OR "瘢痕灸"[常用字段:智能] OR "悬起灸"[常用字段:智能] OR "艾炷灸"[常用字段:智能] OR "热敏灸"[常用字段:智能]	20314
#11	"音乐疗法"[加权:扩展] OR "音乐"[常用字段:智能]	8457
#12	"瑜伽"[加权:扩展] OR "舒展运动"[常用字段:智能] OR "放松"[常用字段:智能]	7096
#13	"随机对照试验"[加权:扩展] OR "随机"[常用字段:智能] OR "随机对照"[常用字段:智能] OR "RCT"[常用字段:智能]	1895053
#14	#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13	1440074
#15	#1 AND #13 AND #14	2785

**Supplementary Table S9.** Risk of bias assessment using ROB 2.0 tool

Study	Randomization process	Deviations from intended interventions	Missing outcome data	Outcome measurement	Selection of reported result	Overall Bias
Cao-Y 2020	Some concerns	Low	Low	Low	Low	Some concerns
Gao-SF 2016	Some concerns	Low	Low	Some concerns	Low	Some concerns
Tang-HL 2015	Some concerns	Low	Low	Low	Low	Some concerns
Li-Yj 2019	Some concerns	Low	Low	Low	Low	Some concerns
Wang-N 2024	Low	Low	Low	Low	Low	Low
Zhang-HJ 2010	Some concerns	Low	Low	Low	Low	Some concerns
Zhao-J 2020	Some concerns	Low	Low	Low	Low	Some concerns
Lin-JZ 2012	Some concerns	Low	Low	Low	Low	Some concerns
Xuan-YB 2007	Low	Low	Low	Low	Low	Low
Li-L 2019	Some concerns	Low	Low	Low	Low	Some concerns
Wang-JP 2015	Some concerns	Low	Low	Low	Low	Some concerns
Zhang-JX 2015	Some concerns	Low	Low	Low	Low	Some concerns
Feng-XJ 2017	Some concerns	Low	Low	Low	Low	Some concerns
Tu-JH 2012	Low	Low	Low	Low	Low	Low
Xu-P 2015	Low	Low	Low	Low	Low	Low
Jespersen-K 2019	Some concerns	Low	Low	Low	Low	Some concerns
Jacobs-GD 2004	Low	Low	Low	Low	Low	Low
Edinger-JD 2001	Some concerns	Low	Low	Low	Low	Some concerns
Liang-XM 2017	Low	Low	Low	Low	Low	Low
Yu-XP 2019	Low	Low	Low	Low	Low	Low
Siu-PM 2021	Some concerns	Low	Low	Low	Low	Some concerns
Christina-S 2007	Some concerns	Low	Low	Low	Low	Some concerns

Yin-X 2017	Some concerns	Low	Low	Low	Low	Some concerns
Lee-B 2020	Low	Low	Low	Low	Low	Low
Edinger-JD 2009	Some concerns	Low	Low	Low	Low	Some concerns
Ritterband-LM 2009	Low	Low	Low	Low	Low	Low
Yeung-WF 2009	Some concerns	Low	Low	Low	Low	Some concerns
Van -SA 2014	Low	Low	Low	Low	Low	Low
Scharf-MB 2007	Some concerns	Low	Low	Low	Low	Some concerns
Feng-F 2019	Some concerns	Low	Low	Low	Low	Some concerns
Espie-CA 2012	Low	Low	Low	Low	Low	Low
Jernelov-S 2012	Some concerns	Low	Low	Low	Low	Some concerns
Yeung-WF 2021	Some concerns	Low	Low	Low	Low	Some concerns
Kaldo-V 2015	Some concerns	Low	Low	Low	Low	Some concerns
Lichstein-KL 2001	Some concerns	Low	Low	Low	Low	Some concerns
Khalsa-SBS 2021	Low	Low	Low	Low	Low	Low
Riemann-D 2002	Low	Low	Low	Low	Low	Low
Lovato-N 2014	Low	Low	Low	Low	Low	Low
Passos-GS 2010	Some concerns	Low	Low	Low	Low	Some concerns
Lo-C 2013	Some concerns	Low	Low	Low	Low	Some concerns
Morin-CM 1999	Low	Some concerns	Low	Low	Low	Some concerns
WU-R 2006	Some concerns	Low	Low	Low	Low	Some concerns
Fu-C 2017	Some concerns	Low	Low	Low	Low	Some concerns
Espie-CA 2007	Some concerns	Low	Low	Low	Low	Some concerns
Abedian-Z 2015	Low	Low	Low	Low	Low	Low
Huang-ZY	Low	Low	Low	Low	Low	Some concerns

---

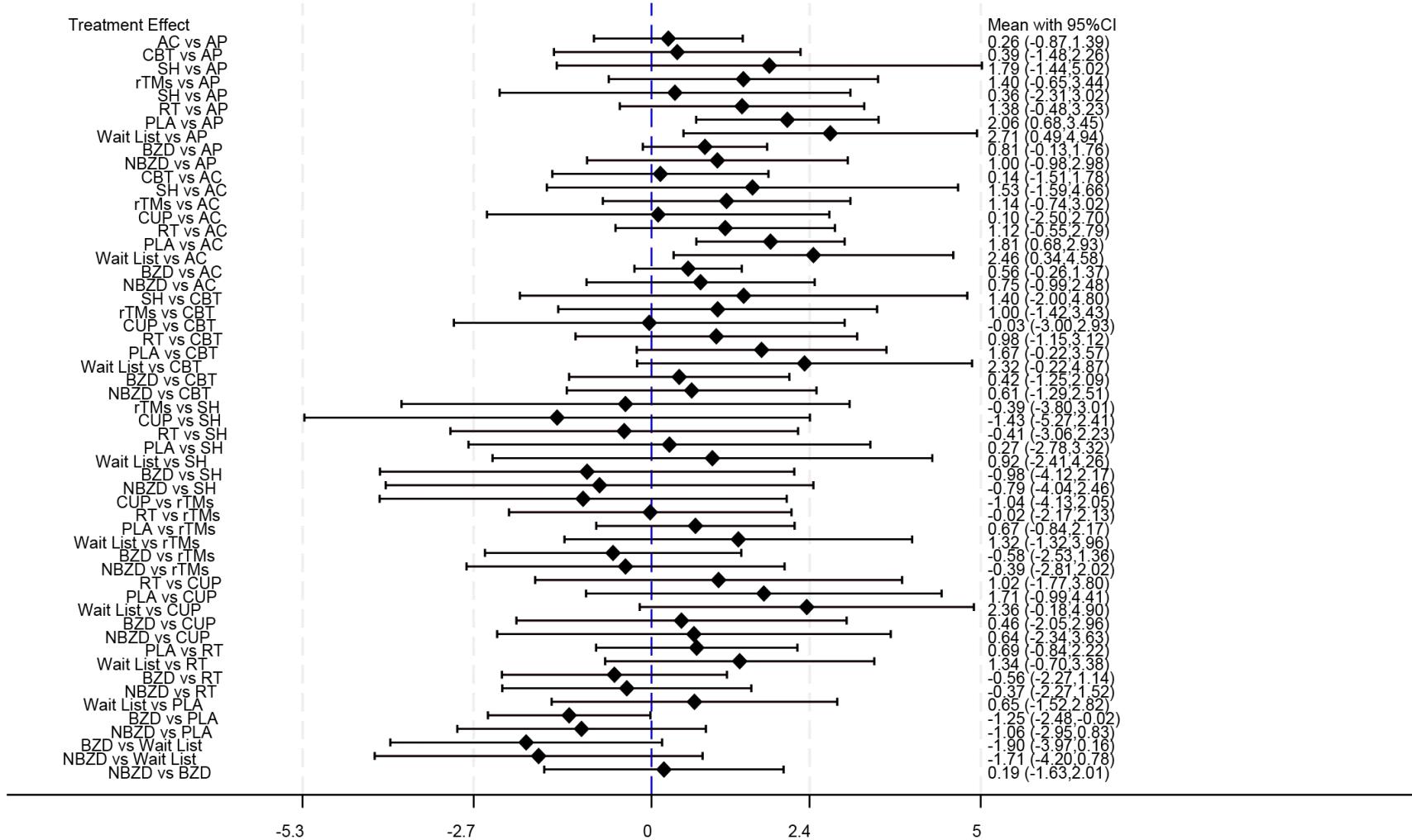
2018

---

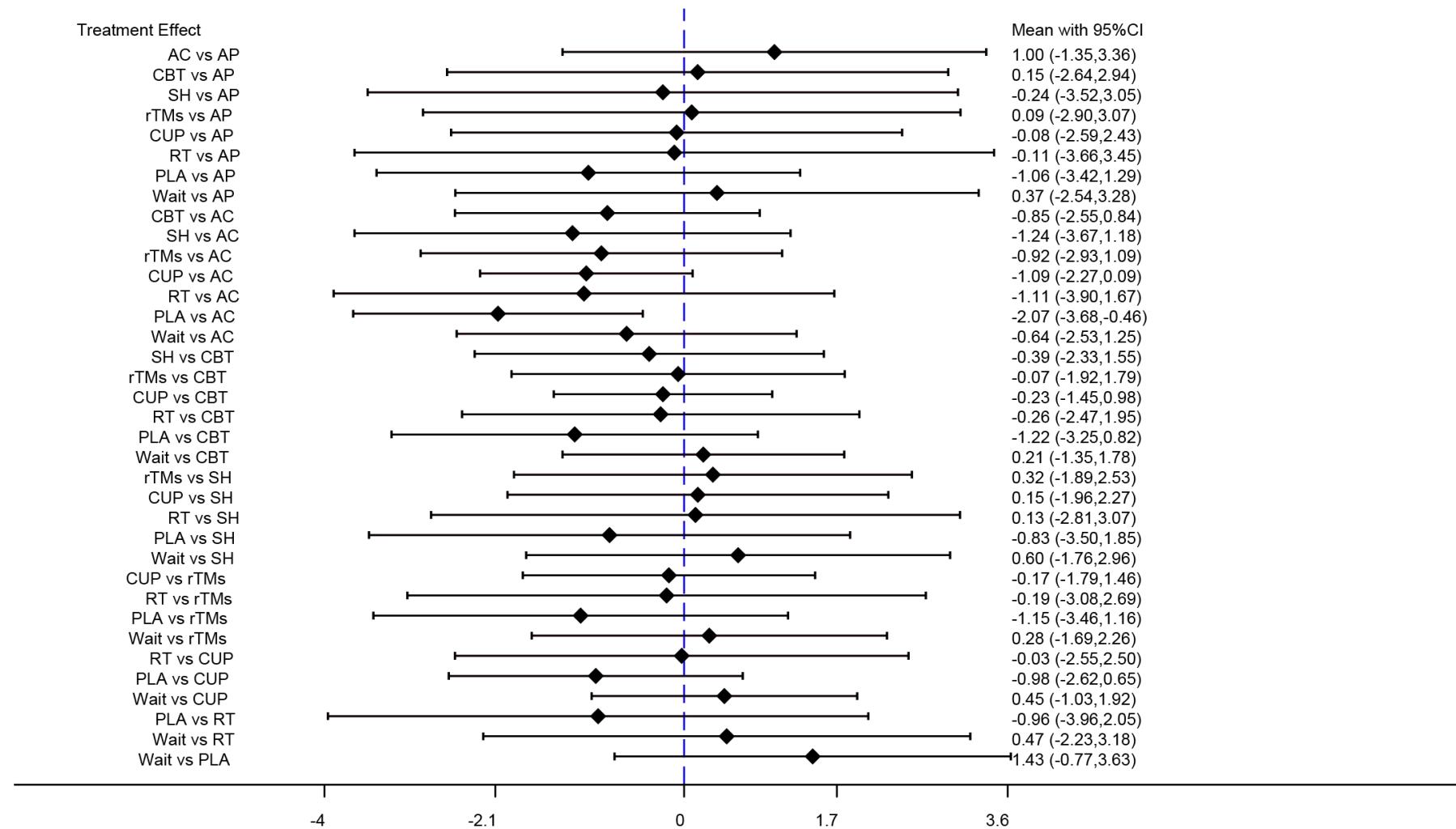
Sivertsen-B						
2006	Some concerns	Low	Low	Low	Low	Some concerns
Jiang-L 2020	Some concerns	Some concerns	Low	Low	Low	Some concerns
Wei-M 2013	Some concerns	Low	Low	Low	Low	Some concerns
Wei-DM 2022	Some concerns	Low	Low	Low	Low	Some concerns
Yang-HR 2024	Low	Low	Low	Low	Low	Low
Zhuang-QX						
2020	Some concerns	Low	Low	Low	Low	Some concerns
Wei-M 2017	Some concerns	Low	Low	Low	Low	Some concerns

---

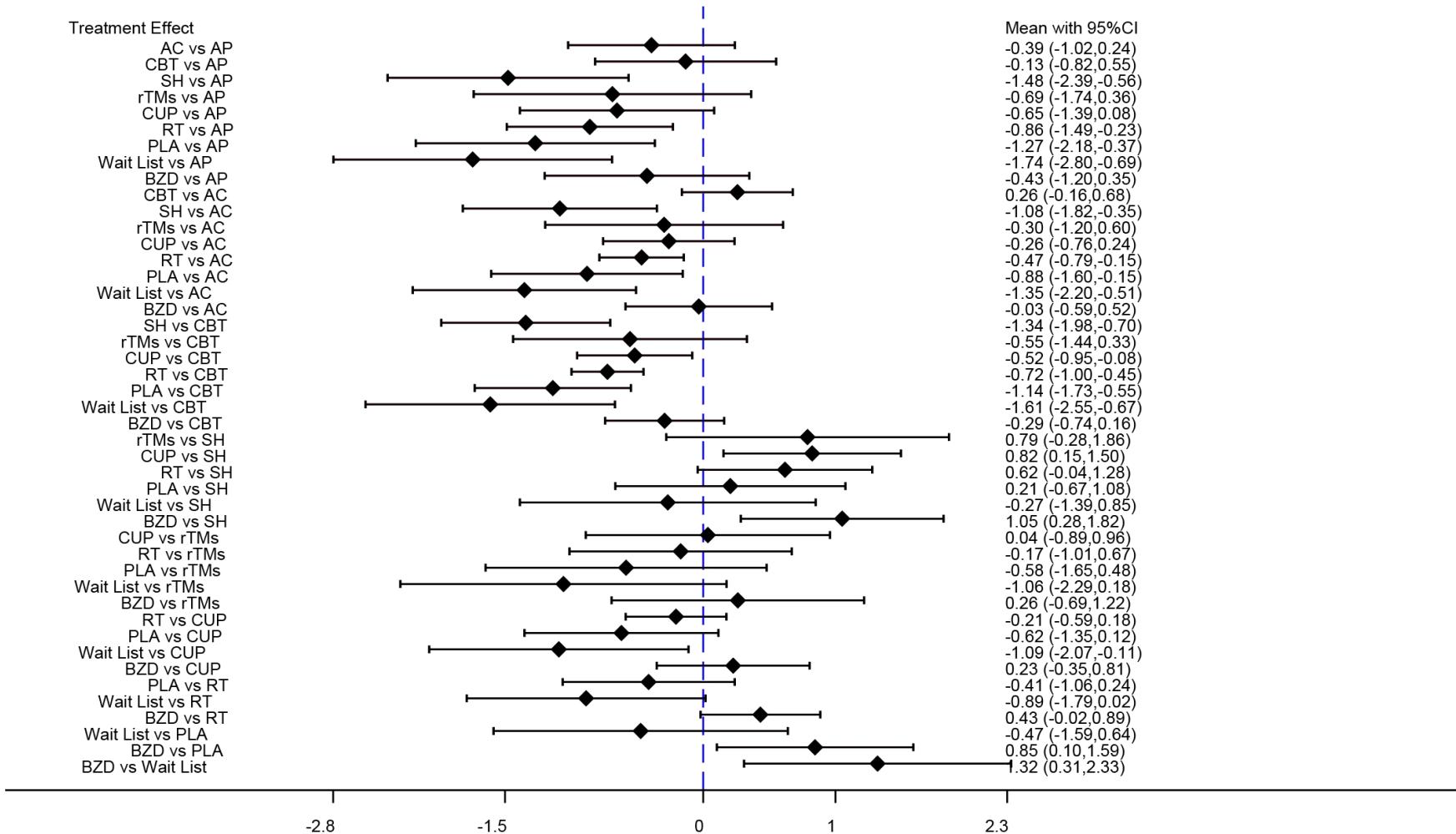
**Supplementary Figure S1.** Results of pairwise comparison on PSQI



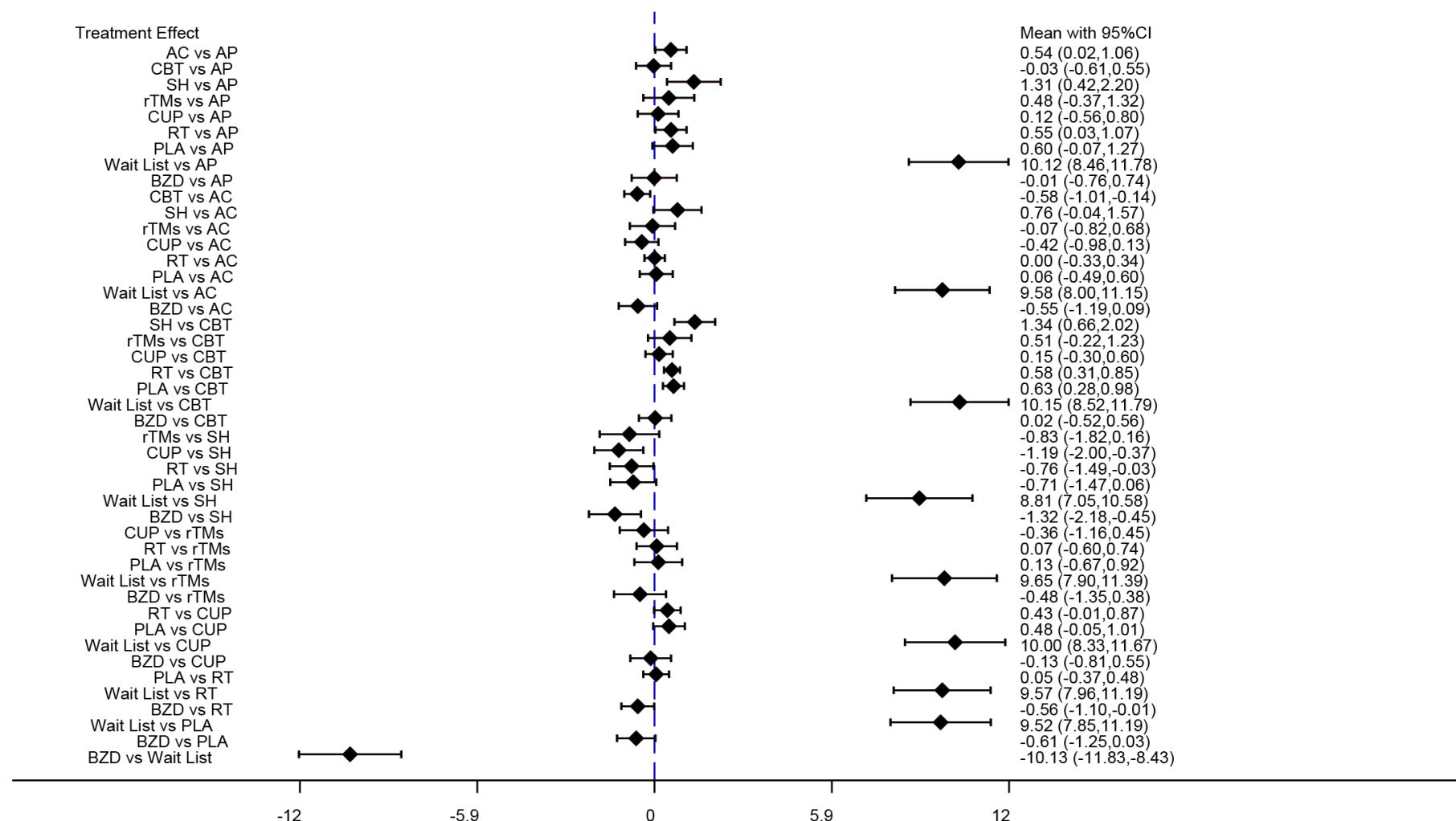
**Supplementary Figure S2.** Results of pairwise comparison on TST



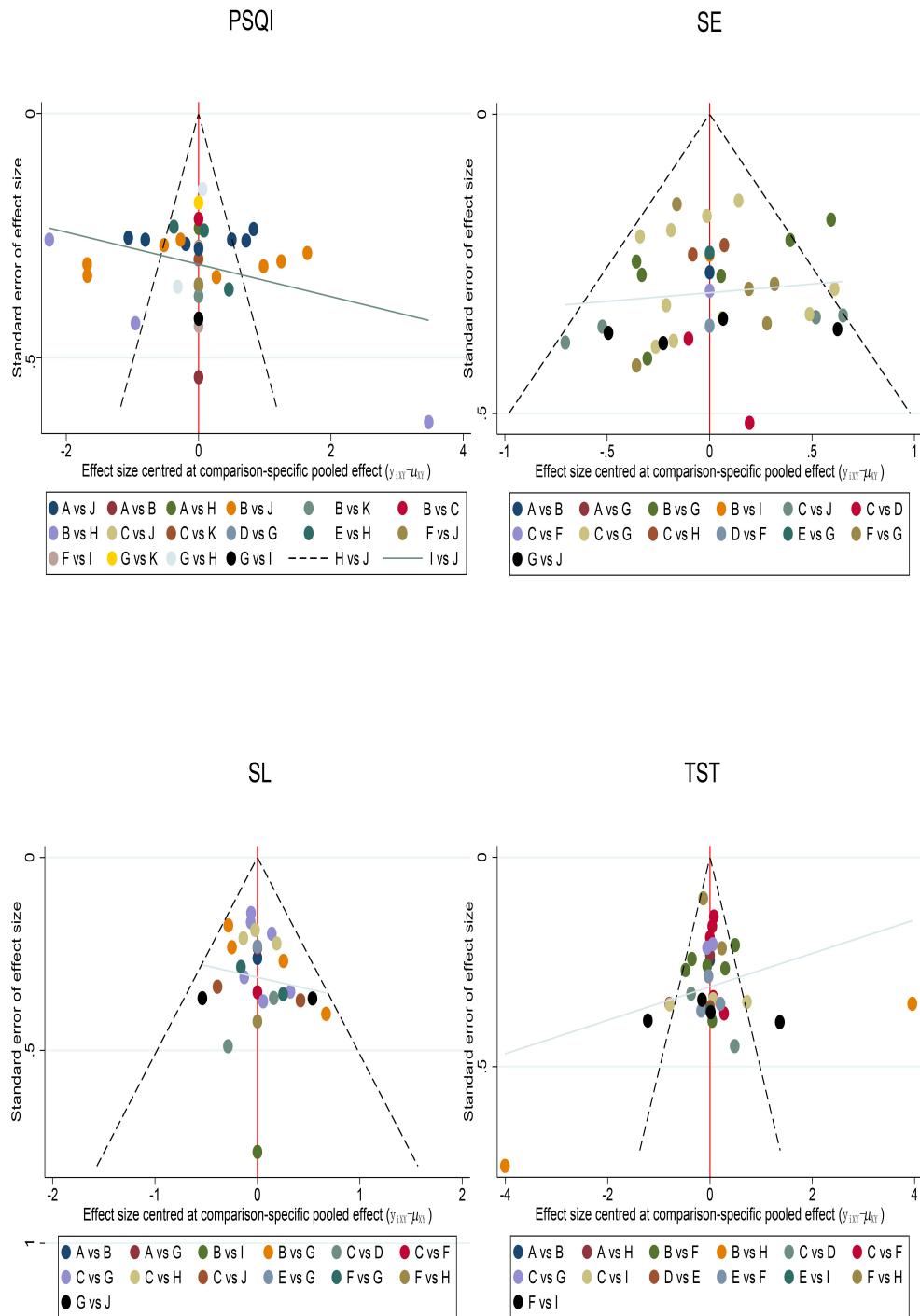
**Supplementary Figure S3.** Results of pairwise comparison on SE



**Supplementary Figure S4.** Results of pairwise comparison on SL

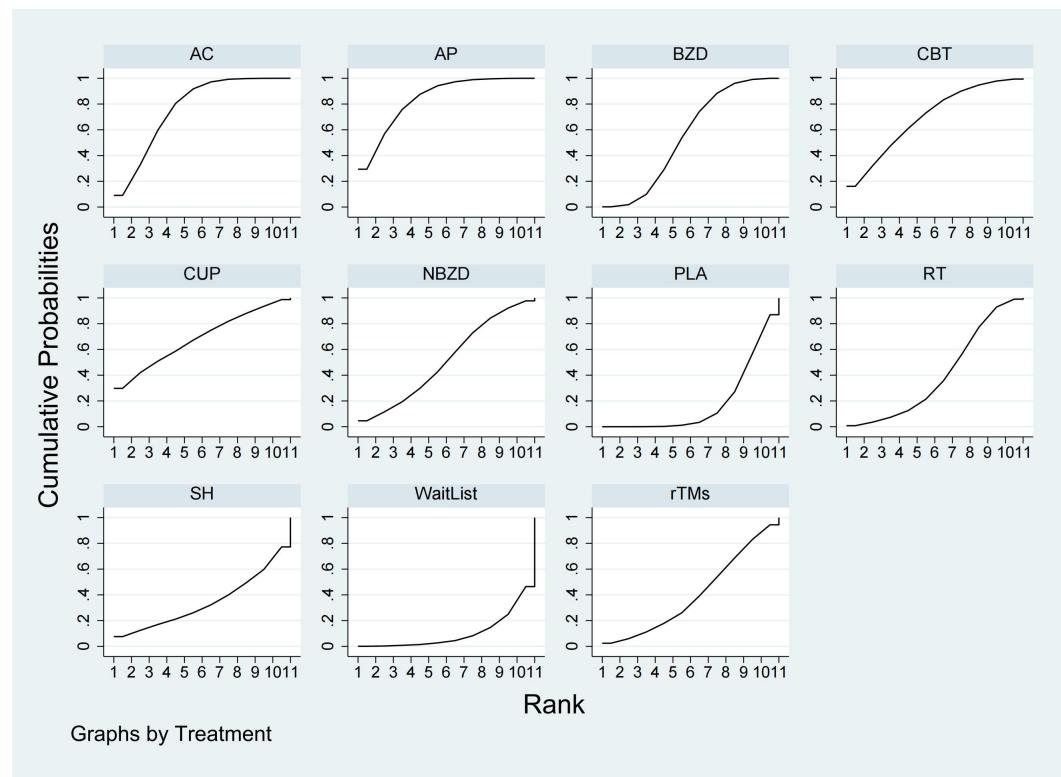


**Supplementary Figure S5.** Funnel plots for PSQI, TST, SE, and SL

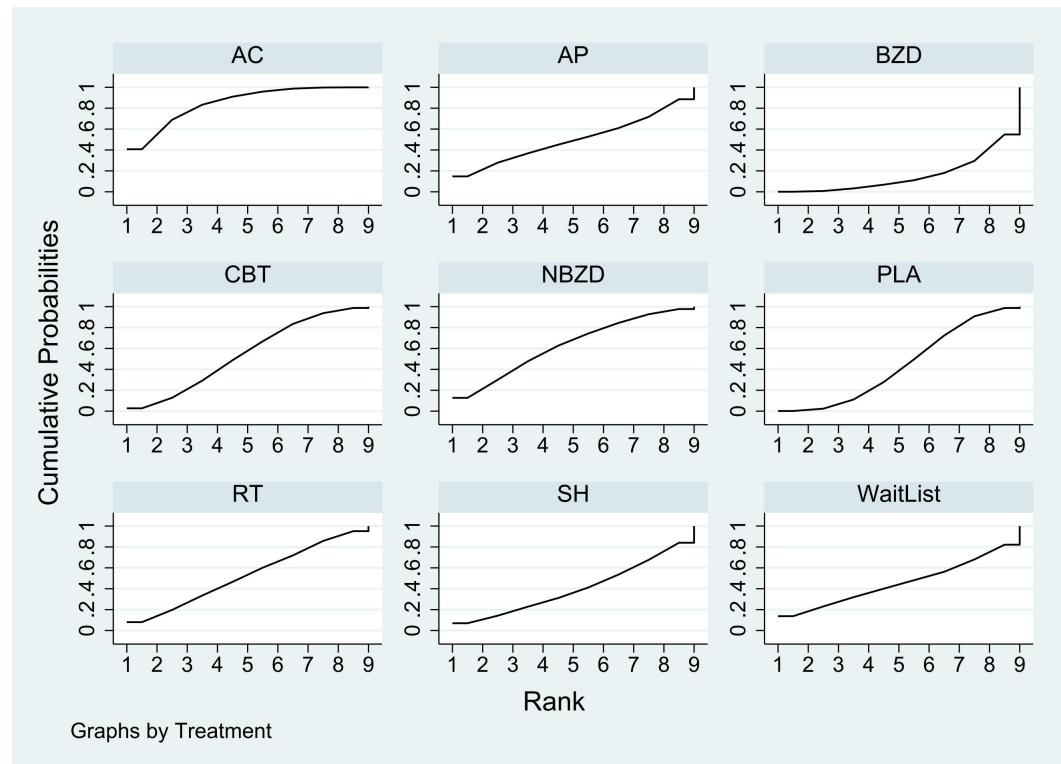


**Notes:** PSQI, Pittsburgh Sleep Quality Index; TST, Total Sleep Time; SE, sleep efficiency; SL, sleep latency; A, Acupressure/Massage (AP); B, Acupuncture (AC); C, Cognitive Behavioral Therapy (CBT); D, Sleep Hygiene (SH); E, Repetitive Transcranial Magnetic Stimulation (rTMS); F, Cupping Therapy (CUP); G, Relaxation Therapy (RT); H, Placebo (sham acupuncture or sham treatment) (PLA); I, Wait List; J, Benzodiazepines (BZD); K, Non-Benzodiazepines (NBZD).

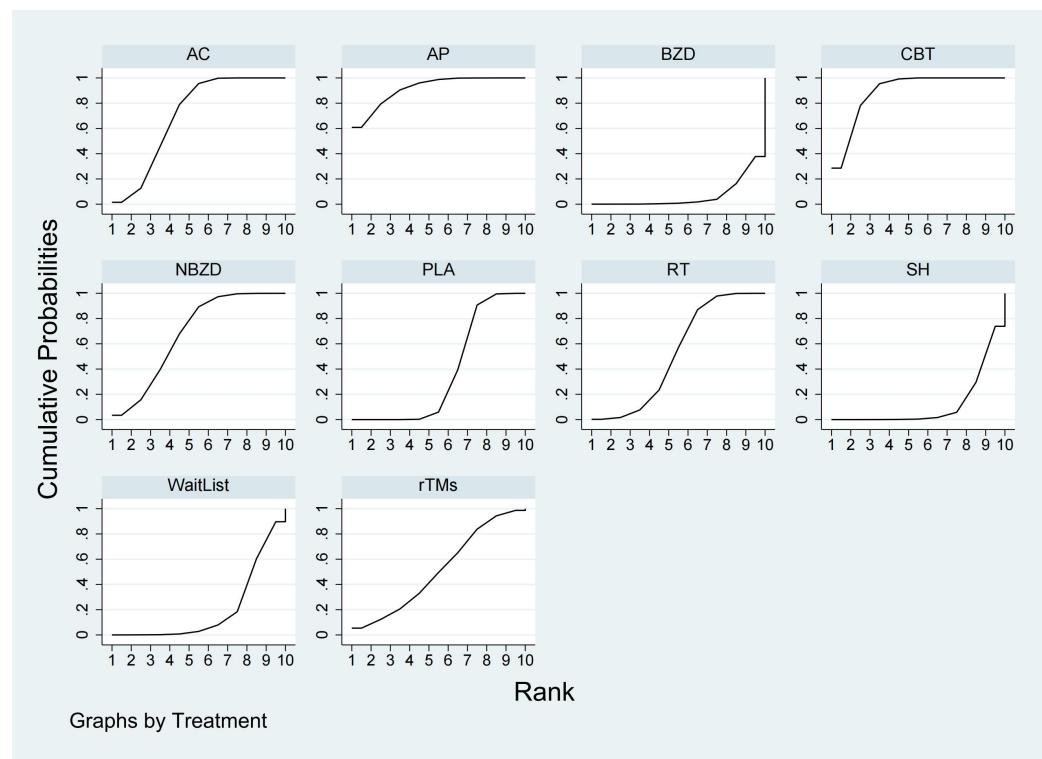
**Supplementary Figure S6.** Average SUCRA values for PSQI



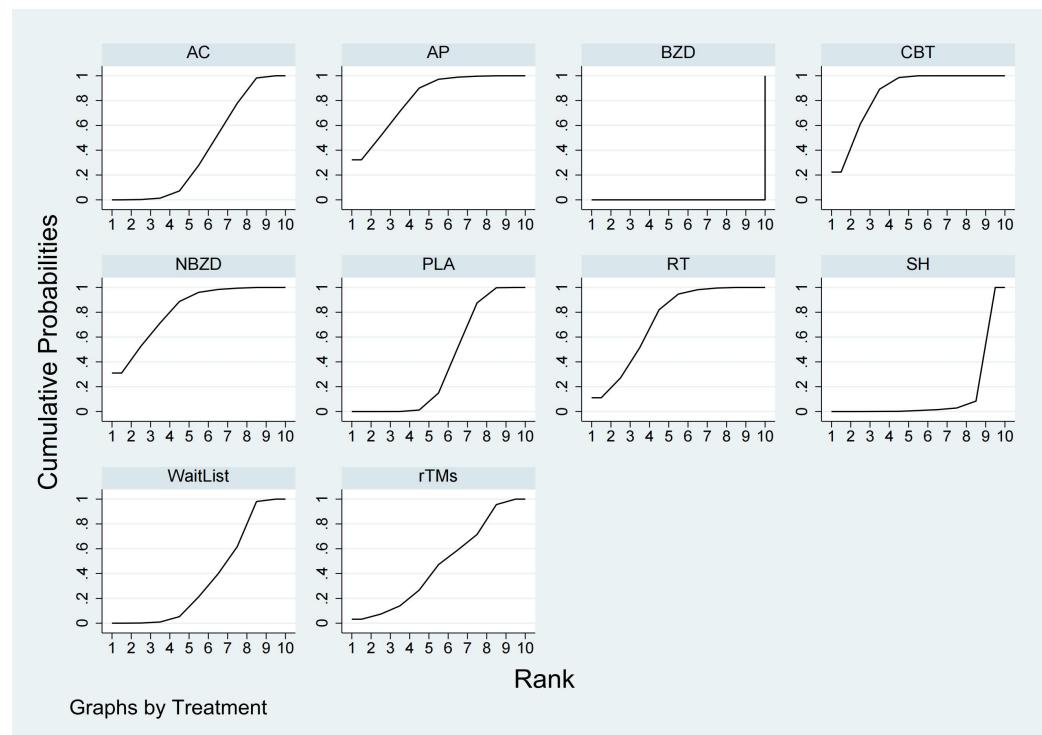
**Supplementary Figure S7.** Average SUCRA values for TST



**Supplementary Figure S8.** Average SUCRA values for SE

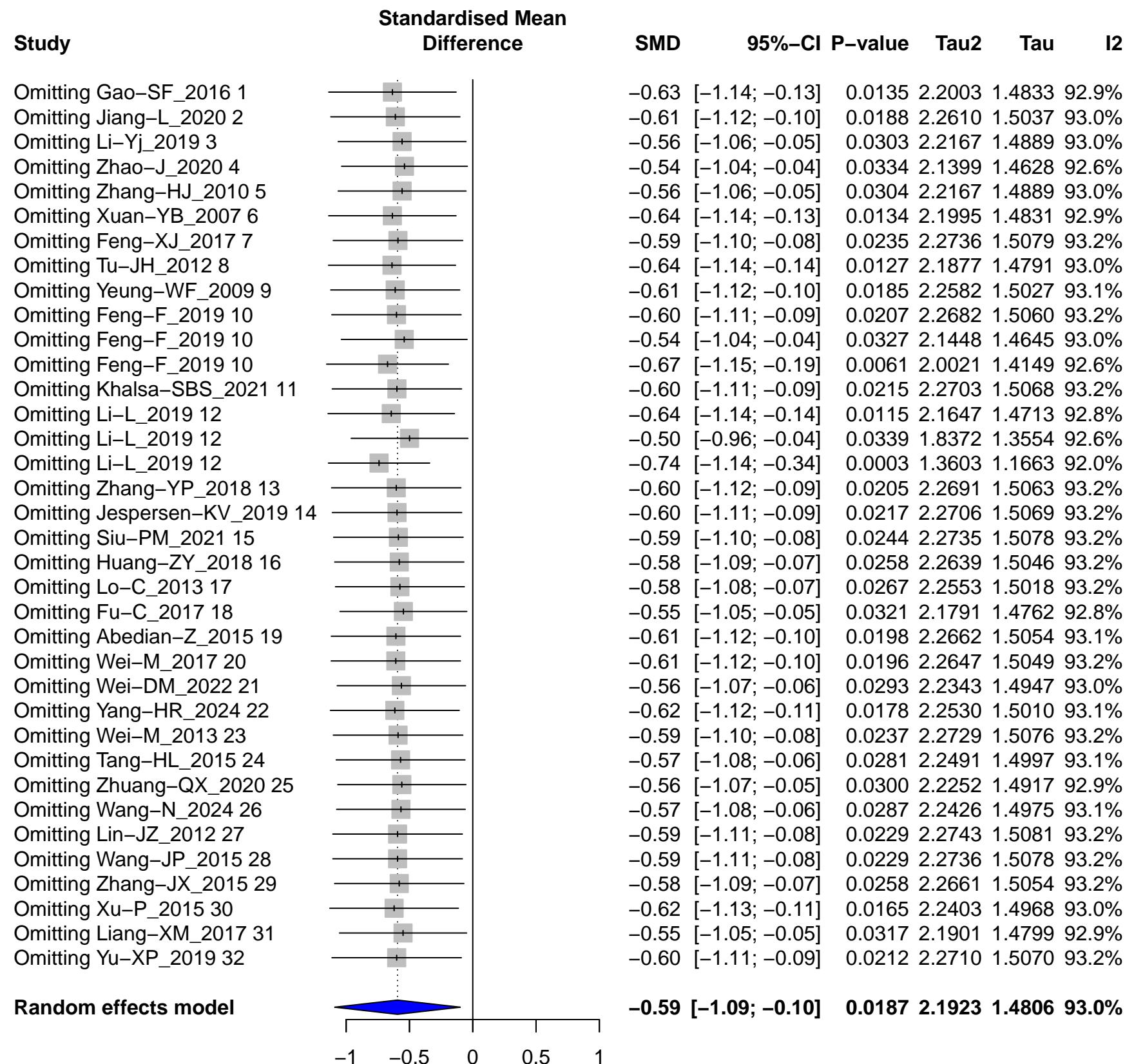


**Supplementary Figure S9.** Average SUCRA values for SL



**Figures S6-9 Notes:** PSQI, Pittsburgh Sleep Quality Index; AC, Acupuncture; CBT, Cognitive Behavioral Therapy; AP, Acupressure/Massage; RT, Relaxation Therapy; CUP, Cupping Therapy; SH, Sleep Hygiene; rTMS, Repetitive Transcranial Magnetic Stimulation; BZD, Benzodiazepines; NBZD, Non-Benzodiazepines; PLA, Placebo (sham acupuncture or sham treatment); Wait List, Waiting List.

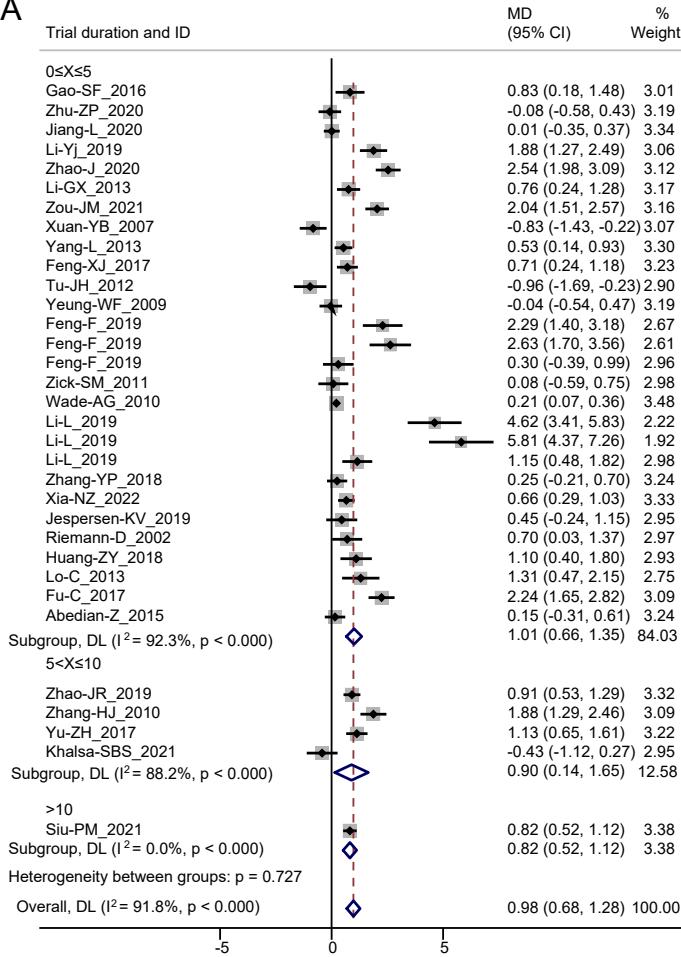
Supplementary Figure S10. Sensitivity analysis results



**Figure S10 Notes:** Sensitivity analysis of standardized mean difference (SMD) using a random effects model. Each point represents the SMD for a specific study, with 95% CI error bars. Studies are listed on the y-axis, and SMD values are on the x-axis. The analysis omits one study at a time to assess the impact on overall results. SMD: effect size of the intervention. 95% CI: confidence interval for SMD. P-value: statistical significance. Tau<sup>2</sup>: between-study variance. Tau: square root of Tau<sup>2</sup>, indicating the standard deviation of the true effects across studies. I<sup>2</sup>: heterogeneity among studies.

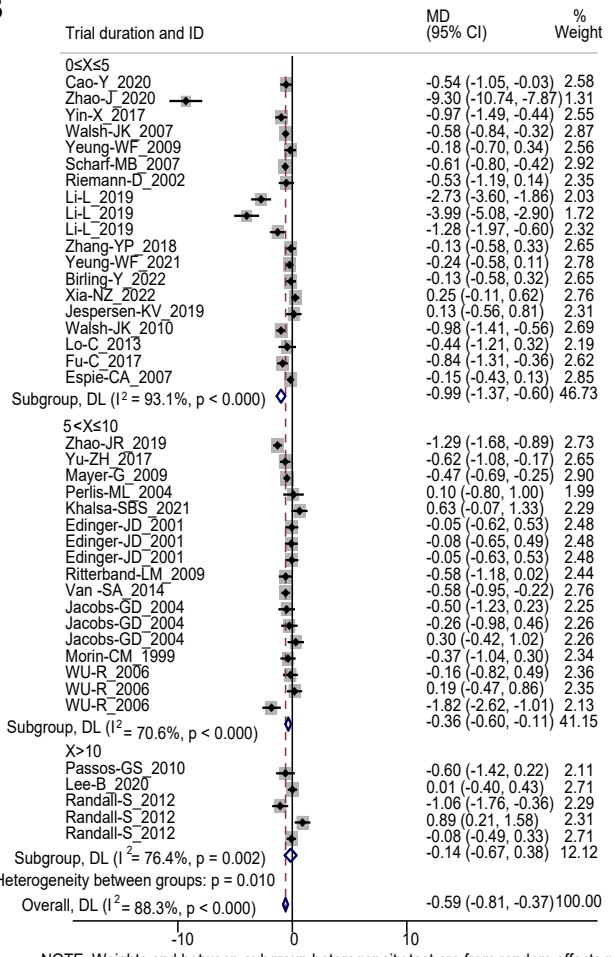
## Supplementary Figure S11. Subgroup analysis based on treatment duration

A



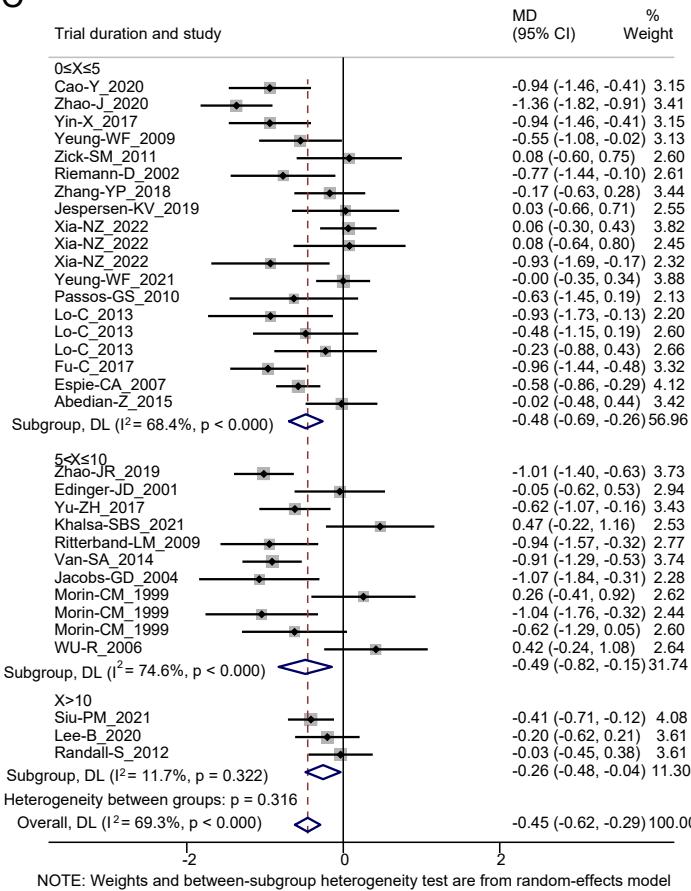
NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

B



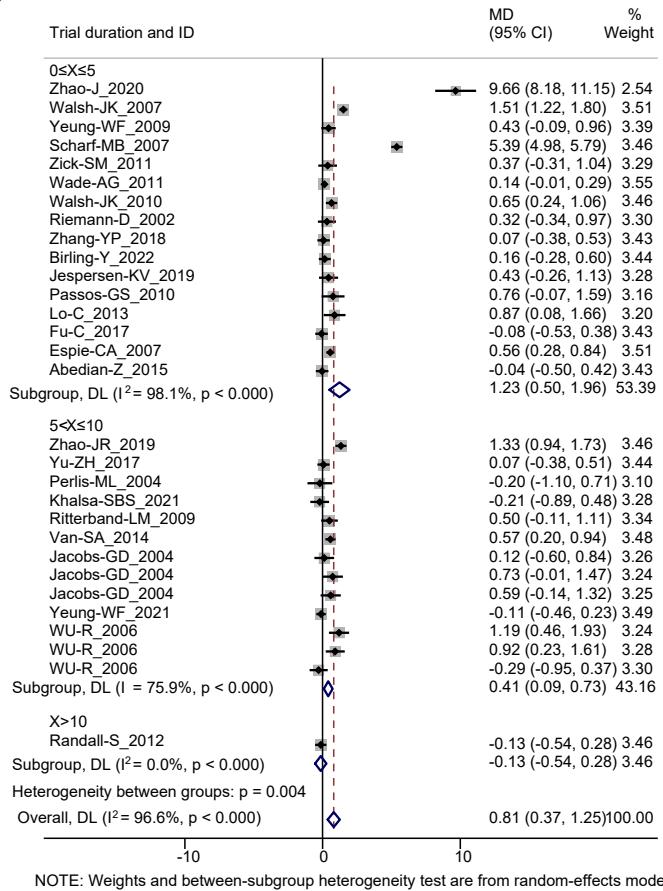
NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

C



NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

D

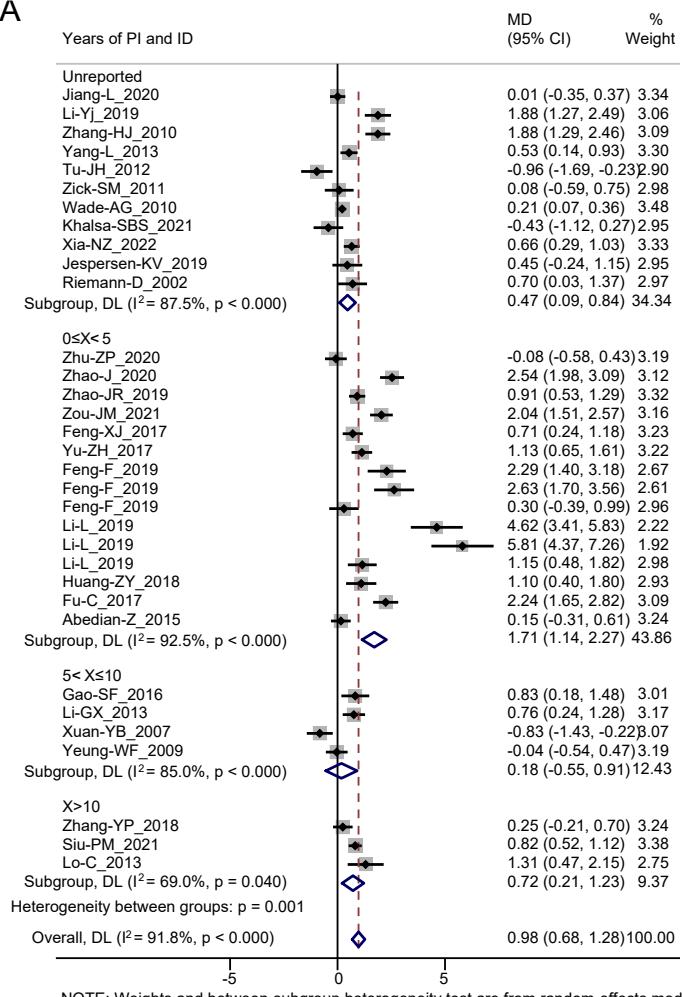


NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

**Figures S11 Notes:** A: PSQI forest plot; B: TST forest plot; C: SE forest plot; D: SL forest plot. This forest plot illustrates the mean difference (MD) and 95% confidence intervals (CIs) for the PSQI, TST, SE and SL under different treatment duration (subgrouped by weeks). Each point represents the effect size of an individual study, with horizontal lines indicating their CIs.

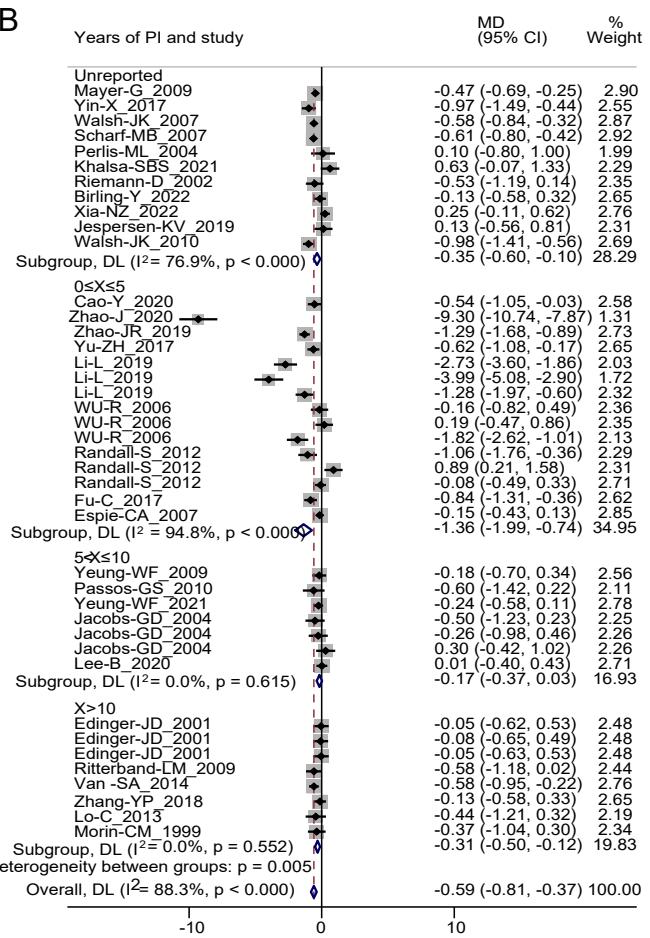
## Supplementary Figure S12. Subgroup analysis based on disease course

A



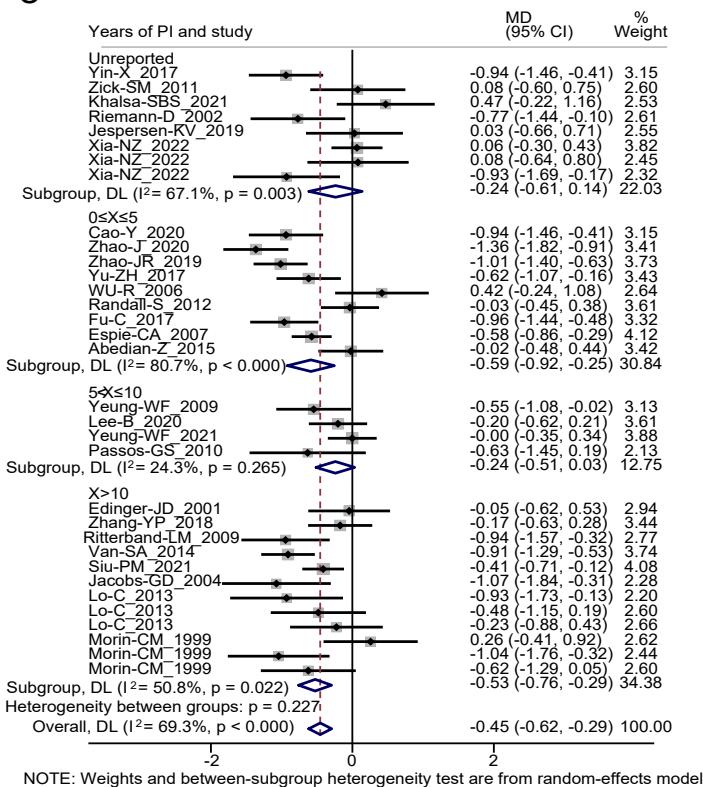
NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

B



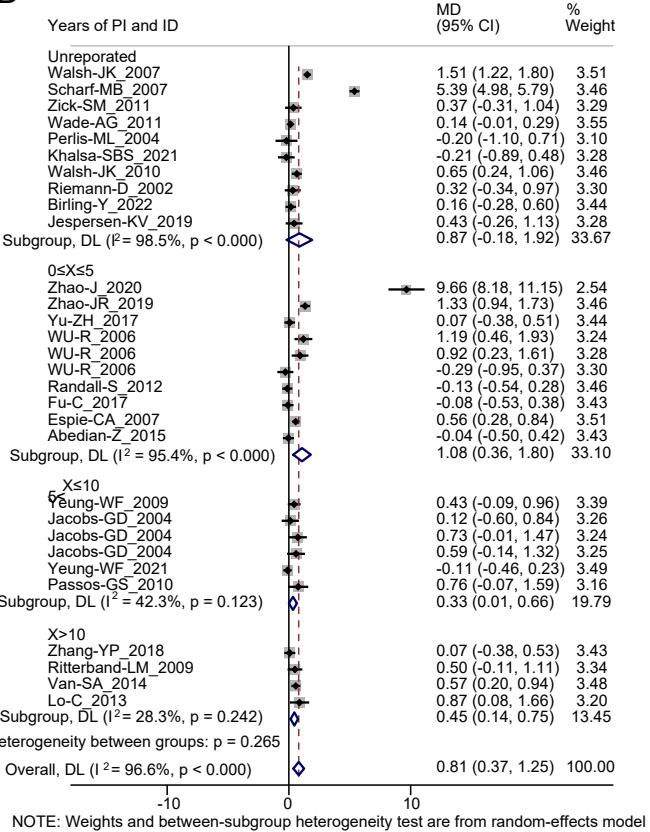
NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

C



NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

D



NOTE: Weights and between-subgroup heterogeneity test are from random-effects model

**Figures S12 Notes:** A: PSQI forest plot; B: TST forest plot; C: SE forest plot; D: SL forest plot. This forest plot illustrates the mean difference (MD) and 95% confidence intervals (CIs) for the PSQI, TST, SE and SL under different treatment duration (subgrouped by weeks). Each point represents the effect size of an individual study, with horizontal lines indicating their CIs.