Table S2. Excluded studies

Reference	Reason for exclusion
Armijo-Olivo S, Cummings GG, Fuentes J, Saltaji H, Ha C, Chisholm A, et al. Identifying items to assess methodological quality in physical therapy trials: a factor analysis. Physical Therapy 2014;94(9):1272-84.	Paper does not report on a structured tool
Armijo-Olivo S, Fuentes J, Ospina M, Saltaji H, Hartling L. Inconsistency in the items included in tools used in general health research and physical therapy to evaluate the methodological quality of randomized controlled trials: a descriptive analysis. BMC Medical Research Methodology 2013;13:116.	Systematic review of tools
Armijo-Olivo S, Fuentes J, Rogers T, Hartling L, Saltaji H, Cummings GG. How should we evaluate the risk of bias of physical therapy trials?: a psychometric and meta-epidemiological approach towards developing guidelines for the design, conduct, and reporting of RCTs in Physical Therapy (PT) area: a study protocol. Syst Rev 2013;2:88.	Protocol for development of new tool
Aromataris E, Fernandez R, Godfrey CM, Holly C, Khalil H, Tungpunkom P. Summarizing systematic reviews: methodological development, conduct and reporting of an umbrella review approach. International Journal of Evidence-Based Healthcare 2015;13(3):132-40.	Refers to a tool to assess quality of published systematic reviews
Arrive L, Renard R, Carrat F, Belkacem A, Dahan H, Le Hir P, et al. A scale of methodological quality for clinical studies of radiologic examinations. Radiology 2000;217(1):69-74.	Tool does not assess reporting bias
Atakpo P, Vassar M. Publication bias in dermatology systematic reviews and meta-analyses. Journal of Dermatological Science 2016;82(2):69-74.	Describes statistical methods only
Ballard M, Montgomery P. Risk of bias in overviews of reviews: a scoping review of methodological guidance and four-item checklist. Research Synthesis Methods 2017;8(1):92-108.	Refers to a tool to assess quality of published systematic reviews
Balzer K. Assessing the quality of research needs to go beyond scoring: Commentary on Crowe and Sheppard (2011). International Journal of Nursing Studies 2012;49(8):1048-50.	Commentary
Bartlett WA, Braga F, Carobene A, Coskun A, Prusa R, Fernandez-Calle P, et al. A checklist for critical appraisal of studies of biological variation. Clinical Chemistry and Laboratory Medicine 2015;53(6):879-85.	Tool does not assess reporting bias
Bashir R, Dunn AG. Systematic review protocol assessing the processes for linking clinical trial registries and their published results. BMJ Open 2016;6(10):e013048.	Paper does not report on a structured tool
Beck NB, Becker RA, Boobis A, Fergusson D, Fowle JR, Goodman J, et al. Instruments for assessing risk of bias and other methodological criteria of animal studies: omission of well-established methods. Environmental Health Perspectives 2014;122(3):A66-7.	Commentary

Reference	Reason for exclusion
Berkman ND, Lohr KN, Morgan LC, Kuo T-M, Morton SC. Interrater reliability of grading strength of evidence varies with the complexity of the evidence in systematic reviews. Journal of Clinical Epidemiology 2013;66(10):1105-17.e1.	Tool does not assess reporting bias
Burda BU, Holmer HK, Norris SL. Limitations of A Measurement Tool to Assess Systematic Reviews (AMSTAR) and suggestions for improvement. Systematic Reviews 2016;5:58.	Refers to a tool to assess quality of published systematic reviews
Cartes-Velasquez RA, Manterola C, Aravena P, Moraga J. Reliability and validity of MINCIR scale for methodological quality in dental therapy research. Brazilian Oral Research 2014;28.	Tool does not assess reporting bias
Chaimani A, Salanti G. Using network meta-analysis to evaluate the existence of small-study effects in a network of interventions. Research Synthesis Methods 2012;3(2):161-76.	Describes statistical methods only
da Costa BR, Hilfiker R, Egger M. PEDro's bias: summary quality scores should not be used in meta-analysis. Journal of Clinical Epidemiology 2013;66(1):75-7.	Commentary
Dahm P. Raising the bar for systematic reviews with Assessment of Multiple Systematic Reviews (AMSTAR). BJU International 2017;119(2):193.	Refers to a tool to assess quality of published systematic reviews
Dalton DR, Aguinis H, Dalton CM, Bosco FA, Pierce CA. Revisiting the file drawer problem in meta-analysis: An assessment of published and nonpublished correlation matrices. Personnel Psychology 2012;65(2):221-49.	Paper does not report on a structured tool
David SP, Ware JJ, Chu IM, Loftus PD, Fusar-Poli P, Radua J, et al. Potential reporting bias in fMRI studies of the brain. PloS One 2013;8(7):e70104.	Paper does not report on a structured tool
Davino-Ramaya C, Krause LK, Robbins CW, Harris JS, Koster M, Chan W, et al. Transparency matters: Kaiser Permanente's National Guideline Program methodological processes. The Permanente Journal 2012;16(1):55-62.	Refers to a tool to assess quality of published systematic reviews
Dawson A, Raphael KG, Glaros A, Axelsson S, Arima T, Ernberg M, et al. Development of a quality-assessment tool for experimental bruxism studies: reliability and validity. Journal of Orofacial Pain 2013;27(2):111-22.	Tool does not assess reporting bias
Deshpande S, Misso K, Westwood M, Stirk L, De Kock S, Clayton D, et al. Not all cochrane reviews are good quality systematic reviews. Value in Health 2016;19(7):A371.	Refers to a tool to assess quality of published systematic reviews
Disher T, Benoit B, Johnston C, Campbell-Yeo M. Skin-to-skin contact for procedural pain in neonates: acceptability of novel systematic review synthesis methods and GRADEing of the evidence. Journal of Advanced Nursing 2017;73(2):504-19.	Paper does not report on a structured tool
Dreier M, Borutta B, Stahmeyer J, Krauth C, Walter U. Comparison of tools for assessing the methodological quality of primary and	Systematic review of tools

Reference	Reason for exclusion
secondary studies in health technology assessment reports in Germany. GMS Health Technology Assessment 2010;6.	
Dreyer N, Velentgas P, Duddy A, Westrich KD, Dubois RW. Grace checklist: Rating the strength of evidence for observational studies of comparative effectiveness. Value in Health 2012;15(4):A5.	Tool does not assess reporting bias
Dreyer NA, Velentgas P, Westrich K, Dubois R. The GRACE checklist for rating the quality of observational studies of comparative effectiveness: a tale of hope and caution. Journal of Managed Care & Specialty Pharmacy 2014;20(3):301-8.	Tool does not assess reporting bias
Dreyer NA, Velentgas P, Westrich K, Dubois RW. GRACE: A validated checklist for identifying robust observational studies of comparative effectiveness. Pharmacoepidemiol Drug Saf 2013;22:356.	Tool does not assess reporting bias
Dreyer NA, Velentgas P, Westrich KD, Dubois RW. There but for grace? a validated screening tool for quality observational studies of comparative effectiveness. Value in Health 2013;16(3):A21.	Tool does not assess reporting bias
Drucker AM, Fleming P, Chan A-W. Research Techniques Made Simple: Assessing Risk of Bias in Systematic Reviews. The Journal of Investigative Dermatology 2016;136(11):e109-e14.	Guidance on using existing tools
Dwan K, Altman DG, Clarke M, Gamble C, Higgins JP, Sterne JA, et al. Evidence for the selective reporting of analyses and discrepancies in clinical trials: a systematic review of cohort studies of clinical trials. PLoS Med 2014;11(6):e1001666.	Paper does not report on a structured tool
Dwan K, Gamble C, Williamson PR, Kirkham JJ. Systematic review of the empirical evidence of study publication bias and outcome reporting bias - an updated review. PLoS One 2013;8(7):e66844.	Paper does not report on a structured tool
Dwan K, Kirkham JJ, Williamson PR, Gamble C. Selective reporting of outcomes in randomised controlled trials in systematic reviews of cystic fibrosis. BMJ Open 2013;3(6).	Evaluation of use of tool in practice, but no measurement properties assessed
Fantony JJ, Gopalakrishna A, Noord MV, Inman BA. Reporting Bias Leading to Discordant Venous Thromboembolism Rates in the United States Versus Non-US Countries Following Radical Cystectomy: A Systematic Review and Meta-analysis. European Urology Focus 2016;2(2):189-96.	Paper does not report on a structured tool
Fitzgerald A, Coop C. Validation and modification of the Graphical Appraisal Tool for Epidemiology (GATE) for appraising systematic reviews in evidence-based guideline development. Health Outcomes Research in Medicine 2011;2(1):e51-e9.	Refers to a tool to assess quality of published systematic reviews
Frosi G, Riley RD, Williamson PR, Kirkham JJ. Multivariate meta-analysis helps examine the impact of outcome reporting bias in Cochrane rheumatoid arthritis reviews. J Clin Epidemiol 2015;68(5):542-50.	Evaluation of use of tool in practice, but no measurement properties assessed
Furukawa TA, Miura T, Chaimani A, Leucht S, Cipriani A, Noma H, et al. Using the contribution matrix to evaluate complex study	Describes statistical methods only

Reference	Reason for exclusion
limitations in a network meta-analysis: a case study of bipolar maintenance pharmacotherapy review. BMC Res Notes 2016;9:218.	
Ghogomu EAT, Maxwell LJ, Buchbinder R, Rader T, Pardo Pardo J, Johnston RV, et al. Updated method guidelines for cochrane musculoskeletal group systematic reviews and metaanalyses. The Journal of Rheumatology 2014;41(2):194-205.	Guidance on using existing tools
Golder S, Loke YK, Bland M. Unpublished data can be of value in systematic reviews of adverse effects: methodological overview. Journal of Clinical Epidemiology 2010;63(10):1071-81.	Paper does not report on a structured tool
Golder S, Loke YK. Is there evidence for biased reporting of published adverse effects data in pharmaceutical industry-funded studies? British Journal of Clinical Pharmacology 2008;66(6):767-73.	Paper does not report on a structured tool
Goodyear-Smith FA, van Driel ML, Arroll B, Del Mar C. Analysis of decisions made in meta-analyses of depression screening and the risk of confirmation bias: a case study. BMC Med Res Methodol 2012;12:76.	Paper does not report on a structured tool
Grant S, Pedersen ER, Osilla KC, Kulesza M, D'Amico EJ. It is time to develop appropriate tools for assessing minimal clinically important differences, performance bias and quality of evidence in reviews of behavioral interventions. Addiction 2016;111(9):1533-5.	Paper does not report on a structured tool
Greenland S, O'Rourke K. On the bias produced by quality scores in meta-analysis, and a hierarchical view of proposed solutions. Biostatistics (Oxford, England) 2001;2(4):463-71.	Describes statistical methods only
Haddaway NR, Woodcock P, Macura B, Collins A. Making literature reviews more reliable through application of lessons from systematic reviews. Conservation Biology 2015;29(6):1596-605.	Guidance on using existing tools
Hahn S, Williamson PR, Hutton JL, Garner P, Flynn EV. Assessing the potential for bias in meta-analysis due to selective reporting of subgroup analyses within studies. Statistics in Medicine 2000;19(24):3325-36.	Describes statistical methods only
Heck NC, Mirabito LA, LeMaire K, Livingston NA, Flentje A. Omitted data in randomized controlled trials for anxiety and depression: A systematic review of the inclusion of sexual orientation and gender identity. Journal of Consulting and Clinical Psychology 2017;85(1):72-6.	Paper does not report on a structured tool
Higgins JPT, Lane PW, Anagnostelis B, Anzures-Cabrera J, Baker NF, Cappelleri JC, et al. A tool to assess the quality of a meta-analysis. Research Synthesis Methods 2013;4(4):351-66.	Refers to a tool to assess quality of published systematic reviews
Hoy D, Brooks P, Woolf A, Blyth F, March L, Bain C, et al. Assessing risk of bias in prevalence studies: modification of an existing tool and evidence of interrater agreement. J Clin Epidemiol 2012;65(9):934-9.	Tool does not assess reporting bias
Hsu W, Speier W, Taira RK. Automated extraction of reported statistical analyses: towards a logical representation of clinical trial	Paper does not report on a structured tool

Reference	Reason for exclusion
literature. AMIA Annual Symposium proceedings AMIA Symposium 2012;2012:350-9.	
Ioannidis JPA, Munafo MR, Fusar-Poli P, Nosek BA, David SP. Publication and other reporting biases in cognitive sciences: detection, prevalence, and prevention. Trends in Cognitive Sciences 2014;18(5):235-41.	Paper does not report on a structured tool
Ioannidis JPA, Trikalinos TA. An exploratory test for an excess of significant findings. Clinical Trials 2007;4(3):245-53.	Describes statistical methods only
Ioannidis JPA, Trikalinos TA. The appropriateness of asymmetry tests for publication bias in meta-analyses: a large survey. CMAJ 2007;176(8):1091-6.	Describes statistical methods only
Jarde A, Losilla J-M, Vives J, Rodrigo MF. Q-Coh: A tool to screen the methodological quality of cohort studies in systematic reviews and meta-analysis. International Journal of Clinical and Health Psychology 2013;13(2):138-46.	Tool does not assess reporting bias
Jefferson T, Jones MA, Doshi P, Del Mar CB, Hama R, Thompson MJ, et al. Risk of bias in industry-funded oseltamivir trials: comparison of core reports versus full clinical study reports. BMJ Open 2014;4(9):e005253.	Evaluation of use of tool in practice, but no measurement properties assessed
Johnson BT, Low RE, MacDonald HV. Panning for the gold in health research: incorporating studies' methodological quality in meta-analysis. Psychology & Health 2015;30(1):135-52.	Describes statistical methods only
Johnston BC, Patrick DL, Busse JW, Schunemann HJ, Agarwal A, Guyatt GH. Patient-reported outcomes in meta-analyses--Part 1: assessing risk of bias and combining outcomes. Health and Quality of Life Outcomes 2013;11:109.	Guidance on using existing tools
Jorgensen L, Paludan-Muller AS, Laursen DR, Savovic J, Boutron I, Sterne JA, et al. Evaluation of the Cochrane tool for assessing risk of bias in randomized clinical trials: overview of published comments and analysis of user practice in Cochrane and non-Cochrane reviews. Syst Rev 2016;5:80.	Evaluation of use of tool in practice, but no measurement properties assessed
Jurgens T, Whelan AM, MacDonald M, Lord L. Development and evaluation of an instrument for the critical appraisal of randomized controlled trials of natural products. BMC Complement Altern Med 2009;9:11.	Tool does not assess reporting bias
Jurgens TM, Whelan AM. Development and evaluation of an instrument for the critical appraisal of randomized controlled trials of natural products. Canadian Journal of Hospital Pharmacy 2011;64(1):68.	Tool does not assess reporting bias
Katikireddi SV, Egan M, Petticrew M. How do systematic reviews incorporate risk of bias assessments into the synthesis of evidence? A methodological study. Journal of Epidemiology and Community Health 2015;69(2):189-95.	Audit of tools used in systematic reviews

Reference	Reason for exclusion
Katrak P, Bialocerkowski AE, Massy-Westropp N, Kumar S, Grimmer KA. A systematic review of the content of critical appraisal tools. BMC Med Res Methodol 2004;4:22.	Systematic review of tools
Kirkham JJ, Riley RD, Williamson PR. A multivariate meta-analysis approach for reducing the impact of outcome reporting bias in systematic reviews. Statistics in Medicine 2012;31(20):2179-95.	Describes statistical methods only
Kocsis JH, Gerber AJ, Milrod B, Roose SP, Barber J, Thase ME, et al. A new scale for assessing the quality of randomized clinical trials of psychotherapy. Comprehensive Psychiatry 2010;51(3):319-24.	Tool does not assess reporting bias
Kovacs FM, Abraira V. Language Bias in a Systematic Review of Chronic Pain: How to Prevent the Omission of Non-English Publications? The Clinical Journal of Pain 2004;20(3):199-200.	Paper does not report on a structured tool
Krauth D, Woodruff TJ, Bero L. Instruments for assessing risk of bias and other methodological criteria of published animal studies: a systematic review. Environmental Health Perspectives 2013;121(9):985-92.	Systematic review of tools
Kromrey JD, Rendina-Gobioff G. On Knowing What We Do Not Know: An Empirical Comparison of Methods to Detect Publication Bias in Meta-Analysis. Educational and Psychological Measurement 2006;66(3):357-73.	Describes statistical methods only
Lamont RF. A quality assessment tool to evaluate tocolytic studies. BJOG 2006;113(Suppl 3):96-9.	Tool does not assess reporting bias
Langendam M, Carrasco-Labra A, Santesso N, Mustafa RA, Brignardello-Petersen R, Ventresca M, et al. Improving GRADE evidence tables part 2: A systematic survey of explanatory notes shows more guidance is needed. J Clin Epidemiol 2016;74:19-27.	Evaluation of use of tool in practice, but no measurement properties assessed
Liebherz S, Schmidt N, Rabung S. How to assess the quality of psychotherapy outcome studies: A systematic review of quality assessment criteria. Psychotherapy Research 2016;26(5):573-89.	Systematic review of tools
Liebherz S, Schmidt N, Rabung S. Study Quality and its Influence on Treatment Outcome in Studies on the Effectiveness of Inpatient Psychotherapy - A Meta-Analysis. PPmP Psychotherapie Psychosomatik Medizinische Psychologie 2016;66(1):31-8.	Not written in English
Lohr KN, Carey TS. Assessing "best evidence": issues in grading the quality of studies for systematic reviews. The Joint Commission Journal on Quality Improvement 1999;25(9):470-9.	Guidance on using existing tools
Lonjon G, Porcher R, Ergina P, Fouet M, Boutron I. Potential Pitfalls of Reporting and Bias in Observational Studies With Propensity Score Analysis Assessing a Surgical Procedure: A Methodological Systematic Review. Ann Surg 2016:no pagination.	Paper does not report on a structured tool
Lundh A, Gotzsche PC. Recommendations by Cochrane Review Groups for assessment of the risk of bias in studies. BMC Med Res Methodol 2008;8:22.	Guidance on using existing tools

Reference	Reason for exclusion
Lynch HN, Goodman JE, Tabony JA, Rhomberg LR. Systematic comparison of study quality criteria. Regul Toxicol Pharmacol 2016;76:187-98.	Systematic review of tools
Macleod MR, Lawson McLean A, Kyriakopoulou A, Serghiou S, de Wilde A, Sherratt N, et al. Risk of Bias in Reports of In Vivo Research: A Focus for Improvement. PLoS Biology 2015;13(10):e1002273.	Tool does not assess reporting bias
Maher CG, Sherrington C, Herbert RD, Moseley AM, Elkins M. Reliability of the PEDro scale for rating quality of randomized controlled trials. Phys Ther 2003;83(8):713-21.	Tool does not assess reporting bias
Malmivaara A. Methodological considerations of the GRADE method. Annals of Medicine 2015;47(1):1-5.	Guidance on using existing tools
Marshall IJ, Kuiper J, Wallace BC. RobotReviewer: evaluation of a system for automatically assessing bias in clinical trials. Journal of the American Medical Informatics Association 2016;23(1):193-201.	Model to semi-automate Cochrane risk of bias tool
McDonagh MS, Peterson K, Balshem H, Helfand M. US Food and Drug Administration documents can provide unpublished evidence relevant to systematic reviews. Journal of Clinical Epidemiology 2013;66(10):1071-81.	Paper does not report on a structured tool
McShane BB, Bockenholt U, Hansen KT. Adjusting for Publication Bias in Meta-Analysis: An Evaluation of Selection Methods and Some Cautionary Notes. Perspectives on Psychological Science 2016;11(5):730-49.	Describes statistical methods only
Millard LAC, Flach PA, Higgins JPT. Machine learning to assist risk-of-bias assessments in systematic reviews. International Journal of Epidemiology 2016;45(1):266-77.	Model to semi-automate Cochrane risk of bias tool
Moher D, Jadad AR, Nichol G, Penman M, Tugwell P, Walsh S. Assessing the quality of randomized controlled trials: an annotated bibliography of scales and checklists. Controlled Clinical Trials 1995;16(1):62-73.	Systematic review of tools
Moons KGM, de Groot JAH, Bouwmeester W, Vergouwe Y, Mallett S, Altman DG, et al. Critical Appraisal and Data Extraction for Systematic Reviews of Prediction Modelling Studies: The CHARMS Checklist. PLoS Med 2014;11(10):e1001744.	Refers to a tool to assess quality of published systematic reviews
Moyer A, Finney JW. Rating methodological quality: toward improved assessment and investigation. Accountability in Research 2005;12(4):299-313.	Guidance on using existing tools
Mueller KF, Briel M, Strech D, Meerpohl JJ, Lang B, Motschall E, et al. Dissemination bias in systematic reviews of animal research: a systematic review. PloS One 2014;9(12):e116016.	Paper does not report on a structured tool
Mueller KF, Meerpohl JJ, Briel M, Antes G, von Elm E, Lang B, et al. Detecting, quantifying and adjusting for publication bias in meta-analyses: protocol of a systematic review on methods. Systematic Reviews 2013;2:60.	Describes statistical methods only

Reference	Reason for exclusion
Mueller KF, Meerpohl JJ, Briel M, Antes G, von Elm E, Lang B, et al. Methods for detecting, quantifying, and adjusting for dissemination bias in meta-analysis are described. J Clin Epidemiol 2016;80:25-33.	Describes statistical methods only
Nakagawa S, Noble DWA, Senior AM, Lagisz M. Meta-evaluation of meta-analysis: ten appraisal questions for biologists. BMC Biology 2017;15(1):18.	Refers to a tool to assess quality of published systematic reviews
Nolting A, Perleth M, Langer G, Meerpohl JJ, Gartlehner G, Kaminski-Hartenthaler A, et al. [GRADE guidelines: 5. Rating the quality of evidence: publication bias]. Zeitschrift fur Evidenz, Fortbildung und Qualitat im Gesundheitswesen 2012;106(9):670-6.	Not written in English
Norris SL, Moher D, Reeves BC, Shea B, Loke Y, Garner S, et al. Issues relating to selective reporting when including non-randomized studies in systematic reviews on the effects of healthcare interventions. Res Synth Methods 2013;4(1):36-47.	Guidance on using existing tools
Nurmatov UB, Xiong T, Kroes MA. Evaluation of quality assessment tools for non-randomised controlled trials assessing surgical interventions: A systematic review of systematic reviews. Value in Health 2015;18(7):A722.	Systematic review of tools
Odierna DH, Forsyth SR, White J, Bero LA. The cycle of bias in health research: a framework and toolbox for critical appraisal training. Accountability in Research 2013;20(2):127-41.	Paper does not report on a structured tool
Palma Perez S, Delgado Rodriguez M. [Practical considerations on detection of publication bias]. Gac Sanit 2006;20(Suppl 3):10-6.	Not written in English
Pearson M, Peters J. Outcome reporting bias in evaluations of public health interventions: evidence of impact and the potential role of a study register. Journal of Epidemiology and Community Health 2012;66(4):286-9.	Evaluation of use of tool in practice, but no measurement properties assessed
Petticrew M, Egan M, Thomson H, Hamilton V, Kunkler R, Roberts H. Publication bias in qualitative research: what becomes of qualitative research presented at conferences? Journal of Epidemiology and Community Health 2008;62(6):552-4.	Paper does not report on a structured tool
Pigott TD, Valentine JC, Polanin JR, Williams RT, Canada DD. Outcome-Reporting Bias in Education Research. Educational Researcher 2013;42(8):424-32.	Paper does not report on a structured tool
Pirracchio R, Resche-Rigon M, Chevret S, Journois D. Do simple screening statistical tools help to detect reporting bias? Annals of Intensive Care 2013;3(1):29.	Describes statistical methods only
Quigley JM, Thompson J, Halfpenny N, Scott DA. Critical appraisal of non-randomized controlled trials-a review of recommended and commonly used tools. Value in Health 2014;17(3):A203.	Systematic review of tools
Quigley JM, Thompson JC, Halfpenny NJ, Scott DA. Critical appraisal of real world evidence-a review of recommended and commonly used tools. Value in Health 2015;18(7):A684.	Systematic review of tools

Reference	Reason for exclusion
Quintana DS. From pre-registration to publication: A non-technical primer for conducting a meta-analysis to synthesize correlational data. Front Psychol 2015;6:1549.	Paper does not report on a structured tool
Rangel SJ, Kelsey J, Colby CE, Anderson J, Moss RL. Development of a quality assessment scale for retrospective clinical studies in pediatric surgery. Journal of Pediatric Surgery 2003;38(3):390-6.	Tool does not assess reporting bias
Rosella L, Bowman C, Pach B, Morgan S, Fitzpatrick T, Goel V. The development and validation of a meta-tool for quality appraisal of public health evidence: Meta Quality Appraisal Tool (MetaQAT). Public Health 2016 Jul;136:57-65.	Tool does not assess reporting bias
Sanderson S, Tatt ID, Higgins JPT. Tools for assessing quality and susceptibility to bias in observational studies in epidemiology: a systematic review and annotated bibliography. International Journal of Epidemiology 2007;36(3):666-76.	Systematic review of tools
Santaguida PL, Riley CM, Matchar DB. Chapter 5: Assessing risk of bias as a domain of quality in medical test studies. Journal of General Internal Medicine 2012;27(Suppl 1):S33-S8.	Guidance on using existing tools
Savovic J, Weeks L, Sterne JA, Turner L, Altman DG, Moher D, et al. Evaluation of the Cochrane Collaboration's tool for assessing the risk of bias in randomized trials: focus groups, online survey, proposed recommendations and their implementation. Syst Rev 2014;3:37.	Evaluation of use of tool in practice, but no measurement properties assessed
Seehra J, Pandis N, Koletsi D, Fleming PS. Use of quality assessment tools in systematic reviews was varied and inconsistent. J Clin Epidemiol 2016;69:179-84.e5.	Audit of tools used in systematic reviews
Shamliyan T, Kane RL, Dickinson S. A systematic review of tools used to assess the quality of observational studies that examine incidence or prevalence and risk factors for diseases. Journal of Clinical Epidemiology 2010;63(10):1061-70.	Systematic review of tools
Shamliyan TA, Kane RL, Ansari MT, Raman G, Berkman ND, Grant M, et al. Development quality criteria to evaluate nontherapeutic studies of incidence, prevalence, or risk factors of chronic diseases: pilot study of new checklists. Journal of Clinical Epidemiology 2011;64(6):637-57.	Tool does not assess reporting bias
Shea BJ, Grimshaw JM, Wells GA, Boers M, Andersson N, Hamel C, et al. Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. BMC Med Res Methodol 2007;7:10.	Refers to a tool to assess quality of published systematic reviews
Shea BJ, Hamel C, Wells GA, Bouter LM, Kristjansson E, Grimshaw J, et al. AMSTAR is a reliable and valid measurement tool to assess the methodological quality of systematic reviews. Journal of Clinical Epidemiology 2009;62(10):1013-20.	Refers to a tool to assess quality of published systematic reviews
Shuang M, Zhao C, Zhang L, Shang HC. Using SYRCLE tools to evaluate the methodological quality of animal experiments of stroke in China. Chinese Journal of Evidence-Based Medicine 2016;16(5):592-7.	Not written in English

Reference	Reason for exclusion
Singh S, Khosla S. Suboptimal choice of methodology for meta-analysis and publication bias assessment. The American Journal of Cardiology 2015;115(12):1782-3.	Describes statistical methods only
Smyth RM, Kirkham JJ, Jacoby A, Altman DG, Gamble C, Williamson PR. Frequency and reasons for outcome reporting bias in clinical trials: interviews with trialists. BMJ 2011;342:c7153.	Paper does not report on a structured tool
Sohani ZN, Meyre D, de Souza RJ, Joseph PG, Gandhi M, Dennis BB, et al. Assessing the quality of published genetic association studies in meta-analyses: the quality of genetic studies (Q-Genie) tool. BMC Genet 2015;16:50.	Tool does not assess reporting bias
Song F, Parekh S, Hooper L, Loke YK, Ryder J, Sutton AJ, et al. Dissemination and publication of research findings: an updated review of related biases. Health Technology Assessment (Winchester, England) 2010;14(8):iii-193.	Paper does not report on a structured tool
Spooner CH, Pickard AS, Menon D. Edmonton Quality Assessment Tool for Drug Utilization Reviews: EQUATDUR-2: the development of a scale to assess the methodological quality of a drug utilization review. Medical Care 2000;38(9):948-58.	Tool does not assess reporting bias
Tate RL, Perdices M, Rosenkoetter U, Wakim D, Godbee K, Togher L, et al. Revision of a method quality rating scale for single-case experimental designs and n-of-1 trials: the 15-item Risk of Bias in N-of-1 Trials (RoBiNT) Scale. Neuropsychological Rehabilitation 2013;23(5):619-38.	Tool does not assess reporting bias
Viswanathan M, Ansari MT, Berkman ND, Chang S, Hartling L, McPheeters M, et al. AHRQ Methods for Effective Health Care Assessing the Risk of Bias of Individual Studies in Systematic Reviews of Health Care Interventions. Methods Guide for Effectiveness and Comparative Effectiveness Reviews. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012.	Guidance on using existing tools
Voss PH, Rehfuess EA. Quality appraisal in systematic reviews of public health interventions: an empirical study on the impact of choice of tool on meta-analysis. Journal of Epidemiology and Community Health 2013;67(1):98-104.	Evaluation of existing tools
Wells GA, Shea B, O'Connell D, Peterson J, Welch V, Losos M, et al. The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. 2008. http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp (accessed 7/03/2017).	Tool does not assess reporting bias
Whiting P, Rutjes AWS, Dinnes J, Reitsma JB, Bossuyt PMM, Kleijnen J. A systematic review finds that diagnostic reviews fail to incorporate quality despite available tools. Journal of Clinical Epidemiology 2005;58(1):1-12.	Systematic review of tools
Whiting P, Rutjes AWS, Reitsma JB, Bossuyt PMM, Kleijnen J. The development of QUADAS: a tool for the quality assessment of	Tool does not assess reporting bias

Reference	Reason for exclusion
studies of diagnostic accuracy included in systematic reviews. BMC Med Res Methodol 2003;3:25.	
Whiting PF, Rutjes AWS, Westwood ME, Mallett S, Deeks JJ, Reitsma JB, et al. QUADAS-2: a revised tool for the quality assessment of diagnostic accuracy studies. Annals of Internal Medicine 2011;155(8):529-36.	Tool does not assess reporting bias
Wiart L, Kolaski K, Vogtle LK, Butler C, Romeiser Logan L, Hickman R, et al. Inter-rater reliability and concurrent validity of the AACPDM study design and quality rating system for conducting systematic reviews (group design). Dev Med Child Neurol 2011;53:74.	Refers to a tool to assess quality of published systematic reviews