Listing of Excluded Studies

All excluded articles listed below were reviewed in their full-text versions. Following each reference, in italics, is the primary reason for exclusion and the question (Q) for which the article was considered. If no Q is indicated, then the article was excluded a priori from the study for the reason given. *Reasons for exclusion pertain only to the usefulness of articles for this study and are not intended as criticisms of the articles per se.* "DA" indicates exclusion at the data abstraction stage. For reference, the questions are:

Question 1a: What is the reliability of new McDonald criteria (incorporating supplementary information form radiologic and laboratory studies including MRI, VEP, and CSF analyses) compared with long-term follow-up diagnosis of clinically definite MS according to the Poser criteria?

Question 1b: What is the inter-rater reliability of diagnosis of MS according to Poser or McDonald criteria among neurologists or between neurologists and non-neurologist physicians?

Question 2: What clinical indicators, including particularly time-course of impairments, predict physical or mental impairment at 12 months?

Question 3a: Among patients with MS, do current disease-modifying treatments result in long-term improvements in physical or mental outcomes compared to placebo or usual care?

Question 3b: Among patients with MS, do treatments aimed at symptom management result in improvements in physical or mental outcomes compared to usual care?

Question 4: Among individuals with MS, what physical, mental, laboratory, or radiographic findings have been associated with inability to work?

Question 5: Among individuals with MS, how does elevated temperature or other environmental factors impair the capacity to work?

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Abel NA, Smith RA. Intrathecal baclofen for treatment of intractable spinal spasticity. Arch Phys Med Rehab 1994;75(1):54-8. *Exclude-Q3-no results for placebo patients*

Adams HP, Wagner S, Sobel DF, et al. Hypointense and hyperintense lesions on magnetic resonance imaging in secondary-progressive MS patients. Eur Neurol 1999;42(1):52-63. *Exclude-Q2-no predictor with outcome*

Albrecht H, Wotzel C, Erasmus LP, et al. Day-to-day variability of maximum walking distance in MS patients can mislead to relevant changes in the Expanded Disability Status Scale (EDSS): average walking speed is a more constant parameter. Mult Scler 2001;7(2):105-9. *Exclude-Q2-no long-term follow up*

Allanson J, Bass C, Wade DT. Characteristics of patients with persistent severe disability and medically unexplained neurological symptoms: a pilot study. J Neurol Neurosurg Psych 2002;73(3):307-9. *Exclude-no MS patients specified*

Allen K, Blascovich J. The value of service dogs for people with severe ambulatory disabilities. A randomized controlled trial. JAMA 1996;275(13):1001-6. *Exclude-no MS patients specified*

Alusi SH, Worthington J, Glickman S, et al. A study of tremor in multiple sclerosis. Brain 2001;124(Pt 4):720-30. *Exclude-Q2-no long-term follow up*

Alusi SH, Worthington J, Glickman S, et al. Evaluation of three different ways of assessing tremor in multiple sclerosis. J Neurol Neurosurg Psych 2000;68(6):756-60. *Exclude-Q2-no long-term follow up*

Amato MP, Fratiglioni L, Groppi C, et al. Interrater reliability in assessing functional systems and disability on the Kurtzke scale in multiple sclerosis. Arch Neurol 1988;45(7):746-8. *Exclude-Q2-background*

Amato MP, Ponziani G. Quantification of impairment in MS: discussion of the scales in use [review]. Mult Scler 1999;5(4):216-9. *Exclude-not relevant to study questions*

Amato MP, Ponziani G. A prospective study on the

prognosis of multiple sclerosis. Neurol Sci 2000;21(4 Suppl 2):S831-8. *Exclude-Q2-wrong timeframe*

Amato MP, Ponziani G, Rossi F, et al. Quality of life in multiple sclerosis: the impact of depression, fatigue and disability. Mult Scler 2001;7(5):340-4. *Exclude-Q2-no long-term follow up*

Aminoff MJ, Davis SL, Panitch HS. Serial evoked potential studies in patients with definite multiple sclerosis. Clinical relevance. Arch Neurol 1984;41(11):1197-202. *Exclude-Q2-no analysis of predictors*

Andersson PB, Waubant E, Gee L, et al. Multiple sclerosis that is progressive from the time of onset: clinical characteristics and progression of disability. Arch Neurol 1999;56(9):1138-42. *Exclude-Q2-wrong timeframe*

Andersson T, Siden A, Persson A. A comparison of clinical and evoked potential (VEP and median nerve SEP) evolution in patients with MS and potentially related conditions. Acta Neurol Scand 1991;84(2):139-45. *Exclude-Q2-no physical or mental outcome reported*

Antel JP, Freedman MS, Brodovsky S, et al. Activated suppressor cell function in severely disabled patients with multiple sclerosis. Ann Neurol 1989;25(2):204-7. *Exclude-Q2-no long-term follow up*

Archibald CJ, McGrath PJ, Ritvo PG, et al. Pain prevalence, severity and impact in a clinic sample of multiple sclerosis patients. Pain 1994;58(1):89-93. *Exclude-Q4-vague measurements of work ability*

Armutlu K, Karabudak R, Nurlu G. Physiotherapy approaches in the treatment of ataxic multiple sclerosis: a pilot study. Neurorehab Neural Repair 2001;15(3):203-11.*Exclude-Q3-no long-term symptom management*

Arnold DL, Bouchard JP, Boyle CAJ, et al. Key issues in the diagnosis and treatment of multiple sclerosis-an overview. Neurology 2002;59(6):U2-S33. *Exclude-review-background*

Arnold DL, Matthews PM. MRI in the diagnosis and management of multiple sclerosis. Neurology 2002;58(8):S23-S31. *Exclude-review-background*

Aronson KJ. Quality of life among persons with multiple sclerosis and their caregivers. Neurology 1997;48(1):74-80.*Exclude-not relevant to study questions*

Aupperle RL, Beatty WW, Shelton FdeNAP, et al. Three screening batteries to detect cognitive impairment in multiple sclerosis. Mult Scler 2002;8(5):382-9. *Exclude-Q4-no findings relevant to question*

AUSTIMS Research Group. Interferon-alpha and transfer factor in the treatment of multiple sclerosis: a double-blind, placebo-controlled trial. J Neurol Neurosurg Psych 1989;52(5):566-74.*Exclude-Q3-not current therapy*

Baker DG. Multiple sclerosis and thermoregulatory dysfunction. J Appl Physiol 2002;92(5):1779-80. *Exclude-DA-Q5-review article*

Bakshi R, Benedict RH, Bermel RA, et al. Regional brain atrophy is associated with physical disability in multiple sclerosis: semiquantitative magnetic resonance imaging and relationship to clinical findings. J Neuroimag 2001;11(2):129-36. *Exclude-Q2-no long-term follow up*

Balcer LJ. Clinical outcome measures for research in multiple sclerosis [review]. J Neuro-Ophthalmol 2001;21(4):296-301. *Exclude-Q2-no long-term follow up*

Barkhof F. MRI in multiple sclerosis: correlation with expanded disability status scale (EDSS) [review]. Mult Scler 1999;5(4):283-6. *Exclude-Q2-no long-term follow up*

Barkhof F. The clinico-radiological paradox in multiple sclerosis revisited [review]. Curr Opinion Neurol 2002;15(3):239-45. *Exclude-Q2-no long-term follow up*

Barkhof F, Filippi M, van Waesberghe JH, et al. Interobserver agreement for diagnostic MRI criteria in suspected multiple sclerosis. Neuroradiology 1999;41(5):347-50. *Exclude-Q1b-no Poser or McDonald criteria*

Barkhof F, Filippi M, van Waesberghe JH, et al. Improving interobserver variation in reporting gadolinium-enhanced MRI lesions in multiple sclerosis. Neurology 1997;49(6):1682-8. *Exclude-Q1b-no Poser or McDonald criteria*

Barkhof F, Frequin ST, Hommes OR, et al. A correlative triad of gadolinium-DTPA MRI, EDSS, and CSF-MBP in relapsing multiple sclerosis patients treated with high-dose intravenous methylprednisolone. Neurology 1992;42(1):63-7. *Exclude-Q3-not RCT*

Barnes D, Hughes RA, Morris RW, et al. Randomised trial of oral and intravenous methylprednisolone in acute relapses of multiple sclerosis. Lancet 1997;349(9056):902-6. *Exclude-Q3-wrong timeframe*

Basmajian JV. Lioresal (baclofen) treatment of spasticity in multiple sclerosis. Am J Phys Med 1975;54(4):175-7. *Exclude-DA-Q3-data poorly described*

Basmajian JV, Shankardass K, Russell D. Ketazolam once daily for spasticity: double-blind cross-over study. Arch Phys Med Rehab 1986;67(8):556-7. *Exclude-DA-Q3-outcomes poorly described*

Basmajian JV, Shankardass K, Russell D, et al. Ketazolam treatment for spasticity: double-blind study of a new drug. Arch Phys Med Rehab 1984;65(11):698-701. *Exclude-DA-Q3-limited results reported for MS patients*

Basmajian JV, Yucel V. Effects of a GABA--derivative (BA-34647) on spasticity. Preliminary report of a double-blind cross-over study. Am J Phys Med 1974;53(5):223-8. *Exclude-DA-Q3-no separate results reported for MS patients*

Basso MR, Beason-Hazen S, Lynn J, et al. Screening for cognitive dysfunction in multiple sclerosis. Arch Neurol 1996;53(10):980-4. *Exclude-Q2-no long-term follow up*

Battaglia MA, Serpero P, Bordo G, et al. Evaluation of the minimal record of disability in multiple sclerosis patients in Genoa. Acta Neurol Scand Suppl 1984;101:92-9. *Exclude-Q2-no long-term follow up*

Bauer HJ, Krtsch U, Schipper R, et al. Disability rating with the IFMSS scales. Acta Neurol Scand Suppl 1984;101:145-52. *Exclude-Q2-no long-term follow up*

Baumhefner RW, Tourtellotte WW, Syndulko K, et al. Quantitative multiple sclerosis plaque assessment with magnetic resonance imaging. Its correlation with clinical parameters, evoked potentials, and intra-blood-brain barrier IgG synthesis. Arch Neurol 1990;47(1):19-26. *Exclude-Q2-no long-term follow up*

Becker KG. APOE genotype is a major predictor of long-term progression of disability in MS. Neurology 2001;57(11):2148-9. *Exclude-Q2-no long-term follow up*

Beenakker EA, Oparina TI, Hartgring A, et al. Cooling garment treatment in MS: clinical improvement and decrease in leukocyte NO production. Neurology. 2001;57(5):892-4. *Exclude-DA-Q3-no specific symptom targeted*

Benedict RH, Shapiro A, Priore R, et al. Neuropsychological counseling improves social behavior in cognitively-impaired multiple sclerosis patients. Mult Scler 2000;6(6):391-6. *Exclude-DA-Q3-no comparison to usual care*

Benesova Y, Niedermayerova I. New approach to evaluation of clinical state in patients with multiple sclerosis. Bratislavske Lekarske Listy 2001;102(8):370-1. *Exclude-Q2-no long-term follow up*

Berg D, Maurer M, Warmuth-Metz M, et al. The correlation between ventricular diameter measured by transcranial sonography and clinical disability and cognitive dysfunction in patients with multiple sclerosis. Arch Neurol 2000;57(9):1289-92. *Exclude-Q2-no long-term follow up*

Bergamaschi R, Romani A, Versino M, et al. Clinical aspects of fatigue in multiple sclerosis. Funct Neurol 1997;12(5):247-51. *Exclude-Q2-no long-term follow up*

Berger JR, Sheremata WA. Persistent neurological deficit precipitated by hot bath test in multiple sclerosis. JAMA. 1983;249(13):1751-3. *Exclude-review-background*

Bernardi S, Buttinelli C, Grasso MG, et al. Evolution and severity markers in 233 MS patients. Riv Neurol 1987;57(3):197-200. *Exclude-Q2-wrong timeframe*

Beutler E, Sipe J, Romine J, et al. Treatment of multiple sclerosis and other autoimmune diseases with cladribine. Sem Hematol 1996;33(1 Suppl 1):45-52. *Exclude-DA-Q3-incomplete data*

Bever CT Jr. The current status of studies of aminopyridines in patients with multiple sclerosis [review]. Ann Neurol 1994;36(Suppl):S118-21. *Exclude-review-background*

Bever CT Jr, Anderson PA, Leslie J, et al. Treatment with oral 3,4 diaminopyridine improves leg strength in multiple sclerosis patients: results of a randomized, double-blind, placebo-controlled, crossover trial. Neurology 1996;47(6):1457-62. *Exclude-Q3-no long-term symptom management*

Bever CT Jr, Leslie J, Camenga DL, et al. Preliminary trial of 3,4-diaminopyridine in patients with multiple sclerosis. Ann Neurol 1990;27(4):421-7. *Exclude-Q3-not RCT*

Bever CT Jr, Young D, Anderson PA, et al. The effects of 4-aminopyridine in multiple sclerosis patients: results of a randomized, placebo-controlled, double-blind, concentration-controlled, crossover trial. Neurology 1994;44(6):1054-9. *Exclude-Q3-wrong timeframe*

Bjuro T, Fugl-Meyer AR, Grimby G, et al. Domestic work in patients with neuromuscular handicap. Scand J Rehab Med Suppl 1978;6:193-6. *Exclude-Q4-no findings relevant to question*

Blake DJ, Bodine C. An overview of assistive technology for persons with multiple sclerosis. J Rehab Res Develop 2002;39(2):299-312. *Exclude-not relevant to study questions*

Blinkenberg M, Jensen CV, Holm S, et al. A longitudinal study of cerebral glucose metabolism, MRI, and disability in patients with MS. Neurology 1999;53(1):149-53. *Exclude-Q2-wrong timeframe*

Boggild M, Ford H. Multiple sclerosis. Clin Evid 2002;(7):1195-207. *Exclude-review-background Q3*

Bourdette DN, Prochazka AV, Mitchell W, et al. Health care costs of veterans with multiple sclerosis: implications for the rehabilitation of MS. VA Multiple Sclerosis Rehabilitation Study Group. Arch Phys Med Rehab 1993;74(1):26-31. *Exclude-Q2-no long-term follow up*

Bowen J, Gibbons L, Gianas A, et al. Self-administered Expanded Disability Status Scale with functional system scores correlates well with a physician-administered test.

Mult Scler 2001;7(3):201-6. *Exclude-Q2-no long-term follow up*.

Branas P, Jordan R, Fry-Smith A, et al. Treatments for fatigue in multiple sclerosis: a rapid and systematic review. Health Technol Assess (Winchester, England) 2000;4(27):1-61. *Exclude-review-background.*

Brassat D, Azais-Vuillemin C, YaouanquestionJ, et al. Familial factors influence disability in MS multiplex families. French Multiple Sclerosis Genetics Group. Neurology 1999;52(8):1632-6. *Exclude-Q2-no long-term follow up*

Brassington JC, Marsh NV. Neuropsychological aspects of multiple sclerosis [review]. Neuropsychol Rev 1998;8(2):43-77. *Exclude-review-background Q2*

Breitbart W, Rosenfeld B, Kaim M, et al. A randomized, double-blind, placebo-controlled trial of psychostimulants for the treatment of fatigue in ambulatory patients with human immunodeficiency virus disease. Arch Intern Med 2001;161(3):411-20. *Exclude-no MS patients*

Brex PA, Ciccarelli O, O'Riordan JI, et al. A longitudinal study of abnormalities on MRI and disability from multiple sclerosis. New Engl J Med 2002;346(3):158-64. *Exclude-Q2-wrong timeframe*

Brochet B, Guinot P, Orgogozo JM, et al. Double blind placebo controlled multicentre study of ginkgolide B in treatment of acute exacerbations of multiple sclerosis. The Ginkgolide Study Group in multiple sclerosis. J Neurol Neurosurg Psych 1995;58(3):360-2. *Exclude-Q2-wrong timeframe*

Brown JR. Recent studies in multiple sclerosis: inferences on rehabilitation and employability. Mayo Clinic Proc 1969;44(10):758-65. *Exclude-not relevant to study question*

Brown JR. Problems in evaluating new treatments for multiple sclerosis. Neurology 1980;30(7):8-11. *Exclude-not relevant to study question*

Brown MG, Murray TJ, Sketris IS, et al. Cost-effectiveness of interferon beta-1b in slowing multiple sclerosis disability progression. First estimates. Internat J Technol Assess Health Care 2000;16(3):751-67. *Exclude-not relevant to study question*

Brusaferri F, Candelise L. Steroids for multiple sclerosis and optic neuritis: a meta-analysis of randomized controlled clinical trials. J Neurol 2000;247(6):435-42. *Exclude-DA-Q3-meta-analysis*

Bryant D, Chiaravalloti ND, DeLuca J. Objective measurement of cognitive fatigue in multiple sclerosis. Rehab Psychol 2003;in press. *Exclude-Q4-no measure of work ability*

Burridge J, Taylor P, Hagan S, et al. Experience of clinical use of the Odstock dropped foot stimulator. Artificial Organs 1997;21(3):254-60. *Exclude-Q3-mixed population*

Calabresi PA. Considerations in the treatment of relapsing-remitting multiple sclerosis [review]. Neurology 2002;58(8 Suppl 4):S10-22. *Exclude-Q2-Other-background*

Camenga DL, Johnson KP, Alter M, et al. Systemic recombinant alpha-2 interferon therapy in relapsing multiple sclerosis. Arch Neurol 1986;43(12):1239-46. *Exclude-Q3-not current therapy*

Capello E, Gardella M, Leandri M, et al. Lowering body temperature with a cooling suit as symptomatic treatment for thermosensitive multiple sclerosis patients. Ital J Neurol Sci 1995;16(8):533-9. *Exclude-DA-Q5-no data on work status or ability*

Caramia F, Pantano P, Di Legge S, et al. A longitudinal study of MR diffusion changes in normal appearing white matter of patients with early multiple sclerosis. Magnet Reson Imag 2002;20(5):383-8. *Exclude-DA-Q1a-no long-term follow up using Poser*

Casanova B, Coret F, Valero C, et al. High clinical inflammatory activity prior to the development of secondary progression: a prospective 5-year follow-up study. Mult Scler 2002;8(1):59-63. *Exclude-Q2-no analysis of predictors*

Catalaa I, Fulton JC, Zhang X, et al. MR imaging quantitation of gray matter involvement in multiple sclerosis and its correlation with disability measures and neurocognitive testing. Am J Neuroradiol 1999;20(9):1613-8. *Exclude-Q2-no analysis of predictors*

Catanzaro M, Weinert C. Economic status of families living with multiple sclerosis. Internat J Rehab Res 1992;15(3):209-18. *Exclude-Q5-no data on work status or ability*

Cazzato G, Mesiano T, Antonello R, et al. Double-blind, placebo-controlled, randomized, crossover trial of high-dose methylprednisolone in patients with chronic progressive form of multiple sclerosis. Eur Neurol 1995;35(4):193-8. *Exclude-Q3-wrong timeframe*

Cazzullo CL, Ghezzi A, Marforio S, et al. Clinical picture of multiple sclerosis with late onset. Acta Neurol Scand 1978;58(3):190-6. *Exclude-Q2-wrong timeframe*

Cendrowski W, Sobczyk W. Clonazepam, baclofen and placebo in the treatment of spasticity. Eur Neurol 1977;16(1-6):257-62. *Exclude-DA-Q3-not RCT*

Cendrowski WS. Progression index and disability status in multiple sclerosis: a resurvey of 207 patients in central Poland. Schweiz Arch Neurol Psych 1986;137(4):5-13. *Exclude-Q2-no predictor with outcome*

Cercignani M, Inglese M, Pagani E, et al. Mean diffusivity and fractional anisotropy histograms of patients with multiple sclerosis. Am J Neuroradiol 2001;22(5):952-8. *Exclude-Q2-no long-term follow up*

Cervera-Deval J, Morant-Guillen MP, Fenollosa-Vasquez P, et al. Social handicaps of multiple sclerosis and their relation to neurological alterations. Arch Phys Med Rehab 1994;75(11):1223-7. *Exclude-review-background Q4*

CHAMPS Study Group. Interferon beta-1a for optic neuritis patients at high risk for multiple sclerosis. Am J Ophthalmol 2001;132(4):463-71. *Exclude-DA-Q1a-no relevant data*

CHAMPS Study Group. Baseline MRI characteristics of patients at high risk for multiple sclerosis: results from the CHAMPS trial. Mult Scler 2002;8(4):330-8. *Exclude-Q2-no long-term follow up*

Cheng EM, Hays RD, Myers LW, et al. Factors related to agreement between self-reported and conventional Expanded Disability Status Scale (EDSS) scores. Mult Scler 2001;7(6):405-10. *Exclude-not relevant to study question*

Chiba S, Ito M, Matsumoto H. Amantadine treatment for refractory pain and fatigue in patients with multiple sclerosis. Can J Neurol Sci 1992;19(2):309. *Exclude-Q3-Other-review*

Christensen O, Clausen J. Social remedial measures for multiple sclerosis patients in Denmark. Acta Neurol Scand 1977;55(5):394-406. *Exclude-DA-Q4-no correlation with findings relevant to question*

Chwastiak L, Ehde DM, Gibbons LE, et al. Depressive symptoms and severity of illness in multiple sclerosis: epidemiologic study of a large community sample. Am J Psych 2002;159(11):1862-8. *Exclude-Q4-no correlation with findings relevant to question*

Ciccarelli O, Brex PA, Thompson AJ, et al. Disability and lesion load in MS: a reassessment with MS functional composite score and 3D fast FLAIR. J Neurol 2002;249(1):18-24. *Exclude-Q2-no long-term follow up*

Cid C, Alcazar A, Regidor I, et al. Neuronal apoptosis induced by cerebrospinal fluid from multiple sclerosis patients correlates with hypointense lesions on T1 magnetic resonance imaging. J Neurol Sci 2002;193(2):103-9. *Exclude-Q2-wrong timeframe*

Clanet M, Radue EW, Kappos L, et al. A randomized, double-blind, dose-comparison study of weekly interferon beta-1a in relapsing MS. Neurology 2002;59(10):1507-17. *Exclude-Q3-no control*

Clifford DB. Tetrahydrocannabinol for tremor in multiple sclerosis. Ann Neurol 1983;13(6):669-71. *Exclude-Q3-not RCT*

Clifford DB, Trotter JL. Pain in multiple sclerosis. Arch Neurol 1984;41(12):1270-2. *Exclude-Q2-no long-term follow up*

Coban O, Bahar S, Akman-Demir G, et al. A controlled study of reliability and validity of MRI findings in neuro-Behcet's disease. Neuroradiology 1996;38(4):312-6. *Exclude-Q1a-no MS patients*

Coban O, Bahar S, Akman-Demir G, et al. Masked assessment of MRI findings: is it possible to differentiate neuro-Behcet's disease from other central nervous system diseases? [corrected][erratum appears in Neuradiology 1999 Jul;41(7):550]. Neuroradiology 1999;41(4):255-60. *Exclude-Q1a-not longitudinal*

Cohen JA, Cutter GR, Fischer JS, et al. Use of the multiple sclerosis functional composite as an outcome measure in a phase 3 clinical trial. Arch Neurol 2001;58(6):961-7. *Exclude-review-background Q4*

Cohen RA, Kessler HR, Fischer M. The Extended Disability Status Scale (EDSS) as a predictor of impairments of functional activities of daily living in multiple sclerosis. J Neurol Sci 1993;115(2):132-5. *Exclude-review-background Q4*

Colosimo C, Millefiorini E, Grasso MG, et al. Fatigue in MS is associated with specific clinical features. Acta Neurol Scand 1995;92(5):353-5. *Exclude-Q2-no long-term follow up*

Comi G, Filippi M, Rovaris M, et al. Clinical, neurophysiological, and magnetic resonance imaging correlations in multiple sclerosis [review]. J Neurol Neurosurg Psych 1998;64 Suppl 1:S21-5. *Exclude-Q1a-non-standard technology*

Comi G, Filippi M, Wolinsky JS. EuropeanCanadian multicenter, double-blind, randomized, placebo-controlled study of the effects of glatiramer acetate on magnetic resonance imaging--measured disease activity and burden in patients with relapsing multiple sclerosis. EuropeanCanadian Glatiramer Acetate Study Group. Ann Neurol 2001;49(3):290-7. *Exclude-Q3-Other-no improvement*

Comi G, Leocani L, Rossi P, et al. Physiopathology and treatment of fatigue in multiple sclerosis [review]. J Neurol 2001;248(3):174-9. *Exclude-Q3-not RCT*

Confavreux C, Aimard G, Devic M. Course and prognosis of multiple sclerosis assessed by the computerized data processing of 349 patients. Brain 1980;103(2):281-300. *Exclude-Q2-wrong timeframe*

Confavreux C, Vukusic S, Moreau T, et al. Relapses and progression of disability in multiple sclerosis. New Engl J

Med 2000;343(20):1430-8. *Exclude-Q2-wrong timeframe*

Confavreux C, Wolfson C. Mathematical models and individualized outcome estimates in multiple sclerosis. Biomed Pharmacother 1989;43(9):675-80. *Exclude-Q2-no physical or mental outcome*

Constantinescu CS, Mehta PD, Rostami AM. Urinary free kappa light chain levels in chronic progressive multiple sclerosis. Pathobiology 1994;62(1):29-33. *Exclude-Q2-wrong timeframe*

Cook SD, Devereux C, Troiano R, et al. Effect of total lymphoid irradiation in chronic progressive multiple sclerosis. Lancet 1986;1(8495):1405-9. *Exclude-Q3-not current therapy*

Cottrell DA, Kremenchutzky M, Rice GP, et al. The natural history of multiple sclerosis: a geographically based study. 5. The clinical features and natural history of primary progressive multiple sclerosis. Brain 1999;122 (Pt 4):625-39. *Exclude-Q2-wrong timeframe*

Cutter GR, Baier ML, Rudick RA, et al. Development of a multiple sclerosis functional composite as a clinical trial outcome measure. Brain 1999;122 (Pt 5):871-82. *Exclude-Q4-no data on work status or ability*

Dastidar P, Heinonen T, Lehtimaki T, et al. Volumes of brain atrophy and plaques correlated with neurological disability in secondary progressive multiple sclerosis. J Neurol Sci 1999;165(1):36-42. *Exclude-Q2-no long-term follow up*

Davis EC, Barnes MP. Botulinum toxin and spasticity. J Neurol Neurosurg Psych 2000;69(2):143-7. *Exclude-Q3-not RCT*

Davis FA, Stefoski D, Rush J. Orally administered 4-aminopyridine improves clinical signs in multiple sclerosis. Ann Neurol 1990;27(2):186-92. *Exclude-Q3-no long-term symptom management*

de Rham B. A contribution to assessment in MS. Study of 100 situations of MS persons through Incapacity Status and Environmental Status and their scales scores. Acta Neurol Scand Suppl 1984;101:113-25. *Exclude-Q4-instrument testing*

De Seze J, Stojkovic T, Ferriby D, et al. Devic's neuromyelitis optica: clinical, laboratory, MRI and outcome profile. J Neurol Sci 2002;197(1-2):57-61. *Exclude-no MS patients*

de Seze M, Wiart L, Joseph PA, et al. Capsaicin and neurogenic detrusor hyperreflexia: a double-blind placebo-controlled study in 20 patients with spinal cord lesions. Neurourol Urodynam 1998;17(5):513-23. *Exclude-Q3-mixed population*

De Souza LH. The development of a scale of the Guttman type for the assessment of mobility disability in multiple sclerosis. Clin Rehab 1999;13(6):476-81. *Exclude-Q2-no long-term follow up*

De Stefano N, Matthews PM, Fu L, et al. Axonal damage correlates with disability in patients with relapsing-remitting multiple sclerosis. Results of a longitudinal magnetic resonance spectroscopy study. Brain 1998;121 (Pt 8):1469-77. *Exclude-Q2-no analysis of predictors*

De Stefano N, Narayanan S, Francis GS, et al. Evidence of axonal damage in the early stages of multiple sclerosis and its relevance to disability. Arch Neurol 2001;58(1):65-70. *Exclude-Q2-no long-term follow up*

Dean G. A double-blind trial with an antidepressant drug, imipramine, in multiple sclerosis. S A Med J 1969;43(4):86-7. *Exclude-Q3-patients not symptomatic*

Dehmeshki J, Barker GJ, Tofts PS. Classification of disease subgroup and correlation with disease severity using magnetic resonance imaging whole-brain histograms: application to magnetization transfer ratios and multiple sclerosis. IEEE Trans Med Imag 2002;21(4):320-31. *Exclude-Q2-no long-term follow up*

Dehmeshki J, Ruto AC, Arridge S, et al. Analysis of MTR histograms in multiple sclerosis using principal components and multiple discriminant analysis. Magnet Reson Med 2001;46(3):600-9. *Exclude-Q2-no long-term follow up*

Dehmeshki J, Silver NC, Leary SM, et al. Magnetisation transfer ratio histogram analysis of primary progressive and other multiple sclerosis subgroups. J Neurol Sci 2001;185(1):11-7. *Exclude-Q2-no long-term follow up*

Detels R, Clark VA, Valdiviezo NL, et al. Factors associated with a rapid course of multiple sclerosis. Arch Neurol 1982;39(6):337-41. *Exclude-Q2-wrong timeframe*

Doble SE, Fisk JD, Fisher AG, et al. Functional competence of community-dwelling persons with multiple sclerosis using the assessment of motor and process skills. Arch Phys Med Rehab 1994;75(8):843-51. *Exclude-Q4-no measurement of work ability*

Drislane FW. Use of evoked potentials in the diagnosis and follow-up of multiple sclerosis [review]. Clin Neurosci 1994;2(3-4):196-201. *Exclude-Q2-background*

Duffy JD, Campbell J. Bupropion for the treatment of fatigue associated with multiple sclerosis. Psychosomatics 1994;35(2):170-1. *Exclude-Q3-not RCT*

Dunevsky A, Perel AB. Gabapentin for relief of spasticity associated with multiple sclerosis. Am J Phys Med Rehab 1998;77(5):451-4. *Exclude-Q3-not RCT*

Durelli L, Bongioanni MR, Ferrero B, et al. Long term

recombinant interferon alpha treatment in MS with special emphasis to side effects. Mult Scler 1996;1(6):366-71. *Exclude-Q3-not current therapy*

Durelli L, Verdun E, Barbero P, et al. Every-other-day interferon beta-1b versus once-weekly interferon beta-1a for multiple sclerosis: results of a 2-year prospective randomised multicentre study (INCOMIN). Lancet 2002;359(9316):1453-60. *Exclude-Q3-Other-no control*

Dyck I. Hidden geographies: the changing lifeworlds of women with multiple sclerosis. Soc Sci Med 1995;40(3):307-20. *Exclude-Q4-no findings relevant to question*

Ebers GC. Prognostic factors in multiple sclerosis. Trans Assoc Life Ins Med Directors Am 1987;70:171-6. *Exclude-Q2-wrong timeframe*

Ebers GC. Treatment of multiple sclerosis [review]. Lancet 1994;343(8892):275-9. *Exclude-review-background Q3*

Ebers GC. The natural history of multiple sclerosis [review]. Neurol Sci 2000;21(4 Suppl 2):S815-7. *Exclude-Q2-wrong timeframe*

Ebers GC, Koopman WJ, Hader W, et al. The natural history of multiple sclerosis: a geographically based study: 8: familial multiple sclerosis. Brain 2000;123 Pt 3:641-9. *Exclude-Q2-wrong timeframe*

Edwards SG, Gong QY, Liu C, et al. Infratentorial atrophy on magnetic resonance imaging and disability in multiple sclerosis. Brain 1999;122 (Pt 2):291-301. *Exclude-Q2-no long-term follow up*

Ellger T, Bethke F, Frese A, et al. Event-related potentials in different subtypes of multiple sclerosis--a cross-sectional study. J Neurol Sci 2002;205(1):35-40. *Exclude-Q2-no long-term follow up*

Ellison GW, Myers LW, Mickey MR, et al. A placebo-controlled, randomized, double-masked, variable dosage, clinical trial of azathioprine with and without methylprednisolone in multiple sclerosis. Neurology 1989;39(8):1018-26. *Exclude-Q3-wrong timeframe*

Engell T, Raun NE, Thomsen M, et al. HLA and heterogeneity of multiple sclerosis. Neurology 1982;32(9):1043-6. *Exclude-Q2-wrong timeframe*

Evangelou N, Jackson M, Beeson D, et al. Association of the APOE epsilon4 allele with disease activity in multiple sclerosis. J Neurol Neurosurg Psych 1999;67(2):203-5. *Exclude-Q2-wrong timeframe*

Facchetti D, Mai R, Colombo A, et al. Limited clinical significance of traditional and quantitative EEG in multiple sclerosis. Acta Neurol Belg 1994;94(4):245-50. *Exclude-Q2-no long-term follow up*

Facchetti D, Mai R, Micheli A, et al. Motor evoked potentials and disability in secondary progressive multiple sclerosis. Can J Neurol Sci 1997;24(4):332-7. *Exclude-Q2-no long-term follow up*

Fazekas F, Offenbacher H, Fuchs S, et al. Criteria for an increased specificity of MRI interpretation in elderly subjects with suspected multiple sclerosis. Neurology 1988;38(12):1822-5. *Exclude-Q1a-not MacDonald criteria*

Feigenson JS, Scheinberg L, Catalano M, et al. The cost-effectiveness of multiple sclerosis rehabilitation: a model. Neurology 1981;31(10):1316-22. *Exclude-Q3b-not RCT*

Feinstein A, Kartsounis LD, Miller DH, et al. Clinically isolated lesions of the type seen in multiple sclerosis: a cognitive, psychiatric, and MRI follow up study. J Neurol Neurosurg Psych 1992;55(10):869-76. *Exclude-Q2-wrong timeframe*

Fernandez O, Antiquedad A, Arbizu T, et al. Treatment of relapsing-remitting multiple sclerosis with natural interferon beta: a multicenter, randomized clinical trial. Mult Scler 1995;1(Suppl 1):S67-9. *Exclude-Q3-wrong timeframe*

Ferreira E, Letwin SR. Desmopressin for nocturia and enuresis associated with multiple sclerosis [review]. Ann Pharmacotherapy 1998;32(1):114-6. *Exclude-Q3-not RCT*

Fierro B, Salemi G, Brighina F, et al. A transcranial magnetic stimulation study evaluating methylprednisolone treatment in multiple sclerosis. Acta Neurol Scand 2002;105(3):152-7. *Exclude-Q3-no control*

Filippi M. Predictive value of MRI findings in multiple sclerosis. Lancet Neurol 2002;1(1):9. *Exclude-Q1a-not longitudinal*

Filippi M. The role of magnetic resonance imaging in the assessment of patients with established multiple sclerosis. Neurol Sci 2002;23(3):89-90. *Exclude-Q1a-Other: review*

Filippi M, Alberoni M, Martinelli V, et al. Influence of clinical variables on neuropsychological performance in multiple sclerosis. Eur Neurol 1994;34(6):324-8. *Exclude-Q2-no long-term follow up*

Filippi M, Barker GJ, Horsfield MA, et al. Benign and secondary progressive multiple sclerosis: a preliminary quantitative MRI study. J Neurol 1994;241(4):246-51. *Exclude-Q2-no long-term follow up*

Filippi M, Bozzali M, Rovaris M, et al. Evidence for widespread axonal damage at the earliest clinical stage of multiple sclerosis. Brain 2003;126:433-7. *Exclude-not relevant to study question*

Filippi M, Colombo B, Rovaris M, et al. A longitudinal magnetic resonance imaging study of the cervical cord in

multiple sclerosis. J Neuroimag 1997;7(2):78-80. *Exclude-Q2-no analysis of predictors*

Filippi M, Dousset V, McFarland HF, et al. Role of magnetic resonance imaging in the diagnosis and monitoring of multiple sclerosis: consensus report of the White Matter Study Group. J Magnet Reson Imag 2002;15(5):499-504. *Exclude-Q1a-consensus statement*

Filippi M, Grossman RI. MRI techniques to monitor MS evolution - the present and the future. Neurology 2002;58(8):1147-53. *Exclude-review-background Q2*

Filippi M, Horsfield MA, Bressi S, et al. Intra- and inter-observer agreement of brain MRI lesion volume measurements in multiple sclerosis. A comparison of techniques. Brain 1995;118 (Pt 6):1593-600. *Exclude-Q1b-No T2 GAD enhancing*

Filippi M, Horsfield MA, Rovaris M, et al. Intraobserver and interobserver variability in schemes for estimating volume of brain lesions on MR images in multiple sclerosis. Am J Neuroradiol 1998;19(2):239-44. *Exclude-Q1b-No T2 GAD enhancing*

Filippi M, Miller DH. Magnetic resonance imaging in the differential diagnosis and monitoring of the treatment of multiple sclerosis [review]. Curr Opinion Neurol 1996;9(3):178-86. *Exclude-Q1a-review*

Filippi M, Paty DW, Kappos L, et al. Correlations between changes in disability and T2-weighted brain MRI activity in multiple sclerosis: a follow-up study. Neurology 1995;45(2):255-60. *Exclude-Q2-wrong timeframe*

Filippi M, Rocca MA, Gasperini C, et al. Interscanner variation in brain MR lesion load measurements in multiple sclerosis using conventional spin-echo, rapid relaxation-enhanced, and fast-FLAIR sequences. Am J Neuroradiol 1999;20(1):133-7. *Exclude-not relevant to study question*

Filippi M, Rossi P, Campi A, et al. Serial contrast-enhanced MR in patients with multiple sclerosis and varying levels of disability. Am J Neuroradiol 1997;18(8):1549-56. *Exclude-Q2-no candidate predictors*

Filippi M, Rovaris M, Gasperini C, et al. A preliminary study comparing the sensitivity of serial monthly enhanced MRI after standard and triple dose gadolinium-DTPA for monitoring disease activity in primary progressive multiple sclerosis. J Neuroimag 1998;8(2):88-93. *Exclude-Q2-no candidate predictors*

Filippi M, Rovaris M, Sormani MP, et al. Intraobserver and interobserver variability in measuring changes in lesion volume on serial brain MR images in multiple sclerosis. Am J Neuroradiol 1998;19(4):685-7. *Exclude-Q1b-No T2-GAD enhancing*

Filippini G, Brusaferri F, Sibley WA, et al. Corticosteroids or ACTH for acute exacerbations in multiple sclerosis [review]. Cochrane Database of Systematic Reviews 2000;(4):CD001331. *Exclude-review-background Q3*

Filippini G, Munari L, Incorvaia B, et al. Interferons in relapsing remitting multiple sclerosis: a systematic review. Lancet 2003;361(9357):545-52. *Exclude-review-background Q3*

Finlayson M, Impey MW, Nicolle C, et al. Self care, productivity and leisure limitations of people with multiple sclerosis in Manitoba. Can J Occup Ther 1998;65:299-308. *Exclude-DA-Q4-limited ability to interpret findings*

Fischer JS, LaRocca NG, Miller DM, et al. Recent developments in the assessment of quality of life in multiple sclerosis (MS) [review]. Mult Scler 1999;5(4):251-9. *Exclude-Q2-no long-term follow up*

Fischer JS, Rudick RA, Cutter GR, et al. The Multiple Sclerosis Functional Composite Measure (MSFC): an integrated approach to MS clinical outcome assessment. National MS Society Clinical Outcomes Assessment Task Force [review]. Mult Scler 1999;5(4):244-50. *Exclude-Q2-no long-term follow up*

Fisher E, Rudick RA, Cutter G, et al. Relationship between brain atrophy and disability: an 8-year follow-up study of multiple sclerosis patients. Mult Scler 2000;6(6):373-7. *Exclude-Q2-no candidate predictors*

Fisher E, Rudick RA, Simon JH, et al. Eight-year follow-up study of brain atrophy in patients with MS. Neurology 2002;59(9):1412-20. *Exclude-Q2-wrong timeframe*

Fisk JD, Pontefract A, Ritvo PG, et al. The impact of fatigue on patients with multiple sclerosis. Can J Neurol Sci 1994;21(1):9-14. *Exclude-Q2-no long-term follow up*

Flachenecker P, Reiners K, Krauser M, et al. Autonomic dysfunction in multiple sclerosis is related to disease activity and progression of disability. Mult Scler 2001;7(5):327-34. *Exclude-Q2-o analysis of predictors*

Fog T. A scoring system for neurological impairment in multiple sclerosis. Acta Neurol Scand Suppl 1965;13 Pt 2:551-5. *Exclude-not relevant to study question*

Francis DA, Bain P, Swan AV, et al. An assessment of disability rating scales used in multiple sclerosis. Arch Neurol 1991;48(3):299-301. *Exclude-not relevant to study question*

Franklin GM, Nelson LM, Filley CM, et al. Cognitive loss in multiple sclerosis. Case reports and review of the literature [review]. Arch Neurol 1989;46(2):162-7. *Exclude-Q4-no findings relevant to question*

Franklin GM, Heaton RK, Nelson LM, et al. Correlation of neuropsychological and MRI findings in

chronic/progressive multiple sclerosis. Neurology 1988;38(12):1826-9. *Exclude-Q2-no long-term follow up*

Freal JE, Kraft GH, Coryell JK. Multiple sclerosis patients' assessment of their medical, psychological, social, and vocational needs. Arch Phys Med Rehab 1980;61:487. *Exclude-Q4-no findings relevant to question*

Freeman J, Langdon D, Hobart J, et al. The impact of rehabilitation on disability and handicap in progressive multiple sclerosis: a randomized controlled trial. Eur J Neurol 1996;3(Suppl 2):15. *Exclude-abstract*

Freeman JA, Langdon DW, Hobart JC, et al. Inpatient rehabilitation in multiple sclerosis: do the benefits carry over into the community? Neurology 1999;52(1):50-6. *Exclude-Q3-not RCT*

Frith JA, McLeod JG, Basten A, et al. Transfer factor as a therapy for multiple sclerosis: a follow-up study. Clin Exper Neurol 1986;22:149-54. *Exclude-Q3-not current treatment*

Frohman EM, Goodin DS, Calabresi PA, et al. The utility of MRI in suspected MS: Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology 2003;61:602-11. *Exclude-review-background*

Fu L, Matthews PM, De Stefano N, et al. Imaging axonal damage of normal-appearing white matter in multiple sclerosis. Brain 1998;121 (Pt 1):103-13. *Exclude-Q2-no analysis of predictors*

Fuller GN, Bone I. Disease modifying treatment in multiple sclerosis. J Neurol Neurosurg Psych 2001;71(Suppl 2):ii20-1. *Exclude-no MS patients*

Fulton JC, Grossman RI, Udupa J, et al. MR lesion load and cognitive function in patients with relapsing-remitting multiple sclerosis. Am J Neuroradiol 1999;20(10):1951-5. *Exclude-Q2-no analysis of predictors*

Gajewski JB, Awad SA. Oxybutynin versus propantheline in patients with multiple sclerosis and detrusor hyperreflexia. J Urol 1986;135(5):966-8. *Exclude-Q3-not RCT*

Galetta SL. The controlled high risk Avonex multiple sclerosis trial (CHAMPS Study) [erratum appears in J Neuroophthalmol 2002 Mar;22(1):67]. J Neuro-Ophthalmol 2001;21(4):292-5. *Exclude-secondary publication*

Gasperini C, Paolillo A, Giugni E, et al. MRI brain volume changes in relapsing-remitting multiple sclerosis patients treated with interferon beta-1a. Mult Scler 2002;8(2):119-23. Exclude-Q2-no analysis of predictors

Ge Y, Grossman RI, Udupa JK, et al. Glatiramer acetate (Copaxone) treatment in relapsing-remitting MS: quantitative MR assessment. Neurology 2000;54(4):813-7. *Exclude-DA-Q3-no clinical outcomes*

Ge Y, Grossman RI, Udupa JK, et al. Brain atrophy in relapsing-remitting multiple sclerosis and secondary progressive multiple sclerosis: longitudinal quantitative analysis. Radiology 2000;214(3):665-70. *Exclude-Q2-no candidate predictors*

Gelenberg AJ, Poskanzer DC. The effect of dantrolene sodium on spasticity in multiple sclerosis. Neurology. 1973;23(12):1313-5. *Exclude-DA-Q3-not randomized*

Gerschlager W, Beisteiner R, Deecke L, et al. Electrophysiological, neuropsychological and clinical findings in multiple sclerosis patients receiving interferon beta-1b: a 1-year follow-up. Eur Neurol 2000;44(4):205-9. *Exclude-Q2-no analysis of predictors*

Ghezzi A, Pozzilli C, Liguori M, et al. Prospective study of multiple sclerosis with early onset. Mult Scler 2002;8(2):115-8. *Exclude-Q2-wrong timeframe*

Gilchrist AC, Creed FH. Depression, cognitive impairment and social stress in multiple sclerosis. J Psychosom Res 1994;38(3):193-201. *Exclude-Q4-no findings relevant to question*

Giovannoni G, Bever CT. Patients with clinically isolated syndromes suggestive of MS - does MRI allow earlier diagnosis? Neurology 2003;60(1):6-7. *Exclude-review-background Q1a*

Giovannoni G, Thorpe J. Is it multiple sclerosis or not? Neurology 2001;57(8):1357-8. *Exclude-Q1a- no primary data*

Giugni E, Pozzilli C, Bastianello S, et al. MRI measures and their relations with clinical disability in relapsing-remitting and secondary progressive multiple sclerosis. Mult Scler 1997;3(4):221-5. *Exclude-Q2-no long-term follow up*

Gleeson RK. Underwriting multiple sclerosis [review]. Trans Assoc Life Ins Med Directors Am 1984;66:111-8. *Exclude-review-background-Q4*

Goldberg DP, Cooper B, Eastwood MR, et al. A standardized psychiatric interview for use in community surveys. Brit J Prev Soc Med 1970;24(1):18-23. *Exclude-Q4-no findings relevant to question*

Gonsette RE. Mitoxantrone immunotherapy in multiple sclerosis [review]. Mult Scler 1996;1(6):329-32. *Exclude-review-background Q3*

Gonsette RE. Mitoxantrone in progressive multiple sclerosis: when and how to treat? [Review]. J Neurol Sci 2003;206(2):203-8. *Exclude-Q3-not RCT*

Goodin DS. A questionnaire to assess neurological impairment in multiple sclerosis. Mult Scler 1998;4(5):444-51. *Exclude-Q2-no long-term follow up*

Goodin DS, Frohman EM, Garmany GP Jr, et al. Disease modifying therapies in multiple sclerosis: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology and the MS Council for Clinical Practice Guidelines.[erratum appears in Neurology 2002 Aug13;59(3):480]. Neurology 2002;58(2):169-78. *Exclude-review-background Q3*

Goodkin DC. Interferon beta-1b in secondary progressive MS: clinical and MRI results of a 3-year randomised controlled trial. Neurology 2000;54:2352. *Exclude-Q3-wrong timeframe*

Goodkin DE, Cookfair D, Wende K, et al. Inter- and intrarater scoring agreement using grades 1.0 to 3.5 of the Kurtzke Expanded Disability Status Scale (EDSS). Multiple Sclerosis Collaborative Research Group. Neurology 1992;42(4):859-63. *Exclude-Q2-background*

Goodkin DE, Hertsgaard D, Seminary J. Upper extremity function in multiple sclerosis: improving assessment sensitivity with box-and-block and nine-hole peg tests. Arch Phys Med Rehab 1988;69(10):850-4. *Exclude-Q2-background*

Goodkin DE, Plencner S, Palmer-Saxerud J, et al. Cyclophosphamide in chronic progressive multiple sclerosis. Maintenance vs nonmaintenance therapy. Arch Neurol 1987;44(8):823-7. *Exclude-DA-Q3-controls not randomized*

Goodkin DE, Rudick RA, VanderBrug Medendorp S, et al. Low-dose oral methotrexate in chronic progressive multiple sclerosis: analysisses of serial MRIs. Neurology 1996;47(5):1153-7. *Exclude-DA-Q3-no relevant data*

Gordon PA, Carroll DJ, Etches WS, et al. A double-blind controlled pilot study of plasma exchange versus sham apheresis in chronic progressive multiple sclerosis. Can J Neurol Sci 1985;12(1):39-44. *Exclude-DA-Q3-non-standard treatment*

Granger CV, Cotter AC, Hamilton BB, et al. Functional assessment scales: a study of persons with multiple sclerosis. Arch Phys Med Rehab 1990;71(11):870-5. *Exclude-Q2-no long-term follow up*

Grant I, McDonald WI, Trimble MR, et al. Deficient learning and memory in early and middle phases of multiple sclerosis. J Neurol Neurosurg Psych 1984;47(3):250-5. *Exclude-Q2-no long-term follow up*

Grimaud J, Barker GJ, Wang L, et al. Correlation of magnetic resonance imaging parameters with clinical disability in multiple sclerosis: a preliminary study. J Neurol 1999;246(10):961-7. *Exclude-Q2-no long-term follow up*

Groves L, Shellenberger MK, Davis CS. Tizanidine treatment of spasticity: a meta-analysis of controlled, double-blind, comparative studies with baclofen and diazepam. Adv Therapy 1998;15(4):241-51. *Exclude-review-background Q3*

Gronseth GS, Ashman EJ. Practice parameter: the usefulness of evoked potentials in identifying clinically silent lesions in patients with suspected multiple sclerosis (an evidence-based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology. [Review]. Neurology 2000;54(9):1720-5. *Exclude-review-background*

Gulick EE. Reliability and validity of the work assessment scale for persons with multiple sclerosis. Nurs Res 1991;40(2):107-12.
Exclude-Q4-instrument validation-most subjects not employed

Gulick EE. Model for predicting work performance among persons with multiple sclerosis. Nurs Res 1992;41(5):266-72. *Exclude-Q4-no relevant data*

Gulick EE. Correlates of quality of life among persons with multiple sclerosis. Nurs Res 1997;46(6):305-11. *Exclude-Q2-no long-term follow up*

Gulick EE, Cook SD, Troiano R. Comparison of patient and staff assessment of MS patients' health status. Acta Neurol Scand 1993;88(2):87-93. *Exclude-Q2-wrong timeframe*

Guthrie TC, Nelson DA. Influence of temperature changes on multiple sclerosis: critical review of mechanisms and research potential. [Review]. J Neurol Sci 1995;129(1):1-8. *Exclude-review-background*

Hammond SR, McLeod JG, Millingen KS, et al. The epidemiology of multiple sclerosis in three Australian cities: Perth, Newcastle and Hobart. Brain 1988;111 (Pt 1):1-25. *Exclude-Q4-no findings relevant to question*

Hartelius L, Svensson P. Speech and swallowing symptoms associated with Parkinson's disease and multiple sclerosis: a survey. Folia Phoniatri Logoped 1994;46(1):9-17. *Exclude-Q2-no long-term follow up*

Hassan N, McLellan DL. Double-blind comparison of single doses of DS103-282, baclofen and placebo for suppression of spasticity. J Neurol Neurosurg Psych 1980;43(12):1132-6. *Exclude-Q3-mixed population*

Haughton VM, Yetkin FZ, Rao SM, et al. Quantitative MR in the diagnosis of multiple sclerosis. Magnet Reson Med 1992;26(1):71-8. *Exclude-Q2-no long-term follow up*

Haupts MR, Hardt C, Pohlau D, et al. Quality of life as a predictor for change in disability in MS. Neurology 2001;56(9):1250.

Exclude-Q2-letter

Hawkins SA. Magnetisation transfer analysis and the disability resulting from multiple sclerosis. J Neurol Neurosurg Psych 2000;69(6):715. *Exclude-Q2-no primary data*

Hawkins SA, McDonnell GV. Benign multiple sclerosis? Clinical course, long term follow up, and assessment of prognostic factors. J Neurol Neurosurg Psych 1999;67(2):148-52. *Exclude-Q2-wrong timeframe*

Hebjørn S. Treatment of detrusor hyperreflexia in multiple sclerosis: a double-blind, crossover clinical trial comparing methantheline bromide (Banthine), flavoxate chloride (Urispas) and meladrazine tartrate (Lisidonil). Urologia Internationalis 1977;32(2-3):209-17. *Exclude-DA-Q3-drug no longer available*

Hedley DW, Maroun JA, Espir ML. Evaluation of baclofen (Lioresal) for spasticity in multiple sclerosis. Postgrad Med J 1975;51(599):615-8. *Exclude-DA-Q3-not RCT*

Heide AC, Kraft GH, Slimp JC, et al. Cerebral N-acetylaspartate is low in patients with multiple sclerosis and abnormal visual evoked potentials. Am J Neuroradiol 1998;19(6):1047-54. *Exclude-Q2-no long-term follow up*

Henke AF, Cohle SD, Cottingham SL. Fatal hyperthermia secondary to sunbathing in a patient with multiple sclerosis. American Journal of Forensic Medicine & Pathology. 2000;21(3):204-6. *Exclude-review-background*

Hirsch RL, Johnson KP, Camenga DL. The placebo effect during a double blind trial of recombinant alpha 2 interferon in multiple sclerosis patients: immunological and clinical findings. Internat J Neurosci 1988;39(3-4):189-96. *Exclude-Q3-not current therapy*

Hobart J, Freeman J, Thompson A. Kurtzke scales revisited: the application of psychometric methods to clinical intuition. Brain 2000;123 (Pt 5):1027-40. *Exclude-Q2-no long-term follow up*

Hobart J, Lamping D, Fitzpatrick R, et al. The Multiple Sclerosis Impact Scale (MSIS-29): a new patient-based outcome measure. Brain 2001;124(Pt 5):962-73. E*xclude-Q4-prevalence data*

Hobart JC, Riazi A, Lamping DL, et al. Measuring the impact of MS on walking ability: the 12-Item MS Walking Scale (MSWS-12). Neurology 2003;60(1):31-6. *Exclude-Q2-no long-term follow up*

Hoenig H, Hoff J, McIntyre L, et al. The self-reported functional measure: Predictive validity for health care utilization in multiple sclerosis and spinal cord injury. Arch Phys Med Rehab 2001;82(5):613-8. *Exclude-Q2-no separate MS patient data*

Hogh P, Oturai A, Schreiber K, et al. Apoliprotein E and multiple sclerosis: impact of the epsilon-4 allele on susceptibility, clinical type and progression rate. Mult Scler 2000;6(4):226-30. *Exclude-Q2-wrong timeframe*

Hohol MJ, Orav EJ, Weiner HL. Disease steps in multiple sclerosis: a longitudinal study comparing disease steps and EDSS to evaluate disease progression. Mult Scler 1999;5(5):349-54. *Exclude-Q2-no candidate predictors*

Holland NJ, Francabandera F, Wiesel-Levison P. International scale for assessment of disability in multiple sclerosis. J Neurosci Nurs 1986;18(1):39-44. *Exclude-not relevant to study question*

Honig LS, Sheremata WA. Magnetic resonance imaging of spinal cord lesions in multiple sclerosis. J Neurol Neurosurg Psych 1989;52(4):459-66. *Exclude-Q2-no long-term follow up*

Hoogervorst EL, Kalkers NF, Uitdehaag BM, et al. A study validating changes in the multiple sclerosis functional composite. Arch Neurol 2002;59(1):113-6. *Exclude-Q2-background*

Hoogervorst EL, Kalkers NF, van Winsen LML, et al. Differential treatment effect on measures of neurologic exam, functional impairment and patient self-report in multiple sclerosis. Mult Scler 2001;7(5):335-9. *Exclude-Q3-not RCT*

Hoogervorst EL, van Winsen LM, Eikelenboom MJ, et al. Comparisons of patient self-report, neurologic examination, and functional impairment in MS. Neurology 2001;56(7):934-7. *Exclude-Q2-no long-term follow up*

Hughes RA. Interferon beta 1a for secondary progressive multiple sclerosis [review]. J Neurol Sci 2003;206(2):199-202. *Exclude-Q2-Other (poor review)*

Hutchinson J, Hutchinson M. The Functional Limitations Profile may be a valid, reliable and sensitive measure of disability in multiple sclerosis. J Neurol 1995;242(10):650-7. *Exclude-Q2-wrong timeframe*

Iannucci G, Tortorella C, Rovaris M, et al. Prognostic value of MR and magnetization transfer imaging findings in patients with clinically isolated syndromes suggestive of multiple sclerosis at presentation. Am J Neuroradiol 2000;21(6):1034-8. *Exclude-Q2-no physical or mental outcome*

Indaco A, Iachetta C, Nappi C, et al. Chronic and acute pain syndromes in patients with multiple sclerosis. Acta Neurol 1994;16(3):97-102. *Exclude-Q2-no long-term follow up*

Ingle GT, Stevenson VL, Miller DH, et al. Two-year follow-up study of primary and transitional progressive multiple sclerosis. Mult Scler 2002;8(2):108-14. *Exclude-*

Q2-no analysis of predictors

Inman RP. Disability indices, the economic costs of illness, and social insurance: the case of multiple sclerosis. Acta Neurol Scand Suppl 1984;101:46-55. *Exclude-no MS patients*

International Federation of Multiple Sclerosis Societies. IFMSS Minimal Record of Disability for multiple sclerosis. Interview protocol for Incapacity Status Scale, Environmental Status Scale 1983. Acta Neurol Scand Suppl 1984;101:191-217. *Exclude-Q2-background*

International Federation of Multiple Sclerosis Societies. International Federation of Multiple Sclerosis Societies. Minimal Record of Disability--1983. Acta Neurol Scand Suppl 1984;101:169-90. *Exclude-Q2-background*

Jacobs L, Salazar AM, Herndon R, et al. Multicentre double-blind study of effect of intrathecally administered natural human fibroblast interferon on exacerbations of multiple sclerosis. Lancet 1986;2(8521-22):1411-3. *Exclude-DA-Q3-non-standard treatment*

Jacobs L, Salazar AM, Herndon R, et al. Intrathecally administered natural human fibroblast interferon reduces exacerbations of multiple sclerosis. Results of a multicenter, double-blind study. Arch Neurol 1987;44(6):589-95. *Exclude-DA-Q3-non-standard treatment*

Jacobs LD, Beck RW, Simon JH, et al. Intramuscular interferon beta-1a therapy initiated during a first demyelinating event in multiple sclerosis. CHAMPS Study Group. New Engl J Med 2000;343(13):898-904. *Exclude-DA-Q1a-no relevant data*

Janardhan V, Bakshi R. Quality of life and its relationship to brain lesions and atrophy on magnetic resonance images in 60 patients with multiple sclerosis. Arch Neurol 2000;57(10):1485-91. *Exclude-Q2-no long-term follow up*

Janardhan V, Bakshi R. Quality of life in patients with multiple sclerosis: the impact of fatigue and depression. J Neurol Sci 2002;205(1):51-8. *Exclude-Q2-no long-term follow up*

Janknegt RA, Zweers HM, Delaere KP, et al. Oral desmopressin as a new treatment modality for primary nocturnal enuresis in adolescents and adults: a double-blind, randomized, multicenter study. Dutch Enuresis Study Group. J Urol 1997;157(2):513-7. *Exclude-no MS patients*

Johnson GS, Johnson RH. Social-services support for multiple sclerosis patients in West of Scotland. Lancet 1977;1(8001):31-4.
Exclude-Q4-no findings relevant to question

Johnson KP, Brooks BR, Ford CC, et al. Sustained clinical benefits of glatiramer acetate in relapsing multiple sclerosis patients observed for 6 years. Copolymer 1 Multiple Sclerosis Study Group. Mult Scler 2000;6(4):255-66. *Exclude-Q3-wrong timeframe*

Johnson RH, Lambie DG, Peace K, et al. Disability in multiple sclerosis and the provision of social and medical services: findings in Wellington, New Zealand. Acta Neurol Scand Suppl 1984;101:105-12. *Exclude-Q4-no correlation with findings relevant to question*

Johnson SK, Frederick J, Kaufman M, et al. A controlled investigation of bodywork in multiple sclerosis. J Alt Complement Med 1999;5(3):237-43. *Exclude-Q3-no long-term symptom management*

Jones B, Summerville J. Avenues and steps to do-it-yourself independence for the physically disabled. J Rehab 1983;49(4):30-5. *Exclude-DA-Q5-no MS patients*

Jones RE, Heron JR, Foster DH, et al. Effects of 4-aminopyridine in patients with multiple sclerosis. J Neurol Sci 1983;60(3):353-62. *Exclude-Q3-not RCT*

Joy JE, Johnston RB. Multiple sclerosis: current status and strategies for the future. Washington, DC: National Academy Press, 2003. *Exclude-review-background*

Juni P, Witschi A, Bloch R, et al. The hazards of scoring the quality of clinical trials for meta-analysis. JAMA 1999;282(11):1054-60. *Exclude-methods paper*

Kahl KG, Kruse N, Toyka KV, et al. Serial analysis of cytokine MRNA profiles in whole blood samples from patients with early multiple sclerosis. J Neurol Sci 2002;200(1-2):53-5. *Exclude-Q2-no physical or mental outcome*

Kalkers NF, Bergers E, Castelijns JA, et al. Optimizing the association between disability and biological markers in MS. Neurology 2001;57(7):1253-8. *Exclude-Q2-no long-term follow up*

Kalkers NF, de Groot V, Lazeron RH, et al. MS functional composite: relation to disease phenotype and disability strata. Neurology 2000;54(6):1233-9. *Exclude-Q2-no long-term follow up*

Kastrukoff LF, Oger JJ, Hashimoto SA, et al. Systemic lymphoblastoid interferon therapy in chronic progressive multiple sclerosis. I. Clinical and MRI evaluation. Neurology 1990;40(3):479-86. *Exclude-DA-Q3-non-standard treatment*

Kaufman M, Moyer D, Norton J. The significant change for the Timed 25-foot Walk in the multiple sclerosis functional composite. Mult Scler 2000;6(4):286-90. *Exclude-Q2-wrong timeframe*

Kemp BA, Gora ML. Amantadine and fatigue of multiple sclerosis [review]. Ann Pharmacotherapy 1993;27(7-

8):893-5. *Exclude-Q3-review*

Khan OA, Tselis AC, Kamholz JA, et al. A prospective, open-label treatment trial to compare the effect of IFNbeta-1a (Avonex), IFNbeta-1b (Betaseron), and glatiramer acetate (Copaxone) on the relapse rate in relapsing--remitting multiple sclerosis: results after 18 months of therapy. Mult Scler 2001;7(6):349-53. *Exclude-Q3-not RCT*

Khatri BO, McQuillen MP, Hoffmann RG, et al. Plasma exchange in chronic progressive multiple sclerosis: a long-term study. Neurology 1991;41(3):409-14. *Exclude-Q3-not RCT*

Khoury SJ, Guttmann CR, Orav EJ, et al. Longitudinal MRI in multiple sclerosis: correlation between disability and lesion burden. Neurology 1994;44(11):2120-4. *Exclude-Q2-no analysis of predictors*

Khoury SJ, Guttmann CR, Orav EJ, et al. Changes in activated T cells in the blood correlate with disease activity in multiple sclerosis. Arch Neurol 2000;57(8):1183-9. *Exclude-Q2-no predictive data linkage*

Kidd D, Thompson AJ. Prospective study of neurorehabilitation in multiple sclerosis. J Neurol Neurosurg Psych 1997;62(4):423-4. *Exclude-Q3-not RCT*

Kidd D, Thorpe JW, Kendall BE, et al. MRI dynamics of brain and spinal cord in progressive multiple sclerosis. J Neurol Neurosurg Psych 1996;60(1):15-9. *Exclude-Q2-no analysis of predictors*

Klarskov P, Heely E, Nyholdt I, et al. Biofeedback treatment of bladder dysfunction in multiple sclerosis. A randomized trial. Scand J Urol Nephrol Suppl 1994;157:61-5. *Exclude-DA-Q3-no data for control group*

Knobler RL, Greenstein JI, Johnson KP, et al. Systemic recombinant human interferon-beta treatment of relapsing-remitting multiple sclerosis: pilot study analysis and six-year follow-up. J Interferon Res 1993;13(5):333-40. *Exclude-Q3-wrong timeframe*

Knobler RL, Panitch HS, Braheny SL, et al. Systemic alpha-interferon therapy of multiple sclerosis. Neurology 1984;34(10):1273-9. *Exclude-Q3-wrong timeframe*

Knutsson E, Martensson A, Gransberg L. Antiparetic and antispastic effects induced by tizanidine in patients with spastic paresis. J Neurol Sci 1982;53(2):187-204. *Exclude-Q3-mixed population*

Ko Ko C. Effectiveness of rehabilitation for multiple sclerosis [review]. Clin Rehab 1999;13(Suppl 1):33-41. *Exclude-Q3-not RCT*

Kobelt G, Jonsson L, Henriksson F, et al. Cost-utility analysis of interferon beta-1b in secondary progressive multiple sclerosis. Internat J Technol Assess Health Care 2000;16(3):768-80. *Exclude-Q4-no findings relevant to question*

Kobelt G, Jonsson L, Miltenburger C, et al. Cost-utility analysis of interferon beta-1B in secondary progressive multiple sclerosis using natural history disease data. Internat J Technol Assess Health Care 2002;18(1):127-38. *Exclude-Q4-no findings relevant to question*

Koch-Henriksen N, Sorensen PS. The Danish national project of interferon-beta treatment in relapsing-remitting multiple sclerosis. The Danish Multiple Sclerosis Group. Mult Scler 2000;6(3):172-5. *Exclude-Q3-no results*

Kohlmeier RE, DiMaio VJ, Kagan-Hallet K. Fatal hyperthermia in hot baths in individuals with multiple sclerosis. American Journal of Forensic Medicine & Pathology. 2000;21(3):201-3. *Exclude-review-background*

Koudriavtseva T, Thompson AJ, Fiorelli M, et al. Gadolinium enhanced MRI predicts clinical and MRI disease activity in relapsing-remitting multiple sclerosis. J Neurol Neurosurg Psych 1997;62(3):285-7. *Exclude-Q2-wrong timeframe*

Koziol JA, Wagner S, Adams HP. Assessing information in T2-weighted MRI scans from secondary progressive MS patients. Neurology 1998;51(1):228-33. *Exclude-Q2-no analysis of predictors*

Kraft GH. Rehabilitation principles for patients with multiple sclerosis [review]. J Spinal Cord Medicine 1998;21(2):117-20. *Exclude-Q5-no data on work status or ability*

Kraft GH. Rehabilitation still the only way to improve function in multiple sclerosis. Lancet 1999;354(9195):2016-7. *Exclude-Q3-no data*

Kraft GH, Alquist AD. Effect of microclimate cooling on physical function in multiple sclerosis. Mult Scler Clin Lab Res 1996;2:114-5. *Exclude-Q5-no data on work status or ability*

Kraft GH, Fitts S. Electrical stimulation AFO for MS footdrop. J Clin Neurophys 1992;9:301. *Exclude-Q3-not RCT*

Kraft GH, Freal JE, Coryell JK. Disability, disease duration, and rehabilitation service needs in multiple sclerosis: patient perspectives. Arch Phys Med Rehab 1986;67(3):164-8. *Exclude-Q4-no relevant data*

Kraft GH, Freal JE, Coryell JK, et al. Multiple sclerosis: early prognostic guidelines. Arch Phys Med Rehab 1981;62(2):54-8. *Exclude-Q2-background*

Kremenchutzky M, Lee D, Rice GP, et al. Diagnostic brain MRI findings in primary progressive multiple sclerosis.

Mult Scler 2000;6(2):81-5. *Exclude-Q2-wrong timeframe*

Krupp LB. Fatigue in multiple sclerosis: definition, pathophysiology and treament. CNS Drugs 2003;17(4):225-34. *Exclude-review-background Q2*

Krupp LB, Christodoulou C. Fatigue in multiple sclerosis [review]. Curr Neurol Neurosci Rep 2001;1(3):294-8. *Exclude-review-background Q3*

Krupp LB, Elkins LE. Fatigue and declines in cognitive functioning in multiple sclerosis. Neurology 2000;55(7):934-9. *Exclude-Q2-no long-term follow up*

Krupp LB, LaRocca NG, Muir-Nash J, et al. The fatigue severity scale. Application to patients with multiple sclerosis and systemic lupus erythematosus. Arch Neurol 1989;46(10):1121-3. *Exclude-Q5-mixed population*

Krupp LB, Rizvi SA. Symptomatic therapy for underrecognized manifestations of multiple sclerosis [review]. Neurology 2002;58(8 Suppl 4):S32-9. *Exclude-Q3--review*

Ku YT, Montgomery LD, Lee HC, et al. Physiologic and functional responses of MS patients to body cooling. Am J Phys Med Rehab 2000;79(5):427-34. *Exclude-DA-Q5-no data on work status or ability*

Kuroiwa Y, Itoyama Y, Shibasaki H, et al. Minimal record of disability in multiple sclerosis--application to Japanese patients. Acta Neurol Scand Suppl 1984;101:100-4. *Exclude-Q4-no correlation with findings relevant to question*

Kurtzke JF. Rating neurologic impairment in multiple sclerosis: an expanded disability status scale (EDSS). Neurology 1983;33(11):1444-52. *Exclude-Q4-no findings relevant to question*

Kurtzke JF. Disability rating scales in multiple sclerosis. Ann NY Acad Sci 1984;436:347-60. *Exclude-Q4-review*

Kurtzke JF. Neuroepidemiology. Part II: Assessment of therapeutic trials. Ann Neurol 1986;19(4):311-9. *Exclude-Q4-no data on work status or ability*

Kurtzke JF. Multiple sclerosis: what's in a name? Neurology 1988;38(2):309-14. *Exclude-review-background*

Kurtzke JF. The Disability Status Scale for multiple sclerosis: apologia pro DSS sua. Neurology 1989;39(2):291-302. *Exclude-Q2-background*

Kurtzke JF. Patterns of neurologic involvement in multiple sclerosis. Neurology 1989;39(9):1235-8. *Exclude-review-background*

Kurtzke JF. Epidemiology of multiple sclerosis. Do*es this really point toward an etiology? Lectio Doctoralis. Neurol Sci 2000;21(6):383-403*. Exclude-review-background

Kurtzke JF. Natural history and clinical outcome measures for multiple sclerosis studies. Why at the present time does EDSS scale remain a preferred outcome measure to evaluate disease evolution? [review]. Neurol Sci 2000;21(6):339-41. *Exclude-Q4-editorial*

Kurtzke JF. Epidemiology and multiple sclerosis. Rev Neurol 2002;35(12):1177. *Exclude-review-background*

Kurtzke JF, Beebe GW, Nagler B, et al. Studies on natural history of multiple sclerosis. 4. Clinical features of the onset bout. Acta Neurol Scand 1968;44(4):467-94. *Exclude-review-background*

Kurtzke JF, Beebe GW, Nagler B, et al. Studies on the natural history of multiple sclerosis. 6. Clinical and laboratory findings at first diagnosis. Acta Neurol Scand 1972;48(1):19-46. *Exclude-Q2-wrong timeframe*

Kurtzke JF, Beebe GW, Nagler B, et al. Prognosis in multiple sclerosis. Trans Am Neurol Assoc 1973;98:272-4. *Exclude-Q2-wrong timeframe*

Kurtzke JF, Beebe GW, Nagler B, et al. Studies on the natural history of multiple sclerosis. 7. Correlates of clinical change in an early bout. Acta Neurol Scand 1973;49(3):379-95. *Exclude-Q2-wrong timeframe*

Kurtzke JF, Beebe GW, Nagler B, et al. Studies on the natural history of multiple sclerosis VIII. Early prognostic features of the later course of the illness. J Chron Dis 1977;30:819-30. *Exclude-Q2-wrong timeframe*

Kurtzke JF, Heltberg A. Multiple sclerosis in the Faroe Islands: an epitome. J Clin Epidemiol 2001;54(1):1-22. *Exclude-review-background*

La Mantia L, Milanese C, D'Amico R. Meta-analysis of clinical trials with copolymer 1 in multiple sclerosis. Eur Neurol 2000;43(4):189-93. *Exclude-review-background Q3*

La Mantia L, Milanese C, Mascoli N, et al. Cyclophosphamide for multiple sclerosis [review]. Cochrane Database of Systematic Reviews 2002;(4):CD002819. E*xclude-review-background Q3*

Lambert CP, Archer RL, Evans WJ. Muscle strength and fatigue during isokinetic exercise in individuals with multiple sclerosis. Med Sci Sports Exer 2001;33(10):1613-9. *Exclude-not relevant to study question*

Langdon DW, Thompson AJ. Multiple sclerosis: a preliminary study of selected variables affecting rehabilitation outcome. Mult Scler 1999;5(2):94-100. *Exclude-Q2-no long-term follow up*

LaRocca NG, Foley F. Development of a structured interview to accompany the minimal record. Acta Neurol

Scand Suppl 1984;101:165-8. *Exclude-not relevant to study question*

LaRocca NG, Scheinberg LC, Slater RJ, et al. Field testing of a minimal record of disability in multiple sclerosis: the United States and Canada. Acta Neurol Scand Suppl 1984;101:126-38. *Exclude-Q2-no long-term follow up*

Lauer K, Firnhaber W. Epidemiological investigations into multiple sclerosis in Southern Hesse. V. Course and prognosis. Acta Neurol Scand 1987;76(1):12-7. *Exclude-Q2-no long-term follow up*

Lazeron RH, Langdon DW, Filippi M, et al. Neuropsychological impairment in multiple sclerosis patients: the role of (juxta)cortical lesion on FLAIR. Mult Scler 2000;6(4):280-5. *Exclude-Q2-no long-term follow up*

Leary SM, Thompson AJ. Interferon beta-1a in primary progressive multiple sclerosis. J Neurol Sci 2003;206(2):215-6. *Exclude-Q3-no data*

Leibowitz U, Alter M. Clinical factors associated with increased disability in multiple sclerosis. Acta Neurol Scand 1970;46(1):53-70. *Exclude-Q2-no long-term follow up*

Lennie P, Van Hemel S. Introduction. In: Visual Impairments Determining Eligibility for Social Security Benefits. National Academy Press: Washington DC, 2002, pp. 31-4. *Exclude-review-background*

Leocani L, Colombo B, Magnani G, et al. Fatigue in multiple sclerosis is associated with abnormal cortical activation to voluntary movement--EEG evidence. Neuroimage 2001;13(6):1186-92. *Exclude-Q2-no long-term follow up*

Lienert C, Lechner-Scott J, Schott D, et al. Use of composite scores in the quantification of deterioration in multiple sclerosis [review]. Mult Scler 1999;5(4):220-2. *Exclude-not relevant to study questions*

Lisak D. Overview of symptomatic management of multiple sclerosis [review]. J Neurosci Nurs 2001;33(5):224-30. *Exclude-Q3-not RCT*

Liu C, Blumhardt LD. Disability outcome measures in therapeutic trials of relapsing-remitting multiple sclerosis: effects of heterogeneity of disease course in placebo cohorts. J Neurol Neurosurg Psych 2000;68(4):450-7. *Exclude-DA-Q3-methods article*

Long KA, Weinert C. Descriptions and perceptions of health among rural and urban adults with multiple sclerosis. Res Nurs Health 1992;15(5):335-42. *Exclude-Q2-no long-term follow up*

Lord SE, Wade DT, Halligan PW. A comparison of two physiotherapy treatment approaches to improve walking in multiple sclerosis: a pilot randomized controlled study. Clin Rehab 1998;12(6):477-86. *Exclude-Q3-no long-term symptom management*

Losseff NA, Wang L, Lai HM, et al. Progressive cerebral atrophy in multiple sclerosis. A serial MRI study. Brain 1996;119 (Pt 6):2009-19. *Exclude-Q2-no analysis of predictors*

Losseff NA, Webb SL, O'Riordan JI, et al. Spinal cord atrophy and disability in multiple sclerosis. A new reproducible and sensitive MRI method with potential to monitor disease progression. Brain 1996;119 (Pt 3):701-8. *Exclude-Q2-no long-term follow up*

Lublin FD. The diagnosis of multiple sclerosis. Curr Opinion Neurol 2002;15(3):253-6. *Exclude-Q1a-no long-term diagnosis*

Lux JB, Leonardi M. The revision of the International Classification of Impairments, Disabilities and Handicaps and its application in MS [review]. Mult Scler 1999;5(4):291-2. *Exclude-Q2-no long-term follow up*

Lyseng-Williamson KA, Plosker GL. Management of relapsing-remitting multiple sclerosis - defining the role of subcutaneous recombinant interferon-beta-1a (Rebif (r)). Dis Manag Health Outcome 2002;10(5):307-25. *Exclude-Q3-not RCT*

Manova MG, Kostadinova II, Chalakova-Atanasova NT, et al. Clinico-electrophysiological correlates in patients with relapsing-remitting multiple sclerosis. Folia Med (Plovdiv) 2001;43(3):5-9. *Exclude-Q3-wrong timeframe*

Matthews PM, Arnold DL. Magnetic resonance imaging of multiple sclerosis: new insights linking pathology to clinical evolution [review]. Curr Opinion Neurol 2001;14(3):279-87. *Exclude-Q2-background*

Mattioli F, Cappa SF, Cominelli C, et al. Serial study of neuropsychological performance and gadolinium-enhanced MRI in MS. Acta Neurol Scand 1993;87(6):465-8. *Exclude-Q2-wrong timeframe*

Mauch E, Kornhuber HH, Pfrommer U, et al. Effective treatment of chronically progressive multiple sclerosis with low-dose cyclophosphamide with minor side-effects. Eur Arch Psych Neurol Sci 1989;238(3):115-7. *Exclude-Q3-not RCT*

Maurer M, Kruse N, Giess R, et al. Gene polymorphism at position -308 of the tumor necrosis factor alpha promotor is not associated with disease progression in multiple sclerosis patients. J Neurol 1999;246(10):949-54. *Exclude-Q2-wrong timeframe*

McDonald WI, Compston A, Edan G, et al. Recommended diagnostic criteria for multiple sclerosis: guidelines from the International Panel on the Diagnosis of Multiple

Sclerosis. Ann Neurol 2001;50(1):121-7. *Exclude-Q1a-not longitudinal*

McDonald WI, Miller DH, Thompson AJ. Are magnetic resonance findings predictive of clinical outcome in therapeutic trials in multiple sclerosis? The dilemma of interferon-beta [review]. Ann Neurol 1994;36(1):14-8. *Exclude-Q2- review*

McDonnell GV, Hawkins SA. Clinical study of primary progressive multiple sclerosis in Northern Ireland, UK. J Neurol Neurosurg Psych 1998;64(4):451-4. *Exclude-Q2-no long-term follow up*

McDonnell GV, Hawkins SA. An assessment of the spectrum of disability and handicap in multiple sclerosis: a population-based study. Mult Scler 2001;7(2):111-7. *Exclude-Q2-no long-term follow up*

McDonnell GV, Hawkins SA. Primary progressive multiple sclerosis: increasing clarity but many unanswered questions. J Neurol Sci 2002;199(1-2):1-15. *Exclude-Q2-no long-term follow up*

McFarland HF. Correlation between MR and clinical findings of disease activity in multiple sclerosis. Am J Neuroradiol 1999;20(10):1777-8. *Exclude-Q2-background*

McFarland HF. The emerging role of MRI in multiple sclerosis and the new diagnostic criteria. Mult Scler 2002;8(1):71-2. *Exclude-Q1a-review*

McIntosh-Michaelis SA, Roberts MH, Wilkinson SM, et al. The prevalence of cognitive impairment in a community survey of multiple sclerosis. Brit J Clin Psychol 1991;30 (Pt 4):333-48. *Exclude-Q2-no long-term follow up*

McLeod JG, Hammond SR, Hallpike JF. Epidemiology of multiple sclerosis in Australia. With NSW and SA survey results. Med J Australia 1994;160(3):117-22. *Exclude-Q4-no findings relevant to question*

Merkelbach S, Sittinger H, Koenig J. Is there a differential impact of fatigue and physical disability on quality of life in multiple sclerosis? J Nerv Mental Dis 2002;190(6):388-93. *Exclude-Q2-no long-term follow up*

Mertin J, Rudge P, Kremer M, et al. Double-blind controlled trial of immunosuppression in the treatment of multiple sclerosis: final report. Lancet 1982;2(8294):351-4. *Exclude-Q3-not current treatment*

Metz L, Hinrichs J, Harris C. Assessment of oral ondansetron in the treatment of cerebellar tremor in MS using the Canadian Occupational Performance Measure. MS Clin Lab Res 1996;2:116. *Exclude-Q3-not RCT*

Middel B, Kuipers-Upmeijer H, Bouma J, et al. Effect of intrathecal baclofen delivered by an implanted programmable pump on health related quality of life in patients with severe spasticity. J Neurol Neurosurg Psych 1997;63(2):204-9. *Exclude-DA-Q3-no separate results for MS patients*

Miki Y, Grossman RI, Udupa JK, et al. Computer-assisted quantitation of enhancing lesions in multiple sclerosis: correlation with clinical classification. Am J Neuroradiol 1997;18(4):705-10. *Exclude-Q2-no long-term follow up*

Milanese C, Salmaggi A, La Mantia L, et al. Double blind study of intrathecal beta-interferon in multiple sclerosis: clinical and laboratory results. J Neurol Neurosurg Psych 1990;53(7):554-7. *Exclude-DA-Q3-non-standard treatment*

Miller DH. Magnetic resonance imaging and spectroscopy in multiple sclerosis [review]. Curr Opinion Neurol 1995;8(3):210-5. *Exclude-not relevant to study questions*

Miller DH. Multiple sclerosis: use of MRI in evaluating new therapies [review]. Sem Neurol 1998;18(3):317-25. *Exclude-Q1a- review*

Miller DH, Khan OA, Sheremata WA, et al. A controlled trial of natalizumab for relapsing multiple sclerosis. New Engl J Med 2003;348(1):15-23. *Exclude-Q3-wrong timeframe*

Miller DH, Molyneux PD, Barker GJ, et al. Effect of interferon-beta1b on magnetic resonance imaging outcomes in secondary progressive multiple sclerosis: results of a European multicenter, randomized, double-blind, placebo-controlled trial. European Study Group on Interferon-beta1b in Secondary Progressive Multiple Sclerosis. Ann Neurol 1999;46(6):850-9. *Exclude-Q3-no improvement*

Miller DM, Weinstock-Guttman B, Bethoux F, et al. A meta-analysis of methylprednisolone in recovery from multiple sclerosis exacerbations. Mult Scler 2000;6(4):267-73. *Exclude-Q3-not RCT*

Milligan NM, Newcombe R, Compston DA. A double-blind controlled trial of high dose methylprednisolone in patients with multiple sclerosis: 1. Clinical effects. J Neurol Neurosurg Psych 1987;50(5):511-6. *Exclude-Q3-wrong timeframe*

MIMS Study Group , Hartung HP, Gonsette R. Mitoxantrone in progressive multiple sclerosis: a placebo-controlled, randomized observer-blind phase III trial: clinical results and three-year follow-up. Neurology 1999;52(Suppl 2):A290. *Exclude-abstract*

Minden SL, Moes EJ, Orav J, et al. Memory impairment in multiple sclerosis. J Clin Exper Neuropsychol 1990;12(4):566-86. *Exclude-Q2-no long-term follow up*

Mitchell JN. Multiple sclerosis and the prospects for employment. J Soc Occup Med 1981;31(4):134-8. *Exclude-DA-Q4-no data to predict work status*

Moher D, Schulz KF, Altman D, et al. The CONSORT Statement: Revised recommendations for improving the quality of reports of parallel-group randomized trials. JAMA 2001;285(15):1987-91. *Exclude-methods paper*

Mohr DC, Goodkin DE, Islar J, et al. Treatment of depression is associated with suppression of nonspecific and antigen-specific T(H)1 responses in multiple sclerosis. Arch Neurol 2001;58(7):1081-6. *Exclude-Q3-not RCT*

Molyneux PD, Barker GJ, Barkhof F, et al. Clinical-MRI correlations in a European trial of interferon beta-1b in secondary progressive MS. Neurology 2001;57(12):2191-7. *Exclude-Q2-no analysis of predictors*

Molyneux PD, Filippi M, Barkhof F, et al. Correlations between monthly enhanced MRI lesion rate and changes in T2 lesion volume in multiple sclerosis [review]. Ann Neurol 1998;43(3):332-9. *Exclude-Q4-no findings relevant to question*

Moody GA, Probert CS, Jayanthi V, et al. The attitude of employers to people with inflammatory bowel disease. Soc Sci Med 1992;34(4):459-60. *Exclude-not relevant to study questions*

Murray TJ. Amantadine therapy for fatigue in multiple sclerosis. Can J Neurol Sci 1985;12(3):251-4. *Exclude-DA-Q3-not randomized*

Myers LW. Immunologic therapy for secondary and primary progressive multiple sclerosis [review]. Curr Neurol Neurosci Rep 2001;1(3):286-93. *Exclude-review-background*

Myhr KM, Riise T, Vedeler C, et al. Disability and prognosis in multiple sclerosis: demographic and clinical variables important for the ability to walk and awarding of disability pension. Mult Scler 2001;7(1):59-65. *Exclude-Q4-work ability not directly assessed*

Nagler B, Beebe GW, Kurtzke JF, et al. Studies on the natural history of multiple sclerosis. 1. Design and diagnosis. Acta Neurol Scand 1966;42(Suppl 19):141-56. *Exclude-review-background*

Nance PW, Sheremata WA, Lynch SG, et al. Relationship of the antispasticity effect of tizanidine to plasma concentration in patients with multiple sclerosis. Arch Neurol 1997;54(6):731-6. *Exclude-DA-Q3-dose comparison study*

National Multiple Sclerosis Society. About MS. Available at http:www.nationalmssociety.org/about. Accessed on October 16, 2003. *Exclude-background*

Nielsen JF, Klemar B, Hansen HJ, et al. A new treatment of spasticity with repetitive magnetic stimulation in multiple sclerosis. J Neurol Neurosurg Psych 1995;58(2):254-5. *Exclude-DA-Q3-not randomized*

Nortvedt MW, Riise T, Myhr KM, et al. Type I interferons and the quality of life of multiple sclerosis patients. Results from a clinical trial on interferon alfa-2a. Mult Scler 1999;5(5):317-22. *Exclude-DA-Q3-non-standard treatment*

Noseworthy J, Paty D, Wonnacott T, et al. Multiple sclerosis after age 50. Neurology 1983;33(12):1537-44. *Exclude-Q2-wrong timeframe*

Noseworthy JH. Clinical trials in multiple sclerosis [review]. Curr Opinion Neurol Neurosurg 1993;6(2):209-15. *Exclude-Q2-background*

Noseworthy JH. Clinical scoring methods for multiple sclerosis [review]. Ann Neurol 1994;36(Suppl):S80-5. *Exclude-Q2-background*

Noseworthy JH. Treatment of multiple sclerosis and related disorders: what's new in the past 2 years? Clin Neuropharmacol 2003;26(1):28-37. *Exclude-not relevant to study questions*

Noseworthy JH, Vandervoort MK, Wong CJ, et al. Interrater variability with the Expanded Disability Status Scale (EDSS) and Functional Systems (FS) in a multiple sclerosis clinical trial. The Canadian Cooperation MS Study Group. Neurology 1990;40(6):971-5. *Exclude-not relevant to study questions*

Noseworthy JH, Wolinsky JS, Lublin FD, et al. Linomide in relapsing and secondary progressive MS: part I: trial design and clinical results. North American Linomide Investigators. Neurology 2000;54(9):1726-33. *Exclude-Q3-not current treatment*.

Nuijten MJ, Hutton J. Cost-effectiveness analysis of interferon beta in multiple sclerosis: a Markov process analysis. Value Health 2002;5(1):44-54. *Exclude-Q3-not RCT*

Nuwer MR, Packwood JW, Myers LW, et al. Evoked potentials predict the clinical changes in a multiple sclerosis drug study. Neurology 1987;37(11):1754-61. *Exclude-Q2-no analysis of predictors*

O'Connor P, Marchetti P, Lee L, et al. Evoked potential abnormality scores are a useful measure of disease burden in relapsing-remitting multiple sclerosis. Ann Neurol 1998;44(3):404-7. *Exclude-Q2-no analysis of predictors*

O'Hara L, Cadbury H, DeSouza L, et al. Physical rehabilitation has a positive effect on disability in multiple sclerosis patients. Neurology 2000;54(6):1396-7. *Exclude-Q3-review*

O'Riordan JI, Doherty C, Javed M, et al. Do alpha-blockers have a role in lower urinary tract dysfunction in multiple sclerosis? J Urol 1995;153(4):1114-6. *Exclude-DA-Q3-drug not available in US*

Offenbacher H, Fazekas F, Schmidt R, et al. Assessment of MRI criteria for a diagnosis of MS. Neurology 1993;43(5):905-9. *Exclude-Q1a-no longitudinal data*

Oliveri RL, Valentino P, Russo C, et al. Randomized trial comparing two different high doses of methylprednisolone in MS: a clinical and MRI study. Neurology 1998;50(6):1833-6. *Exclude-Q3-wrong timeframe*

Optic Neuritis Study Group. The 5-year risk of MS after optic neuritis. Experience of the optic neuritis treatment trial. Neurology 1997;49(5):1404-13. *Exclude-Q2-wrong timeframe*

Ordia JI, Fischer E, Adamski E, et al. Chronic intrathecal delivery of baclofen by a programmable pump for the treatment of severe spasticity. J Neurosurg 1996;85(3):452-7. *Exclude-Q3-RCT for single bolus only*

Packer TL, Sauriol A, Brouwer B. Fatigue secondary to chronic illness: postpolio syndrome, chronic fatigue syndrome, and multiple sclerosis. Arch Phys Med Rehab 1994;75(10):1122-6. *Exclude-Q4-no correlation with findings relevant to question*

Pan JW, Krupp LB, Elkins LE, et al. Cognitive dysfunction lateralizes with NAA in multiple sclerosis. Appl Neuropsychol 2001;8(3):155-60. *Exclude-Q2-no long-term follow up*

Panitch H, Goodin DS, Francis G, et al. Randomized, comparative study of interferon beta-1a treatment regimens in MS: The EVIDENCE Trial. Neurology 2002;59(10):1496-506. *Exclude-Q3-no control*

Paralyzed Veterans of America. Multiple sclerosis clinical practice guidelines: fatigue and multiple sclerosis: evidence-based management strategies for fatigue in multiple sclerosis. Washington, DC: Paralyzed Veterans of America. 1999. *Exclude-Q3-not RCT*

Patel UJ, Grossman RI, Phillips MD, et al. Serial analysis of magnetization-transfer histograms and Expanded Disability Status Scale scores in patients with relapsing-remitting multiple sclerosis. Am J Neuroradiol 1999;20(10):1946-50. *Exclude-Q2-no analysis of predictors*

Patten SB, Metz LM. Depression in multiple sclerosis [review]. Psychother Psychosom 1997;66(6):286-92. *Exclude-not relevant to study question*

Patten SB, Metz LM, SPECTRIMS Study Group. Interferon beta1a and depression in secondary progressive MS: data from the SPECTRIMS Trial. Neurology 2002;59(5):744-6. *Exclude-not relevant to study question*

Paty DW. Double-blind trial of linoleic acid in multiple sclerosis. Arch Neurol 1983;40(11):693-4. *Exclude-Q3-wrong timeframe*

Paty DW, Li DK, UBC MSMRI Study Group and IFNB Multiple Sclerosis Study Group. Interferon beta-lb is effective in relapsing-remitting multiple sclerosis. II. MRI analysis results of a multicenter, randomized, double-blind, placebo-controlled trial. 1993 [classical article]. Neurology 2001;57(12 Suppl 5):S10-5. *Exclude-Q3-no improvement*

Paty DW, Oger JJ, Kastrukoff LF, et al. MRI in the diagnosis of MS: a prospective study with comparison of clinical evaluation, evoked potentials, oligoclonal banding, and CT. Neurology 1988;38(2):180-5. *Exclude-Q1a-not McDonald criteria*

Patzold U, Pocklington PR. Course of multiple sclerosis. First results of a prospective study carried out of 102 MS patients from 1976-1980. Acta Neurol Scand 1982;65(4):248-66. *Exclude-Q2-wrong timeframe*

Pelletier J, Suchet L, Witjas T, et al. A longitudinal study of callosal atrophy and interhemispheric dysfunction in relapsing-remitting multiple sclerosis. Arch Neurol 2001;58(1):105-11. *Exclude-Q2-wrong timeframe*

Penman MF. Assessing the prevalence of cognitive impairment in multiple sclerosis: implications for patient management. AXON 1991;13(2):45-9. *Exclude-not relevant to study question*

Perkin GD, Aminoff MJ. A trial of brolitene in the treatment of spasticity. Brit J Clin Pharmacol 1976;3(5):879-82. *Exclude-DA-Q3-drug not available in US*

Petro DJ, Ellenberger C Jr. Treatment of human spasticity with delta 9-tetrahydrocannabinol. J Clin Pharmacol 1981;21(8-9 Suppl):413S-6S. *Exclude-Q3-no long-term symptom management*

Pina Latorre MA, Ara JR, Modrego PJ, et al. Evaluation of handicap and socio-economic status in patients with multiple sclerosis--data from a population-based survey in the sanitary area of Calatayud, northern Spain. Wiener Mediz Wochenschr 2001;151(9-10):224-7. *Exclude-DA-Q4-no measure of work capacity*

Pinto OD, Polker M, Debono G. Results of international clinical trials with Lioresal. Postgrad Med J 1972;48(Suppl 5):18-23 *Exclude-DA-Q3-not RCT*

Plaut GS. Effectiveness of amantadine in reducing relapses in multiple sclerosis. J Roy Soc Med 1987;80(2):91-3. *Exclude-Q3-not RCT*

Plioplys AV, Plioplys S. Amantadine and L-carnitine treatment of Chronic Fatigue Syndrome. Neuropsychobiology 1997;35(1):16-23. *Exclude-Q3-no long-term symptom management*

Poehlau D, Federlein J, Postert T, et al. Intravenous immunoglobulin (IVIG) treatment for patients with primary

or secondary progressive multiple sclerosis -- outline of a double-blind randomized, placebo-controlled trial. Mult Scler 1997;3(2):149-52. *Exclude-DA-Q3-no results reported*

Polman CH, Bertelsmann FW, de Waal R, et al. 4-Aminopyridine is superior to 3,4-diaminopyridine in the treatment of patients with multiple sclerosis. Arch Neurol 1994;51(11):1136-9. *Exclude-Q3-no long-term symptom management*

Polman CH, Bertelsmann FW, van Loenen AC, et al. 4-aminopyridine in the treatment of patients with multiple sclerosis. Long-term efficacy and safety. Arch Neurol 1994;51(3):292-6. *Exclude-Q3-not RCT*

Poser CM, Brinar VV. Problems with diagnostic criteria for multiple sclerosis. Lancet 2001;358(9295):1746-7. *Exclude-Q1a-not longitudinal*

Poser CM, Paty DW, Scheinberg L, et al. New diagnostic criteria for multiple sclerosis: guidelines for research protocols. Ann Neurol 1983;13(3):227-31. *Exclude-Q4-no findings relevant to question*

Poser S, Bauer HJ, Ritter G, et al. Rehabilitation for patients with multiple sclerosis? J Neurol 1981;224(4):283-90. *Exclude-Q4-no correlation with findings relevant to question*

Poser S, Herrmann-Gremmels I, Wikstrom J, et al. Clinical features of the spinal form of multiple sclerosis. Acta Neurol Scand 1978;57(2):151-8. *Exclude-Q4-methodology unclear*

Poser S, Raun NE, Poser W. Age at onset, initial symptomatology and the course of multiple sclerosis. Acta Neurol Scand 1982;66(3):355-62. *Exclude-Q2-wrong timeframe*

Postma TJ, Oenema D, Terpstra S, et al. Cost analysis of the treatment of severe spinal spasticity with a continuous intrathecal baclofen infusion system. Pharmacoeconomics 1999;15(4):395-404. *Exclude-DA-Q3-no separate results for MS patients*

PRISMS Study Group and the University of British Columbia MSMRI Analysis Group. PRISMS-4: Long-term efficacy of interferon-beta-1a in relapsing MS [erratum appears in Neurology 2001 Sep 25;57(6):1146]. Neurology 2001;56(12):1628-36.
Exclude-Q3-no control

Provinciali L, Ceravolo MG, Bartolini M, et al. A multidimensional assessment of multiple sclerosis: relationships between disability domains. Acta Neurol Scand 1999;100(3):156-62. *Exclude-Q2-no long-term follow up*

Pryse-Phillips W. Twenty questions about multiple sclerosis clinical trials methodologies [review]. Neurol Sci 2001;22(2):187-93. *Exclude-not relevant to study questions*

Pugnetti L, Mendozzi L, Motta A, et al. MRI and cognitive patterns in relapsing-remitting multiple sclerosis. J Neurol Sci 1993;115 Suppl:S59-65. *Exclude-Q2-no long-term follow up*

Rabey JM, Moriel EZ, Farkas A, et al. Detrusor hyperreflexia in multiple sclerosis. Alleviation by a combination of imipramine and propantheline, a clinico-laboratory study. Eur Neurol 1979;18(1):33-7. *Exclude-Q3-not RCT*

Rammohan KW, Rosenberg JH, Lynn DJ, et al. Efficacy and safety of modafinil (Provigil) for the treatment of fatigue in multiple sclerosis: a two centre phase 2 study. J Neurol Neurosurg Psych 2002;72(2):179-83. *Exclude-DA-Q3-not randomized*

Ramsaransing G, Maurits N, Zwanikken C, et al. Early prediction of a benign course of multiple sclerosis on clinical grounds: a systematic review. Mult Scler 2001;7(5):345-7. *Exclude-Q2-no long-term follow up*

Rao SM, Leo GJ, Bernardin L, et al. Cognitive dysfunction in multiple sclerosis. I. Frequency, patterns, and prediction. Neurology 1991;41(5):685-91. *Exclude-Q4-no findings relevant to question*

Ravnborg M, Gronbech-Jensen M, Jonsson A. The MS Impairment Scale: a pragmatic approach to the assessment of impairment in patients with multiple sclerosis. Mult Scler 1997;3(1):31-42. *Exclude-Q2-no long-term follow up*

Ravnborg M, Liguori R, Christiansen P, et al. The diagnostic reliability of magnetically evoked motor potentials in multiple sclerosis. Neurology 1992;42(7):1296-301. *Exclude-Q2-no long-term follow up*

Reding MJ, LaRocca N, Madonna M. Acute-hospital care versus rehabilitation hospitalization for management on nonemergent complications in multiple sclerosis. J Neurol Rehab 1987;1(1):13-7. *Exclude-Q3b-not RCT*

Rice GP, Incorvaia B, Munari L, et al. Interferon in relapsing-remitting multiple sclerosis [review]. Cochrane Database of Systematic Reviews 2001;(4):CD002002. *Exclude-review-background Q3*

Richards RG, Sampson FC, Beard SM, et al. A review of the natural history and epidemiology of multiple sclerosis: implications for resource allocation and health economic models [review]. Health Technol Assess (Winchester, England) 2002;6(10):1-73. *Exclude-not relevant to study questions*

Rio J, Nos C, Tintore M, et al. Assessment of different treatment failure criteria in a cohort of relapsing-remitting multiple sclerosis patients treated with interferon beta:

implications for clinical trials. Ann Neurol 2002;52(4):400-6. *Exclude-Q2-no candidate predictors*

Robinson LR, Kraft GH, Fitts SS, et al. Body cooling may not improve somatosensory pathway function in multiple sclerosis. Am J Phys Med Rehab 1997;76(3):191-6. *Exclude-DA-Q5-no data on work status or ability*

Rodriguez M, Siva A, Ward J, et al. Impairment, disability, and handicap in multiple sclerosis: a population-based study in Olmsted County, Minnesota. Neurology 1994;44(1):28-33. *Exclude-Q2-no long-term follow up*

Roessler RT, Rumrill PD Jr. Multiple sclerosis and employment barriers: a systemic perspective on diagnosis and intervention. Work 2003;21(1):17-23. *Exclude-review-background*

Roessler RT, Rumrill PD Jr, Hennessey ML, et al. Perceived strengths and weaknesses in employment policies and services among people with multiple sclerosis: results of a national survey. Work 2003;21(1):25-36. *Exclude-review-background*

Ron MA, Callanan MM, Warrington EK. Cognitive abnormalities in multiple sclerosis: a psychometric and MRI study. Psychol Med 1991;21(1):59-68. *Exclude-Q2-no long-term follow up*

Rosenberg GA, Appenzeller O. Amantadine, fatigue, and multiple sclerosis. Arch Neurol 1988;45(10):1104-6. *Exclude-DA-Q3-treatment preference data only*

Rostami AM, Sater RA, Bird SJ, et al. A double-blind, placebo-controlled trial of extracorporeal photopheresis in chronic progressive multiple sclerosis. Mult Scler 1999;5(3):198-203. *Exclude-Q3-not current treatment*

Rovaris M, Rocca MA, Filippi M. Magnetic resonance-based techniques for the study and management of multiple sclerosis. Brit Med Bull 2003;65:133-55. *Exclude-Q1a-review*

Rudick RA, Cutter G, Baier M, et al. Use of the Multiple Sclerosis Functional Composite to predict disability in relapsing MS. Neurology 2001;56(10):1324-30. *Exclude-Q2-wrong timeframe*

Rudick RA, Cutter G, Reingold S. The multiple sclerosis functional composite: a new clinical outcome measure for multiple sderosis trials [review]. Mult Scler 2002;8(5):359-65. *Exclude-Q2-review*

Ruggieri RM, Palermo R, Vitello G, et al. Cognitive impairment in patients suffering from relapsing-remitting multiple sclerosis with EDSS ≤ 3.5. Acta Neurol Scand 2003;108:323-6. *Exclude-Q4-no measurement of work ability*

Sailer M, Losseff NA, Wang L, et al. T1 lesion load and cerebral atrophy as a marker for clinical progression in patients with multiple sclerosis. A prospective 18 months follow-up study. Eur J Neurol 2001;8(1):37-42. *Exclude-Q2-no analysis of predictors*

Salan, SZ. Understanding Social Security Disability Programs. Presentation at Multidisciplinary Experts Meeting for the study of Criteria to Determine Disability Related to Multiple Sclerosis, sponsored by the Agency for Healthcare Research and Qualtiy Center for Outcomes and Evidence, Baltimore, MD, March 2003. *Exclude-background*

Salen BA, Spangfort EV, Nygren AL, et al. The Disability Rating Index: an instrument for the assessment of disability in clinical settings. J Clin Epidemiol 1994;47(12):1423-35. *Exclude-Q4-self-report of ability to work*

Sand PK, Appell R, Miklos JR, et al. Randomized, double-blind study to compare extended-release oxybutynin and tolterodine for overactive bladder. Obstet Gynecol 2001;97(4 Suppl 1):S49. *Exclude-no MS patients*

Sandyk R. Treatment with weak electromagnetic fields improves fatigue associated with multiple sclerosis. Internat J Neurosci 1996;84(1-4):177-86. *Exclude-Q3-not RCT*

Sater RA, Rostami AM, Galetta S, et al. Serial evoked potential studies and MRI imaging in chronic progressive multiple sclerosis. J Neurol Sci 1999;171(2):79-83. *Exclude-Q2-no analysis of predictors*

Schapiro RT. Pharmacologic options for the management of multiple sclerosis symptoms [review]. Neurorehab Neural Repair 2002;16(3):223-31. *Exclude-Q3-review*

Scheinberg L, Holland N, Larocca N, et al. Vocational disability and rehabilitation in multiple sclerosis. Internat J Rehab Res 1981;4(1):61-4. *Exclude-Q4-no findings relevant to question*

Schneitzer L. Rehabilitation of patients with multiple sclerosis. Arch Phys Med Rehab 1978;59(9):430-7. *Exclude-Q5-review*

Schuurman PR, Bosch DA, Bossuyt PM, et al. A comparison of continuous thalamic stimulation and thalamotomy for suppression of severe tremor. New Engl J Med 2000;342(7):461-8. *Exclude-Q3-no long-term symptom management*

Schuurman PR, Bruins J, Merkus MP, et al. A comparison of neuropsychological effects of thalamotomy and thalamic stimulation. Neurology 2002;59(8):1232-9. *Exclude-Q3-not RCT*

Schwartz CE, Vollmer T, Lee H. Reliability and validity of two self-report measures of impairment and disability for MS. North American Research Consortium on Multiple

Sclerosis Outcomes Study Group. Neurology 1999;52(1):63-70. *Exclude-Q3-no longitudinal follow up*

Schwid SR, Covington M, Segal BM, et al. Fatigue in multiple sclerosis: current understanding and future directions [review]. J Rehab Res Develop 2002;39(2):211-24. *Exclude-Q3-review*

Schwid SR, Petrie MD, McDermott MP, et al. Quantitative assessment of sustained-release 4-aminopyridine for symptomatic treatment of multiple sclerosis. Neurology 1997;48(4):817-21. *Exclude-Q3-no long-term symptom management*

Scott TF, Nussbaum P, McConnell H, et al. Measurement of treatment response to sertraline in depressed multiple sclerosis patients using the Carroll scale. Neurol Res 1995;17(6):421-2. *Exclude-Q3-not RCT*

Shafey H. The effect of fluoxetine in depression associated with multiple sclerosis. Can J Psych 1992;37(2):147-8. *Exclude-Q3-not RCT*

Shakespeare DT, Young CA, Boggild M. Anti-spasticity agents for multiple sclerosis [retraction of Shakespeare DT, Boggild M, Young C. Cochrane Database Syst Rev. 2001;(4):CD001332; PMID: 11687107] [review]. Cochrane Database of Systematic Reviews 2000;(4):CD001332. *Exclude-review-background Q3*

Sharrack B, Hughes RA, Morris RW, et al. The effect of oral and intravenous methylprednisolone treatment on subsequent relapse rate in multiple sclerosis. J Neurol Sci 2000;173(1):73-7. *Exclude-Q3-no control*

Sheean GL, Murray NM, Rothwell JC, et al. An open-labelled clinical and electrophysiological study of 3,4 diaminopyridine in the treatment of fatigue in multiple sclerosis. Brain 1998;121 (Pt 5):967-75. *Exclude-Q3-not RCT*

Sheplan L, Ishmael C. Spasmolytic properties of dantrolene sodium: clinical evaluation. Military Medicine. 1975;140(1):26-9. *Exclude-DA-Q3-no separate results for MS patients*

Silver JM, Hales RE, Yudofsky SC. Psychopharmacology of depression in neurologic disorders [review]. J Clin Psych 1990;51(Suppl):33-9. *Exclude-Q3-review*

Simon JH. Contrast-enhanced MR imaging in the evaluation of treatment response and prediction of outcome in multiple sclerosis [review]. J Magnet Reson Imag 1997;7(1):29-37. *Exclude-Q2-background*

Simon JH. The contribution of spinal cord MRI to the diagnosis and differential diagnosis of multiple sclerosis [review]. J Neurol Sci 2000;172(Suppl 1):S32-5. *Exclude-Q1a-review*

Simon JH, Jacobs LD, Campion MK, et al. A longitudinal study of brain atrophy in relapsing multiple sclerosis. The Multiple Sclerosis Collaborative Research Group (MSCRG). Neurology 1999;53(1):139-48. *Exclude-Q2-no physical or mental outcome*

Simone IL, Carrara D, Tortorella C, et al. Course and prognosis in early-onset MS: comparison with adult-onset forms. Neurology 2002;59(12):1922-8. *Exclude-Q2-wrong timeframe*

Slade A, Tennant A, Chamberlain MA. A randomised controlled trial to determine the effect of intensity of therapy upon length of stay in a neurological rehabilitation setting. J Rehab Med 2002;34(6):260-6. *Exclude-Q3-mixed population*

Slater RJ. Criteria and uses of the Minimal Record of Disability in multiple sclerosis. Acta Neurol Scand Suppl 1984;101:16-20. *Exclude-Q2-background*

Smith ME, Stone LA, Albert PS, et al. Clinical worsening in multiple sclerosis is associated with increased frequency and area of gadopentetate dimeglumine-enhancing magnetic resonance imaging lesions. Ann Neurol 1993;33(5):480-9. *Exclude-Q2-wrong timeframe*

Smith PF, Darlington CL. Recent developments in drug therapy for multiple sclerosis [review]. Mult Scler 1999;5(2):110-20. *Exclude-Q3-review*

Smits RC, Emmen HH, Bertelsmann FW, et al. The effects of 4-aminopyridine on cognitive function in patients with multiple sclerosis: a pilot study. Neurology 1994;44(9):1701-5. *Exclude-Q3-no long-term symptom management*

Social Security Administration. Social Security Basic Facts, June 2003. Available at http:www.socialsecurity.govpressoffice. Last accessed October 14, 2003. *Exclude-background*

Social Security Administration. Disability Evaluation under Social Security January 2003. Baltimore, MD: Social Security Administration Office of Disability, 2003; SSA Pub. No. 64-039. *Exclude-background*

Social Security Administration. Fast Facts & Figures About Social Security. Baltimore, MD: Social Security Administration, Office of Policy, Office of Research, Evaluation, and Statistics., 2003. *Exclude-background*

Solari A, Amato MP, Bergamaschi R, et al. Accuracy of self-assessment of the minimal record of disability in patients with multiple sclerosis. Acta Neurol Scand 1993;87(1):43-6. *Exclude-Q2-no long-term follow up*

Solari A, Filippini G, Gagliardi L, et al. Interobserver agreement in the diagnosis of multiple sclerosis. Arch Neurol 1989;46(3):289-92. *Exclude-Q1b-no Poser or*

McDonald criteria

Solari A, Uitdehaag B, Giuliani G, et al. Aminopyridines for symptomatic treatment in multiple sclerosis [review]. Cochrane Database of Systematic Reviews 2001;(4):CD001330. *Exclude-review-background Q3*

Sorensen PS, Fazekas F, Lee M. Intravenous immunoglobulin G for the treatment of relapsing-remitting multiple sclerosis: a meta-analysis. Eur J Neurol 2002;9(6):557-63. *Exclude-review-background Q3*

Sorensen PS, Wanscher B, Jensen CV, et al. Intravenous immunoglobulin G reduces MRI activity in relapsing multiple sclerosis. Neurology 1998;50(5):1273-81. *Exclude-Q3-wrong timeframe*

Sorensen PS, Wanscher B, Schreiber K, et al. A double-blind, cross-over trial of intravenous immunoglobulin G in multiple sclerosis: preliminary results. Mult Scler 1997;3(2):145-8. *Exclude-Q3-wrong timeframe*

Sormani MP, Molyneux PD, Barkhof F, et al. MRI enhancing lesion frequency from patients with MS enrolled in the placebo arms of clinical trials or in natural history studies. Magnet Reson Imag 1999;17(8):1236-7. *Exclude-Q2-no long-term follow up*

Sperling RA, Guttmann CR, Hohol MJ, et al. Regional magnetic resonance imaging lesion burden and cognitive function in multiple sclerosis: a longitudinal study. Arch Neurol 2001;58(1):115-21. *Exclude-Q2-no analysis of predictors*

Stangel M, Boegner F, Klatt CH, et al. Placebo controlled pilot trial to study the remyelinating potential of intravenous immunoglobulins in multiple sclerosis. J Neurol Neurosurg Psych 2000;68(1):89-92. *Exclude-Q3-wrong timeframe*

Stefoski D, Davis FA, Faut M, et al. 4-Aminopyridine improves clinical signs in multiple sclerosis. Ann Neurol 1987;21(1):71-7. *Exclude-Q3-no long-term symptom management*

Stefoski D, Davis FA, Fitzsimmons WE, et al. 4-Aminopyridine in multiple sclerosis: prolonged administration. Neurology 1991;41(9):1344-8. *Exclude-Q3-no long-term symptom management*

Stenager E, Knudsen L, Jensen K. Multiple sclerosis: the impact of physical impairment and cognitive dysfunction on social and sparetime activities. Psychother Psychosom 1991;56(3):123-8. *Exclude-Q2-no long-term follow up*

Stevenson VL, Miller DH. Magnetic resonance imaging in the monitoring of disease progression in multiple sclerosis [review]. Mult Scler 1999;5(4):268-72. *Exclude-not relevant to study question*

Stevenson VL, Miller DH, Leary SM, et al. One year follow up study of primary and transitional progressive multiple sclerosis. J Neurol Neurosurg Psych 2000;68(6):713-8. *Exclude-Q2-no analysis of predictors*

Strohle A, Kumpfel T, Sonntag A. Paroxetine for depersonalization associated with multiple sclerosis. Am J Psych 2000;157(1):150. *Exclude-Q3-case report*

Stroup DF, Berlin JA, Morton SC, et al. Meta-analysis of observational studies in epidemiology: A proposal for reporting. JAMA 2000;283(15):2008-12. *Exclude-methods paper*

Stuifbergen AK. Health-promoting behaviors and quality of life among individuals with multiple sclerosis. Scholar InquestionNurs Pract 1995;9(1):31-50; discussion 51-5. *Exclude-Q2-no long-term follow up*

Stuve O, Cree BC, Von Budingen HC, et al. Approved and future pharmacotherapy for multiple sclerosis. Neurologist 2002;8(5):290-301. *Exclude-Q3-review*

Susset V, Vobecky J, Black R. Disability outcome and self-assessment of disabled persons: an analysis of 506 cases. Arch Phys Med Rehab 1979;60(2):50-6. *Exclude-Q2-no long-term follow up*

Swinburn WR, Liversedge LA. Long-term treatment of multiple sclerosis with azathioprine. J Neurol Neurosurg Psych 1973;36(1):124-6. *Exclude-Q3-not RCT*

Syndulko K, Jafari M, Woldanski A et al. Effects of temperature in multiple sclerosis: a review of the literature. J Neurol Rehab 1996;10:23-34. *Exclude-review-background*

Syndulko K, Ke D, Ellison GW, et al. Comparative evaluations of neuroperformance and clinical outcome assessments in chronic progressive multiple sclerosis: I. Reliability, validity and sensitivity to disease progression. Multiple Sclerosis Study Group. Mult Scler 1996;2(3):142-56. *Exclude-Q2-no analysis of predictors*

Then Bergh F, Kumpfel T, Grasser A, et al. Combined treatment with corticosteroids and moclobemide favors normalization of hypothalamo-pituitary-adrenal axis dysregulation in relapsing-remitting multiple sclerosis: a randomized, double blind trial. J Clin Endocrinol Metab 2001;86(4):1610-5. *Exclude-Q3-wrong timeframe*

Thompson AJ. Symptomatic treatment in multiple sclerosis [review]. Curr Opinion Neurol 1998;11(4):305-9. *Exclude-Q3-not RCT*

Thompson AJ. Measuring handicap in multiple sclerosis [review]. Mult Scler 1999;5(4):260-2. *Exclude-review-background-Q4*

Thompson AJ. Symptomatic management and

rehabilitation in multiple sclerosis. J Neurol Neurosurg Psych 2001;71(Suppl 2):ii22-7. *Exclude-review-background Q3*

Thompson AJ. Progress in neurorehabilitation in multiple sclerosis [review]. Curr Opinion Neurol 2002;15(3):267-70. *Exclude-review-background Q2*

Thompson AJ, Brazil J, Whelan CA, et al. Peripheral blood T lymphocyte changes in multiple sclerosis: a marker of disease progression rather than of relapse? J Neurol Neurosurg Psych 1986;49(8):905-12. *Exclude-Q2-no analysis of predictors*

Thorpe JW, Kidd D, Moseley IF, et al. Serial gadolinium-enhanced MRI of the brain and spinal cord in early relapsing-remitting multiple sclerosis. Neurology 1996;46(2):373-8. *Exclude-Q2-no analysis of predictors*

Trojano M, Liguori M, Bosco Zimatore G, et al. Age-related disability in multiple sclerosis. Ann Neurol 2002;51(4):475-80. *Exclude-Q2-wrong timeframe*

Tubridy N, Behan PO, Capildeo R, et al. The effect of anti-alpha4 integrin antibody on brain lesion activity in MS. The UK Antegren Study Group. Neurology 1999;53(3):466-72. *Exclude-Q3-wrong timeframe*

Tyndall A, Koike T. High-dose immunoablative therapy with hematopoietic stem cell support in the treatment of severe autoimmune disease: current status and future direction [review]. Intern Med 2002;41(8):608-12. *Exclude-Q3-not RCT*

Ungerleider JT, Andyrsiak T, Fairbanks L, et al. Delta-9-THC in the treatment of spasticity associated with multiple sclerosis. Adv Alcohol Substance Abuse 1987;7(1):39-50. *Exclude-DA-Q3-protocol not clear*

van der Werf SP, Jongen PJ, Lycklama a Nijeholt GJ, et al. Fatigue in multiple sclerosis: interrelations between fatigue complaints, cerebral MRI abnormalities and neurological disability. J Neurol Sci 1998;160(2):164-70. *Exclude-Q2-no long-term follow up*

Van Diemen HA, Polman CH, Koetsier JC, et al. 4-Aminopyridine in patients with multiple sclerosis: dosage and serum level related to efficacy and safety. Clin Neuropharmacol 1993;16(3):195-204. *Exclude-Q3-no long-term symptom management*

van Diemen HA, Polman CH, van Dongen MM, et al. 4-Aminopyridine induces functional improvement in multiple sclerosis patients: a neurophysiological study. J Neurol Sci 1993;116(2):220-6. *Exclude-Q3-no long-term symptom management*

van Diemen HA, Polman CH, van Dongen TM, et al. The effect of 4-aminopyridine on clinical signs in multiple sclerosis: a randomized, placebo-controlled, double-blind, cross-over study. Ann Neurol 1992;32(2):123-30. *Exclude-DA-Q3-no specific symptom targeted*

van Diemen HA, van Dongen MM, Dammers JW, et al. Increased visual impairment after exercise (Uhthoff's phenomenon) in multiple sclerosis: therapeutic possibilities. Eur Neurol 1992;32(4):231-4. *Exclude-Q3-not RCT*

Van Haver H, Lissoir F, Droissart C, et al. Transfer factor therapy in multiple sclerosis: a three-year prospective double-blind clinical trial. Neurology 1986;36(10):1399-402. *Exclude-DA-Q3-non-standard treatment*

van Walderveen MA, Barkhof F, Hommes OR, et al. Correlating MRI and clinical disease activity in multiple sclerosis: relevance of hypointense lesions on short-TRshort-TE (T1-weighted) spin-echo images. Neurology 1995;45(9):1684-90. *Exclude-Q2-no analysis of predictors*

Vartanian T. An examination of the results of the EVIDENCE, INCOMIN, and phase III studies of interferon beta products in the treatment of multiple sclerosis [review]. Clin Therap 2003;25(1):105-18. *Exclude-review-background Q3*

Vastag B. New diagnostic criteria for MS issued. JAMA 2001;286(14):1703. *Exclude-Q1a-not longitudinal*

Vercoulen JH, Hommes OR, Swanink CM, et al. The measurement of fatigue in patients with multiple sclerosis. A multidimensional comparison with patients with chronic fatigue syndrome and healthy subjects. Arch Neurol 1996;53(7):642-9. *Exclude-Q2-no long-term follow up*

Verjans E, Theys P, Delmotte P, et al. Clinical parameters and intrathecal IgG synthesis as prognostic features in multiple sclerosis. Part I. J Neurol 1983;229(3):155-65. *Exclude-Q2-wrong timeframe*

Vickrey BG, Hays RD, Harooni R, et al. A health-related quality of life measure for multiple sclerosis. Qual Life Res 1995;4(3):187-206. *Exclude-Q2-no long-term follow up*

Villar LM, Masjuan J, Gonzalez-Porque P, et al. Intrathecal IgM synthesis is a prognostic factor in multiple sclerosis. Ann Neurol 2003;53(2):222-6. *Exclude-Q2-wrong timeframe*

Visscher BR, Liu KS, Clark VA, et al. Onset symptoms as predictors of mortality and disability in multiple sclerosis. Acta Neurol Scand 1984;70(5):321-8. *Exclude-Q2-wrong timeframe*

Vukusic S, Confavreux C. Prognostic factors for progression of disability in the secondary progressive phase of multiple sclerosis [review]. J Neurol Sci 2003;206(2):135-7. *Exclude-Q2-wrong timeframe*

Wade DT, Robson P, House H, et al. A preliminary controlled study to determine whether whole-plant cannabis extracts can improve intractable neurogenic symptoms. Clin Rehab 2003;17(1):21-9. *Exclude-Q3-mixed population*

Wade DT, Young CA, Chaudhuri KR, et al. A randomised placebo controlled exploratory study of vitamin B-12, lofepramine, and L-phenylalanine (the "Cari Loder regime") in the treatment of multiple sclerosis. J Neurol Neurosurg Psych 2002;73(3):246-9. *Exclude-Q3-wrong timeframe*

Warren S, Warren KG. Prevalence of multiple sclerosis in Barrhead County, Alberta, Canada. Can J Neurol Sci 1992;19(1):72-5. *Exclude-review-background Q2*

Weiner HL, Cohen JA. Treatment of multiple sclerosis with cyclophosphamide: critical review of clinical and immunologic effects [review]. Mult Scler 2002;8(2):142-54. *Exclude-review-background Q3*

Weiner HL, Dau PC, Khatri BO, et al. Double-blind study of true vs. sham plasma exchange in patients treated with immunosuppression for acute attacks of multiple sclerosis. Neurology 1989;39(9):1143-9. *Exclude-DA-Q3-no long-term data*

Weiner HL, Mackin GA, Orav EJ, et al. Intermittent cyclophosphamide pulse therapy in progressive multiple sclerosis: final report of the Northeast Cooperative Multiple Sclerosis Treatment Group. Neurology 1993;43(5):910-8. *Exclude-Q3a-no placebo group*

Weinshenker BG. Therapeutic plasma exchange for acute inflammatory demyelinating syndromes of the central nervous system [review]. J Clin Apheresis 1999;14(3):144-8. *Exclude-Q3-not current treatment*

Weinshenker BG. Plasma exchange for severe attacks of inflammatory demyelinating diseases of the central nervous system [review]. J Clin Apheresis 2001;16(1):39-42. *Exclude-Q3-not current treatment*

Weinshenker BG, Bass B, Rice GP, et al. The natural history of multiple sclerosis: a geographically based study. I. Clinical course and disability. Brain 1989;112 (Pt 1):133-46. *Exclude-Q2-wrong timeframe*

Weinshenker BG, Bass B, Rice GP, et al. The natural history of multiple sclerosis: a geographically based study. 2. Predictive value of the early clinical course. Brain 1989;112 (Pt 6):1419-28. *Exclude-Q2-no candidate predictors*

Weinshenker BG, Ebers GC. The natural history of multiple sclerosis [review]. Can J Neurol Sci 1987;14(3):255-61. *Exclude-Q2-wrong timeframe*

Weinshenker BG, Hader W, Carriere W, et al. The influence of pregnancy on disability from multiple sclerosis: a population-based study in Middlesex County, Ontario. Neurology 1989;39(11):1438-40. *Exclude-Q2-wrong timeframe*

Weinshenker BG, O'Brien PC, Petterson TM, et al. A randomized trial of plasma exchange in acute central nervous system inflammatory demyelinating disease. Ann Neurol 1999;46(6):878-86. *Exclude-Q3-wrong timeframe*

Weinstein R. Therapeutic apheresis in neurological disorders [review]. J Clin Apheresis 2000;15(1-2):74-128. *Exclude-Q3-not RCT*

Weinstock-Guttman B, Jacobs LD. What is new in the treatment of multiple sclerosis? [Review]. Drugs 2000;59(3):401-10. *Exclude-Q3-wrong timeframe*

White AT, Wilson TE, Petajan JH. Effect of pre-exercise cooling on physical function and fatigue in multiple sclerosis patients. Med Sci Sports Exer 1997;29(Suppl 5):S83. *Exclude-Q5-no data on work status or ability*

Wiart L, Joseph PA, Petit H, et al. The effects of capsaicin on the neurogenic hyperreflexic detrusor. A double blind placebo controlled study in patients with spinal cord disease. Preliminary results. Spinal Cord 1998;36(2):95-9. *Exclude-Q3-mixed population*

Wiebe S, Lee DH, Karlik SJ, et al. Serial cranial and spinal cord magnetic resonance imaging in multiple sclerosis. Ann Neurol 1992;32(5):643-50. *Exclude-Q2-no association of predictor with outcome at baseline*

Wiggs JW. Amantidine, the old anti-Parkinson medication, being useful in the fatigue syndrome that often accompanies multiple sclerosis. South Dakota J Med 1991;44(9):279. *Exclude-Q3-not RCT*

Wiles CM, Brown P, Chapel H, et al. Intravenous immunoglobulin in neurological disease: a specialist review. J Neurol Neurosurg Psych 2002;72(4):440-8. *Exclude-review-background Q3*

Wiles CM, Clarke CR, Irwin HP, et al. Hyperbaric oxygen in multiple sclerosis: a double blind trial. Brit Med J Clin Res Ed 1986;292(6517):367-71. *Exclude-Q3-wrong timeframe*

Williams ES, McKeran RO, Bellingham G. The uptake of available services and benefits for patients with multiple sclerosis in a south London borough. Public Health 1988;102(2):169-75. *Exclude-Q4-no findings relevant to question*

Wingerchuk DM, Noseworthy JH. Randomized controlled trials to assess therapies for multiple sclerosis [review]. Neurology 2002;58(8 Suppl 4):S40-8. *Exclude-review-background Q3*

Wingerchuk DM, Weinshenker BG. Multiple sclerosis:

epidemiology, genetics, classification, natural history, and clinical outcome measures [review]. Neuroimag Clin NA 2000;10(4):611-24 ,vii. *Exclude-review-background Q2*

Wolf BA. Effects of temperature reduction on multiple sclerosis. Physical Therapy. 1970;50(6):808-12. *Exclude-DA-Q3-no specific symptom targeted*

Wolfson C, Confavreux C. A probabilistic model of the natural history of multiple sclerosis. Am J Epidemiol 1985;122:545-6. *Exclude-Q2-model*

Wolinsky JS, Comi G, Filippi M, et al. Copaxone's effect on MRI-monitored disease in relapsing MS is reproducible and sustained. Neurology 2002;59(8):1284-6. *Exclude-Q3-not RCT*

Wolinsky JS, Narayana PA, Johnson KP, et al. United States open-label glatiramer acetate extension trial for relapsing multiple sclerosis: MRI and clinical correlates. Multiple Sclerosis Study Group and the MRI Analysis Center. Mult Scler 2001;7(1):33-41. *Exclude-Q2-wrong timeframe*

Wolinsky JS, Narayana PA, Noseworthy JH, et al. Linomide in relapsing and secondary progressive MS: part II: MRI results. MRI Analysis Center of the University of Texas-Houston, Health Science Center, and the North American Linomide Investigators. Neurology 2000;54(9):1734-41. *Exclude-Q3-not current treatment*

Wood PH. Assessing disablement status in multiple sclerosis. Acta Neurol Scand Suppl 1984;101:154-64. *Exclude-Q4-no findings relevant to question.*

World Health Organization. International Classification of Functioning, Disability and Health: ICF. World Health Organization: Geneva, 2001. *Exclude-background*

World Health Organization. International Classification of Impairments, Disabilities, and Handicaps: A Manual of Classification Relating to the Consequences of Disease. World Health Organization: Geneva, 1980. *Exclude-background*

Worthington J, Jones R, Crawford M, et al. Pregnancy and multiple sclerosis--a 3-year prospective study. J Neurol 1994;241(4):228-33. *Exclude-Q2-no candidate predictors*

Yudkin PL, Ellison GW, Ghezzi A, et al. Overview of azathioprine treatment in multiple sclerosis. Lancet 1991;338(8774):1051-5. *Exclude-review-background Q3*

Zhao GJ, Li DK, Wolinsky JS, et al. Clinical and magnetic resonance imaging changes correlate in a clinical trial monitoring cyclosporine therapy for multiple sclerosis. The MS Study Group. J Neuroimag 1997;7(1):1-7. *Exclude-Q2-Other-no analysis of predictors*

Zifko UA, Rupp M, Schwarz S, et al. Modafinil in treatment of fatigue in multiple sclerosis. Results of an open-label study. J Neurol 2002;249(8):983-7. *Exclude-Q3-not RCT*

Zivadinov R, Rudick RA, De Masi R, et al. Effects of IV methylprednisolone on brain atrophy in relapsing-remitting MS. Neurology 2001;57(7):1239-47. *Exclude-Q3-wrong timeframe*