	Cancer, solid tumors (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Campo 2013**		**Galantino 2003**		**Irwin 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomisation vis blocks of varying sizes (2-4)	PN	Only states that participants were 'randomly assigned' to two groups by use of a table of random numbers.	NI	The randomization sequence was generated via computerized random number generator prior the start of the trial in blocks of 2 conditions (CBT:TCC; 1:1).
	NI	Authors did not provide information on allocation concealment. It is possible that the enrolling investigator or the participant had knowledge of the forthcoming allocation.	PY	Authors did not provide information on allocation concealment. It is possible that the enrolling investigator or the participant had knowledge of the forthcoming allocation.	PY	To maintain allocation concealment, none of the research staff who assessed subjects or enrolled participants had access to the randomization list and staff were specifically told that simple randomization was being used such that either of the two treatments was possible for each group assignment.
	Y	Baseline characteristics were well balanced across the intervention and control group.	PN	No baseline characteristics table provided.	PN	Treatment groups were comparable with regard to demographic and clinical background characteristics. The TCC group included significantly more non-white participants
	Some concerns		**High**		**Low**	
Bias due to deviations from	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	NI	The authors do not report if there were deviations from the intended intervention	NI	The only reported deviation is non-completion by 10 participants, which were considered not related to the trial context.

	Cancer, solid tumors (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Campo 2013**		**Galantino 2003**		**Irwin 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable.	NA	Not applicable	NA	Not applicable
	NA	Not applicable.	NA	Not applicable	NA	Not applicable
	PY	Modified ITT analyses. All participants with available outcome data were included in analysis.	NI	The authors do not report the number of participants who were originally randomised so it is difficult to make an assessment.	Y	An intention-to-treat basis using a mixed model approach, covarying for baseline was used. Data from all randomized participants were included with no imputation of missing data
	NA	Not applicable.	NI	Not able to be assessed.	NA	Not applicable
	Low		**High**		**Low**	
Bias due to missing outcome data	PY	14.3% of participants (9/63) withdrew following randomisation. Reasons were provided. Data available for all other participants.	NI	The authors do not report the number of patients included and randomised.	Y	Data available for all randomised participants
	PN	Authors report that no imputation methods were carried out and participants were excluded from final analysis .	NI	The authors do not report if patients withdrew from the study or not.	NA	Not applicable
	PY	Reasons for not completing the study provided. Potentially related to participants health status in the intervention arm.	NA	Not applicable	NA	Not applicable

	Cancer, solid tumors (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Campo 2013**		**Galantino 2003**		**Irwin 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	It is not clear if analysis accounted for participant characteristics to explain the relationship between missingness and true value. It is unlikely that missingness in the outcome depended on its true value.	NA	Not applicable	NA	Not applicable
	Some concerns		**High**		**Low**	
Bias in measurement of the outcome	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.
	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.
	Y	Since these were participant-reported outcomes, the outcome assessor is the study participant.	Y	Since these were participant-reported outcomes, the outcome assessor is the study participant. For other measures such as BP, it is not reported if the evaluator/assessor was blinded and therefore the measurement could be biased.	Y	All primary outcomes (sleep quality, fatigue, etc.) were participant-reported, the outcome assessor is the study participant. For secondary measures taken through blood samples, it is not reported if the evaluator/assessor was blinded and therefore the measurement could be biased.
	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain).	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.). Not clear if assessors were blinded.	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.). Not clear if assessors were blinded.

	Cancer, solid tumors (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Campo 2013**		**Galantino 2003**		**Irwin 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	PY	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	Y	The clinical registry specifies the outcomes planned to analyses	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	PY	Data was analysed in accordance with the statistical analysis plan.
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	PN	Although there is no statistcal analysis plan. It appears that the authors decided on three subscales of the FACT-B questionnaire that would be analysed.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	N	Outcome measures are clearly defined and reported, and there is not indication of selective reporting of results/ outcomes/ measures on the basis of the results.	PN	Due to unavailable trial protocol or statistical analysis plan, information on statistical analyses conducted and detail on calculation methodology of reported results makes it difficult to determine whether there was bias in selection of reported results.	N	Outcome measures are clearly defined and reported, and there is not indication of selective reporting of results/ outcomes/ measures on the basis of the results.
	Low		**Some concerns**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable

	Cancer, solid tumors (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Campo 2013**		**Galantino 2003**		**Irwin 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Cancer, breast (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Larkey 2011**		**Mustian 2004**		**Natma 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Participants were randomised by an independent statistian via stratified randomisation	PN	Participants were randomly assigned to two groups through the use of a coin flip.	Y	Ballot randomization was used
	Y	Participants were blinded to study predictions and randomised to one of two classes, both called “Rejuvenating Movement” to conceal allocation	PN	The investigators do not detail allocation concealment however as it is a coin flip, it is not likley that investigator or the participant had knowledge of the forthcoming allocation.	Y	Group assignment concealed from participants until baseline assessments were completed
	N	There were no statistically significant differences in key baseline characteristics between the intervention groups	PN	baseline characteristics for the two groups were not significantly different.	N	At baseline, there were no significant differences between the two groups in terms of participant demographics, clinical characteristics, and four main outcomes of the study sample
	Low		**Low**		**Low**	
Bias due to deviations from	PN	Both intervention groups were called “Rejuvenating Movement” so participants did not know if they were in the Tai Chi or active control group.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	N	The only reported deviation is non-completion by 14 participants. Reasons are provided and are not considered related to the trial context. No adverse events were reported.	PN	The only reported deviations were non-completion by some participants.	PN	There were no reported deviations.

	Cancer, breast (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Larkey 2011**		**Mustian 2004**		**Natma 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	Only individuals who attended some portion of the classes are included in the statistical analysis (irrespective of whether they had measurements at all three timepoints)	PY	Data were anaysed on an intention-to-treat basis. Missing data were not imputed and baseline data were not carreid forward.	PY	It is assumed intention-to-treat methods were used for the primary analyses. This is on account that no participants were recorded to have dropped out. The authors did not state how missing data would be handled.
	NA	Not applicable.	NA	Not applicable.	NA	Not applicable
	Low		**Low**		**Low**	
Bias due to missing outcome data	PY	13.8% of participants (14/101) dropped out of the study and were not included in the analysis. Data available for all other randomised participants.	N	32.3% (10/31) of patients did not complete the intervention or comparable usual care group measures.	Y	Data was available for all participants.
	Y	The authors state there was no significant difference in baseline characteristics of those who are included in the analysis and those who did not attend the classes.	PN	The authors did not report on baseilne characteristics of those who left and/or those who remained in the study but state there was no noticeble difference among those who withdrew from the study.	NA	Not applicable
	NA	Not applicable	PY	Reasons for not completing the study provided. Potentially related to participants health status (e.g. side effects from treatment)	NA	Not applicable

	Cancer, breast (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Larkey 2011**		**Mustian 2004**		**Natma 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	PY	It is unlikely that missingness in the outcome depended on its true value.	NA	Not applicable
	Low		**Some concerns**		**Low**	
Bias in measurement of the outcome	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.
	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.
	PY	All primary outcomes (physical health, mental health, etc.) were participant-reported, the outcome assessor is the study participant. Objectives measures were taken by a blinded assessr.	Y	Since these were participant-reported outcomes, the outcome assessor is the study participant.	Y	Most outcomes (self esteem, fatigue, etc.) were participant-reported, the outcome assessor is the study participant. For measures such as corotisol, the evaluator/assessor was blinded.
	PN	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement. However, as allocation was concealed and there was no inactive control, this is unlikely to significantly influence results.	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).

	Cancer, breast (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Larkey 2011**		**Mustian 2004**		**Natma 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.
	Low		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	N	Outcome measures are clearly defined and reported, and there is not indication of selective reporting of results/ outcomes/ measures on the basis of the results.	N	Outcome measures are clearly defined and reported, and there is not indication of selective reporting of results/ outcomes/ measures on the basis of the results.	N	Due to unavailable trial protocol or statistical analysis plan, it difficult to determine whether there was bias in selection of reported results. All reported results favour the intervention.
	Low		**Some concerns**		**Some concerns**	
Overall risk of bias	**Low risk**	The study does not have any bias considered to seriously alter the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial

	Cancer, breast (survivors)		Cancer, breast (survivors)		Cancer, breast (survivors)	
Study ID	**Larkey 2011**		**Mustian 2004**		**Natma 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Source: Chapter 8 (
a. For the precise w

	Cancer, NSCLC (postsurgical)		Cancer, NSCLC (postsurgical)		Anal, rectal, prostate (undergoing radiotherapy)	
Study ID	**Jiang 2020**		**Wang 2013b**		**McQuade 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Random number table generated by a computer.	Y	Random number table generated by a computer.	Y	Participants were randomly assigned via an electronic database to one of three groups using minimization to balance covariate characteristics
	Y	Sequentially numbered opaque envelopes were used to conceal the sequence.	PY	Numbered envelopes were used to conceal the sequence. Not clear if envelopes were opaque but likely to have been adequately concealed.	PY	Authors did not provide information on allocation concealment.
	Y	Baseline characteristics were well balanced across the intervention and control group.	Y	Baseline characteristics were well balanced across the intervention and control group.	PN	Treatment groups were comparable with regard to demographic and clinical background characteristics, except the low exercise group reported greater sleep times at baseline -likely due to chance
	Low		**Low**		**Low**	
Bias due to deviations from	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	NI	The authors do not report if there were deviations from the intended intervention	NI	The authors do not report if there were deviations from the intended intervention	PN	The only reported deviation is non-completion by 10 participants. Reasons are not provided; it is unclear if their withdrawl was related to the trial context. However, there were no group differeneces between patients with and without missing data

	Cancer, NSCLC (postsurgical)		Cancer, NSCLC (postsurgical)		Anal, rectal, prostate (undergoing radiotherapy)	
Study ID	**Jiang 2020**		**Wang 2013b**		**McQuade 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	ITT was used	Y	ITT was used	PY	A modified intention-to-treat analysis is assumed with all participants except nine who did not provide any follow up data, who were excluded.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias due to missing outcome data	Y	All 100 patients (100%) who were randomised were included in final analysis.	Y	15.6% of participants (5/32) withdrew following randomisation. Reasons were provided. Data available for all other participants	PY	13.16% participants (10/76) were not included in the primary analysis.
	NA	Not applicable	NA	Not applicable	NA	Missing data was imputed with Markov Chain Monte Carlo method and then used the MIANALYZE procedure to generate statistical inferences. All the analyses remained the same or resulted in similar p values.
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Cancer, NSCLC (postsurgical)		Cancer, NSCLC (postsurgical)		Anal, rectal, prostate (undergoing radiotherapy)	
Study ID	**Jiang 2020**		**Wang 2013b**		**McQuade 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	N	The study used validated methods for all outcome measures.	PN	There is no evidence to suggest that the measures used were not appropriate.	N	The study used validated methods for all outcome measures.
	PN	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.
	Y	Since these were participant-reported outcomes, the outcome assessor is the study participant.	PY	Outcome assessors were unblinded. Unclear if lab personel were blinded to the trial study design.	Y	All outcomes (sleep quality, fatigue, etc.) were participant-reported, the outcome assessor is the study participant.
	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain).	PN	It is unlikely that outcome assessors could influence the observer-reported outcomes because assessed outcomes do not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. sleep disturbances, fatigue, emotional well-being, etc.). Not clear if assessors were blinded.

	Cancer, NSCLC (postsurgical)		Cancer, NSCLC (postsurgical)		Anal, rectal, prostate (undergoing radiotherapy)	
Study ID	**Jiang 2020**		**Wang 2013b**		**McQuade 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	NA	Not applicable	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.
	Some concerns		**Low**		**Some concerns**	
Bias in selection of the reported result	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	PN	Data may not be analysed in accordance with the statistical analysis plan. Authors report the American Urological Association Symptom Score which is not described in the methods. The authors state that other secondary measures will be reported elsewhere (not found in our search)
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	PY	All eligible reported results for the outcome domain correspond to all intended outcome measurements. Some concern for QoL
	N	Due to unavailable trial protocol or statistical analysis plan, information on statistical analyses conducted and detail on calculation methodology of reported results makes it difficult to determine whether there was bias in selection of reported results.	N	Due to unavailable trial protocol or statistical analysis plan, information on statistical analyses conducted and detail on calculation methodology of reported results makes it difficult to determine whether there was bias in selection of reported results.	PY	The authors report the total FSI score & PSQI-score, but also selectively report one subscale (out of seven) of the PSQI. Only three of four subscales of the EPIC are reported (urinary, hormonal, bowel function) (sexual function not rpeorted).
	Some concerns		**Some concerns**		**High**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial

	Cancer, NSCLC (postsurgical)		Cancer, NSCLC (postsurgical)		Anal, rectal, prostate (undergoing radiotherapy)	
Study ID	**Jiang 2020**		**Wang 2013b**		**McQuade 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Source: Chapter 8 (
a. For the precise w

	Cancer, lung (undergoing chemotherapy)		Nasopharyngeal carcinoma (undergoing chemot	
Study ID	**Zhang 2016**		**Zhou 2018 (objective)**	
	Judgement	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Random number table generated by a computer.	Y	Random number table generated by a computer.
	Y	Allocation performed by third-party uninvolved in recruitment	Y	Allocation performed by third-party not involved in the study
	Y	Baseline characteristics were well balanced across the intervention and control group.	Y	Baseline characteristics were well balanced across the intervention and control group.
	Low		**Low**	
Bias due to deviations from	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.

	Cancer, lung (undergoing chemotherapy)		Nasopharyngeal carcinoma (undergoing chemot	
Study ID	**Zhang 2016**		**Zhou 2018 (objective)**	
	Judgement	**Comments**	**Judgement**	**Comments**
intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable
	Y	Modified intention to treatment analysis. Appropriate analysis performed on participants as per randomised assignment to intervention.	Y	Modified intention to treatment analysis and per-protocol analysis was presented. Appropriate analysis performed on participants as per randomised assignment to intervention.
	NA	Not applicable	NA	Not applicable
	Low		**Low**	
Bias due to missing outcome data	PN	22.9% of participants (12/96) withdrew following randomisation. Reasons were provided. Data available for all other participants.	N	27.2% of participants (31/114) withdrew following randomisation. Reasons were provided. Data available for all other participants.
	PN	Authors do not report handling of missing data in analysis methods. There is reason to suspect bias in the result due to missing outcome data.	PN	Authors do not report handling of missing data in analysis methods. There is reason to suspect bias in the result due to missing outcome data.
	PY	Reasons for not completing the study provided. Some potentially related to participants health status (e.g. chemotherapy).	PY	Reasons for not completing the study provided. Some potentially related to participants health status (e.g. chemotherapy side effects).

	Cancer, lung (undergoing chemotherapy)		Nasopharyngeal carcinoma (undergoing chemot	
Study ID	**Zhang 2016**		**Zhou 2018 (objective)**	
	Judgement	**Comments**	**Judgement**	**Comments**
	PN	It is not clear if analysis accounted for participant characteristics to explain the relationship between missingness and true value. It is unlikely that missingness in the outcome depended on its true value.	PN	It is not clear if analysis accounted for participant characteristics to explain the relationship between missingness and true value. It is unlikely that missingness in the outcome depended on its true value.
	Some concerns		**Some concerns**	
Bias in measurement of the outcome	N	The study used validated methods for all outcome measures.	PN	There is no evidence to suggest that the measures used were not appropriate.
	PN	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.
	Y	Since these were participant-reported outcomes, the outcome assessor is the study participant.	NI	Unclear if study personel were blinded to the trial study design.
	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their self-reported outcomes, which by nature involve some judgement (i.e. pain).	PN	It is unlikely that outcome assessors could influence the observer-reported outcomes because assessed outcomes do not involve judgement, unlike patient reported outcomes (i.e. pain intensity).

	Cancer, lung (undergoing chemotherapy)		Nasopharyngeal carcinoma (undergoing chemot	
Study ID	**Zhang 2016**		**Zhou 2018 (objective)**	
	Judgement	**Comments**	**Judgement**	**Comments**
	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	NA	Not applicable
	Some concerns		**Some concerns**	
Bias in selection of the reported result	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	N	Due to unavailable trial protocol or statistical analysis plan, information on statistical analyses conducted and detail on calculation methodology of reported results makes it difficult to determine whether there was bias in selection of reported results.	N	Due to unavailable trial protocol or statistical analysis plan, information on statistical analyses conducted and detail on calculation methodology of reported results makes it difficult to determine whether there was bias in selection of reported results.
	Some concerns		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial

	Cancer, lung (undergoing chemotherapy)		Nasopharyngeal carcinoma (undergoing chemot	
Study ID	**Zhang 2016**		**Zhou 2018 (objective)**	
	Judgement	**Comments**	**Judgement**	**Comments**

Source: Chapter 8 (
a. For the precise w

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	The randomisation process was not described	Y	A computer-generated randomization schedule developed and conducted by an independent programmer was used.	Y	Random Allocation Software used to generate random-numbers.
	NI	The allocation sequence concealment was not described	Y	Allocation concealment was implemented by using sealed, sequentially numbered boxes that were identical in appearance for the two treatment groups.	NI	Authors did not provide information on allocation concealment.
	N	There were no statistically significant between group differences and characteristics are well matched across all domains	N	There were no statistically significant between group differences and characteristics are well matched across all domains	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.
	Some concerns		**Low**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	NI	No deviations or participant flow are reported. However, the mean attendance percentage for the 36 Tai Chi sessions in the Tai Chi group was 95%.	PY	Reported deviations were non-completion by 30% of participants, which primarily occurred during the lead-in phase of the drug before complementary addition of Tai Chi or Attention Control. Two subjects from the Attention Control group dropped out due to the lack of efficacy of treatment. This deviation can be considered related to the trial context. No serious adverse events were observed.	N	There were no deviations from the intended intervention reported. All participants complied and completed the assigned intervention or control.
	NA	Not applicable	PN	Only two participants (3%) dropped out due to lack of efficacy. Due to the low number, this is unlikely to have a large effect on the outcome.	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	NI	No information is reported regarding analysis.	Y	All outcome results used intent-to-treat analyses with mixed linear models analyses; no data were imputed.	Y	It is interpretted that an intention to treat analysis method was used.
	N	No information is reported regarding whether analysis performed on participants as per randomised assignment to intervention, however, results show the number of participants analysed in each group is consistent with groups at randomisation.	NA	Not applicable	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
	NI	No drop outs reported. Data for the outcome is assumed to be available for all participants.	N	5/73 participants (6.8%) withdrew following randomisation. Reasons were provided. Data available for all other participants.	Y	No drop outs reported. Data for the outcome is available for all participants.

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PY	Participant flow not reported but adherence is reported as 95% for the 26 Tai Chi sessions.	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in	PN	Study used published criteria to assess outcome measures but they are not validated	N	The trial included appropriate outcome measurement instruments.	N	The trial included appropriate outcome measurement instruments.
	N	All outcome measures were recorded using the same methods and time points, and by same blinded interviewer.	N	The methods of outcome assessment were comparable across intervention groups.	N	The methods of outcome assessment were comparable across intervention groups.
	N	Assesor was blinded to the group assignment and study hypothesis.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
measurement of the outcome	NA	Not applicable	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.
	NA	Not applicable	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Low		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	N	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	NI	Analysis intentions are not reported in sufficient detail to enable an assessment	PN	All reported outcome measures and time points were considered in the analysis.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.

	Mood disorders (depression)		Mood disorders (depression)		Mood disorders (depression)	
Study ID	**Chou 2004**		**Lavertsky 2010**		**Liu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NI	Analysis intentions are not reported in sufficient detail to enable an assessment	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	High		**Some concerns**		**Low**	
Overall risk of bias	High risk	The study has plausible bias that seriously weakens confidence in the results.	Some concerns	The study has plausible bias that raises some doubt about the results.	Some concerns	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable
Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	A computer-generated randomization with no restriction	NI	Randomisation sequence not specified.	NI	Randomisation sequence not specified.
	Y	Allocation concealment was implemented by using sealed envelopes and opened sequentially.	NI	Not specified, unlikely to have occurred.	NI	Not specified, unlikely to have occurred.
	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.	N	Baseline characteristics were balnced across groups	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.
	Low		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	Participants were aware of their allocation due to the overt nature of the intervention.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the over nature of the intervention.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	PN	Reported deviations included non-adherence and drop outs. 7 Participants from the intervention group were excluded due to non-adherence. No adverse events due to the tai chi intervention were reported.	PY	The tai chi intervetion arm had a signifcantly higher participant drop out rate than the tai chi + DVD intervention arm and control arm (43% vs 21% and 21%, respectively).	PN	There were no reported deviations.
	NA	Not applicable	NI	The authors assert that partipants lost to follow up due to drop out and adherance was not influenced by their anxiety and sleep quality levels (i.e. the primary outcomes of the study) by way of t-tests. However, detailed reasons for participant drop out/non-adherance was not reported.	NA	Not applicable
	NA	Not applicable	PN	Per point 2.3.	NA	Not applicable

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	N	A per protocol analysis was used. 7 participants were withdrawn from the Tai Chi group as they did not attend 65% of the sessions. Additionally, 2 participants in the control group who did not attend follow-up assessment were excluded from analysis.	Y	An ITT was used and reported.	PY	It is assumed intention-to-treat methods were used for the primary analyses. This is on account that no participants were recorded to have dropped out. The authors did not state how missing data would be handled.
	PY	Due to the proportion of participants who were excluded from analysis (23%) there is potential for this to impact the result.	NA	Not applicable	NA	Not applicable
	High		**Some concerns**		**Low**	
	PY	9 participants (23%) were excluded from the analysis due to non-adherence and lost to follow up. Data available for all other participants.	N	Per point 2.3.	Y	Data was available for all participants.

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NI	Per point 2.4.	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Some concerns**		**Low**	
Bias in	N	Appropriate tests and questionnaires were used for the intended outcome measures.	N	Appropriate tests and questionnaires were used for the intended outcome measures.	N	Study used published criteria to assess outcome measures but they are not validated
	PN	All outcome measures were recorded using the same methods, time points and conditions. Questionnaires could have been recorded differently due to their subjective nature	PY	Outcomes were measured at comparable follow up periods. However, participants were not blinded to their allocation, hence this knowledge could have influenced their performance on tasks and self-reports.	N	All outcome measures were recorded using the same methods and time points, however no mention of conditions is made
	N	Outcome measures were assessed by research staff who were blinded to patients' randomization status. However, for self-report measures, the assessor is the subject (Quality of Life Questionnaire and Multidimentional Scale of Perceived Social Support)	N	Assessors were reported as being blinded to participants' treatment group. However, self-report measures were undertaken by participants who had knowledge of their treatment allocation.	Y	For subjective measures, the assessor is the subject (Generic Quality of Life Inventory-74). It was not reported if assessors were blinded for the Hamilton Anxiety Scale.

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
measurement of the outcome	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.). It is unclear if outcomes are assessed by research assistants or participants and thus unclear if this is likely.
	PY	Baseline surveys conducted reported that all participants had positive expectations of Tai Chi, and more than half had strong beliefs that Tai Chi was helpful for depression, therefore it is likely that knowledge of the intervention affected some of the outcomes.	PY	Per point 4.4	PY	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected outcomes.
	High		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	Y	Pre-specified analysis plan specified in the trial registry was followed and reported.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All reported outcome measures and time points were considered in the analysis.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).

	Mood disorders (depression)		Anxiety or fear-related (including subclinical)		Anxiety or fear-related (including subclinical)	
Study ID	**Yeung 2012**		**Caldwell 2015**		**Song 2014a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	Low		**Low**		**Some concerns**	
Overall risk of bias	High risk	The study has plausible bias that seriously weakens confidence in the results.	Some concerns	The study has plausible bias that raises some doubt about the results.	Some concerns	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Permuted block randomization conducted by a third party not involved in the study.	NI	Randomisation sequence not specified.	NI	Randomisation sequence not specified. However, participants were recruited after randomization, leading to a possible selection bias,
	Y	Sealed opaque envelopes which contain the allocation information were used	NI	Not specified, unlikely to have occurred.	NI	Not specified, unlikely to have occurred.
	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.	N	Baseline characteristics were balnced across groups	N	Baseline characteristics were balnced across groups
	Low		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	Participants were aware of their allocation due to the overt nature of the intervention.	Y	Participants were aware of their allocation due to the overt nature of the intervention.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	PY	Reported deviations included non-completion by 19/69 participants (27.5%). Reasons were provided and 11 of the participants 57.9% dropped out as they no longer wished to participate. Majority of these subjects were from the waitlisted control group. The unwillingness to participate may have arose because of the trial context.	PN	No reported deviationsor deviations occurred due to the trial context were reported.	PY	Reported deviations included non-completion by 8 participants (4 from each intervention arm). Reasons for dropout included not wanting to make the time commitment to see the study through to completion, difficulty with completing the homework assignments or TTC classes, and not perceiving a benefit of the intervention(s).
	PY	Dropping out may have been influenced by participants perception about the group to which they were assigned. Differences between people who leave the study and those who continue can introduce bias into a study's results	NA	Not applicable	PN	The low number of droppouts (16.6%) is unlikely to have a significant effect on the final outcome.
	PN	The deviations were partially unbalanced with 2 in the Tai Chi group, 2 in the Exercise group, and 7 in the control group.	NA	Not applicable	NA	Not applicable

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	Y	An intention to treat method used whereby participants who dropped out from the study would have their last known data carried forward.	NI	Missing data and participant drop outs were not reported, neither whether an ITT, mITT or PP was used to analyse the data.	PN	It is assumed participants who dropped out of the study are not included in the analysis. Demographic and cognitive variables of the individuals who participated in the entire study versus those who dropped out before the study was completed were compared. Significant differences were reported in the Cognitive Assessment and Verbal Leaning Test.
	NA	Not applicable	NI	Given the lack of informaton, it is difficult to acertain whether participants were analysed in the groups they were originally randomised to.	PY	Due to the significant differences found in primary outcomes between those who were analysed and those who were excluded. It is possible that disclusing certain participants may have negatively effected the outcomes.
	High		**Some concerns**		**High**	
	PY	Data available for all participants. For those who were lost to follow up, their last known data was carried forward	NI	The authors do not report whether or not there is any missing data.	PY	8/48 participants (16.6%) were excluded from the anlaysis. Data availble for all other particpants.

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NI	It is difficult to asertain whether or not the result was baised due to missing data, given that the authors did not report the presence or absence of missing daa.	NA	Not applicable
	NA	Not applicable	NI	Per point 3.2.	NA	Not applicable
	NA	Not applicable	NI	Per point 3.2.	NA	Not applicable
	Low		**Some concerns**		**Low**	
Bias in	N	Appropriate tests and questionnaires were used for the intended outcome measures.	N	Appropriate tests and questionnaires were used for the intended outcome measures.	N	Study used validated methods for outcome measures.
	PN	All outcome measures were recorded using the same methods, time points and conditions. Questionnaires could have been recoded differently due to their subjective nature	PY	Outcomes were measured at comparable follow up periods. However, participants were not blinded to their allocation, hence this knowledge could have influenced their performance on tasks and self-reports.	N	All outcome measures were recorded using the same methods, time points and conditions.
	PY	For subjective measures, the assessor is the subject (State Trait Anxiety Inventory, Perceieved Stress Scale 14, SF36, Visual Anlog Scale). It was not reported if outcome assessors were blinded to treatment group. However, the data was analysed by a blinded data analyst.	N	Assessors were reported as being blinded to participants' treatment group. However, self-report measures were undertaken by participants who had knowledge of their treatment allocation.	NI	It is not stated whether the outcome assessor was blinded.

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
measurement of the outcome	PY	Participants were aware of the intervention they were receiving, therefore this could have influenced their outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.). It is unclear if outcomes are assessed by research assistants or participants and thus unclear if this is likely.	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).	PY	The outcome measure is objective however it is scored by an assessor observing the patient. It is considered possible that knowledge of the intervention status could influence scoring.
	PY	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai chi, therefore it is possible that knowledge of the intervention affected outcomes.	PY	Per point 4.4.	PN	Since the outcome measure is objective it is considered unlikely that knowledge of the intervention would affect measurement,
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No analysis plan was specified.	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	N	All reported outcome measures and time points were considered in the analysis.	N	No, the appropriate outcomes from the tests/questionnaires administered were reported.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.

	Anxiety or fear-related (including subclinical)		Neurocognitive		Neurocognitive	
Study ID	**Zheng 2018**		**Cheng 2012**		**Fogarty 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest that innapropriate multiple analyses of the data occurred.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Some concerns		**Some concerns**		**Low**	
Overall risk of bias	High risk	The study has plausible bias that seriously weakens confidence in the results.	Some concerns	The study has plausible bias that raises some doubt about the results.	High risk	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	Randomisation sequence not specified.	Y	Computer-generated random numbers prepared by an independent statistician	Y	Computer-generated random number sequences prepared by an independent research assistant
	NI	Not specified, unlikely to have occurred.	Y	The group allocations were kept sealed and were only released to the researchers when the baseline assessments for all of the participants in each home were completed.	Y	The group allocations were kept sealed and only released to participants after baseline assessments by the independent researcher. They were inaccessible to all the study researchers for the duration of the study.
	N	Baseline characteristics were balnced across groups.	N	There were no significant differences between the groups in terms of their demographic characteristics and outcome assessments at baseline, except that the control group participants were slightly but significantly more cognitively impaired than the experimental group (P = 0.042).	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.
	Some concerns		**Low**		**Low**	
	Y	Participants were aware of their allocation due to the overt nature of the intervention.	Y	Participants were aware of their allocation due to the overt nature of the intervention.	Y	Participants were aware of their allocation due to the overt nature of the intervention.
	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	PY	Participant drop out rates were considerable (22-46%), likely owing to the long follow up period (12 months) and vulnerability of the participant population (adults aged 65+ with mild cognitive impairment). In addition to this limitation, more participants dropped out of the tai chi intervention group than the exercise intervention group.	PY	Participant drop out rates were considerable (26-9%), likely owing to the vulnerability of the participant population (adults aged 60+ with dementia with their caregivers). Major reasons for droppouts included admitted to hospital, declined to continue (n=3) and health issue of caregiver. In addition to this limitation, more participants dropped out of the Tai Chi intervention group (n=5) than the control group (n=2).	PN	Reported deviations were non-completion by 6 participants but only 1 withdrawal due to unwillingnes to continue. Changes are consistent with trial protocol.
	PY	It could be possible that unequal drop out rates were due to differences in the intervetion groups (i.e. preference or higher efficacy of exercise group versus tai chi intervention group).	PN	As only 3 participants (11.5%) dropped out due to unwillingness to participate, it is unlikely that the drop out rates would have affected the final outcome.	NA	Not applicable
	NI	It is difficult to determine whether the difference in drop out rates could have impacted the outcome.	NA		NA	Not applicable

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	PY	A per-protocol analysis was used. Given that uneuqal participant drop outs could bias the outcome (per point 2.4), this type of analysis is inappropriate.	PN	A per-protocol method is interpreted as participants who dropped out of the study were not included in the final data analyses.	PN	A per-protocol method is interpreted as participants who dropped out of the study were not included in the final data analyses. However, baseline characteristics showed no statistically significant differences between the 6 dropout participants and the 74 participants who completed the study.
	PY	Per point 2.6	PY	Given that unequal participant drop outs could bias the outcome (per point 2.3), this type of analysis is inappropriate.	PN	Although missing data was not imputed, a comparison of the baseline characteristics revealed it is unlikely the naïve per protocol method had a substantial impact on the results.
	High		**High**		**Some concerns**	
	N	Per point 2.3.	PN	7/26 participants (26.9%) were excluded from the analysis. All other participant data is available.	Y	6/80 participants (7.5%) were excluded from the analysis as they did not return for follow up assessments. Data available from all other participants.

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	N	Per point 2.4.	PN	As per 2.4, it is unlikely that the high droppout rate affected the final outcome.	NA	Not applicable
	Y	Per point 2.4.	NA	Not applicable	NA	Not applicable
	Y	Per point 2.4.	NA	Not applicable	NA	Not applicable
	High		**Low**		**Low**	
Bias in	N	Appropriate tests and questionnaires were used for the intended outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	PY	Outcomes were measured at comparable follow up periods. However, participants were not blinded to their allocation, hence this knowledge could have influenced their performance on tasks and self-reports.	N	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.
	PY	Assessors were reported as being blinded to participants' treatment group. However, self-report measures were undertaken by participants who had knowledge of their treatment allocation.	PY	Group allocation was blinded to the assessors throughout the study. However, the Menorah Park engagement Scale is self-reported and participants were aware of their intervention.	PN	The authors do not explicitly state that the assessors were blinded to intervention. However, it is reported that sealed envelopes of participant allocation was inaccessible to all the researchers, suggesting intervention concealment.

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
measurement of the outcome	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).	PN	Due to the vulnerability of the study population, it is unclear if knowledge of the intervention is likely to impact the final engagement scale.	NA	Not applicable
	PY	Per point 4.4.	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	
Bias in selection of the reported result	NI	The outcomes specifed in the protocol plan were reported in the published study, however the study fails to detail inferential statstical methods used to analyse the outcome data (i.e. between groups analyses).	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	N	No, the appropriate outcomes from the tests/questionnaires administered were reported.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.

	Neurocognitive		Neurocognitive		Neurocognitive	
Study ID	**Lam 2011**		**Liu 2018b**		**Lyu 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest that innapropriate multiple analyses of the data occurred.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	Only psychometric measurement tools were used to assess the outcomes in this study while biological and neuroimaging markers were not examined. Therefore, the study fails to explore the full breadth of underlying mechanisms in Tai Chi therapy
	Some concerns		**Low**		**Low**	
Overall risk of bias	High risk	The study has plausible bias that seriously weakens confidence in the results.	High risk	The study has plausible bias that seriously weakens confidence in the results.	Some concerns	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Computer-generated randomisation stratified at each treatment site	Y	Computer generated block randomisation conducted by an independent resercher not involved in the study.
	Y	After completion of the baseline home visit, a member of the trials unit randomised dyads and sent them a letter to advise their treatment allocation	PY	Authors report allocation was sequentially numbered and opaque sealed.
	N	Baseline characteristics suggested an even balance across trial arms including medication consumption and other long-term health conditions	PN	There were no significance differences in participant demographic characteristics between the Tai Chi and control groups at baseline. However, the Geriatric Depression Scale differed between the two groups. This may suggest as issue with the randomization process but this baseline outcome data was entered as covariates in all analyses.
	Low		**Low**	
	Y	Participants were aware of their allocation due to the overt nature of the intervention.	Y	Participants were aware of their allocation due to the overt nature of the intervention.
	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.	Y	Carers and people delivering intervention knew of patients of patients allocation due to the overt nature of the intervention.

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	PY	The only reported deviation was non-completion by some participants. 5 participants from the Tai Chi group discontinued early in the intervention and 6 were subsequently lost to follow up. Reasons were provided and only 1 dyad withdrew due to 'not enjoying Tai Chi'. Similarly, 7 dyads were lost to follow up in the control group with 5 pairs 'no longer interested in the study'. No serious adverse events were related to participation in the trial	N	The only reported deviation was non-completion by 7 participants. Reasons were provided and changes are consistent with what is likely to occur outside of the trial context. No participants in either group altered their medication or supplement use for treatment of cognition during the trial. The Tai Chi group attended on average 31.5 of the 36 sessions (87.5%), and all participants reported that they used the video every time they practiced Tai Chi. There were no study-related injuries or falls.
	PN	As only 6 dyads (7%) from either group dropped out due to unwillingness to participate, it is unlikely that the drop out rates would have affected the final outcome.	NA	Not applicable
	NA	Not applicable	NA	Not applicable

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
[ITT])	PY	An intention-to-treat analysis is reportly used. However, the study participation flow diagram excludes several dyads who either discontinued early in the intervention or were lost to follow up.	Y	Per-protocol and intention-to-treat (ITT) analyses were performed with missing data calculated using multiple imputation. These results were similar. Thus, to preserve original randomization, baseline and posttraining data for the two groups for the ITT analysis are presented.
	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**	
	PY	14/85 participants (16.5%) were excluded from the analysis with primary outcome. Data available from all other participants.	PY	7/66 participants (10.6%) withdrew before the end of the trial. Missing data was imputed with an ITT analysis. Data available from all other participants.

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable
	Low		**Low**	
Bias in	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	N	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.
	N	The authors specify that the assessors were blinded to participants' treatment group. An unblinded research assistant conducted weekly phone calls to collect falls data; however, this is unlikley to affect the outcome as it is objective.	N	Trained assessors blinded to participant group allocation assessed all outcomes at baseline and the end of Week 15.

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
measurement of the outcome	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable
	Low		**Low**	
Bias in selection of the reported result	N	Several changes were made to the protocol during the trial to aid recruitment including broadening the eligibility criteria to a minimum age of 18 years and minimum Mini Addenbrooke's Cognitive Examination (M-ACE) score of 10, and reimbursing participants for their travel (intervention group) and participation (control group).	PY	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.

	Neurocognitive		Neurocognitive	
Study ID	**Nyman 2018**		**Sungkarat 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Some concerns		**Low**	
Overall risk of bias	Some concerns	The study has plausible bias that raises some doubt about the results.	Low risk	The study does not have any bias considered to seriously alter the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Computer aided randomisation program	NI	No mention of the method of randomisation	PY	Participants drew a card assigning them to their intervention group.
	NI	The authors do not report on allocation concealment	NI	The authors do not report on allocation concealment	PY	After enrolment, subjects drew a card from the instructor. Given this method, it is not possible for the enrolling investigator to know the upcoming allocation.
	PN	The baseline characteristics appear comparable between the intervention groups. The authors report that age differs between the two groups, with the Tai Chi group being younger than the control group.	PN	The baseline characteristics appear comparable between groups, however 3 participants from one group were excluded from the baseline.	N	The baseline characteristics between the intervention groups appear comparable and no significant differences were reported.
	Some concerns		**Some concerns**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	Y	The authors state that an intention to treat approach is used.	Y	Intention to treat method is specified. Post-randomisation exclusion of ineligible participants can be considered appropriate.	Y	Intention to treat method is specified.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	N	Outcome data at the end of the intervention was missing for 22 participants (16.2%). There were 15 drop outs in the intervention group (20%) and 7 in the control group (11%).	N	Outcome data was missing for 8 participants (30%) overall. There were two drop outs in the Tai Chi group (22%), three in the conventional exercise group (33%) and three in the control group (33%).	PN	5 participants withdrew during the intervention period (10.6%). There were two withdrawals in the Tai Chi group (13.3%), 1 in the exercise group (5.9%), and 2 in the control group (13.3%). An additional 2 participants withdrew during the follow up period, 1 in each of the exrercise and control groups.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PN	Insufficient analysis to assess the potential impact of missing outcome data.	N	Insufficient analysis to assess the potential impact of missing outcome data.	N	Insufficient analysis to assess the potential impact of missing outcome data.
	Y	The baseline characteristics of those who dropped out are not signficiantly different from those who remained in the trial, however the reasons for drop out lead to some concerns, particularly among those who fell or had other injuries, and those who refused to continue without giving a reason.	Y	There are four drop outs of particular concern: three who dropped out post-randomisation due to fear of falling, and one who dropped out due to starting a new treatment.	PY	The reasons given for drop out do not relate to the outcome being measured (hospitalisation due to infection, second stroke, schedule conflict). There is some concern about the participant who was excluded for engaging in a new treatment, especially if this was done because the intervention was not effective.
	N	Given that the drop out rates between groups are fairly balanced, it is not considered likely to significantly impact the result.	PY	If this participant started a new treatment because the intervention was not working, this would bias the outcome in favour of the intervention as the poorer performer is being excluded.	PN	Given that this is only one participant it is not considered likely to significantly impact the result.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Some concerns		**High**		**Some concerns**	
Bias in measurement of the outcome	N	Validated outcome measurements used.	N	Validated outcome measurements used.	N	Validated outcome measurements used.
	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.
	N	It is reported that the outcome assessor is blind to intervention status.	N	It is reported that the outcome assessor is blind to intervention status.	N	It is reported that the outcome assessor is blind to intervention status.
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	PN	The 6 week (mid-intervention) result for two outcomes was not presented, however the post-intervention and follow-up result is reported.	PN	The 6 week (mid-intervention) result for two outcomes was not presented, however the post-intervention and follow-up result is reported.	PY	Some of the primary outcome measures specified in the clinical trial registry are not reported in this publication. The 6 week (mid-intervention) result for two outcomes was not presented, however the post-intervention and follow-up result is reported.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Au-Yeung 2007**		**Chan 2017**		**Chan 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	High		**Some concerns**		**High**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable
Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	No mention of the randomisation method	Y	The sequence numbers were generated by an independent statistician using Excel	NI	No mention of the method of randomisation
	NI	The authors do not report on allocation concealment	Y	After completing baseline testing, each participant received a sealed envelope containing a random allocation sequence number to either the intervention or control group.	NI	The authors do not report on allocation concealment
	NI	Baseline characteristics not presented. The authors report no significant difference in mean age between the groups.	N	There were no statistically significant differences between the two groups	N	Baseline characteristics appear comparable between the groups
	Some concerns		**Low**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	The authors do not report on any deviation from protocol	PN	The only reported deviation was non-completion from some participants. Twp participants from the control group lost interest and 1 participant from the Tai Chi group was hospitalised. Changes are consistent with what would happne outside the trial context. During the study duration, there were no adverse events.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	PY	It is interpretted that an intention to treat method is used,	Y	The primary and secondary analyses were done on an intention-to-treat basis	PY	It is interpreted that an intention to treat analysis was used.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	The authors do not report any drop outs during the intervention period.	Y	Data was available for 89.3% of participants randomised. There was 1 drop out in the intervention group and 2 from the control group. Reasons provided.	Y	Data was available for 92% of participants randomised. There was one drop out in each group, reasons for drop out are not reported.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in measurement of the outcome	N	Validated outcome measurements used.	N	Validated outcome measurements used.	N	Validated outcome measurements used.
	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	N	Assessors were blinded to intervention allocation.	NI	Blinding of the outcome assessor is not reported
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	NA	Not applicable	PY	Included participant-reported outcomes

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	NA	Not applicable	PN	There is no reason to believe that that patient-reported outcomes were influenced by knowledge of the intervention received.
	Some concerns		**Low**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	PY	Only significant results are reported.	PN	All reported outcome measures and time points were considered in the analysis.	PN	All reported outcome measures and time points were considered in the analysis.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD	
Study ID	**Hart 2004**		**Huang 2019**		**Kim 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	PN	It is reported that this study did not compare FRI findings to those of previous studies. While different studies haveaddressed the need for assessment of the risk of falls, few have used the BBS. Although there is a recognized need for consensus, measurement indexes for FRI in stroke survivors are not yet standardized.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	High		**Some concerns**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Simple randomisation	Y	Randomisation through PLAN algorithm in SAS	NI	No mention of the randomisation sequence.
	PY	The authors mention that there was allocation concealment but do not provide a method	PY	Randomisation program was safe-guarded by project manager who did not participate in any other processes.	NI	The authors do not report on allocation concealment.
	N	Baseline characteristics appear comparable between groups	PY	Multiple domains where the Tai Chi group are significantly healthier/better functioning than the control group at baseline.	N	Baseline characteristics appear comparable between the intervention and control groups. Authors report no significant differences.
	Low		**High**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	Y	8 participants withdrew from the trial due to dissatisfaction with their treatment assignment.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	No changes from the trial protocol were reported.
	Y	The remaining participants were likely to be more motivated to complete the trial which is likely to affect their outcome if they are putting in greater effort.	NA	Not applicable	NA	Not applicable
	N	All of these withdrawals occurred in the SilverSneakers and control groups, there were no withdrawls for this reason in the Tai Chi group.	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	Y	Intention to treat analysis is specified	Y	Intention to treat analysis is specified.	PY	No information but it is interpreted that a modified intention to treat analysis was used.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	
	PY	14 participants dropped out during the trial (<10%).	Y	Follow up outcome data (12 weeks post intervention) was available for 90% of participants). Immediate post-intervention data was available for 92.4% of participants.	Y	No loss to follow up was reported, assumed all participants were retained.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PY	Statistcial analysis included a last observation carrired forward for drop outs, as well as a sensitivity analysis exlucding these participants (modified ITT).	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in measurement of the outcome	N	Validated outcome measurements used.	N	Validated outcome measurements used.	N	Validated outcome measurement.
	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	N	Assessors were blinded to intervention status.
	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	NA	Not applicable

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	N	Data was not analysed in the way specified by the trial protocol.	NI	No pre-specified analysis plan was available.
	PN	All reported outcome measures and time points were considered in the analysis.	PY	A number of outcomes specified in the trial protocol were not reported.	PN	All reported outcome measures and time points were considered in the analysis.

	Rehabilitation after stroke / CVD		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Taylor-Piliae 2013**		**Tao 2015**		**Amano 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	PY	Data was not analysed in the way specified by the trial protocol.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	Low		**High**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	No mention of the randomisation sequence.	Y	Participants recived a number from a random number table and then were alternately assigned the intervention or control group based on their number.	PY	Randomisation was performed using a coin toss.
	NI	The authors do not report on allocation concealment.	NI	The authors do not report on allocation concealment.	NI	The authors do not report on allocation concealment, but the first author determined the intervention group by flipping a coin.
	N	Baseline characteristics appear comparable between intervention groups.	N	The baseline characteristics appeared comparable between the intervention and control groups.	N	The baseline characteristics of the two groups appear comparable.
	Some concerns		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	
	NA	Not applicable	NA	Not applicable	NA	

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	PY	No information but it is interpreted that a modified intention to treat analysis was used, excluding participants with missing data.	PN	No information is provided but it is interpretted that a per protocol approach is used, due to the exclusion of participants who did not complete the intervention.	N	Per protocol analysis was used, excluding participants who did not participate in the required 20 Tai Chi classes.
	NA	Not applicable	PN	Only one participant was excluded for non-completion (2.5%) so this is not considered a strong concern.	PY	2 participants (11%) of the intervention group were excluded due to non-completion which could impact the result.
	Low		**Some concerns**		**High**	
	Y	Data was missing for 2 participants (18%) of the control group. Data was available for 91% of participants overall.	Y	Overall, data was available for 95% of participants at the 6 month follow up. This differed slightly between the intervention (92.5% available) and control (97.5% available) groups but due to low overall participant numbers this is not considered problematic.	N	Data was missing for 7 participants (21%): 4 from the intervention group (23.5%) and 3 from the control group (18.7%).

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	N	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.
	NA	Not applicable	NA	Not applicable	Y	The reported reasons for dropping out included hospitalisation, transportation issues, feeling the exercise was not sufficiently intense and a death in the family. Although these reasons are reported, there is concen specifically regarding the hospitalisations and the transportation issues. Particularly as transportation issues only occured in the intervention group and resulted in the participants being excluded from the analysis.
	NA	Not applicable	NA	Not applicable	PY	Although the reasons for not completing the study are reported, there is concern particularly regarding those participants who could not complete the required number of sessions and were thus excluded from the analysis. If these participants did not complete sessions due to disease severity and were excluded, it would likely bias the results in favour of the intervention.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**High**	
Bias in measurement of the outcome	N	Validated outcome measurement.	N	Validated outcome measurement.	N	Validated outcome measurement.
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments between the intervention and control groups. Some potenial concerns about the time interval, as it was specified that the intervention group was assessed after completing 20 clases, while the control group did not receive classes so may have been assessed on a slightly different timeline.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	N	Assessors were blinded to intervention status.	N	Assessors were blinded to intervention status.
	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	NA	Not applicable	NA	Not applicable

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	NI	Multiple papers from same trial reporting outcome measures not mentioned in earlier papers. Concern that additional outcomes may not have been reported.	PN	All reported outcome measures and time points were considered in the analysis.	PN	All reported outcome measures and time points were considered in the analysis.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Choi 2013**		**Gao 2009**		**Hackney 2008**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	Some concerns		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Groups were assigned by first author pulling intervention group out of a hat.	N	Participants were allocated by the alternate number method.	Y	Randomisation was by permuted block randomisation.
	NI	The authors do not report on allocation concealment, but the first author determined the intervention group by pulling the intervention out of a hat.	NI	The authors do not report on allocation concealment.	Y	Protocol specifies that allocation will be concealed, a sealed envelope with the randomisation sequence will be given to the research assistant who assigns study participants to their intervention groups after eligibility is confirmed and baseline characteristics have been collected.
	N	The baseline characteristics of the two groups appear comparable.	N	The baseline characteristics appear comparable between the intervention groups.	N	Baseline characteristics between the groups appear comparable.
	Some concerns		**Some concerns**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	PN	The authors report that participants were blinded to their intervention group, although given the nature of the intervetion it is unclear how this was achieved.	Y	The nature of the intervention means participants were aware of their group assignment.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	NI	Blinding of carers is not reported, unclear since it was reported that participants were blinded.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	Y	Participants were excluded from the intervention if there was a change in their medication.	PN	There were no reported deviations from the trial protocol.	N	A number of deviations from the protocol were noted, however none relate to the delivery of the intervention. Instead they relate to participant recruitment and outcome measures to be included. The only deviation reported is non-completion by some participants however this is consistent with the trial protocol.
	PN	Only one participant (1.3%) was excluded for this reason.	NA	Not applicable	NA	Not applicable
	NA		NA	Not applicable	NA	Not applicable

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	N	Per protocol analysis was used, excluding participants who did not participate in the required 20 intervention classes, and excluding those who had had changes in their medication during the trial.	Y	It is interpretted that an intention to treat analysis method was used.	Y	Intention-to-treat analysis method was used.
	PY	Overall, 14 participants (18.6%) had their outcome data excluded from the analysis.	NA	Not applicable	NA	Not applicable
	High		**Low**		**Low**	
	N	Overall, there was missing outcome data for 14 participants (18.6%).	Y	Data was available for all participants.	Y	Outcome data was available for 185 (95%) of participants. This did not differ between intervention groups.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	N	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.	NA	Not applicable	NA	Not applicable
	Y	Although the reasons for not completing the study are reported, there is some concern due to the differences between groups, and the possibility that some of these reasons may be associated with disease severity (e.g. hospitalisations and pain).	NA	Not applicable	NA	Not applicable
	PY	Although the reasons for not completing the study are reported, there is concern particularly regarding those participants who could not complete the required number of sessions and were thus excluded from the analysis. If these participants did not complete sessions due to disease severity and were excluded, it would likely bias the results in favour of the intervention.	NA	Not applicable	NA	Not applicable

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	High		**Low**		**Low**	
Bias in measurement of the outcome	N	Validated outcome measurement.	N	Validated outcome measurement.	N	Validated outcome measurements used.
	N	Outcomes were measured using the same instruments between the intervention and control groups. Some potenial concerns about the time interval, as it was specified that the intervention group was assessed after completing 20 clases, while the control group did not receive classes so may have been assessed on a slightly different timeline.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups. Efforts were made to schedule outcome measurements at the same time of day, and outcome measurements were performed in the same order.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	Y	Outcome measures were assessed by the researcher who was not blinded.	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	Y	As the researcher who conducted the stduy was the person responsible for meauring outcomes, it is considered possible that knowledge of the intervention status could have influenced measurement if there was a desire for better outcomes for the intervention.	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	Given the objective and standardised nature of the outcomes, it is considered unlikely that knowledge of the intervention status is likely to have influenced outcome measurement.	PN	To reduce this potential for bias, the protocol specifies that study participants will not be told the aim of the study, simply that three different exercises are being compared. Through this, participants are considered less likely to differentially report their outcomes as they would not have enrolled in order to receive a particular intervention.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	Y	Data was analysed in accordance with the pre-specified analysis plan.
	PN	All reported outcome measures and time points were considered in the analysis.	PN	All reported outcome measures and time points were considered in the analysis.	PY	A number of outcomes specified in the protocol as "other outcomes" were not reported which causes some concern.

	Parkinson's disease		Parkinson's disease		Parkinson's disease	
Study ID	**Hackney 2009**		**Khuzema 2020**		**Li 2012**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	Data was analysed in accordance with the pre-specified analysis plan.
	Low		**Low**		**Some concerns**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	No mention of the randomisation sequence.	NI	No mention of the randomisation sequence.	Y	Computer generated block randomisation was used
	NI	The authors do not report on allocation concealment.	NI	The authors do not report on allocation concealment.	NI	The authors do not report on allocation concealment
	N	There is a difference in average weight between groups (p=0.08). Baseline measures for the HAQ disability index and CRP levels were significantly dfferent between groups, indicating that tai chi group participants might have had more severe disease. This potential bias favours the experimental group as they would have more opportunity for improvement from baseline. These differences were all flagged by the authors as potential factors influencing the results.	NI	Baseline characteristics not presented.	PN	Baseline characteristics appear comparable between the treatment groups. The authors reported a significant difference in education level, and it appears that there are more females in the Tai Chi group and more males in the Tango group.
	Some concerns		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	PY	It is interpretted that an intention to treat method was used.	NI	No mention of the method of analysis.	Y	It seems most likely that a modified ITT analysis was used, although there is some uncertainty. The study reports adhering to ITT principles and that all subjects, even those who had attendance irregularities or protocol irregularities, were included in the statistical analysis. However, the study subsequently says that 20/22 subjects in the tai chi group and 18/22 subjects in the control group "were left to continue." It is unclear what this means and the data tables do not indicate the total n. Therefore it is uncertain whether participants were excluded from the final analysis.
	NA	Not applicable	PN	It is considered unlikely that per protocol or as treated analysis would be used. It is considered likely that participants would be analysed via modified intention-to-treat by excluding drop outs who do not have outcome data.	NA	Not applicable
	Low		**Some concerns**		**Low**	
	Y	2 participants dropped out of the study (8.7%), both from the intervention group due to transportation issues. Due to the low number of participants and the unequal weighting between the intervention and control group at randomisation, it is not considered problematic that only participants in the intervention group dropped out.	N	5 participants (14.7%) dropped out during the trial. There was 1 dropout in the intervention arm and 4 in the control arm.	N	Data was missing from 8 participants, 4 in each group. It is unclear how many participants there were at the start of the trial to assess what the drop out rate was, however given the participant numbers available, drop out was 26% in the Tai chi group and 29% in the control group.

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NI	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.	N	Insufficient analysis to confirm whether the outcome is biased by the missing data, although reasons for drop out are given. Missing data was handled by multiple imputation methods which should not be considered appropriate to correct for bias in this domain.
	NA	Not applicable	NI	Reasons for drop out were not reported so it is impossible to assess a potential relationship with the outcome.	NI	There is no information provided about reasons for drop out during the trial.
	NA	Not applicable	NI	Reasons for drop out were not reported so it is impossible to assess whether drop out was likely associated with the true value of the outcome.	NI	There is no information provided about reasons for drop out during the trial.

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**High**		**High**	
Bias in measurement of the outcome	N	Validated outcome measurements used.	N		N	Validated outcome measurements used.
	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.
	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Low		**Low**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	PN	All reported outcome measures and time points were considered in the analysis.	PN	All reported outcome measures and time points were considered in the analysis.	PN	All reported outcome measures and time points were considered in the analysis.

	Parkinson's disease		Rehabilitation after stroke / CVD		Parkinson's disease	
Study ID	**Nocera 2013**		**Wang 2010**		**Poier 2019**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	Low		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Permuted-block randomisation with randomly varying block sizes	Y	Computer-generated random numbers	NI	No mention of the randomisation sequence.
	NI	The authors do not comment on allocation concealment	Y	Allocation was concealed using selaed envelopes	NI	The authors do not report on allocation concealment.
	N	Baseline characteristics appear comparable at baseline.	N	Baseline characteristics appear comparable between groups.	N	Baseline characteristics appear comparable.
	Some concerns		**Low**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
[ITT])	PY	Not specified but an intention to treat method was interpreted	Y	The authors specify intention to treat analysis is used, with last observation carried forward to account for missing outcome data.	N	Exclusion of participants who did not complete the intervention (per protocol) should be considered inappropriate.
	NA	Not applicable	NA	Not applicable	PY	Two participants in the intervention group (11%) were excluded. This is not considered enough to substanitally impact the result.
	Low		**Low**		**Some concerns**	
	N	6 month outcome data was missing for 1 participant in the control group (6.3%) and 4 participants in the intervention group (25%)	PN	Data was missing for 10% of participants, 5% in the control and 15% in the intervention group.	N	Data not included for 2 participants (11%) of the intervention group.

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PN	Inadequate methods to assess the impact of missing data. Reasons for drop out were given as withdrawal of consent, unrelated medical reasons.	N	Inadequate methods to assess the impact of missing data. Reasons for drop out include low motivation in the intervention group.	NI	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.
	Y	Some concern due to the drop outs for medical reasons in the intervention group only.	Y	Concerns arise due to the 15% of participants in the intervention group who dropped out due to low motivation	Y	Although it is stated that participants did not complete the intervention because of timing constraints, given the nature of the condition it is considered possible that these participants could have been more unwell and this influenced their decision to not participate.
	PN	Authors state that the medical reasons were unrelated to the trial.	PY	If participants had low motivation because they felt they weren't improving, and thus dropped out this is likely to be related to the true value of the outcome	PN	Although it is considered possible that non-participation is due to MS symptoms, time constraints is also considered a probable reason for non-completion and will be accepted as true.

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Some concerns		**High**		**Some concerns**	
Bias in measurement of the outcome	N	Validated outcome measurements used.	N	Validated outcome measurements used.	N	Validated outcome measurement.
	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured at the same time points using the same instruments between the intervention groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.	NI	It is not stated whether the outcome assessor was blinded.
	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	PN	The study included both objective and subjective measures where participants could have biased their answers. However, primary outcomes were objective measures and there is no reason to believe patient-reported outcomes were negatively influenced.	PY	The outcome measure is objective however it is scored by an assessor observing the patient. It is considered possible that knowledge of the intervention status could influence scoring.

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	PN	Since the outcome measure is objective it is considered unlikely that knowledge of the intervention would affect measurement,
	Low		**Low**		**Some concerns**	
Bias in selection of the reported result	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	PY	Some outcomes specified in the clinical trial registry were not reported. Those reported use the instruments and time points specified.	PY	Some outcomes specified in the clinical trial registry were not reported, and changing the primary outcome was changed between the trial registry and the publication of results. Those reported use the instruments and time points specified.	PN	The secondary outcome specified by the clinical trial registry (health related quality of life measured with the MSQOL-54) is not reported in this publication.

	Parkinson's disease		Parkinson's disease		Multiple sclerosis	
Study ID	**Vergara-Diaz 2017**		**Zhang 2015**		**Azimzadeh 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred	N	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	Some concerns		**High**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
Bias arising from the randomisation process	NI	No mention of the randomisation sequence.
	NI	The authors do not report on allocation concealment.
	PN	There were five significant differences in which the control group scored better than the intervention group: physical functioning, role limitations due to physical health, vitality, social functioning, and the PCS.
	High	
	Y	The nature of the intervention precludes blinding participants to their group assignment.

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..
	PY	A number of participants dropped out after randomisation due to the time delay between recruitment and randomisation.
	PN	Drop out due to time delay is not considered likely to affect the outcome, and was equal between groups.
	NA	Not applicable

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
[ITT])	PY	Modified intention to treat with data carried forward when participants having missing data.
	NA	Not applicable
	Some concerns	
	N	There were 17 drop outs (36%) during the trial. This was was uneven between groups, 11 dropped out of the intervention group (46%) while 6 dropped out of the control group (26%). Additionally there was an unspecified number of people for whom analysed data was from the last observation was carried forward, compared to final outcome data.

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
Bias due to missing outcome data	N	No analyses were performed that would suggest the missing data did not cause bias.
	PY	Across intevention and control groups, 7 participants were lost to follow up because the time/travel commitment was too great. The other 5 particpants lost to follow up either dropped out for a "personal matter", did not give a reason, or lost contact. For these five participants, the missingness of outcome data could have been influenced by its value. It is even possible that those who reported that they dropped out due to time/travel commitment could have also factored their health status into the decision without explicitly reporting this to the researchers, and therefore the missingness could have depended on the outcome value in those situations as well.
	PY	More participants dropped out of the intervention group in total than the control group. It is logical that patients with more severe tension headaches would be more likely to drop out of either group because the burden of headache symptoms could make it difficult to carry out daily activities.

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
	High	
Bias in measurement of the outcome	N	Study used validated instruments (HRQOL SF-36v2 and HIT-6™).
	PN	Measurement of the outcome was conducted in the same way for both groups: both intervention and control groups received mailed surveys for each assessment and were instructed to complete them and return them by mail.
	PY	All subjects were assessed by a blinded evaluator. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns	
Bias in selection of the reported result	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received. It was specified that an assistant not otherwise involved in the study was the only person with access to the outcome data.
	PY	The outcomes were measured at baseline and at three time points throughout the intervention period, however results are only reported comparing "baseline" and "follow-up" (the time point for "follow-up" is not specified) and comparing "differences in changes in HRQOL and headache impact between treatment and control groups" however, how these differences were calculated is not specified - it is unclear if all measurements at each time point were incorporated into the analysis.

	Tension type headache	
Study ID	**Abbott 2007**	
	Judgement	**Comments**
	NI	How the reported differences between intervention and control group were calculated is not specified - it is unclear if this is an average of the difference at each of the three time points, or an average of the difference between baseline and one of the time points, or other methodology.
	Some concerns	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Cardiac rehabilitation		Cardiac rehabilitation		Cardiac rehabilitation	
Study ID	**Channer 1996**		**Liu 2020b**		**Nery 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Patients randomised to intervention groups, no further details provided	Y	Random table generated by a computer	PY	Uniform random numbers table divided into 2 groups generated in SPSS 18.0
	NI	Allocation concealment not discussed	Y	Allocation concealment performed	Y	Codes generated were enclosed in sequentially numbered, opaque sealed envelopes
	NI	Baseline characteristics not provided or discussed	N	No significant differences between baseline characteristics of intervention and control group	PN	Baseline characteristics suggest no significant differences between intervention and control groups
	High		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	NI	Authors do not provide details of deviations or loss to follow-up	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	PN	There were no deviations or changes to intervention groups were made

	Cardiac rehabilitation		Cardiac rehabilitation		Cardiac rehabilitation	
Study ID	**Channer 1996**		**Liu 2020b**		**Nery 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	Appropriate analysis performed on participants, presumably based on randomised assignment to intervention.	Y	Appropriate analysis performed on participants completing study as per randomised assignment to intervention.	Y	Appropriate analysis performed on participants completing study as per randomised assignment to intervention.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	
	NI	No information provided on the number of participants in each intervention group or how many participants dropped out or completed the study	PY	12.8% or participants (9/70) were lost to follow-up. This was evenly balanced between the two groups	Y	Data available for all participants

	Cardiac rehabilitation		Cardiac rehabilitation		Cardiac rehabilitation	
Study ID	**Channer 1996**		**Liu 2020b**		**Nery 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NI	Authors do not report handling of missing data in analysis methods. There is reason to suspect bias in the result due to missing outcome data	NA	Not applicable	NA	Not applicable
	NI	No information provided on the number of participants in each intervention group or how many participants dropped out or completed the study	NA	Not applicable	NA	Not applicable
	NI	No information provided on the number of participants in each intervention group or how many participants dropped out or completed the study	NA	Not applicable	NA	Not applicable
	High		**Low**		**Low**	
Bias in measurement of the outcome	N	Study used validated methods for outcome measures	PN	Method of measuring outcome appropriate and valid	PN	Method of meaursing the outcome was appropriate and validated
	PN	Measurements recorded by same methods for all intervention groups	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	NI	The authors provide no details to determine awareness of outcome assessors	PY	Participants were aware of their intervention group and reported their outcomes via questionnaires. One objective measure - unclear if assessor blinded to participant group assignment (single blinded study)	PN	Outcome evaluator were blinded to group allocation

	Cardiac rehabilitation		Cardiac rehabilitation		Cardiac rehabilitation	
Study ID	**Channer 1996**		**Liu 2020b**		**Nery 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NI	The authors provide no details to determine awareness of outcome assessors	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	NA	Not applicable
	NI	The authors provide no details to determine awareness of outcome assessors	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	NA	Not applicable
	High		**Some concerns**		**Low**	
Bias in selection of the reported result	Y	Researcher's prespecified intentions are available	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PY	The outcomes were measured at before and after active interventions and after inactive intervention only. Full results are not provided and it is not clear if all data, or a subset of data, has been reported or selected based on results.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	High		**Low**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.

	Cardiac rehabilitation		Coronary heart disease		Coronary heart disease	
Study ID	**Zhang 2020**		**Li 2019b**		**Liu 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Participants randomly assigned to intervention or control group using random number table	Y	Random number table used to evenly and randomly assign patients to intervention or control group	Y	Participants randomly assigned to intervention or control group with equal number of male and female participants in each group
	PY	Authors report random allocation according to allocation concealment	NI	Authors do not advise on allocation concealment	NI	Authors do not advise on allocation concealment
	N	No significant difference in baseline characteristics between groups	N	No significant baseline characteristics between groups	NI	No baseline characteristics provided
	Low		**Some concerns**		**High**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Cardiac rehabilitation		Coronary heart disease		Coronary heart disease	
Study ID	**Zhang 2020**		**Li 2019b**		**Liu 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	As-treated analysis performed on participants completing the study and ITT analysis performed on all enrolled participants.	Y	ITT analysis performed on participants completing study as per randomised assignment to intervention.	Y	ITT analysis performed on participants completing study as per randomised assignment to intervention.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	16.7% of participants lost to follow-up. Data available for remaining participants	PY	A total of 23.6% of participants (77/326) were lost to follow-up over the 6 month period.	PY	Data available for all participants

	Cardiac rehabilitation		Coronary heart disease		Coronary heart disease	
Study ID	**Zhang 2020**		**Li 2019b**		**Liu 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	Method of meaursing the outcome was appropriate and validated	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	The authors do not report if outcome assessors were blinded. Outcomes were observer-reported or observer-interpreted.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.

	Cardiac rehabilitation		Coronary heart disease		Coronary heart disease	
Study ID	**Zhang 2020**		**Li 2019b**		**Liu 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence cardiovascular outcomes (e.g. heart rate, blood pressure, blood analysis).	PY	Given these measures were self-reports, participants could have biased their answers.	PY	Given these measures were self-reports, participants could have biased their answers.
	NA	Not applicable	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

	Coronary heart disease		Heart failure		Heart failure	
Study ID	**Sato 2010**		**Barrow 2007**		**Hagglund 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Participants were randomised to either intervention or control group. No further details provided.	PY	Matched participants were randomised into intervention or control group. No further details provided	PY	At the time for baseline data collection, the participants were randomly assigned to either a control or training group
	NI	Authors do not advise on allocation concealment	NI	Authors do not advise on allocation concealment	NI	The authors do not provide details of allocation concealment.
	PN	No significant differences in baseline characteristics except for body mass index which was significantly higher in the Tai Chi group than the control group	PN	No significant difference in baseline characteristics between groups	PN	No significant differences in baseline characteristics. Body mass index was borderline statistically significantly (higher in the control group)
	Some concerns		**Some concerns**		**Some concerns**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Coronary heart disease		Heart failure		Heart failure	
Study ID	**Sato 2010**		**Barrow 2007**		**Hagglund 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	IIT analysis performed on participants completing study as per randomised assignment to intervention.	Y	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	Data available for all participants	PY	20% of participants lost to follow-up. Data available for all remaining participants	NI	The authors do not clearly report if data available for all participants.

	Coronary heart disease		Heart failure		Heart failure	
Study ID	**Sato 2010**		**Barrow 2007**		**Hagglund 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NI	Authors do not report handling of missing data in analysis methods. There is reason to suspect bias in the result due to missing outcome data.
	NA	Not applicable	NA	Not applicable	NI	Authors do not clearly report reasons for withdrawal or partial completion. It is not possible to determine the impact of missingness
	NA	Not applicable	NA	Not applicable	NI	Authors do not clearly report reasons for withdrawal or partial completion. It is not possible to determine the impact of missingness
	Low		**Low**		**High**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	NI	The authors do not report if outcome assessors were blinded.	PY	The authors do not report if outcome assessors were blinded. Outcome was objective observer-reported.	PY	The authors do not report if outcome assessors were blinded. Outcomes were observer-reported or observer-interpreted.

	Coronary heart disease		Heart failure		Heart failure	
Study ID	**Sato 2010**		**Barrow 2007**		**Hagglund 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence cardiovascular outcomes (e.g. heart rate, oxygen uptake, blood pressure).	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence objective cardiovascular outcomes (e.g. heart rate, blood pressure, blood analysis).	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence cardiovascular outcomes (e.g. heart rate, blood pressure, blood analysis).
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	Y	Researcher's prespecified intentions are available
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PY	The outcomes were measured at before and after active interventions and after inactive intervention only. Full results are not provided and it is not clear if all data, or a subset of data, has been reported or selected based on results.
	Low		**Low**		**High**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

	Heart failure		Heart failure		Heart failure	
Study ID	**Redwine 2019**		**Yeh 2004**		**Yeh 2011**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomisation using computer generated algorithm	Y	Permuted block randomisation used	Y	Block randomization with variable block size to generate treatment assignment
	NI	Authors do not report on allocation concealment	Y	Assignments were sealed in sequentially numbered, opaque envelopes and opened by an unblinded investigator following baseline testing	NI	The authors do not report on allocation concealment
	N	No significant differences in baseline characteristics between treatment groups	N	No statistically significant differences were found between the two groups	PN	The 2 groups were generally similar in demographics, clinical classification of heart disease severity, and rates of comorbidities. More men in the control group compared to intervention group. No statistical differences reported
	Low		**Low**		**Some concerns**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Heart failure		Heart failure		Heart failure	
Study ID	**Redwine 2019**		**Yeh 2004**		**Yeh 2011**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	Data available for all, or nearly all, participants. 15.7% were lost to follow-up	PY	Data available for all, or nearly all, participants. Last observation carried forward for 4 participants	PY	Data available for all, or nearly all, participants.

	Heart failure		Heart failure		Heart failure	
Study ID	**Redwine 2019**		**Yeh 2004**		**Yeh 2011**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	N	Outcome assessors were blinded to participant treatment groups.	N	Outcome assessors were blinded to participant treatment groups. NOTE - there are subjective outcomes that could influence measurment of the outcome	N	Outcome assessors were blinded to participant treatment groups. NOTE - there are subjective outcomes that could influence measurment of the outcome

	Heart failure		Heart failure		Heart failure	
Study ID	**Redwine 2019**		**Yeh 2004**		**Yeh 2011**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**Low risk**	The study does not have any bias considered to seriously alter the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Heart failure		Hypertension		Hypertension	
Study ID	**Yeh 2013**		**Chan 2016**		**Ma 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Block randomization with variable block size to generate treatment assignment	Y	Random allocation performed using a computer-based randomiser	Y	Participants asked to selct an opaque envelope to allocate their group
	NI	The authors do not report on allocation concealment	PY	Randomisation list stored in a password-protected computer only accessible by the research staff responsible for participant allocation	PY	The authors do not report on allocation concealment; however, opaque envelopes suggest allocation concealment
	PN	The 2 groups were generally similar in demographics, clinical classification of heart disease severity, and rates of comorbidities. Those in the intervention group appear to have a heavier body weight. No statistical differences reported	N	No statistically significant differences seen between the groups	N	No statistically significant differences seen between the groups
	Some concerns		**Low**		**Low**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Heart failure		Hypertension		Hypertension	
Study ID	**Yeh 2013**		**Chan 2016**		**Ma 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	Data available for all, or nearly all, participants	PY	Data available for all, or nearly all, participants	PY	28.5% of participants lost to follow-up over the 6 month intervention.

	Heart failure		Hypertension		Hypertension	
Study ID	**Yeh 2013**		**Chan 2016**		**Ma 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	N	Outcome assessors were blinded to participant treatment groups. NOTE - there are subjective outcomes that could influence measurment of the outcome	N	Research assistants responsible for data collection were blinded to group assignment. NOTE - secondary outcomes include self-reported measures	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.

	Heart failure		Hypertension		Hypertension	
Study ID	**Yeh 2013**		**Chan 2016**		**Ma 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).
	NA	Not applicable	NA	Not applicable	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Low		**Low**		**Some concerns**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Hypertension		Heart failure		Hypertension	
Study ID	**Shou 2019**		**Caminiti 2011**		**Sun 2015a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Participants randomly divided into two groups. No further information provided	PY	After completion of baseline testing, participants were simply randomised by lot to either one of two groups.	PY	Participants randomly assigned to intervention or control group. No further information provided
	NI	The authors do not report on allocation concealment	NI	The authors do not provide details of allocation concealment.	NI	The authors do not report on allocation concealment
	NI	There is a difference in average weight between groups (p=0.08). Baseline measures for the HAQ disability index and CRP levels were significantly dfferent between groups, indicating that tai chi group participants might have had more severe disease. This potential bias favours the experimental group as they would have more opportunity for improvement from baseline. These differences were all flagged by the authors as potential factors influencing the results.	PN	No significant differences in baseline characteristics between the groups	N	No statistically significant differences were found between the two groups
	High		**Low**		**Some concerns**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Hypertension		Heart failure		Hypertension	
Study ID	**Shou 2019**		**Caminiti 2011**		**Sun 2015a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	Y	ITT analysis performed on participants completing the study as per randomised intervention	PY	It seems most likely that a modified ITT analysis was used, although there is some uncertainty. The study reports adhering to ITT principles and that all subjects, even those who had attendance irregularities or protocol irregularities, were included in the statistical analysis. However, the study subsequently says that 20/22 subjects in the tai chi group and 18/22 subjects in the control group "were left to continue." It is unclear what this means and the data tables do not indicate the total n. Therefore it is uncertain whether participants were excluded from the final analysis.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	NI	The authors do not clearly report if data available for all participants.	PY	Data available for all participants	PY	16.3% of participants were lost to follow-up and excluded from final analysis

	Hypertension		Heart failure		Hypertension	
Study ID	**Shou 2019**		**Caminiti 2011**		**Sun 2015a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NI	Authors do not report handling of missing data in analysis methods. There is reason to suspect bias in the result due to missing outcome data.	NA	Not applicable	NA	Not applicable
	NI	Authors do not clearly report reasons for withdrawal or partial completion. It is not possible to determine the impact of missingness	NA	Not applicable	NA	Not applicable
	NI	Authors do not clearly report reasons for withdrawal or partial completion. It is not possible to determine the impact of missingness	NA	Not applicable	NA	Not applicable
	High		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	NI	The authors do not report whether outcome assessors were blinded to participant allocation	PY	The authors do not report if outcome assessors were blinded. Primary outcome was objective observer-reported. NOTE - participant self-reported exercise tolerance was also evaluated	N	Researchers conducting laboratory tests were not aware of the allocation status of the participants

	Hypertension		Heart failure		Hypertension	
Study ID	**Shou 2019**		**Caminiti 2011**		**Sun 2015a**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence objective cardiovascular outcomes (e.g. heart rate, blood pressure, blood analysis).	PN	Participants were aware of the intervention they were receiving, however, it is unlikely that this could influence objective cardiovascular outcomes (e.g. heart rate, blood pressure, blood analysis).	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Hypertension		Hypertension		Hypertension	
Study ID	**Talebi 2017**		**Tsai 2003**		**Young 1999**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Coin toss used for allocation of centre to control or intervention	PY	Participants were randomly assiged by drawing to either a intervention or control group. No further details provided	PY	Participants were randomly assiged to either a intervention or control group. No further details provided
	PY	Cohort selected based on random selection of participating community centres that were placed inside envelopes.	NI	Authors do not report on allocation concealment	NI	Authors do not report on allocation concealment
	PY	Statistically significant differences in economic status were found between the two groups	PN	No statistically signficant differences between the two groups	PY	The aerobic group had a higher level of estimated daily energy expenditure and spent more time in moderate intensity physical activity. No statistically significant differences in baseline demographics
	Some concerns		**Some concerns**		**High**	
	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention means participants were aware of their group assignment.
	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	PY	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made

	Hypertension		Hypertension		Hypertension	
Study ID	**Talebi 2017**		**Tsai 2003**		**Young 1999**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	16.3% of participants were lost to follow-up and excluded from final analysis	PY	13.6% of participants were lost to follow-up	PY	Data available for all, or nearly all, participants. 3% lost to follow-up

	Hypertension		Hypertension		Hypertension	
Study ID	**Talebi 2017**		**Tsai 2003**		**Young 1999**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	N	Technicians were masekd to intervention status.

	Hypertension		Hypertension		Hypertension	
Study ID	**Talebi 2017**		**Tsai 2003**		**Young 1999**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	Given these measures were self-reports, participants could have biased their answers.	NA	Not applicable
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
Bias in selection of the reported result	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

			Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID			**Chan 2010**		**Kantatong 2019**	
	Judgement	**Signalling question**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process		1.1 Was the allocation sequence random?	Y	Computer-generated random sequence.	Y	Stratified randomisation, each strata allocated to blocks of four and randomised by drawing lots.
		1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions?	NI	The authors do not report on allocation concealment.	Y	Concealed allocation was mentioned but no details given.
		1.3 Did baseline differences between intervention groups suggest a problem with the randomisation process?	PN	Significant difference in gender between the three groups as only one female in Tai Chi Qigong group, but all other fields were not significant.	N	Baseline characteristics were comparable between groups, with no statistically significant difference between groups.
	Low	**Risk-of-bias judgement**	**Some concerns**		**Low**	
		2.1. Were participants aware of their assigned intervention during the trial?	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
		2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.

			Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID			**Chan 2010**		**Kantatong 2019**	
	Judgement	**Signalling question**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])		2.3. If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the trial context?	PN	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	N	No deviations from the trial protocol were reported.
		2.4 If Y/PY to 2.3: Were these deviations likely to have affected the outcome?	NA	Not applicable	NA	Not applicable
		2.5. If Y/PY/NI to 2.4: Were these deviations from intended intervention balanced between groups?	NA	Not applicable	NA	Not applicable
		2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?	Y	Intention to treat analysis was used to analyse the outcome data, with last observation carried forward for missing outcome data.	Y	Intention to treat analysis was used to analyse the outcome data.
		2.7 If N/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized?	NA	Not applicable	NA	Not applicable
		Risk-of-bias judgement	**Low**		**Low**	
		3.1 Were data for this outcome available for all, or nearly all, participants randomized?	N	The 3-month drop out rate was 23.4% across all arms of the trial. This rate was different between the intervention group (14.3%), the exercise group (27.5%) and the control group (28.3%). At 6-month follow up, 78 participants (37.8%) had dropped out: 20 in the intervention group (28.6%), 23 in the exercise group (33.3%) and 35 in the control group (52.2%).	Y	There were no drop outs during this trial.

			Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID			**Chan 2010**		**Kantatong 2019**	
	Judgement	**Signalling question**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data		3.2 If N/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data?	PN	Insufficient methods to assess whether missingness impacted the outcome data. No sensitvity analysis or other adjustment methods were reported.	NA	Not applicable
		3.3 If N/PN to 3.2: Could missingness in the outcome depend on its true value?	Y	Although reasons for drop out were identified, differences in the number and proportion of drop outs between intervention groups leads to concern.	NA	Not applicable
		3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value?	PY	Characteristics of those who drop out compared to those who remain are not given, and with a chronic disease over a 6-month trial period, it is likely that differences and changes in symptoms may influence drop out rates.	NA	Not applicable
		Risk-of-bias judgement	**High**		**Low**	
Bias in measurement of the outcome		4.1 Was the method of measuring the outcome inappropriate?	N	Appropriate measure of outcome, had been validated in population.	N	Outcomes were measured appropriately
		4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
		4.3 If N/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants?	PY	Outcome assessor was blinded. However, the participant was aware of the intervention and majority of outcomes were self-reported.	PY	Outcome assessor was blinded. However, the participant was aware of the intervention.
		4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received?	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given that these measures were self-reports, participants could have biased their answers (i.e. performance bias) given that they knew which intervention they had received.	PN	It is unlikely that outcome assessors could influence the objective outcomes in this study

			Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID			**Chan 2010**		**Kantatong 2019**	
	Judgement	**Signalling question**	**Judgement**	**Comments**	**Judgement**	**Comments**
		4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?	PN	Participants were not blinded to intervention; however, they were not informed as to the research hypothesis, and knowledge of the type of exercise being studied did not seem to bias reported treatment outcome expectations. Thus, it is unlikely that any preconceived notion of the benefit of one type of exercise over another had a bearing on the results	NA	Not applicable.
		Risk-of-bias judgement	**Some concerns**		**Low**	
Bias in selection of the reported result		5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis?	N	Clinical trial registry reports additional primary outcomes which were not reported in the trial publications. No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
		Is the numerical result being assessed likely to have been selected, on the basis of the results, from... 5.2. ... multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	PN	Reported outcomes use the pre-specified measurement tools according to the clinical trial registry. Not all outcomes were reported.	PN	All reported outcome measures and time points were considered in the analysis.
		Is the numerical result being assessed likely to have been selected, on the basis of the results, from... 5.3 ... multiple eligible analyses of the data?	PY	No pre-specified analysis plan was available.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred
		Risk-of-bias judgement	**High**		**Low**	
Overall risk of bias		#N/A	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable
Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Leung 2011**		**Ng 2014**		**Niu 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Random allocation by computerised phone dial-up, with minimisation for lung function, sex and the main limiting symptom in the endurance shuttle walk test.	Y	Random number sequences using Microsoft Excel	Y	Computer generated random number sequence.
	Y	Concealed allocation was mentioned but no details given.	Y	Concealed allocation through sequentially numbered envelopes by a research assistant not involved in recruitment, opened by participants.	PN	The same researcher generated the randomisation and enrolled participants. A different therapist allocated participants to the intervention and control groups.
	N	Baseline characteristics were comparable between groups, with no statistically significant difference between groups.	N	Baseline characteristics were comparable between groups, there were significantly more people with severe or very severe COPD in the Tai Chi group and some difference in the baseline lung function values between groups. This is considered to be compatible with chance since randomisation was well described.	N	Baseline characteristics are comparable between the two groups.
	Low		**Low**		**High**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	PY	The nature of the intervention precludes blinding participants to their group assignment, however participants were blinded to the purpose of the trial.
	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Leung 2011**		**Ng 2014**		**Niu 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	N	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	N	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	N	It was reported that there we no deviations from the protocol after trial commencement. There was non-completion by one participant who died.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Intention to treat analysis was used to analyse the outcome data.	Y	Intention to treat analysis was used to analyse the outcome data.	PY	No information was provided regarding the analysis method used. It is interpretted that all participants were analysed in the group to which they were assigned (ITT).
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PN	There were three discontinuations in the intervention group (13%) and one in the control group (5%).	N	There were 26 discontinuations in the intervention group (27.6%) and 28 in the control group (28.6%).	Y	One participant in the control arm died, data was available for all other participants (97.5%).

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Leung 2011**		**Ng 2014**		**Niu 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PN	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.	PN	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.	NA	Not applicable
	PY	Although the reasons for drop out were reported, differences between the intervention and control groups leads to concern.	PY	Although the reasons for drop out were reported, the number of participants who dropped out for each reason was not specified.	NA	Not applicable
	PY	The exacerbation of COPD symptoms in the intervention group is of particular concern.	PY	With no information about how many participants dropped out for each reason (COPD symptom exacerbation is a particular concern), it is likely that missingness was influenced by the true health state of participants.	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
Bias in measurement of the outcome	N	Appropriate measure of outcome, specific to the population.	N	Outcome meausres were validated in the population.	N	Outcomes were measured using standard tools according to the user manuals.
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	Outcome assessor was blinded. However, the participant was aware of the intervention.	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.	N	A blinded assessor conducted the assessments at each time period.
	PN	It is unlikely that outcome assessors could influence the objective outcomes in this study	PY	Self-reported subjective outcomes could be influenced by the knowledge of their intervention status.	NA	Not applicable

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Leung 2011**		**Ng 2014**		**Niu 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable.	PN	As the control group also received a pulmonary rehabilitation program, it is not considered likely that they would differentially report their outcomes.	NA	Not applicable
	Low		**Some concerns**		**Low**	
Bias in selection of the reported result	N	Analysis of covariance was specified in the study plan, repeated measures analysis of variance was reported.	PN	Original clinical trial registry reported that analysis of variance would be used but analysis of covariance was used.	NI	No pre-specified analysis plan for the reported outcomes.
	PN	All reported outcome measures and time points were considered in the analysis.	PN	Reported outcomes use the pre-specified measurement tools according to the clinical trial registry. An additional time point (2 months) is reported which was not included in the clinical trials registry.	PN	All reported outcome measures and time points were considered in the analysis.
	N	Analysis of covariance was specified in the study plan, repeated measures analysis of variance was reported.	PY	Original clinical trial registry reported that analysis of variance would be used but analysis of covariance was used.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred
	High		**High**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Polkey 2017**		**Wang 2019**		**Yeh 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	No information on the randomisation method was provided.	NI	No information on the randomisation method was provided.	Y	Conputer-generated randomisation
	NI	The authors do not report on allocation concealment.	NI	No information on allocation concealment.	NI	The authors do not report on allocation concealment.
	N	Baseline characteristics were comparable between groups, with no statistically significant difference between groups.	N	Baseline characteristics were comparable between groups, with no statistically significant difference between groups.	PN	Baseline characteristics were broadly comparable between groups, with only caloric expenditure per week being significantly different between the groups.
	Some concerns		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Polkey 2017**		**Wang 2019**		**Yeh 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	N	The only reported deviations were non-completion by some participants, and one patient who used a bronchodilator between consent and the first visit (patients were supposed to be bronchodilator naïve). Changes are consistent with trial protocol, or likely did not occur due to the trial context.	N	The only reported deviations were non-completion by some participants. Changes are consistent with trial protocol.	N	The only reported deviations were non-completion by one participant, for whom outcome data was still available. Changes are consistent with trial protocol.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Intention to treat analysis was used to analyse the outcome data, with last observation carried forward to account for missing data.	PY	No information was provided regarding the analysis method used. It is interpretted that all participants were analysed in the group to which they were assigned (ITT).	Y	Intention to treat analysis was used to analyse the outcome data.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	Y	A total of 10 participants (8.3%) dropped out of the study, 5 in both the intervention and control groups.	PY	There were 4 drop outs in total (8%), 2 in each group.	PY	Outcome data was available for all participants in the trial.

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Polkey 2017**		**Wang 2019**		**Yeh 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	N	Standardised and validated measurement tools were used.	N	Commonly used and validated tools were used to measure the outcomes.	N	Commonly used and validated tools were used to measure the outcomes.
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	Y	Neither the participants nor the assessors were blinded to treatment status.	PY	Outcome assessor was blinded. However, the participant was aware of the intervention.	PY	Outcome assessor was blinded. However, the participant was aware of the intervention.
	Y	Knowledge of the intervention status could have influenced the measurement of outcomes.	PN	It is unlikely that outcome assessors could influence the objective outcomes in this study	PN	It is unlikely that outcome assessors could influence the objective outcomes in this study

	Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease		Chronic Obstructive Pulmonary Disease	
Study ID	**Polkey 2017**		**Wang 2019**		**Yeh 2010**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Given the objective nature of the outcome, it is considered unlikely that knowledge of the intervention status would have bias the measurement.	NA	Not applicable.	NA	Not applicable.
	Some concerns		**Low**		**Low**	
Bias in selection of the reported result	NI	No pre-specified analysis plan for the reported outcomes.	NI	No pre-specified analysis plan was available.	NI	No pre-specified analysis plan was available.
	PN	Some outcomes measured were not reported, however all primary measures were reported.	PN	All reported outcome measures and time points were considered in the analysis.	PY	Some measured outcomes were not reported.
	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred
	Some concerns		**Low**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

Study ID
Bias arising from the randomisation process

Study ID
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])

Study ID
Bias due to missing outcome data
Bias in measurement of the outcome

Study ID
Bias in selection of the reported result
Overall risk of bias

Y = yes; PY= partial
Source: Chapter 8 C
a. For the precise w

	Chronic Obstructive Pulmonary Disease	
Study ID	**Zhu 2018**	
	Judgement	**Comments**
Bias arising from the randomisation process	Y	Using random numbers
	Y	Recruitment staff had no access to results of the randomisation.
	N	Baseline characteristics were comparable between groups, with no apparent differences between groups.
	Low	
Bias due to deviations from the intended interventions	Y	The nature of the intervention means participants were aware of their group assignment.
	Y	The nature of the intervention precludes blinding carers to the group assignment.

There is a diff

Study ID
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])

Chronic Obstructive Pulmonary Disease	
Zhu 2018	
Judgement	**Comments**
N	The only reported deviations were non-completion by one participant, for whom outcome data was still available. Changes are consistent with trial protocol.
NA	Not applicable
NA	Not applicable
PY	No information was provided regarding the analysis method used. It is interpretted that all participants were analysed in the group to which they were assigned (ITT).
NA	Not applicable
Low	
PN	8 people (13.3%) did not complete the trial.

	Chronic Obstructive Pulmonary Disease	
Study ID	**Zhu 2018**	
	Judgement	**Comments**
Bias due to missing outcome data	PN	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.
	PN	Reported reasons for dropping out of the trial seem unlikely to be caused by the true value of the outcome.
	NA	Not applicable
	Low	
Bias in measurement of the outcome	N	Appropriate measure of outcome, had been validated in population.
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	NI	No information was provided regarding the blinding of outcome assessors.
	PY	Knowledge of the intervention status could have influenced the measurement of outcomes.

Knowledge of allocation by outcome as

Study ID
Bias in selection of the reported result
Overall risk of bias

Y = yes; PY= partial
Source: Chapter 8 C
a. For the precise w

Chronic Obstructive Pulmonary Disease	
Zhu 2018	
Judgement	**Comments**
PN	Given the objective nature of the outcome, it is considered unlikely that its measurement would be biased by knowledge of the intervention status.
Some concerns	
NI	No pre-specified analysis plan was available.
PN	All reported outcome measures and time points were considered in the analysis.
PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred
Low	
Some concerns	The study has plausible bias that raises some doubt about the results.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomisation table was used. Stratification by age.	Y	Stratified permuted randomization with varying block size and patterns were used.	Y	A computerised randomisation schedule in blocks of 30 was used.
	NI	No information is provided on allocation sequence concealment.	PY	Study reported method of randomisation in suitable detail, citing a textbook on the fundamentals of clinical trials (Friedman et al., 2010). Given the care taken to construct the trial with rigorous methodology, it is likely that the allocation sequence was concealed until participants were enrolled and assigned.	PY	Randomisation was conducted at an offiste location and participants were informed of their assignments after completing the baseline assessment.
	N	No significant differences in baseline characteristics.	N	No significant differences in baseline characteristics.	PN	The only baseline differences were in the selected signal joint (joint selected by participant to be assessed - the most severe joint) and DASS21 stress subscale score.
	Some concerns		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	No deviations were reported.	PN	No deviations were reported.	PY	At least 4 out of the 8 participants who dropped out of the tai chi group gave reasons that suggested problems with intervention or trial context: disliked tai chi (n=2), exacerbation of knee pain (n=2), and wanted hydrotherapy (n unknown).
	NA	Not applicable	NA	Not applicable	PN	In total, 8/56 (14%) of the tai chi participants dropped out, which is reasonable given the duration of the trial and given that the trial was powered to be able to accommodate a 25% dropout rate while still showing an effect.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Intention to treat was used (except for any participants dropping out within the first week, of which there may have been 1 in the control group).	Y	Modified ITT analysis was used (participants who were lost to follow up were not included in the analysis).	Y	Modified intention to treat analysis was used (missing data was filled in by carrying the last observation forward).

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Some concerns**	
	PY	32% dropout rate in control; 18% dropout rate in tai chi group. Given the reasons for dropout, it is likely that there was missing data for at least some of these participants, however this was not reported. Given the duration of the study and nature of the interventions, the dropout rate was not seen as irregular - the study cites another similar study which had a higher dropout rate.	Y	283/343 (83%) of participants returned for the 8 week follow-up. Attrition at 8 weeks was 16.7% (30/181) for the tai chi group and 17.9% (29/162) for the control group. This is reasonable as the analyses conducted prior to the study estimated that 150 participants would be needed per group, and ultimately the study recruited 181 in the tai chi group and 162 in the control group.	Y	Posttreatment assessments at 12 weeks were completed for 141 participants (93%) and followup assessments were completed 12 weeks later for 133 participants (88%).

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	PN	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points. The 1 year follow up of self-reported outcomes is considered "single arm" however the first 8 weeks of the study is a full randomised controlled trial.	PN	For the original tai chi and hydrotherapy groups, outcome measurements were taken at the same time. For the waitlist control participants, outcome measurements were taken 12 weeks later (since they delayed the start of tai chi or hydrotherapy by 12 weeks in order to have an inactive control group for the first 12 weeks), however the time points were comparable.
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	Given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
	NI	No information was provided about a pre-specified analysis plan.	PY	Clinicaltrials.gov registry indicates that outcomes were largely measured according to plan.	PY	The objective outcomes listed in the clinical registry mostly align with the measures reported in the publication, except one additional measure was included in the publication (up and go test).

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Brismee 2007**		**Callahan 2016**		**Fransen 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in selection of the reported result	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	Some of the outcomes listed on the clinicaltrials.gov listing are inconsistent with the outcomes ultimately measured in the study, however the differences are considered minor. The differences include: 20-foot walk test instead of 50-foot, Falls surveillance was not conducted, and PRO instruments to be used for the secondary self-reported outcomes were not specified in the clinical trials registry but were specified in the paper.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	Outcome measurements were taken at baseline and multiple time points throughout the intervention period and follow up. Outcome values at each time point were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and post-intervention, and at 1-year follow up for the tai chi group. Outcome values at each time point were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline, 12 weeks, and 24 weeks. Outcome values at all time points were reported. There is no indication that other analyses were conducted.
	Some concerns		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable
Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	PY	Participants were assigned randomly, using a table of random numbers	Y	Computer-generated balanced block randomization	Y	Computer-generated (using SAS (v9.2) statistical software) random numbers were used.
	PY	No information is provided on allocation sequence concealment. However, one participant from the control group dropped out due to dislike in assignment, suggested allocation concealment.	Y	Random numbers were distributed in sealed envelopes.	PY	Random numbers were distributed in sealed envelopes.
	PY	Significant differences in two of the pretest measures were observed between the groups. T'ai Chi participants reported more arthritis pain and less satisfaction with overall health status than the control group.	N	No significant differences in baseline characteristics.	N	No significant differences in baseline characteristics.
	Some concerns		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PY	1 participant who dropped out of the control group gave reasons that suggested problems with intervention or trial context: was not selected for the T'ai Chi classes. Attendance was good with an average of 91% for Tai Chi participants.	PN	Only reported deviations were non completion from 3 participants. One patient was withdrawn from the study due to the professional activities not related to her clinical condition. No other information is provided. This is 1/13 (7.7%) of the tai chi group.	N	No protocol deviations - it was reported that no significant adverse events associated with either intervention occurred.
	N	Given the small number of drop outs due to the trial context, it is unlikely that the deviation affected the final outcome.	NA	Not applicable	NA	Not applicable

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PN	A per protocol analysis was used, whereby participants in the T'ai Chi group were required to attend at least 75% of the T'ai Chi classes in order to be considered part of the intervention group.	PY	An intention-to treat analysis was used by applying the 'last score carried forward' technique to those who withdrew or were withdrawn during the study protocol.	Y	Modified intention to treat analysis was used (participants who were lost to follow-up or discontinued the intervention were excluded from the analysis).

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	N	All Tai Chi participants met the minimum attendance criterion, thus no substantial impact on the final results occurred.	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	
	PY	Two participants (6%) dropped out of the study, one from the control group and one from the T'ai Chi group. Data available for all other participants.	Y	Post-treatment assessments were available for all participants in ITT analysis.	Y	Posttreatment assessments were available for 54/64 tai chi group participants and 53/65 control group participants.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	PN	Measurements were reportly recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	Outcome assessor was blinded. However, the participant was aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PN	It is unlikely that outcome assessors could influence the objective outcomes in this study

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	NA	Not applicable.
	Some concerns		**Some concerns**		**Low**	
	PY	The outcomes listed in the clinical registry align with the measures reported in the publication, except for two secondary outcomes (self-reported patient global assessment on a visual analogue scale). The methods section of the publication indicates that the outcome was measured, however the results were partially reported only for the baseline measurement.	NI	No information was provided about a pre-specified analysis plan.	PY	Clinical trial registry entry includes most of the outcomes that were measured and reported in the study. The final paper includes an additional outcome - knee range of motion.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Hartman 2000**		**Lee 2009**		**Li 2019d**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in selection of the reported result	PN	Largely, all eligible reported results for the outcome domain correspond to all intended outcome measurements. Lack of reporting on two of the nine secondary outcomes is not seen as a significant issue.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	In the methods section, the WOMAC tool is described as having three subscales, however only the results of two subscales (pain and functional status) are reported in the baseline characteristics and results. It is possible that the third subscale (stiffness) was also measured and subsequently omitted, however it is given that it was not reported in the baseline characteristics nor in the results this may be unlikely.
	PY	Outcome measurements were taken at baseline, and 12 weeks. There is no indication that other analyses were conducted. However, multiple statistical comparisons were used to attempt to overcome unequivalence in groups.	PN	Outcome measurements were taken at baseline and 24 weeks. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline (preoperatively and postoperatively) and 14 weeks. Outcome values at all time points were reported. There is no indication that other analyses were conducted.
	High		**Some concerns**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Computer-generated random number sequence generated using SAS.	PY	Study reports that permutation method was used to randomly assign participants to groups.	PY	Randomisation was performed using an Excel program.
	NI	No information is provided on allocation sequence concealment.	NI	No information is provided on allocation sequence concealment.	NI	No information is provided on allocation sequence concealment.
	N	No significant differences in baseline characteristics.	PN	Baseline characteristics such as age, height, weight, and BMI were reported for each group, however the assessment of these data was not described and it was not explicitly stated that there was no significant difference between groups. Upon examination of the presented data, it is unlikely that there were significant differences.	N	No significant differences in baseline characteristics.
	Some concerns		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	N	No protocol deviations - no adverse events were reported.	PN	No protocol deviations were reported.	PN	No protocol deviations were reported.
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Modified intention to treat analysis was used (participants who dropped out were excluded from the analysis).	Y	Intention-to-treat analysis was used.	Y	Modified intention to treat analysis was used - participants who dropped out were not included in the final analysis.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	Y	108/140 randomised subjects completed the study: Tai chi (28/35), Baduanjin (29/35), stationary cycling (27/35), control (24/35).	Y	Outcome data was reported for all participants.	PN	22/38 in the tai chi group and 21/34 in the control group completed the study, resulting in dropout rates of 43% and 39%, respectively. Reasons for dropout included knee replacement surgery, childcare, transportation to the exercise site.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	PY	The baseline characteristics and pre-test measurements were presented only for the participants who also had final outcome data. There were no significant differences.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Some concerns**	

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.
	Y	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.
	PY	Knowledge of the intervention could have influenced their self-reported outcomes, which by nature involve some judgement.	PY	Knowledge of the intervention could have influenced their self-reported outcomes, which by nature involve some judgement.	PY	Given these measures were self-reports, participants could have biased their answers.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	As the other groups also received active interventions (cycling, baduanjin, or health education) and the study objective was more broadly intended to assess effects of exercise interventions rather than specifically the effect of tai chi, it is not considered likely that the tai chi group was more prone than the control group to influence based on knowledge of the intervention.	PN	As the other groups also received active interventions (closed chain kinetic exercise or ultrasound alone) and the study objective was more broadly intended to assess effects of different exercise interventions rather than specifically the effect of tai chi, it is not considered likely that the tai chi group was more prone than the control group to influence based on knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
	PY	Clinical trial registry entry includes most of the outcomes that were measured and reported in the study.	PY	Clinical trial registry entry includes most of the outcomes that were measured and reported in the study.	NI	No information was provided about a pre-specified analysis plan.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Liu 2019a**		**Nahayatbin 2018**		**Song 2007**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in selection of the reported result	PN	Largely, all eligible reported results for the outcome domain correspond to all intended outcome measurements. "Cognitive function," "tea questionnaire," and "qualitative research" were all listed as outcomes on the clinical trial registry entry, but not mentioned in the publication. However, the main outcomes such as KOOS (as an extension of WOMAC) and fMRI scans were reported, therefore the exclusion of some other outcomes which may have originally been part of the protocol is not a significant factor.	PY	Largely, all eligible reported results for the outcome domain correspond to all intended outcome measurements. There are a few discrepancies with the clinical trial registry entry, including that the registry specified VAS would be used to assesss pain when the study used the KOOS pain subscale.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	Outcome measurements were taken at baseline and 12 weeks. Outcome values at all time points were reported. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline, 6th session, 12th session, and 1 month post-treatment. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and 12 weeks. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.
	Low		**High**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomisation was performed using an Excel program.	Y	Random number table used to assign each site to an intervention. 4 sites assigned to each intervention (tai chi and control).	Y	Randomisation assignments were made using computer-generated random numbers.
	NI	No information is provided on allocation sequence concealment.	PY	A statistician who was blinded to the characteristics of the sites and the participants performed the randomisation.	Y	Sealed, opaque envelopes were used to conceal assignment.
	N	No significant differences in baseline characteristics.	N	No significant differences in baseline characteristics between sites or between participants.	N	No significant differences in baseline characteristics.
	Some concerns		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	No protocol deviations were reported.	Y	1 participant in the control group dropped out due to wanting to be in the tai chi group.	N	No protocol deviations were reported.
	NA	Not applicable	N	1 person out of 27 control group participants would not have a significant effect on the outcome.	NA	Not applicable
Bias due to						

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Modified intention to treat analysis was used - participants who dropped out were not included in the final analysis.	PY	Intention to treat analysis was used - all participants were included in the final analysis. Last observation was carried forward for participants with missing outcome data.	Y	Intention to treat analysis was used - all participants were included in the final analysis.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Some concerns**		**Low**	
	PN	Nearly twice as many participants dropped out of the tai chi group (11/41, 24%) as in the control group (6/41, 15%).	PY	4/28 (14%) of tai chi group participants dropped out (busy schedule, n=1; health problem, n=3). 6/27 (22%) of control participants dropped out (busy schedule, n=2; health problem, n=2; moving to another facility, n=1; wanted tai chi group, n=1).	Y	No missing data was reported; final results were reported for all participants.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PN	No reported analysis methods to correct for bias or sensitivity analyses were used to demonstrate that the result was not biased by missing outcome data.	PY	Dropout rates were not found to be statistically significant between groups. There were no significant differences between participants who completed the study and those who dropped out.	NA	Not applicable
	PN	Reasons for dropout did not indicate that the tai chi group dropped out because of problems with the intervention.	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.
	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.
	PY	Knowledge of the intervention could have influenced their self-reported outcomes, which by nature involve some judgement.	PY	Knowledge of the intervention could have influenced their self-reported outcomes, which by nature involve some judgement.	PN	Investigators were aware of this potential limitation and took steps to reduce potential bias by de-emphasising the study's specific interest in tai chi. Participant expectations were also assessed; and both groups had similar expectations of benefit.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Since the control group also received an active intervention (self-help education) , it is not considered likely that the tai chi group was more prone than the control group to influence based on knowledge of the intervention.	PN	Since the control group also received an active intervention , it is not considered likely that the tai chi group was more prone than the control group to influence based on knowledge of the intervention.	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
	NI	No information was provided about a pre-specified analysis plan.	NI	No information was provided about a pre-specified analysis plan.	Y	Clinical trial registry entry includes the outcomes that were measured and reported in the study.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Song 2010**		**Tsai 2013**		**Wang 2008b**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in selection of the reported result	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	Outcome measurements were taken at baseline and 6 months. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.
	Some concerns		**Some concerns**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Low risk**	The study does not have any bias considered to seriously alter the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomisation assignments were made using computer-generated random numbers used a permutated block randomisation procedure.	Y	Psudeorandom numbers were generated by a statistician using R statistical package.	PN	Participants were assigned pseudorandomly based on gender and pain score on WOMAC.
	Y	Performed by a person not involved in the study; envelopes were generated by another person not involved in the study.	Y	Assignments were concealed in sealed, opaque envelopes with date and signature labels. The study coordinator opened the consecutive envelopes individually after obtaining consent and confirming eligibility.	NI	No information is provided on allocation sequence concealment.
	N	No significant differences in baseline characteristics.	N	No significant differences in baseline characteristics.	N	No significant differences in baseline characteristics.
	Low		**Low**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PY	There are discrepancies in the description of the intervention across the 4 papers that have published results from this study. Some described Yang-style 8-form, others describe 5 forms. The published protocol describes an "innovative tai chi rehabilitation program" (ITCRP), which is 5 movements modified for OA. This terminology was not used in the papers, however the papers describing 5 movements of tai chi seemed to match the protocol. It is unclear how the tai chi intervention was carried out and to what extent it aligned with the standard Yang style 8-form	N	No protocol deviations were reported.	N	No protocol deviations were reported.
	PN	While the intervention is described in varied ways in each paper, there is no reason to believe that the participants received versions of the tai chi intervention. It is unclear which version they received, but it is assumed that all tai chi participants received the same intervention given that all participants received the intervention at the same time.	NA	Not applicable	NA	Not applicable

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Modified intention to treat analysis was used - all participants were analysed despite some missing data.	PN	Modified intention to treat analysis was used for the primary outcome (WOMAC pain) and several secondary outcomes (see Wang 2016a). However, other secondary outcomes were assessed using a subgroup of the study population (the subgroup for which data was available) (see Lee 2018c, Lee 2017b).	PY	Method of analysis was not specified; it is likely that a modified intention to treat analysis was used given that there was missing outcome data for some participants and no attempt to fill it in was described.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	Y	The modified ITT analysis used in Wang 2016a attempted to account for missing data amongst some participants. The analysis found that participants with missing outcome data had worse outcomes on multiple baseline characteristics than participants who remained in the study, suggesting that participants with more severe disease had been more likely to drop out. The secondary analyses that only looked at a subgroup of participants from whom additional outcome data was collected excludes many patients who were randomised to their allocated interventions and therefore there is a high potential for impact on the results.	NA	Not applicable
	Some concerns		**High**		**Low**	
	PY	Across the four papers reporting results from this study, there was some discrepancy in reporting on dropout rates and missing data. One paper (Zhu 2017) reported that 20/23 tai chi participants who completed the 24-week evaluation and 18/23 of the control group participants who completed the 24-week evaluation. Two other papers (Zhang 2020a and Zhu 2016a) reported that 21/23 tai chi participants and 19/23 control group participants completed the evaluation.	PN	Data were available for nearly all participants for the outcomes reported in Wang 2016a (including the primary outcome, WOMAC pain). Other publications reported several other secondary outcomes however these were only measured in a subset of the trial participants, therefore outcome data was missing for 50% or more of the participants for those secondary outcomes.	Y	31/39 (79%) completed the study.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Whichever set of numbers is correct, the missing outcome data was unlikely to bias the result due to overall low numbers.	PN	As described in 2.7, the baseline characteristics differences between participants who were lost to follow up and participants who remained in the study suggest that the result may have been biased (for the outcomes reported in Wang 2016a). The high rate of missing outcome data for other secondary outcomes reported in other publications is an indicator that the result is likely biased. It is not clear why certain participants were selected to provide additional outcome data, therefore they may have been bias in that selection process.	NA	Not applicable
	NA	Not applicable	Y	Participants lost to follow up had worse baseline characteristics than participants who remained in the study.	NA	Not applicable
	NA	Not applicable	Y	Participants lost to follow up had worse baseline characteristics than participants who remained in the study.	NA	Not applicable
	Some concerns		**High**		**Low**	

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measures.
	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.	N	Measurements were recorded by the same methods at the same time points.
	Y	Outcome assessor was blinded. However, the participant was aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.
	PY	Knowledge of the intervention could have influenced their self-reported outcomes, which by nature involve some judgement.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Since the control group also received an active intervention , it is not considered likely that the tai chi group was more prone than the control group to influence based on knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
	PY	Outcomes reported across 4 publications were mostly aligned with planned outcomes in the clinical trial registry and published protocol. Several planned outcomes (Lequesne knee score, functional reach test, knee muscle strength, neuromuscular response, activities of daily living) were not reported on in the publications.	PY	Outcomes listed in the published protocol and clinical trial registry entry are largely aligned with the published outcomes	NI	No information was provided about a pre-specified analysis plan.

	Osteoarthritis		Osteoarthritis		Osteoarthritis	
Study ID	**Wang 2013a**		**Wang 2015a**		**Wortley 2013**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in selection of the reported result	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.
	Low		**Low**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias arising from the randomisation process	Y	Randomisation assignments were made using computer-generated random numbers.
	Y	Sealed, opaque envelopes were used to conceal assignment.
	PY	There is a difference in average weight between groups (p=0.08). Baseline measures for the HAQ disability index and CRP levels were significantly dfferent between groups, indicating that tai chi group participants might have had more severe disease. This potential bias favours the experimental group as they would have more opportunity for improvement from baseline. These differences were all flagged by the authors as potential factors influencing the results.
	Some concerns	
	Y	The nature of the intervention means participants were aware of their group assignment.

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias due to	Y	The nature of the intervention precludes blinding carers to the group assignment.
	PN	No protocol deviations were reported.
	NA	Not applicable

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	NA	Not applicable
	Y	Intention to treat analysis was used - all participants were included in the final analysis.

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
	NA	Not applicable
	Low	
	Y	No missing data was reported; final results were reported for all participants.

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias due to missing outcome data	NA	Not applicable
	NA	Not applicable
	NA	Not applicable
	Low	

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias in measurement of the outcome	N	Study used validated methods for outcome measures.
	N	Measurements were recorded by the same methods at the same time points.
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.
	PY	Given these measures were self-reports, participants could have biased their answers.

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns	
	NI	No information was provided about a pre-specified analysis plan.

	Rhumatoid Arthritis	
Study ID	**Wang 2005**	
	Judgement	**Comments**
Bias in selection of the reported result	PY	The paper reports that there were 25 secondary outcomes (in addition to 2 primary outcomes). However, one of the the publications only reports 13 total outcomes. The other publication reports all outcomes (including additonal domains from the SF-36). It sems that the 2005 paper did not publish results if they were not statistially significant. However, these were reported in Wang 2008a. There is no clinical trial registry entry or other source of information to confirm which outcomes the authors planned to assess.
	PN	Outcome measurements were taken at baseline and multiple time points throughout the study. Outcome values at both time points were reported in the results. There is no indication that other analyses were conducted.
	High	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	Participants were randomly divided into two groups. No further details provided	Y	Participants were assigned to a Tai chi or education condition, using a computer-generated table of random numbers with block stratification using age in 5-year intervals.	Y	Patients were allocated in three randomization cycles, using computer-generated numbers
	NI	The authors do not provide any information on allocation concealment	NI	The authors do not provide any information on allocation concealment	Y	Patients were given sealed opaque evelopes that were opened individually upon assignment
	N	The groups were not statistically significantly different at baseline with regard to age, disease duration, comorbid conditions, medications, and scores for the outcomes.	PN	The groups were not statistically significantly different at baseline with regard to treatment expectations and demographics. While groups are not significantly different, women and those who have had higher education are significantly overrepresented.	N	Baseline characteristics were reasonably well balanced between the two groups, except that the tai chi group had a lower CES-D score.
	Some concerns		**Some concerns**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	N	The nature of the intervention means participants were aware of their group assignment.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	N	The nature of the intervention precludes blinding carers to the group assignment.
	N	There were no deviations or changes to intervention groups reported.	N	There were no deviations or changes to intervention groups reported.	NA	There were no deviations or changes to intervention groups reported.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	mITT analysis performed on participants completing the study as per randomised intervention. The 6 participants that withdrew from the trial were not analysed, however no information is given regarding whether they had been randomised to an intervention group.	PY	Modified intention to treat analysis was used - participants who dropped out were not included in the final analysis.	PY	An ITT analaysis was used. Those that dropped out were included in the outcome data and were considered not to have had any changes in scores.
	NA	Not applicable	NA	Not applicable	N	Not applicable
	Low		**Low**		**Low**	

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	Y	Data available for all, or nearly all, participants	Y	Data available for all, or nearly all, participants (94%)	PY	89.5% of participants completed the study. 10% of participants in the TC group and 12% of participants in the control group dropped out of the study. Reasons for drop outs, were given and none were related to outcomes analysed.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	N	There is no evidence to suggest the method of meaursing the outcome was inappropriate	N	There is no evidence to suggest the method of meaursing the outcome was inappropriate	N	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	Y	Outcome assessors were not aware of intervention allocations. However the majority of primary outcomes were participant-reported, therefore the outcome assessor is the study participant.	Y	Outcome assessors were not aware of intervention allocations. However the majority of primary outcomes were participant-reported, therefore the outcome assessor is the study participant.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	Participants (and likely investigators) were aware of the intervention they were receiving, therefore this could have influenced self-reported and investigator-measured outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).	PY	Participants (and likely investigators) were aware of the intervention they were receiving, therefore this could have influenced self-reported and investigator-measured outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	Though self reported outcomes are subject to potential influence of participants expectations of treatment, expectations were assessed at baseline and found to not be statistically significant between groups. Therefore the authors have concluded that the expectations of treatment did not likely influence the outcomes.	PN	Though self reported outcomes are subject to potential influence of participants expectations of treatment, expectations were assessed at baseline and found to not be statistically significant between groups. Therefore the authors have concluded that the expectations of treatment did not likely influence the outcomes.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	NI	Researcher's do not clearly describe prespecified intentions in sufficient detail.	Y	Researcher's prespecified intentions are available in sufficient detail.	N	Researcher's prespecified intentions are available in sufficient detail.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Some concerns		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Bongi 2016**		**Jones 2011**		**Wang 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable

Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.

a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Subjects were randomised using computer software in 6 cycles, blocked on instructor and cycle in the tai chi group, and unblocked in the aerobic exercise group.	Y	Patients were randomised using computer-generated block assignment and stratified by disease duration (=<5 or >5 years)	Y	Patients were randomised using a computer generated sequence according to 4 groups based on age and sex, with group assignments according to random blocks of 2 and 4 subjects per block
	PY	Assignments were concealed in sealed, opaque envelopes and were only opened for each participant after the study coordinator obtained consent and confirmed eligibility.	NI	The authors do not provide any information on allocation concealment	NI	The authors do not provide any information on allocation concealment
	N	Baseline characteristics were reasonably well balanced between the two groups.	N	Baseline characteristics were reasonably well balanced between the two groups.	PY	In terms of baseline characteristics, with the exception of education, gender, and disease status, patient demographics are relatively well balanced between groups. The light exercise group had more women (82.61% vs 72.73%) and more college graduates (69.57% vs 40.91%). The Tai Chi group had more =<high school graduates (59.09% vs. 30.43%), people with diabetes (22.73% vs.8.70%), and people with peripheral artery disease (22.73% vs. 13.04%).
	Low		**Some concerns**		**High**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	N	The nature of the intervention means participants were aware of their group assignment.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention precludes blinding carers to the group assignment.	N	The nature of the intervention precludes blinding carers to the group assignment.
	Y	Reported deviations were loss to follow-up, non-adherence, and drop outs. 1 participant in the Tai Chi group dropped out due to prefering aerobic exercise. Significantly more participants had dropped out at week 24 than the study was powered to determine effect for (TC groups: 18%, 27/151; AE group: 22%, 17/75).	PY	The only reported deviation was non-completion by six participants with five from the control control. One participant from the control group dropped out due to an adverse event, however it is not clear if this was related to the intervention.	Y	Only 9 participants (41%) in the Tai chi group adhered to the exercise program (attendance rate ≥ 80%) and 14 participants (61%) in the light physical exercise group adhered to the program. Reasons for absences were doctors' appointments, family commitments, health complications, transportation challenges, fatigue, musculoskeletal pain, and vacations.
	PN	A subgroup analysis which only included resulted in similar results, so this potentially did not impact outcomes.	PN	Due to the low number of participant drop outs due to an adverse event (1/37), it is unlikley to affect the final results.	PN	The study authors found no demographic differences between those who didn't complete the study and those who did not.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	An ITT analysis was used to estimate which included all patients in the final analysis. A longitudinal model was used to protect against the effects of missing data, though sensitivity analyses using multiple imputation were also examined for missing data. Addtionally a subgroup of paarticipants who attended at least half of sessions were used to determine the effect of treatment adherence.	PY	Modified intention to treat analysis was used - participants who dropped out were not included in the final analysis.	Y	Modified intention to treat analysis was used - participants who dropped out were not included in the final analysis.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Some concerns		**Some concerns**		**Some concerns**	

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	N	183 (81%) participants completed the 12 week evaluation, 181 (80%) completed the 24 week evaluation, and 158 (70%) completed the 52 week evaluation. In the Tai Chi group, 3.3% of participants dropped out due to trial contexts: 2 participants dropped out for pain related issues, 2 dropped out for firomyalgia flare-ups, and one dropped out due to preferring aerobic exercise. In the aerobic exercise group, 1 person dropped-out due to pain related issues.	PY	16% of participants were lost to follow up. 1/18 (5%) was in the Tai Chi group and 5/19 (26%) were in the control group.	N	14% of subjects did not complete the intervention. 18% were in the tai chi group and 12% were in the light exercise group. Additionally, 1 subject did not complete post intervention testing in the TC group and was not analysed. Reasons for these failures in completion are given. 2 further participants were also lost to follow up in the extended follow up to analyse falls. Both patients were in the Tai Chi group.
	N	Sensitivity analyses revealed differences in age, duration of body pain, self efficacy, FIQR score, Pittsburgh sleep quality index, SF-36 mental component, HADS anxiety, six minute walk test, and attendance rate between those with missing data and those without at one or more time points.	NA	Not applicable	N	No reported analysis methods to correct for bias or sensitivity analyses were used to demonstrate that the result was not biased by missing outcome data.
	PY	Since many of the dropouts were due to progressive disease aor health status, it is possible that the missingness of the outcome depended on its true value	NA	Not applicable	PY	Dropouts in the tai chi group were due to pain (n=1) and difficulty performing tai chi (n=2), and the missing post-intervention testing was due to a health issue. In the light exercise group, non-completion was due to falls & other health complications (n=2). Additionally, participants who did not complete the study were significantly older and had a higher BPI pain severity score compared to those who did not. These could potentially be due to problems with the intervention.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PY	The proportions of missing data differ that provide evidence for missingness in the outcome differ between groups. Additionally, The circumstances of the trial make it likely that missingness in the outcome depends on its true value. Furthermore, Use of multiple imputation led to small changes in some of the treatment effects.	NA	Not applicable	PY	Since continuing symtoms are a likely cause of drop out, there is high potential that the missingness depends on it's true value.
	High		**Low**		**High**	
Bias in measurement of the outcome	N	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	N	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	Y	Outcome assessors were not aware of intervention allocations. However the majority of primary outcomes were participant-reported, therefore the outcome assessor is the study participant.	PY	Outcome assessors were not aware of intervention allocations. However the majority of primary outcomes were participant-reported, therefore the outcome assessor is the study participant.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.
	PY	Participants (and likely investigators) were aware of the intervention they were receiving, therefore this could have influenced self-reported and investigator-measured outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).	PY	Participants (and likely investigators) were aware of the intervention they were receiving, therefore this could have influenced self-reported and investigator-measured outcomes, which by nature involve some judgement (i.e. pain, fatigue, emotional well-being, etc.).	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai Chi. However, researchers meausured expectations at baseline and follow up, finding similar expectations between groups.	PY	Participants in this study may have elected to participate in the study because of preconceived view of the beneficial effects of Tai Chi, therefore it is possible that knowledge of the intervention affected self-reported outcomes.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	Y	Researcher's prespecified intentions are available on the clinical trial website and the trial protocol, both published prior to the study start.	Y	Researcher's prespecified intentions are available on the clinical trial website.	NI	Researcher's do not clearly describe prespecified intentions in sufficient detail.
	N	There is clear evidence through examination of the results that all eligible reported results for the outcome domain correspond to most intended outcome measurements. One caveat is the sleep quality numeric rating scale which was not administered despite originally being proposed. However, this is unlikely to be due to bias as it was not administered at all	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Some concerns**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

	Fibromyalgia		Fibromyalgia		Fibromyalgia	
Study ID	**Wang 2015b**		**Wong 2018**		**You 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Y = yes; PY= partial						
Source: Chapter 8 (						
a. For the precise w						

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	Participants were randomly divided into two groups. No further details provided	Y	The randomisation sequence computer generated using the random number function in Excel	NI	Participants were equally and randomly divided into two groups. No further details provided
	NI	The authors do not provide any information on allocation concealment	Y	The allocation sequence was generated by an investigator not involved in assessment and treatment codes placed sequentially into sealed opaque envelopes	NI	The authors do not provide any information on allocation concealment
	NI	No baseline characteristics reported.	N	The groups were not statistically significanlty different at baseline with regard to age, sex, self-reported chronic pain grade, and scores for the outcomes.	NI	No baseline characteristics reported.
	High		**Low**		**High**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PY	The authors do not clearly report if data available for all or nearly all participants.	Y	Data available for all, or nearly all, participants	PY	The authors do not clearly report if data available for all or nearly all participants.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	PY	Researcher's do not clearly describe prespecified intentions in sufficient detail.	Y	Researcher's prespecified intentions are available in sufficient detail.	PY	Researcher's do not clearly describe prespecified intentions in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PY	The outcomes were measured at before and after active interventions and after inactive intervention only. Full results are not provided and it is not clear if all data, or a subset of data, has been reported or selected based on results.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PY	The outcomes were measured at before and after active interventions and after inactive intervention only. Full results are not provided and it is not clear if all data, or a subset of data, has been reported or selected based on results.
	High		**Low**		**High**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

	Low Back Pain		Low Back Pain		Low Back Pain	
Study ID	**Cho 2014**		**Hall 2009**		**Jang 2015**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Y = yes; PY= partial

Source: Chapter 8 (

a. For the precise w

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	NI	Randomised trial. No further details provided.	Y	Participants were allocated to 1 of 3 groups using a Random Number Generator sequence	Y	Participants were allocated to 1 of 3 groups in order of appearance adopting a computer-generated (Random Allocation Software, version 1.0.0) nonstratified block randomization with randomly varying block sizes
	NI	The authors do not provide any information on allocation concealment	NI	The authors do not provide any information on allocation concealment	Y	The trial coordinator who was not involved in participants' outcome assessments prepared sealed opaque envelopes with randomization assignments. Envelopes were labeled according to the study participant's identification number, and for eligible participants, envelopes were opened in ascending order by the study physician to determine the group allocation.
	N	No significant differences in baseline characteristics across the groups	N	No significant differences in baseline characteristics across the groups	N	No significant differences in baseline characteristics across the groups
	Some concerns		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment. Neither participants nor the interventionist were blinded to the intervention

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.. Neither participants nor the interventionist were blinded to the intervention
	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made	PN	There were no deviations or changes to intervention groups made
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	ITT analysis performed on participants completing the study as per randomised intervention	PY	Method of analysis was not specified; it is likely that an intention to treat analysis was used given that there were no drop outs during the intervention	PY	ITT analysis performed on participants completing the study as per randomised intervention
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	PY	Data available for all, or nearly all, participants.	PY	Data available for all participants.	PY	Data available for all, or nearly all, participants.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
Bias in measurement of the outcome	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate	PN	There is no evidence to suggest the method of meaursing the outcome was inappropriate
	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.	PN	Outcomes were measured using the same instruments and time periods between the intervention and control groups.
	PY	The authors do not explicitly state if outcome assessors were blinded to the intervention. However, participants were aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns		**Some concerns**		**Some concerns**	
Bias in selection of the reported result	Y	Researcher's prespecified intentions are available in sufficient detail.	Y	Researcher's prespecified intentions are available in sufficient detail. Clinical trial number is provided, Chi CTR-TRC-12002244.	Y	Researcher's prespecified intentions are available in sufficient detail.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Low**		**Low**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Low Back Pain		Low Back Pain		Neck Pain	
Study ID	**Weifen 2013**		**Zou 2019**		**Lauche 2016**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**

Y = yes; PY= partial

Source: Chapter 8 (

a. For the precise w

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
Bias arising from the randomisation process	Y	simple random sampling method
	NI	Not reported
	NI	Not reported
	Some concerns	
	Y	The nature of the intervention means participants were aware of their group assignment.

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	None reported
	NA	Not applicable
	NA	Not applicable
	NA	Not applicable
	NA	Not applicable
	Low	

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
Bias due to missing outcome data	Y	Not drop outs reported
	NA	Not applicable
	NA	Not applicable

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
	NA	Not applicable
	Low	
Bias in measurement of the outcome	PN	Study used validated methods for outcome measures.
	PN	Measurements were recorded by the same methods, at the same time points
	PY	The outcomes assessor was blinded to the intervention. However, participants were aware of the intervention.
	PY	The assessor measuring the outcome variables was blinded to the treatment allocation. However, given these measures were self-reports, participants could have biased their answers.

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
	PN	There is no reason to believe that patient-reported outcomes were substantially influenced by knowledge of the intervention.
	Some concerns	
Bias in selection of the reported result	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.

	Neck Pain	
Study ID	**Rajalaxmi-2018**	
	Judgement	**Comments**
Y = yes; PY= partial		
Source: Chapter 8 (		
a. For the precise w		

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Allocated using a computer based algorithm.	N	Randomisation method is not specified.	Y	Randomly assigned by coin tossing
	NI	No information.	NI	No information is provided on allocation sequence concealment.	NI	The authors do not report on allocation concealment
	N	Baseline characteristics were well balanced. No statistically significant group differences were found between baseline measures.	PN	Despite randomisation, mean age of the control group was slightly younger than the experimental group, however the difference is not considered to be significant	N	Baseline characteristics were well balanced. No statistically significant group differences were found between baseline measures.
	Some concerns		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	Changes from assigned intervention is likely consistent with what would occur outside the trial context.	N	No deviations were reported	PN	Changes from assigned intervention is likely consistent with what would occur outside the trial context.
	NA	Not applicable.	NA	Not applicable.	NA	Not applicable.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable.	NA	Not applicable.	NA	Not applicable.
	Y	Modified intent to treat analysis was used.	PN	Per protocol analysis was interpretted as only those who completed post-test measures were included in the analysis.	PN	Per protocol analysis was interpretted as only those who completed post-test measures were included in the analysis.
	NA	Not applicable.	PN	It is unlikely given the nature of the intervention and the low number of missing data (14%), that any participants who were excluded from the analysis would have a substantial impact on on the result.	PN	It is unlikely given the nature of the intervention and the low number of missing data (n=2), that any participants who were excluded from the analysis would have a substantial impact on on the result.
	Low		**Some concerns**		**Some concerns**	
	Y	11.4% (3/35) of participants were excluded from analysis. Data was available for nearly all participants randomised.	N	18% (44/242) were lost to follow up	Y	There were 9 drop outs during the study (13%). This appeared balanced between the three groups.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable.	N	Insufficient methods to assess whether missingness impacted the outcome data. No sensitivity analysis or other adjustment methods were reported.	NA	Not applicable.
	NA	Not applicable.	PN	The reasons for discontinuation including participants' unanticipated schedule changes, travel and one whose walker dependence was greater than expected are unlikely to affect the final outcomes. The missingness of outcomes for hospitalised patients may depend on their true value, but given that only one patient withdraw for this reason, it is unlikely to impact the final results.	NA	Not applicable.
	NA	Not applicable.	NA	Not applicable.	NA	Not applicable.
	Low		**Low**		**Low**	
	N	Study used validated methods for outcome measures	N	Study used validated methods for outcome measures	N	Study used validated methods for outcome measures

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	All outcome measures were recorded using the same methods, time points and conditions and by the same investigator who was blinded to the paticipants group assignment	PN	All outcome measures were recorded using the same methods, time points and conditions and by the same experienced physiotherapist.	N	All outcome measures were recorded using the same measurement instruments and time points.
	N	Outome assessors were blinded to the participants group assignment.	NI	No information is provided on the blinding of assessors	Y	Blind measurements were not feasible because of the nonrandom participant assignment at each facility
	NA	Not applicable.	PN	It is unlikely that assessors could influence the outcome because the assessed outcome does not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	PN	Given the objective outcome, it is considered unlikely that knowledge of the intervention status could have influenced measurement of the outcome.
	NA	Not applicable.	NA	Not applicable	NA	Not applicable.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Aviles 2019**		**Chewning 2019**		**Choi 2005**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	PY	Data was analysed in accordance with the pre-specified statistical analysis plan.	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	PY	Data was analysed in accordance with the pre-specified statistical analysis plan.
	PY	There is clear evidence through examination of the SAP that a domain was measured in multiple ways but data for only some of the outcome endpoints was reported.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	All reported outcome measures and time points were considered in the analysis.
	PY	There is evidence through examination of the results reported and the SAP that all eligible reported results for the outcome domains for the secondary outcomes were not repoted.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred.
	High		**Some concerns**		**Low**	
Overall risk of bias	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial yes; N = no, PN = partial no; NI = no information; NA = not applicable
Source: Chapter 8 Cochrane handbook for systematic reviews of interventions.
a. For the precise wording of signalling questions and guidance for answering each one, see the full risk-of-bias tool at www.riskofbias.info.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Allocated using a computerized random number generator and a minimization algorithm	NI	Randomisation method is not specified.	NI	Randomisation method is not specified.
	Y	The participants and assessors were blinded to group assignment at baseline and follow-up.	NI	No information is provided on allocation sequence concealment.	NI	No information is provided on allocation sequence concealment.
	N	The groups were reasonably well balanced and it was unlikely that any of the differences between group are of clinical significance	N	Baseline characteristics were well matched with regard to demographics. No statistically significant group differences were found between outcome measures.	PN	Baseline charateristics were not reported, however the author comments that there were no differences between the 2 groups
	Low		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	Changes from assigned intervention is likely consistent with what would occur outside the trial context.	Y	Pretest lab data for subject 11 was lost due to equipment error; thus, analysis for Group 1 used n = 10. Initially the control group had three additional females who were dropped either because they wanted only TC training or did not want to be tested on the platform.	N	None reported
	NA	Not applicable.	PN	Three participants who dropped out due to dissatisfaction with the group to which they were assigned, however as all measures were objective and there was no significant differences between the demongraphic data of patients dropped and those who were included in the final analysis, these deviations were unlikely to affect the final outcome	NA	Not applicable.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable.	NA		NA	Not applicable.
	PN	Per protocol analysis was interpretted due to the apparent exclusion of participants who did not complete 3 main assessment components	PN	Per protocol analysis was interpretted due to the apparent exclusion of participants who did not complete 3 main assessment components	PY	Modified ITT - Participants lost to follow-up were not included in the analysis.
	PN	7 participants were excluded due to missing component (2%). This is considered small enough that it is unlikely to affect the outcome as it is a continuous outcome rather than a rare occurrence.	PN	7 participants were excluded due to missing component (2%). This is considered small enough that it is unlikely to affect the outcome as it is a continuous outcome rather than a rare occurrence.	NA	Not applicable.
	Some concerns		**Some concerns**		**Low**	
	N	23.35% (110/471) were excluded from follow up analysis with more drop outs from the control group (31%) than experimental group (23%).	N	5/22 participants had partial or all outcome data missing	N	7/15 participants dropped out of the study

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	N	Employed multiple imputation (50 imputed data sets) sensitivity analysis to test the influence of missing data, because there were some baseline differences between those with and without missing data.	N	No information provided	N	No information provided
	PY	Reported reasons for drop out include health issues (n=84), schedule issues (n=10) and didn't like (n=19). 85 participants discontinued intervention due to 'other' issues and 64 refused the 24 week assessment. It is considered possible that these participants dropped out due to some factor related to the outcome	PN	Reasons for withdrawal from the study were not related to the participants' health status and there were no significant differences between the demongraphic data of patients dropped out and those who were included in the final analysis. therefore these deviations were unlikely to affect the final outcome	PY	Three participants dropped out before completing testing because of health reasons, The number of drop outs from the intervention and control group were not specified. The missingness of these outcomes may depend on their true value
	NI	A greater proportion of those with poorer self-rated health status had missing data compared with those with better self-rated health status (data not shown). Without reasons for drop out provided, it is difficult to make a judgement regarding whether these participants dropped out due to factors relating to the outcome.	NA	Not applicable.	PY	The study conducted no subgroup or supplemental analyses regarding reasons for missing data, so it is difficult to determine whether missing outcomes are due to their true value. Due to small same size and lack of reporting on which group lost participants, it was asummed that missingness in the outcomes was likely to depend on its true value
	Some concerns		**Low**		**High**	
	N	Study used validated methods for outcome measures	N	Study used validated methods for outcome measures	N	Study used validated methods for outcome measures

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	N	All outcome measures were recorded using the same methods, time points and conditions and by the same investigator who was blinded to the paticipants group assignment	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.
	N	Assessors did not have access to the randomization list, and participants were asked not to reveal their group assignment to the assessor at subsequent assessments.	NI	No information is provided on the blinding of assessors	NI	No information is provided on the blinding of assessors
	NA	Not applicable.	PN	It is unlikely that assessors could influence the outcome because the assessed outcome does not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	PN	It is unlikely that assessors could influence the outcome because the assessed outcome does not involve judgement, unlike patient reported outcomes (i.e. pain intensity).
	NA	Not applicable.	NA	Not applicable	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Day 2012**		**Gatts-2007**		**Hall 2009**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	PY	Data was analysed in accordance with the pre-specified statistical analysis plan.	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start
	PN	All reported outcome measures and time points were considered in the analysis.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	PN	There is no evidence to suggest inappropriate multiple analysis of the data occurred.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.
	Low		**Some concerns**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Block randomisation	NI	Randomisation sequence was not specified.	Y	A computer block randomisation program was used.
	Y	allocation was concealed using an automated secure website operated by an off-site independent service	NI	Authors did not provide information on allocation concealment and participants were all recruited from congregated assited living facilities	NI	Authors did not provide information on allocation concealment.
	Y	The distributions of the baseline characteristics between the TCC and LET groups were similar	PN	Baseline characteristics were well balanced. No statistically significant group differences were found between baseline measures.	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.
	Low		**Some concerns**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	N	59 participants declined because of family discouragement	PN	Changes from assigned intervention is likely consistent with what would occur outside the trial context.	PN	80 patients withdrew from the study because of illness (75) or time commitments (5). Only 6 particpants withdrew due to loss of interest. Attendance was good with 78% for Tai Chi group, 77% in multimodal exercise group and and 77% for stretching exercise group. The changes are consistent with trial protocol. This deviation appears to be balanced across groups.
	PY	Family disouragement could be the result of disatisfaction with the group to which they were assigned.	NA	Not applicable.	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Y	Deviations were balanced	NA	Not applicable.	NA	Not applicable
	PY	Modified ITT - Participants lost to follow-up were not included in the analysis.	PN	It is assumed intention-to-treat methods were used for the primary analyses. This is on account that no participants were recorded to have dropped out. The authors did not state how missing data would be handled.	Y	Intention-to-treat method were used for primary and secondary outcome analysis.
	NA	Not applicable.	NA	Not applicable.	NA	Not applicable
	Some concerns		**Some concerns**		**Low**	
	N	122/456 (27%) lost to follow up	Y	Data was available for all participants.	Y	12.98% of participants (87/670) withdrew following randomisation. Reasons were provided and only 4 people in the control group left due to loss of interest. Data available for all other participants.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	N	No information is provided	NA	Not applicable	NA	Not applicable
	Y	Some of the reasons for withdrawal from the study were related to the participants' health status (death, hospitalisation, physical discomfort)	NA	Not applicable	NA	Not applicable
	PN	The study conducted no subgroup or supplemental analyses regarding reasons for missing data, however health related reasons for withdrawl were balanced between the two groups	NA	Not applicable	NA	Not applicable
	Some concerns		**Low**		**Low**	
	Y	Study used validated methods for outcome measures	N	Study used validated methods for outcome measure	N	Study used validated methods for outcome measure

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	Y	All outcome measures were recorded using the same methods, time points and conditions.	PN	Outcome measure was recorded using the same method and conditions. Information on investigator was not reported.	PN	Outcome measure was recorded using the same method and conditions. Information on investigator was not reported.
	PY	Two assessors were blinded to the group assignment. Falls calendar was self-reported and participants were aware of intervention	NI	The authors do not report if the outcome assessors were aware of the intervention received by study participants.	N	Primary and secondary outcome assessor were masked to group allocation and class instructors were blinded to study's hypothesis
	PN	It is unlikely that participants did not accurately report in their fall diaries as a clear definition of a fall was outlined prior to study commencement.	PN	It is unlikely that assessors could influence the outcome because the assessed outcome does not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	NA	Not applicable
	NA	Not applicable.	NA	Not applicable	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Hwang 2016**		**Kim 2009a**		**Li 2018**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	NI	Data was analysed in accordance with the statistical analysis plan but there is no mention of whether it changed after study start	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	Some concerns		**Some concerns**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	A computer prestratified block randomization used	NI	Randomisation sequence was not specified.	Y	A centralized computer-generated allocation method was used following a minimisation procedure to ensure equivalence in confounding variables
	PY	Authors did not provide information on allocation concealment. However, GP's invited patients by mail and were not told which group their patients were allocated to	NI	Authors did not provide information on allocation concealment.	NI	Authors did not provide information on allocation concealment.
	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.	PY	Significant between-group difference for age (P=0.017) with Tai Chi intervention group younger than control group participants.	N	As a result of the allocation strategy, the baseline characteristics showed no statistically significant differences between the two arms.
	Low		**High**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.. However, GPs were not told which group their patients were allocated to.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.
	PN	26 patients withdrew from the study due health problems (7) or death (1). 15 dropped out due to loss of interest with most (73%) from control group. 47% attended at least 21 lesson (80%). Reasons for nonadherence were due to unavoidable circumstances such as participant or spouse injury/illness, transport issues or inconvenient timing. The changes are consistent with trial protocol.	PN	4 patients from the Tai Chi group were excluded because of family issues and time commitments; 1 patient from the control group was excluded due to infection; 3 patients in the yoga group were excluded because of knee pain and discomfort. Changes from assigned intervention is likely consistent with what would occur outside the trial context.	PY	2 participants from the Balance and Stepping group were excluded due to program-induced exacerbation of chronic musculoskeletal conditions. Program alterations could not alleviate complaints.
	NA	Not applicable	NA	Not applicable	N	Only 0.9% of participants (2/213) were withdrawn due to musculoskeletal complaints. This is considered small enough that is is unlikely to affect the final outcome.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Y	Intention-to-treat method used. This analysis was restricted to the participants who adhered sufficiently to the intervention protocol and outcome measurements.	PN	Analysis excluded participants who dropped out after randomisation but unclear, although likey they had started the intervention. There was no mention of how missing data was handled for particpants who dropped out during the course of the intervention.	PN	Per protocol analysis was interpretted due to the apparent exclusion of participants with low attendance at the intervention arms.
	NA	Not applicable	PN	While no specifics were given on analysis method, it is unlikely given the nature of the intervention that any participants who were excluded from the analysis would have a substantial impact on on the result.	PN	15 participants were excluded/dropped out due to low attendance (7%). This is considered small enough that it is unlikely to affect the outcome.
	Low		**Some concerns**		**Some concerns**	
	Y	There were 26 dropouts: 12 (9%) in the intervention group and 14 (11%) in the control group. Data available for all other participants	Y	18.75% of participants (9/48) withdrew following randomisation. Reasons were provided and only 1 person in the Tai Chi group left due to no reason. Data available for all other participants	Y	24% of participants (51/213) withdrew following randomisation. Reasons were provided. Data available for all other participants

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	N	Study used validated methods for outcome measures.	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	PN	All outcome measures collected at research centre were reportedly recorded using the same methods, time points and conditions. Questionnaires were self-administered and may be subject to differences between groups.	PN	All outcome measures were recorded using the same methods, time points and conditions.	PN	All outcome measures were recorded using the same methods, time points and conditions.
	N	The research assistants collecting the data and outcome assessor was blinded to the intervention received by the participants.	NI	The trialists do not explictly state if outcome assessors were blinded to intervention status.	N	Assessors were blinded to group assignment and training.
	NA	Not applicable	PN	It is unlikely that outcome assessors could influence the observer-reported outcomes because assessed outcomes do not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Logghe 2009**		**Ni 2014a**		**Nnodim 2006**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	N	Two minor adjustments were made regarding the study protocol. Did not use FEV and PEF values and did not perform cost-effectiveness calculation on account of the results. It was reported that these adjustments did not influence the validity of the study	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	PY	Variations in testing procedures and instrumentation presented in previous literature results in difficultly in overall comparison.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	Some concerns		**High**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	A computer-generated block randomization schedule developed and conducted by an independent programmer was used.	Y	Random number generator stratified according to Berg Balance Scale score	NI	Randomisation sequence was not specified.
	Y	Blind allocation concealment was used to prevent previous knowledge of the upcoming assignments through the use of opaque envelopes. The allocation list was placed in a locked cabinet for the duration of the study.	Y	Blind allocation concealment was used to prevent previous knowledge of the upcoming assignments through the use of sealed envelopes.	PY	Participants were not aware of the intervention to which they were randomized until after signing informed consent.
	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.	N	Baseline characteristics showed no statistically significant differences between the intervention and control groups.
	Low		**Low**		**Low**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.. However, instructors were blinded to outcome measures, and participants were instructed not to disclose the intervention they received.
	PN	A number of deviations from the protocol were noted, however none relate to the delivery of the intervention. Instead they relate to participant recruitment and outcome measures to be included. The only deviation reported is non-completion by some participants however this is consistent with the trial protocol.	PN	It was reported that 61 participants withdrew from the study due to drop outs, loss of sight, worsening sickness, hospitalisation, and death. This was balanced across treatment groups. In addition, it was reported that the large drop out rate may be due to other medical conditions which caused acute health problems with the 15 weeks of exercise presenting a burden for participants in both groups. Changes from assigned intervention is likely consistent with what would occur outside the trial context.	PN	Reported deviations were non-completion and subsequently lost to follow up by 49 out of 158 participants in the intervention group. There were 44 participants in the Wellness Education control group who did not enter the study or were lost to follow up. Reasons were reported with 7 withdrawl due to dissatisfaction with group assignment. Changes are consistent with trial protocol. Attendance was good with 76.1% for Tai Chi group and 81.17% for the Wellness Education program.
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	PY	It is assumed an intention-to-treat method was used for the primary and secondary analyses. This is on account of 149 participants dropping out after classes started and were not included in the analyses. A multilevel mixed-effects binomial analysis was used to investigate month-by-month patterns of missing data for the participants.	Y	Intention-to-treat method used. This analysis was restricted to the participants who adhered sufficiently to the intervention protocol and outcome measurements.	PY	Intention-to-treat method used, whereby all participants were analyzed as randomised. However, there was no mention of how missing data was handled for particpants who dropped out during the course of the intervention.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	PY	28.8% of of participants (179/684) withdrew after classes had started. Reasons were provided and authors reported to which group the droppouts were allocated. Data available for all other participants. However, the level of missing information was significantly higher in the Low Level Exercise group than the two Tai Chi group arms.	PN	40.1% of of participants (61/152) withdrew after classes had started. Reasons were provided and authors reported to which group the droppouts were allocated. Data available for all other participants, however there was a significant amount of missing data.	PY	Data was included for 91.96% of participants (286/311) with only the participants who did not enter the study (12 from Tai Chi and 12 from Wellness program) not included in analysis. However, it was reported that 69 participants discontinued intervention during follow up without specifying the impact of missing data.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	PY	The missing data was balanced between intervention groups.	PY	The missing data was balanced between intervention groups.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.	N	The study used validated methods for all outcome measures.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	PN	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.	N	All outcome measures were recorded using the same methods, time points and conditions.
	N	Assessors were blinded to group assignment and training.	PY	All research assistants involved in the assessment were unaware of group assignment. However, for subjective measures, the assessor is the subject (self-efficacy scale).	N	Evaluators were blinded to intervention allocation and participants were instructed not to disclose the intervention they received. However, for subjective measures, the assessor is the subject (Depression questionnaire).
	NA	Not applicable	PN	Participant-reported outcomes could be influenced by knowledge of the intervention. However, majority of outcomes were objective and unlikley to bias the measurement.	PN	Knowledge of allocation by outcome assessors (i.e. participants) could have influenced the ascertainment of outcome data (i.e. expectation bias).
	NA	Not applicable	NA	Not applicable.	NA	Not applicable.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Taylor 2011**		**Tsousignant 2012**		**Wolf 2003**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	Y	No interim statistical analysis was conducted, and analysis was undertaken according to original assigned groups, regardless of adherence.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	PY	The Wei, Lin, and Weissfeld method is reportedly used whereby data were analyzed adjusting for site (center); that is, it was assumed that each center had a separate baseline hazard function.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	PY	Each site had different baseline hazard functions which was used to interpret the statistical analysis.
	N	All eligible reported results for the outcome domain correspond to all intended outcome measurements.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	Low		**Some concerns**		**High**	
Overall risk of bias	**Low risk**	The study does not have any bias considered to seriously alter the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**High risk**	The study has plausible bias that seriously weakens confidence in the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias arising from the randomisation process	Y	Randomly assigned by coin tossing following a minimisation procedure to ensure equivalence in confounding variables.	Y	Randomized by drawing lots supervised by a person independent of the study	Y	Randomly assigned through a drawing of lots at a ratio of 1:1:1 without any stratification by independent helpers.
	NI	The authors did not report on allocation concealment	PY	Process of allocation was controlled by independent personnel	NI	The authors did not report on allocation concealment
	N	As a result of the allocation strategy, the baseline characteristics showed no statistically significant differences between the two arms.	PN	Baseline characteristics were well balanced. Only significant difference was in average sitting height, which was treated as a co-variate in the ANCOVA.	N	No significant group differences were found between participants characteristics ($p > .05$).
	Some concerns		**Low**		**Some concerns**	
	Y	The nature of the intervention means participants were aware of their group assignment.	Y	The participants were aware of their group assignments	Y	The nature of the intervention means participants were aware of their group assignment.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to deviations from intended interventions (effect of assignment to intervention [ITT])	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment.	Y	The nature of the intervention means carers and people delivering the intervention were aware of the group assignment..
	N	The reported deviations were 2/49 (4%) dropped out of the study due to moving away from the community. This was balanced between treatment groups with 1 from each. The baseline characteristics of those participants who dropped out and completed the study were not significantly different. The attendance from the Tai Chi group was good with 91.7% practicing for 4 hours of more per week and no subjects in the control group changed their lifestyle during the intervention period.	PN	Changes from assigned intervention is likely consistent with what would occur outside the trial context.	N	Six participants withdrew at the beginning of the intervention mainly because of low confidence to master the exercise skills (n = 2) and time inconvenience (n = 4). This was balanced between intervention group and active control with no drop outs from the inactive control group. Changes from assigned intervention is likely consistent with what would occur outside the trial context.
	NA	Not applicable	NA	Not applicable.	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	NA	Not applicable	NA	Not applicable.	NA	Not applicable
	PY	It is assumed that a modified intention-to-treat method was used for the analyses. This is on account of 2 participants dropping out after classes started and were not included in the analyses. The authors did not state how missing data would be handled.	Y	Intention-to-treat method were used for primary analyses and missing values imputed based upon last observation carried forward principle	PY	An intention-to-treat method was used for the analyses and a sensitivity test was subsequently conducted using the available data. Missing values (6) were replaced using the last-observation carried-forward method.
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	Y	4% of participants (2/49) withdrew after classes had started. Reasons were provided. Data available for all other participants.	Y	10% of participants (6/59) withdrew following randomisation. Reasons were provided and 4 people in the control group left from refusal to continue. Data available for all other participants.	Y	9% of participants (6/61) withdrew at the beginning of the intervention. Reasons were provided. Data available for all other participants.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias due to missing outcome data	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable
	Low		**Low**		**Low**	
	N	Study used validated methods for outcome measures.	N	Study used validated methods for outcome measure	N	Study used validated methods for outcome measures.

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
Bias in measurement of the outcome	PN	All physical performance outcome measures were reportedly recorded using the same methods, time points and conditions. However, the Fall Efficacy Scale was personalised and may have differed between groups due to personal circumstances.	PN	Outcome measure was recorded using the same method and conditions. Information on investigator was not reported.	N	All outcome measures were recorded using the same methods, time points and conditions.
	NI	The trialists do not explictly state if outcome assessors were blinded to intervention status.	N	Participants instructed not to inform the assessor	N	Neither the testers nor the data analyst knew participant names and their assignments.
	PN	It is unlikely that outcome assessors could influence the observer-reported outcomes because assessed outcomes do not involve judgement, unlike patient reported outcomes (i.e. pain intensity).	NA	Not applicable	NA	Not applicable
	NA	Not applicable	NA	Not applicable	NA	Not applicable

	Fall Prevention (at risk population)		Fall Prevention (at risk population)		Fall Prevention (at risk population)	
Study ID	**Zhang 2006**		**Lee 2015**		**Zhao 2017**	
	Judgement	**Comments**	**Judgement**	**Comments**	**Judgement**	**Comments**
	Low		**Low**		**Low**	
Bias in selection of the reported result	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.	NI	The study does not specify if the analysis plan changed after randomisation or after outcome assessments from participants were received.
	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	PY	Possible limitations due to utilising Chinese version of the Fall Efficacy Scale, whereby responses may be dependent on underlying cultural trends.	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).	N	There is only one possible way in which the outcome domain can be measured (hence there is no opportunity to select from multiple measures).
	Some concerns		**Some concerns**		**Some concerns**	
Overall risk of bias	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.	**Some concerns**	The study has plausible bias that raises some doubt about the results.

Y = yes; PY= partial
Source: Chapter 8 (
a. For the precise w