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TABLE E-1 Oxman and Guyatt Index

	of Scientific Q						
	of Belefitine Q	uality for R	esearch O	verview	s ^{9,10}		
Were the search methods used to find evidence (original research) on the primary question or questions stated?							
No		Partially			Yes		
Was the search for evidence reasonably comprehensive?							
No		Can't tell			Yes		
Were the criteria used for deciding which studies to include in the overview reported?							
No		Partially			Yes		
Was bias in the selection of studies avoided?							
No		Can't tell			Yes		
Were the criteria used for assessing the validity of the included studies reported?							
No		Partially			Yes		
Was the validity of all of the studies referred to in the text assessed with use of appropriate criteria (either in selecting the studies for inclusion or in analyzing the studies that were cited)?							
No		Can't tell			Yes		
Were the methods used to combine the findings of the relevant studies (to reach a conclusion) reported?							
No		Partially			Yes		
Were the findings of the relevant studies combined appropriately relative to the primary question that the overview addresses?							
No		Can't tell			Yes		
9. Were the conclusions made by the author or authors supported by the data and/or analysis reported in the overview?							
No		Partially			Yes		
How would yo	u rate the sci	entific qual	ity of this	review	?		
ensive	Major		Minor		Minimal		
/S	flaws 3	4	flaws 5	6	flaws 7		
	No Were the criter overview report No Was bias in the No Was bias in the No Was the validit with use of apprinclusion or in No Were the meth (to reach a con No Were the finding relative to the position of the No Were the concludate and/or and No How would your ensive	No Was the search for evidence No Were the criteria used for doverview reported? No Was bias in the selection of No Were the criteria used for a studies reported? No Was the validity of all of the with use of appropriate criteria inclusion or in analyzing the No Were the methods used to conclusion or in analyzing the No Were the findings of the relevance of the primary queston No Were the conclusions made data and/or analysis reported No How would you rate the scientific of the serious of the serious of the primary queston No How would you rate the scientific of the serious of the seriou	No Partially Was the search for evidence reasonably No Can't tell Were the criteria used for deciding whoverview reported? No Partially Was bias in the selection of studies avon No Can't tell Were the criteria used for assessing the studies reported? No Partially Was the validity of all of the studies rewith use of appropriate criteria (either inclusion or in analyzing the studies the No Can't tell Were the methods used to combine the (to reach a conclusion) reported? No Partially Were the findings of the relevant studing relative to the primary question that the No Can't tell Were the conclusions made by the author data and/or analysis reported in the over No Partially How would you rate the scientific qualensive Major flaws	No Partially Was the search for evidence reasonably compreh No Can't tell Were the criteria used for deciding which studies overview reported? No Partially Was bias in the selection of studies avoided? No Can't tell Were the criteria used for assessing the validity of studies reported? No Partially Was the validity of all of the studies referred to it with use of appropriate criteria (either in selectin inclusion or in analyzing the studies that were cited. No Can't tell Were the methods used to combine the findings of (to reach a conclusion) reported? No Partially Were the findings of the relevant studies combinate relative to the primary question that the overview of the conclusions made by the author or author data and/or analysis reported in the overview? No Partially How would you rate the scientific quality of this ensive Major flaws flaws	No Partially Was the search for evidence reasonably comprehensive? No Can't tell Were the criteria used for deciding which studies to incloverview reported? No Partially Was bias in the selection of studies avoided? No Can't tell Were the criteria used for assessing the validity of the instudies reported? No Partially Was the validity of all of the studies referred to in the tewith use of appropriate criteria (either in selecting the stinclusion or in analyzing the studies that were cited)? No Can't tell Were the methods used to combine the findings of the re(to reach a conclusion) reported? No Partially Were the findings of the relevant studies combined appreclative to the primary question that the overview address No Can't tell Were the conclusions made by the author or authors supdata and/or analysis reported in the overview? No Partially How would you rate the scientific quality of this review ensive Major Minor flaws flaws		

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TABLE E-2 Instructions for Scoring the Oxman and Guyatt Index⁷

The purpose of this index is to evaluate the scientific quality (that is, adherence to scientific principles) of research overviews (review articles) published in the medical literature. It is not intended to measure literary quality, importance, relevance, originality, or other attributes of overviews.

The index is designed to assess overviews of primary (original) research on pragmatic questions regarding causation, diagnosis, prognosis, therapy, or prevention. A research overview is a survey of research. The same principles that apply to epidemiological surveys apply to overviews: a question must be clearly specified, a target population must be identified and assessed, appropriate information must be obtained from that population in an unbiased fashion, and conclusions must be derived, sometimes with the help of a formal statistical analysis, as is done in meta-analysis. The fundamental difference between overviews and epidemiological surveys is the unit of analysis, not the scientific issues that the questions in this index address.

Since most published overviews do not include a methods section, it is difficult to answer some of the questions in the index. The answers should be based, as much as possible, on information provided in the overview. If the methods that were used are reported incompletely relative to a specific item, score that item as "partially." Similarly, if no information is provided regarding the methods used relative to a particular question, score it as "can't tell," unless there is information in the overview to suggest whether or not a criterion was met.

For question 8, if no attempt was made to combine the findings and no statement is made regarding the inappropriateness of combining the findings, check "no." If a summary estimate is given anywhere in the abstract, the discussion, or the summary section of the paper and the method used to derive the estimate is not reported, mark "no," even if there is a statement regarding the limitations of combining the findings of the studies reviewed. If in doubt, mark "can't tell."

For an overview to receive a "yes" on question 9, data (not just citations) must be reported that support the main conclusions regarding the primary question or questions that the overview addresses.

The score for question 10, the overall scientific quality, should be based on the answers to the first nine questions. If the "can't tell" option is used one or more times on the preceding questions, a review is likely to have minor flaws at best, and it is difficult to rule out major flaws (that is, a score of 4 points or less). If the "no" option is used in question 3, 4, 6, or 8, the review is likely to have major flaws (that is, a score of 4 points or less, depending on the number and degree of flaws).

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TABLE E-3: Reference List of Included Meta-Analyses

Meta-analyses included from 2005:

1.

Bellamy N, Campbell J, Robinson V, Gee T, Bourne R, Wells G. Intraarticular corticosteroid for treatment of osteoarthritis of the knee. Cochrane Database Syst Rev. 2005;2:CD005328.

2.

Bellamy N, Campbell J, Robinson V, Gee T, Bourne R, Wells G. Viscosupplementation for the treatment of osteoarthritis of the knee. Cochrane Database Syst Rev. 2005;2:CD005321.

3.

Brouwer RW, Jakma TS, Verhagen AP, Verhaar JA, Bierma-Zeinstra SM. Braces and orthoses for treating osteoarthritis of the knee. Cochrane Database Syst Rev. 2005;1:CD004020.

4.

Chinnock P, Roberts I. Gangliosides for acute spinal cord injury. Cochrane Database Syst Rev. 2005;2:CD004444.

5.

Cohen AT, Hirst C, Sherrill B, Holmes P, Fidan D. Metaanalysis of trials comparing ximelagatran with low molecular weight heparin for prevention of venous thromboembolism after major orthopaedic surgery. Br J Surg. 2005;92:1335-44.

6.

Fidelix TS, Soares BG, Trevisani VF. Diacerein for osteoarthritis. Cochrane Database Syst Rev. 2006;1:CD005117.

7.

Forster MC, Aster AS, Ahmed S. Reaming during anterograde femoral nailing: is it worth it? Injury. 2005;36:445-9.

8.

Forster MC, Bruce AS, Aster AS. Should the tibia be reamed when nailing? Injury. 2005;36:439-44.

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9.

Forster MC, Forster IW. Patellar tendon or four-strand hamstring? A systematic review of autografts for anterior cruciate ligament reconstruction. Knee. 2005;12:225-30.

10.

Gibson JN, Waddell G. Surgery for degenerative lumbar spondylosis. Cochrane Database Syst Rev. 2005;4:CD001352.

11.

Goldblatt JP, Fitzsimmons SE, Balk E, Richmond JC. Reconstruction of the anterior cruciate ligament: meta-analysis of patellar tendon versus hamstring tendon autograft. Arthroscopy. 2005;21:791-803.

12.

Green S, Buchbinder R, Hetrick S. Acupuncture for shoulder pain. Cochrane Database Syst Rev. 2005;2:CD005319.

13.

Handoll HH, Hanchard NC, Goodchild L, Feary J. Conservative management following closed reduction of traumatic anterior dislocation of the shoulder. Cochrane Database Syst Rev. 2006;1:CD004962.

14.

Handoll HH, Koscielniak-Nielsen ZJ. Single, double or multiple injection techniques for axillary brachial plexus block for hand, wrist or forearm surgery. Cochrane Database Syst Rev. 2006;1:CD003842.

15.

Hayden JA, van Tulder MW, Malmivaara A, Koes BW. Exercise therapy for treatment of non-specific low back pain. Cochrane Database Syst Rev. 2005;3:CD000335.

16.

Jacobs WC, Clement DJ, Wymenga AB. Retention versus sacrifice of the posterior cruciate ligament in total knee replacement for treatment of osteoarthritis and rheumatoid arthritis. Cochrane Database Syst Rev. 2005;4:CD004803.

17.

Jainandunsing JS, van der Elst M, van der Werken CC. Bioresorbable fixation devices for musculoskeletal injuries in adults. Cochrane Database Syst Rev. 2005;2:CD004324.

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18.

Jutte PC, Van Loenhout-Rooyackers JH. Routine surgery in addition to chemotherapy for treating spinal tuberculosis. Cochrane Database Syst Rev. 2006;1:CD004532.

19.

Kay TM, Gross A, Goldsmith C, Santaguida PL, Hoving J, Bronfort G; Cervical Overview Group. Exercises for mechanical neck disorders. Cochrane Database Syst Rev. 2005;3:CD004250.

20.

Kent P, Marks D, Pearson W, Keating J. Does clinician treatment choice improve the outcomes of manual therapy for nonspecific low back pain? A metaanalysis. J Manipulative Physiol Ther. 2005;28:312-22.

21.

Khadilkar A, Milne S, Brosseau L, Robinson V, Saginur M, Shea B, Tugwell P, Wells G. Transcutaneous electrical nerve stimulation (TENS) for chronic low-back pain. Cochrane Database Syst Rev. 2005;3:CD003008.

22.

Margaliot Z, Haase SC, Kotsis SV, Kim HM, Chung KC. A meta-analysis of outcomes of external fixation versus plate osteosynthesis for unstable distal radius fractures. J Hand Surg [Am]. 2005;30:1185-99.

23.

Mohtadi NG, Bitar IJ, Sasyniuk TM, Hollinshead RM, Harper WP. Arthroscopic versus open repair for traumatic anterior shoulder instability: a meta-analysis. Arthroscopy. 2005;21:652-8.

24.

Moore RA, Derry S, Makinson GT, McQuay HJ. Tolerability and adverse events in clinical trials of celecoxib in osteoarthritis and rheumatoid arthritis: systematic review and meta-analysis of information from company clinical trial reports. Arthritis Res Ther. 2005;7:R644-65. Erratum in: Arthritis Res Ther. 2006;8:401.

25.

Papadokostakis G, Papakostidis C, Dimitriou R, Giannoudis PV. The role and efficacy of retrograding nailing for the treatment of diaphyseal and distal femoral

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fractures: a systematic review of the literature. Injury. 2005;36:813-22.

26.

Parker MJ, Gillespie WJ, Gillespie LD. Hip protectors for preventing hip fractures in older people. Cochrane Database Syst Rev. 2005;3:CD001255.

27.

Parker MJ, Handoll HH. Gamma and other cephalocondylic intramedullary nails versus extramedullary implants for extracapsular hip fractures in adults. Cochrane Database Syst Rev. 2005;4:CD000093.

28.

Parker MJ, Handoll HH. Extramedullary fixation implants and external fixators for extracapsular hip fractures in adults. Cochrane Database Syst Rev. 2006;1:CD000339.

29.

Parvizi J, Rapuri VR, Saleh KJ, Kuskowski MA, Sharkey PF, Mont MA. Failure to resurface the patella during total knee arthroplasty may result in more knee pain and secondary surgery. Clin Orthop Relat Res. 2005;438:191-6.

30.

Peccin MS, Almeida GJ, Amaro J, Cohen M, Soares BG, Atallah AN. Interventions for treating posterior cruciate ligament injuries of the knee in adults. Cochrane Database Syst Rev. 2005;2:CD002939.

31.

Peloso P, Gross A, Haines T, Trinh K, Goldsmith CH, Aker P; Cervical Overview Group. Medicinal and injection therapies for mechanical neck disorders. Cochrane Database Syst Rev. 2005;2:CD000319.

32.

Poolman RW, Goslings JC, Lee JB, Statius Muller M, Steller EP, Struijs PA. Conservative treatment for closed fifth (small finger) metacarpal neck fractures. Cochrane Database Syst Rev. 2005;3:CD003210.

33.

Prodromos CC, Joyce BT, Shi K, Keller BL. A metaanalysis of stability after anterior cruciate ligament reconstruction as a function of hamstring versus patellar tendon graft and fixation type. Arthroscopy. 2005;21:1202. Dijkman eAppendix Page 7 of 15

34.

Roddy E, Zhang W, Doherty M. Aerobic walking or strengthening exercise for osteoarthritis of the knee? A systematic review. Ann Rheum Dis. 2005;64:544-8.

35.

Rome K, Handoll HH, Ashford R. Interventions for preventing and treating stress fractures and stress reactions of bone of the lower limbs in young adults. Cochrane Database Syst Rev. 2005;2:CD000450.

36.

Sawka AM, Papaioannou A, Adachi JD, Gafni A, Hanley DA, Thabane L. Does alendronate reduce the risk of fracture in men? A meta-analysis incorporating prior knowledge of anti-fracture efficacy in women. BMC Musculoskelet Disord. 2005;6:39.

37.

Srikanth VK, Fryer JL, Zhai G, Winzenberg TM, Hosmer D, Jones G. A meta-analysis of sex differences prevalence, incidence and severity of osteoarthritis. Osteoarthritis Cartilage. 2005;13:769-81.

38.

Stengel D, Bauwens K, Ekkernkamp A, Cramer J. Efficacy of total ankle replacement with meniscal-bearing devices: a systematic review and meta-analysis. Arch Orthop Trauma Surg. 2005;125:109-19.

39.

Taylor RS, Van Buyten JP, Buchser E. Spinal cord stimulation for chronic back and leg pain and failed back surgery syndrome: a systematic review and analysis of prognostic factors. Spine (Phila Pa 1976). 2005;30:152-60.

40.

Thomson CE, Crawford F, Murray GD. The effectiveness of extra corporeal shock wave therapy for plantar heel pain: a systematic review and meta-analysis. BMC Musculoskelet Disord. 2005;6:19.

41.

Towheed TE, Maxwell L, Anastassiades TP, Shea B, Houpt J, Robinson V, Hochberg MC, Wells G. Glucosamine therapy for treating osteoarthritis. Cochrane Database Syst Rev. 2005;2:CD002946.

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42.

Trees AH, Howe TE, Dixon J, White L. Exercise for treating isolated anterior cruciate ligament injuries in adults. Cochrane Database Syst Rev. 2005;4:CD005316.

43.

Valery PC, Holly EA, Sleigh AC, Williams G, Kreiger N, Bain C. Hernias and Ewing's sarcoma family of tumours: a pooled analysis and meta-analysis. Lancet Oncol. 2005;6:485-90.

44.

Wajon A, Ada L, Edmunds I. Surgery for thumb (trapeziometacarpal joint) osteoarthritis. Cochrane Database Syst Rev. 2005;4:CD004631.

45.

Zlowodzki M, Zelle BA, Cole PA, Jeray K, McKee MD; Evidence-Based Orthopaedic Trauma Working Group. Treatment of acute midshaft clavicle fractures: systematic review of 2144 fractures: on behalf of the Evidence-Based Orthopaedic Trauma Working Group. J Orthop Trauma. 2005;19:504-7.

Meta-analyses included from 2008:

1.

Abraham A, Handoll HH, Khan T. Interventions for treating wrist fractures in children. Cochrane Database Syst Rev. 2008;2:CD004576.

2.

Ahn J, Man LX, Park S, Sodl JF, Esterhai JL. Systematic review of cemented and uncemented hemiarthroplasty outcomes for femoral neck fractures. Clin Orthop Relat Res. 2008;466:2513-8.

3.

AlBuhairan B, Hind D, Hutchinson A. Antibiotic prophylaxis for wound infections in total joint arthroplasty: a systematic review. J Bone Joint Surg Br. 2008;90:915-9.

4.

Bajammal SS, Zlowodzki M, Lelwica A, Tornetta P 3rd, Einhorn TA, Buckley R, Leighton R, Russell TA, Larsson S, Bhandari M. The use of calcium phosphate bone cement in fracture treatment. A meta-analysis of randomized trials. J Bone Joint Surg Am. 2008;90:1186-96.

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5.

Berg KM, Kunins HV, Jackson JL, Nahvi S, Chaudhry A, Harris KA Jr, Malik R, Arnsten JH. Association between alcohol consumption and both osteoporotic fracture and bone density. Am J Med. 2008;121:406-18.

6.

Bjordal JM, Lopes-Martins RA, Joensen J, Couppe C, Ljunggren AE, Stergioulas A, Johnson MI. A systematic review with procedural assessments and meta-analysis of low level laser therapy in lateral elbow tendinopathy (tennis elbow). BMC Musculoskelet Disord. 2008;9:75.

7.

Chester R, Smith TO, Sweeting D, Dixon J, Wood S, Song F. The relative timing of VMO and VL in the aetiology of anterior knee pain: a systematic review and meta-analysis. BMC Musculoskelet Disord. 2008;9:64.

8.

Christensen R, Bartels EM, Altman RD, Astrup A, Bliddal H. Does the hip powder of Rosa canina (rosehip) reduce pain in osteoarthritis patients?—a meta-analysis of randomized controlled trials. Osteoarthritis Cartilage. 2008;16:965-72.

9.

Christensen R, Bartels EM, Astrup A, Bliddal H. Symptomatic efficacy of avocado-soybean unsaponifiables (ASU) in osteoarthritis (OA) patients: a meta-analysis of randomized controlled trials. Osteoarthritis Cartilage. 2008;16:399-408.

10.

Dinh MT, Abad CL, Safdar N. Diagnostic accuracy of the physical examination and imaging tests for osteomyelitis underlying diabetic foot ulcers: meta-analysis. Clin Infect Dis. 2008;47:519-27.

11.

Ettema HB, Kollen BJ, Verheyen CC, Büller HR. Prevention of venous thromboembolism in patients with immobilization of the lower extremities: a meta-analysis of randomized controlled trials. J Thromb Haemost. 2008;6:1093-8.

12.

Fowler SJ, Symons J, Sabato S, Myles PS. Epidural analgesia compared with peripheral nerve blockade after

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major knee surgery: a systematic review and meta-analysis of randomized trials. Br J Anaesth. 2008;100:154-64.

13.

Fransen M, McConnell S. Exercise for osteoarthritis of the knee. Cochrane Database Syst Rev. 2008;4:CD004376.

14.

Gill JB, Chin Y, Levin A, Feng D. The use of antifibrinolytic agents in spine surgery. A meta-analysis. J Bone Joint Surg Am. 2008;90:2399-407.

15.

Hall J, Swinkels A, Briddon J, McCabe CS. Does aquatic exercise relieve pain in adults with neurologic or musculoskeletal disease? A systematic review and meta-analysis of randomized controlled trials. Arch Phys Med Rehabil. 2008;89:873-83.

16.

Handoll HH, Parker MJ. Conservative versus operative treatment for hip fractures in adults. Cochrane Database Syst Rev. 2008;3:CD000337.

17.

Hawke F, Burns J, Radford JA, du Toit V. Custom-made foot orthoses for the treatment of foot pain. Cochrane Database Syst Rev. 2008;3:CD006801.

18.

Hegedus EJ, Goode A, Campbell S, Morin A, Tamaddoni M, Moorman CT 3rd, Cook C. Physical examination tests of the shoulder: a systematic review with meta-analysis of individual tests. Br J Sports Med. 2008;42:80-92.

19.

Hernández-Molina G, Reichenbach S, Zhang B, Lavalley M, Felson DT. Effect of therapeutic exercise for hip osteoarthritis pain: results of a meta-analysis. Arthritis Rheum. 2008;59:1221-8.

20.

Ibrahim T, Tleyjeh IM, Gabbar O. Surgical versus nonsurgical treatment of chronic low back pain: a metaanalysis of randomised trials. Int Orthop. 2008;32:107-13. Erratum in: Int Orthop. 2009;33:589-90.

21.

Jiang SD, Jiang LS, Zhao CQ, Dai LY. No advantages of Gamma nail over sliding hip screw in the management of

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peritrochanteric hip fractures: a meta-analysis of randomized controlled trials. Disabil Rehabil. 2008;30:493-7.

22.

Jirarattanaphochai K, Jung S. Nonsteroidal antiinflammatory drugs for postoperative pain management after lumbar spine surgery: a meta-analysis of randomized controlled trials. J Neurosurg Spine. 2008;9:22-31.

23.

Karamanis EM, Matthaiou DK, Moraitis LI, Falagas ME. Fluoroquinolones versus beta-lactam based regimens for the treatment of osteomyelitis: a meta-analysis of randomized controlled trials. Spine (Phila Pa 1976). 2008;33:E297-304.

24.

Karchevsky M, Babb JS, Schweitzer ME. Can diffusion-weighted imaging be used to differentiate benign from pathologic fractures? A meta-analysis. Skeletal Radiol. 2008;37:791-5.

25.

Kemp AM, Dunstan F, Harrison S, Morris S, Mann M, Rolfe K, Datta S, Thomas DP, Sibert JR, Maguire S. Patterns of skeletal fractures in child abuse: systematic review. BMJ. 2008;337:a1518.

26.

Krych AJ, Jackson JD, Hoskin TL, Dahm DL. A metaanalysis of patellar tendon autograft versus patellar tendon allograft in anterior cruciate ligament reconstruction. Arthroscopy. 2008;24:292-8.

27.

Kwee TC, Kwee RM, Alavi A. FDG-PET for diagnosing prosthetic joint infection: systematic review and metaanalysis. Eur J Nucl Med Mol Imaging. 2008;35:2122-32.

28.

Lin CW, Moseley AM, Refshauge KM. Rehabilitation for ankle fractures in adults. Cochrane Database Syst Rev. 2008;3:CD005595.

29.

Mehrholz J, Kugler J, Pohl M. Locomotor training for walking after spinal cord injury. Cochrane Database Syst Rev. 2008;2:CD006676.

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30.

Meredick RB, Vance KJ, Appleby D, Lubowitz JH. Outcome of single-bundle versus double-bundle reconstruction of the anterior cruciate ligament: a meta-analysis. Am J Sports Med. 2008;36:1414-21.

31.

Meserve BB, Cleland JA, Boucher TR. A meta-analysis examining clinical test utilities for assessing meniscal injury. Clin Rehabil. 2008;22:143-61.

32.

Mollon B, da Silva V, Busse JW, Einhorn TA, Bhandari M. Electrical stimulation for long-bone fracture-healing: a meta-analysis of randomized controlled trials. J Bone Joint Surg Am. 2008;90:2322-30.

33.

Morse K, Davis AD, Afra R, Kaye EK, Schepsis A, Voloshin I. Arthroscopic versus mini-open rotator cuff repair: a comprehensive review and meta-analysis. Am J Sports Med. 2008;36:1824-8.

34.

Muchow RD, Resnick DK, Abdel MP, Munoz A, Anderson PA. Magnetic resonance imaging (MRI) in the clearance of the cervical spine in blunt trauma: a meta-analysis. J Trauma. 2008;64:179-89.

35.

Nourbakhsh A, Grady JJ, Garges KJ. Percutaneous spine biopsy: a meta-analysis. J Bone Joint Surg Am. 2008;90:1722-5.

36.

Panesar SS, Mirza S, Bharadwaj G, Woolf V, Ravikumar R, Athanasiou T. The percutaneous compression plate versus the dynamic hip screw: a meta-analysis. Acta Orthop Belg. 2008;74:38-48.

37.

Papakostidis C, Kontakis G, Bhandari M, Giannoudis PV. Efficacy of autologous iliac crest bone graft and bone morphogenetic proteins for posterolateral fusion of lumbar spine: a meta-analysis of the results. Spine (Phila Pa 1976). 2008;33:E680-92.

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38.

Parvizi J, Saleh KJ, Ragland PS, Pour AE, Mont MA. Efficacy of antibiotic-impregnated cement in total hip replacement. Acta Orthop. 2008;79:335-41.

39.

Sharrock NE, Gonzalez Della Valle A, Go G, Lyman S, Salvati EA. Potent anticoagulants are associated with a higher all-cause mortality rate after hip and knee arthroplasty. Clin Orthop Relat Res. 2008;466:714-21.

40.

Shie P, Cardarelli R, Brandon D, Erdman W, Abdulrahim N. Meta-analysis: comparison of F-18 fluorodeoxyglucose-positron emission tomography and bone scintigraphy in the detection of bone metastases in patients with breast cancer. Clin Nucl Med. 2008;33:97-101. Erratum in: Clin Nucl Med. 2008;33:329.

41.

Shiga T, Wajima Z, Ohe Y. Is operative delay associated with increased mortality of hip fracture patients? Systematic review, meta-analysis, and meta-regression. Can J Anaesth. 2008;55:146-54.

42.

Slobogean GP, Kennedy SA, Davidson D, O'Brien PJ. Single- versus multiple-dose antibiotic prophylaxis in the surgical treatment of closed fractures: a meta-analysis. J Orthop Trauma. 2008;22:264-9.

43.

Tsiridis E, Pavlou G, Charity J, Tsiridis E, Gie G, West R. The safety and efficacy of bilateral simultaneous total hip replacement: an analysis of 2063 cases. J Bone Joint Surg Br. 2008;90:1005-12.

44.

Warden SJ, Hinman RS, Watson MA Jr, Avin KG, Bialocerkowski AE, Crossley KM. Patellar taping and bracing for the treatment of chronic knee pain: a systematic review and meta-analysis. Arthritis Rheum. 2008;59:73-83.

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TABLE E-4 Total Number and Percentage of Meta-Analyses Fulfilling Each Criterion from the Oxman and Guyatt Index

Guyatt muex	Total Number (%) of Meta- Analyses Fulfilling Each				
		Criterion			
				P Value	P Value
	1984-			1984-1999	2005 vs.
Item	1999	2005	2008	vs. 2005	2008
Were the search methods used to find evidence on the primary question or questions stated?	33 (83)	45 (100)	39 (89)	0.003	0.020
Was the search for evidence reasonably comprehensive?	29 (73)	42 (93)	33 (75)	0.010	0.018
Were the criteria used for deciding which studies to include in the overview reported?	31 (78)	44 (98)	42 (96)	0.004	0.544
Was bias in the selection of studies avoided?	17 (43)	21 (47)	27 (61)	0.700	0.164
Were the criteria used for assessing the validity of the included studies reported?	19 (48)	38 (84)	32 (73)	<0.001	0.177
Was the validity of all of the studies referred to in the text assessed using appropriate criteria?	18 (45)	41 (91)	30 (68)	<0.001	0.007
Were the methods used to combine the findings of the relevant studies (to reach a conclusion) reported?	28 (70)	41 (91)	41 (93)	0.013	0.717
Were the findings of the relevant studies combined appropriately relative to the primary question of the overview?	25 (63)	45 (100)	40 (91)	<0.001	0.038
Were the conclusions made by the author(s) supported by the data and/or analysis reported in the overview?	26 (65)	45 (100)	37 (84)	<0.001	0.005

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TABLE E-5 Comparison of Studies Fulfilling Each Overview Quality Assessment Questionnaire (OQAQ) Item with Respect to the Direction of Their Conclusion

Quality Score (Items 1 through 9 of OQAQ) and Study Conclusions										
	Number (%) of Meta-Analyses Fulfilling Each Criterion									
	1984-1999			2005			2008			
	Positive	Negative	P	Positive	Negative	P	Positive	Negative	P	
Item	Conclusion*	Conclusion†	Value	Conclusion*	Conclusion†	Value	Conclusion*	Conclusion†	Value	
1	22 (79)	11 (92)	0.30	25 (100)	20 (100)	-	24 (89)	15 (88)	0.95	
2	21 (75)	8 (67)	0.64	22 (88)	20 (100)	0.44	18 (67)	14 (82)	0.26	
3	21 (75)	10 (83)	0.53	24 (96)	20 (100)	0.08	25 (93)	17 (100)	0.25	
4	8 (29)	9 (75)	0.008	11 (44)	10 (50)	0.77	14 (48)	13 (75)	0.10	
5	13 (46)	6 (50)	0.75	20 (80)	18 (90)	0.51	16 (59)	15 (88)	0.04	
6	13 (46)	5 (42)	0.96	22 (88)	19 (95)	0.27	14 (52)	15 (88)	0.01	
7	18 (64)	10 (83)	0.20	22 (88)	19 (95)	0.27	26 (96)	15 (88)	0.30	
8	14 (50)	11 (92)	0.01	25 (100)	20 (100)	-	25 (93)	15 (88)	0.62	
9	18 (64)	8 (67)	0.82	25 (100)	20 (100)	-	22 (82)	15 (88)	0.55	

^{*}The percentages were derived by dividing the number of studies fulfilling each criterion by the total number of studies with a positive conclusion. †The percentages were derived by dividing the number of studies fulfilling each criterion by the total number of studies with a negative conclusion.