

Online Supplementary Data 2

...Continued from Online Supplementary Data 1.

2014 Update on the Canadian Rheumatology Association/Spondyloarthritis Research Consortium of Canada Treatment Recommendations for the Management of Spondyloarthritis Part II: Specific Management Recommendations

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REFERENCES

1. Rohekar A, Chan J, Tse SM, Haroon N, Chandran V, Bessette L, et al. A brief review of the 2014 Update on the Canadian Rheumatology Association/Spondyloarthritis Research Consortium of Canada Treatment Recommendations for the Management of Spondyloarthritis. Part I: principles of the management of spondyloarthritis in Canada. *J Rheumatology* 2014;xx:xxx-xxx .
2. van den Berg R, Baraliakos X, Braun J, van der Heijde D. First update of the current evidence for the management of ankylosing spondylitis with non-pharmacological treatment and non-biologic drugs: A systematic literature review for the ASAS/EULAR management recommendations in ankylosing spondylitis. *Rheumatology (Oxford)* 2012;51:1388-96.
3. Dagfinrud H, Kvien TK, Hagen KB. The cochrane review of physiotherapy interventions for ankylosing spondylitis. *J Rheumatol* 2005;32:1899-906.
4. Kjekken I, Bo I, Ronningen A, Spada C, Mowinckel P, Hagen KB, et al. A three-week multidisciplinary in-patient rehabilitation programme had positive long-term effects in patients with ankylosing spondylitis: Randomized controlled trial. *J Rehabil Med* 2013 6;45:260-7.
5. Ozgocmen S, Akgul O, Altay Z, Altindag O, Baysal O, Calis M, et al. Expert opinion and key recommendations for the physical therapy and rehabilitation of patients with ankylosing spondylitis. *Int J Rheum Dis* 2012;15:229-38.
6. Dagfinrud H, Halvorsen S, Vollestad NK, Niedermann K, Kvien TK, Hagen KB. Exercise programs in trials for patients with ankylosing spondylitis: Do they really have the potential for effectiveness? *Arthritis Care Res (Hoboken)* 2011;63:597-603.
7. Aytakin E, Caglar NS, Ozgonenel L, Tutun S, Demiryontar DY, Demir SE. Home-based exercise therapy in patients with ankylosing spondylitis: Effects on pain, mobility, disease activity, quality of life, and respiratory functions. *Clin Rheumatol* 2012;31:91-7.
8. Sudre A, Figuereido IT, Lukas C, Combe B, Morel J. On the impact of a dedicated educational program for ankylosing spondylitis: Effect on patient satisfaction, disease knowledge and spinal mobility, a pilot study. *Joint Bone Spine* 2012 Jan;79:99-100.
9. Hammond A, Bryan J, Hardy A. Effects of a modular behavioural arthritis education programme: A pragmatic parallel-group randomized controlled trial. *Rheumatology (Oxford)* 2008;47:1712-8.
10. Gronning K, Skomsvoll JF, Rannestad T, Steinsbekk A. The effect of an educational programme consisting of group and individual arthritis education for patients with polyarthritis--a randomised controlled trial. *Patient Educ Couns* 2012;88:113-20.
11. Lubrano E, Helliwell P, Parsons W, Emery P, Veale D. Patient education in psoriatic arthritis: A cross sectional study on knowledge by a validated self-administered questionnaire. *J Rheumatol* 1998;25:1560-5.
12. Poddubnyy D, Haibel H, Listing J, Marker-Hermann E, Zeidler H, Braun J, et al. Baseline radiographic damage, elevated acute-phase reactant levels, and cigarette smoking status predict spinal radiographic progression in early axial spondylarthritis. *Arthritis Rheum* 2012;64:1388-98.
13. Poddubnyy D, Haibel H, Listing J, Marker-Hermann E, Zeidler H, Braun J, et al. Cigarette smoking has a dose-dependent impact on progression of structural damage in the spine in patients with axial spondyloarthritis: Results from the GERman SPondyloarthritis inception cohort (GESPIC). *Ann Rheum Dis* 2013;72:1430-2.
14. Haroon N, Inman RD, Leach TJ, Weisman MH, Lee M, Rahbar MH, et al. The impact of tumor necrosis factor alpha inhibitors on radiographic progression in ankylosing spondylitis. *Arthritis Rheum* 2013;65:2645-54.
15. Chung HY, Machado P, van der Heijde D, D'Agostino MA, Dougados M. Smokers in early axial spondyloarthritis have earlier disease onset, more disease activity, inflammation and damage, and poorer function and health-related quality of life: Results from the DESIR cohort. *Ann Rheum Dis* 2012;71:809-16.
16. Ward MM, Hendrey MR, Malley JD, Leach TJ, Davis JC,Jr, Reveille JD, et al. Clinical and immunogenetic prognostic factors for radiographic severity in ankylosing spondylitis. *Arthritis Rheum* 2009;61:859-66.
17. Aaverns HL, Oxtoby J, Taylor HG, Jones PW, Dziedzic K, Dawes PT. Smoking and outcome in ankylosing spondylitis. *Scand J Rheumatol* 1996;25:138-42.
18. Ward MM, Weisman MH, Davis JC,Jr, Reveille JD. Risk factors for functional limitations in patients with long-standing ankylosing spondylitis. *Arthritis Rheum* 2005;53:710-7.

19. Kaan U, Ferda O. Evaluation of clinical activity and functional impairment in smokers with ankylosing spondylitis. *Rheumatol Int* 2005;25:357-60.
20. Doran MF, Brophy S, MacKay K, Taylor G, Calin A. Predictors of longterm outcome in ankylosing spondylitis. *J Rheumatol* 2003;30:316-20.
21. Ward MM. Predictors of the progression of functional disability in patients with ankylosing spondylitis. *J Rheumatol* 2002;29:1420-5.
22. Bodur H, Ataman S, Rezvani A, Bugdayci DS, Cevik R, Birtane M, et al. Quality of life and related variables in patients with ankylosing spondylitis. *Qual Life Res* 2011;20:543-9.
23. Matthey DL, Dawson SR, Healey EL, Packham JC. Relationship between smoking and patient-reported measures of disease outcome in ankylosing spondylitis. *J Rheumatol* 2011;38:2608-15.
24. Tillett W, Jadon D, Shaddick G, Cavill C, Korendowych E, de Vries CS, et al. Smoking and delay to diagnosis are associated with poorer functional outcome in psoriatic arthritis. *Ann Rheum Dis* 2013;72:1358-61.
25. Eder L, Law T, Chandran V, Shanmugarajah S, Shen H, Rosen CF, et al. Association between environmental factors and onset of psoriatic arthritis in patients with psoriasis. *Arthritis Care Res (Hoboken)* 2011;63:1091-7.
26. Eder L, Shanmugarajah S, Thavaneswaran A, Chandran V, Rosen CF, Cook RJ, et al. The association between smoking and the development of psoriatic arthritis among psoriasis patients. *Ann Rheum Dis* 2012;71:219-24.
27. Li W, Han J, Qureshi AA. Smoking and risk of incident psoriatic arthritis in US women. *Ann Rheum Dis* 2012;71:804-8.
28. van der Heijde D, Baraf HS, Ramos-Remus C, Calin A, Weaver AL, Schiff M, et al. Evaluation of the efficacy of etoricoxib in ankylosing spondylitis: Results of a fifty-two-week, randomized, controlled study. *Arthritis Rheum* 2005;52:1205-15.
29. Gossec L, van der Heijde D, Melian A, Krupa DA, James MK, Cavanaugh PF, et al. Efficacy of cyclo-oxygenase-2 inhibition by etoricoxib and naproxen on the axial manifestations of ankylosing spondylitis in the presence of peripheral arthritis. *Ann Rheum Dis* 2005;64:1563-7.
30. Sieper J, Klopsch T, Richter M, Kapelle A, Rudwaleit M, Schwank S, et al. Comparison of two different dosages of celecoxib with diclofenac for the treatment of active ankylosing spondylitis: Results of a 12-week randomised, double-blind, controlled study. *Ann Rheum Dis* 2008;67:323-9.
31. Cinar M, Dinc A, Simsek I, Erdem H, Koc B, Pay S, et al. Evaluation of the short-term efficacy of NSAID on patients with active ankylosing spondylitis in daily practice: A 3-month, longitudinal, observational study. *Rheumatol Int* 2010;30:331-40.
32. Sieper J, Rudwaleit M, Baraliakos X, Brandt J, Braun J, Burgos-Vargas R, et al. The assessment of SpondyloArthritis international society (ASAS) handbook: A guide to assess spondyloarthritis. *Ann Rheum Dis* 2009;68 Suppl 2:i11-44.
33. Escalas C, Trijau S, Dougados M. Evaluation of the treatment effect of NSAID/TNF blockers according to different domains in ankylosing spondylitis: Results of a metaanalysis. *Rheumatology (Oxford)* 2010;49:1317-25.
34. Dougados M, Behier JM, Jolchine I, Calin A, van der Heijde D, Olivieri I, et al. Efficacy of celecoxib, a cyclooxygenase 2-specific inhibitor, in the treatment of ankylosing spondylitis: A six-week controlled study with comparison against placebo and against a conventional nonsteroidal antiinflammatory drug. *Arthritis Rheum* 2001;44:180-5.
35. Barkhuizen A, Steinfeld S, Robbins J, West C, Coombs J, Zwillich S. Celecoxib is efficacious and well tolerated in treating signs and symptoms of ankylosing spondylitis. *J Rheumatol* 2006;33:1805-12.
36. Dougados M, Gueguen A, Nakache JP, Velicitat P, Veys EM, Zeidler H, et al. Ankylosing spondylitis: What is the optimum duration of a clinical study? A one year versus a 6 weeks non-steroidal anti-inflammatory drug trial. *Rheumatology (Oxford)* 1999;38:235-44.
37. Batlle-Gualda E, Figueroa M, Ivorra J, Raber A. The efficacy and tolerability of aceclofenac in the treatment of patients with ankylosing spondylitis: A multicenter controlled clinical trial. aceclofenac indomethacin study group. *J Rheumatol* 1996;23:1200-6.
38. Villa Alcazar LF, de Buergo M, Rico Lenza H, Montull Fruitos E. Aceclofenac is as safe and effective as tenoxicam in the treatment of ankylosing spondylitis: A 3 month multicenter comparative trial. spanish study group on aceclofenac in ankylosing spondylitis. *J Rheumatol* 1996;23:1194-9.
39. Carcassi C, La Nasa G, Perpignano G. A 12-week double-blind study of the efficacy, safety and tolerance of pirazolac b.i.d. compared with indomethacin t.i.d. in patients with ankylosing spondylitis. *Drugs Exp Clin Res* 1990;16:29-37.
40. Schwarzer AC, Cohen M, Arnold MH, Kelly D, McNaught P, Brooks PM. Tenoxicam compared with diclofenac in patients with ankylosing spondylitis. *Curr Med Res Opin* 1990;11:648-53.
41. Benhamou M, Gossec L, Dougados M. Clinical relevance of C-reactive protein in ankylosing spondylitis and evaluation of the NSAID/coxibs' treatment effect on C-reactive protein. *Rheumatology (Oxford)* 2010;49:536-41.
42. Wanders A, Heijde D, Landewe R, Behier JM, Calin A, Olivieri I, et al. Nonsteroidal antiinflammatory drugs reduce radiographic progression in patients with ankylosing spondylitis: A randomized clinical trial. *Arthritis Rheum* 2005;52:1756-65.
43. Kroon F, Landewe R, Dougados M, van der Heijde D. Continuous NSAID use reverts the effects of inflammation on radiographic progression in patients with ankylosing spondylitis. *Ann Rheum Dis* 2012;71:1623-9.

44. Poddubnyy D, Rudwaleit M, Haibel H, Listing J, Marker-Hermann E, Zeidler H, et al. Effect of non-steroidal anti-inflammatory drugs on radiographic spinal progression in patients with axial spondyloarthritis: Results from the german spondyloarthritis inception cohort. *Ann Rheum Dis* 2012;71:1616-22.
45. Song IH, Poddubnyy DA, Rudwaleit M, Sieper J. Benefits and risks of ankylosing spondylitis treatment with nonsteroidal antiinflammatory drugs. *Arthritis Rheum* 2008;58:929-38.
46. Braun J, van den Berg R, Baraliakos X, Boehm H, Burgos-Vargas R, Collantes-Estevez E, et al. 2010 update of the ASAS/EULAR recommendations for the management of ankylosing spondylitis. *Ann Rheum Dis* 2011;70:896-904.
47. van der Heijde D, Sieper J, Maksymowych WP, Dougados M, Burgos-Vargas R, Landewe R, et al. 2010 update of the international ASAS recommendations for the use of anti-TNF agents in patients with axial spondyloarthritis. *Ann Rheum Dis* 2011;70:905-8.
48. Haroon N, Kim TH, Inman RD. NSAID and radiographic progression in ankylosing spondylitis bagging big game with small arms? *Ann Rheum Dis* 2012;71:1593-5.
49. Ramiro S, Radner H, van der Heijde D, van Tubergen A, Buchbinder R, Aletaha D, et al. Combination therapy for pain management in inflammatory arthritis (rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis, other spondyloarthritis). *Cochrane Database Syst Rev* 2011:CD008886.
50. Chang JK, Yu CT, Lee MY, Yeo K, Chang IC, Tsou HK, et al. Tramadol/acetaminophen combination as add-on therapy in the treatment of patients with ankylosing spondylitis. *Clin Rheumatol* 2013;32:341-7.
51. Maugars Y, Mathis C, Vilon P, Prost A. Corticosteroid injection of the sacroiliac joint in patients with seronegative spondylarthropathy. *Arthritis Rheum* 1992;35:564-8.
52. Luukkainen R, Nissila M, Asikainen E, Sanila M, Lehtinen K, Alanaatu A, et al. Periarticular corticosteroid treatment of the sacroiliac joint in patients with seronegative spondylarthropathy. *Clin Exp Rheumatol* 1999;17:88-90.
53. Maugars Y, Mathis C, Berthelot JM, Charlier C, Prost A. Assessment of the efficacy of sacroiliac corticosteroid injections in spondylarthropathies: A double-blind study. *Br J Rheumatol* 1996;35:767-70.
54. Hanly JG, Mitchell M, MacMillan L, Mosher D, Sutton E. Efficacy of sacroiliac corticosteroid injections in patients with inflammatory spondylarthropathy: Results of a 6 month controlled study. *J Rheumatol* 2000;27:719-22.
55. Bollow M, Braun J, Taupitz M, Haberle J, Reibhauer BH, Paris S, et al. CT-guided intraarticular corticosteroid injection into the sacroiliac joints in patients with spondylarthropathy: Indication and follow-up with contrast-enhanced MRI. *J Comput Assist Tomogr* 1996;20:512-21.
56. Braun J, Bollow M, Seyrekbasan F, Haberle HJ, Eggens U, Mertz A, et al. Computed tomography guided corticosteroid injection of the sacroiliac joint in patients with spondylarthropathy with sacroiliitis: Clinical outcome and followup by dynamic magnetic resonance imaging. *J Rheumatol* 1996;23:659-64.
57. Karabacakoglu A, Karakose S, Ozerbil OM, Odev K. Fluoroscopy-guided intraarticular corticosteroid injection into the sacroiliac joints in patients with ankylosing spondylitis. *Acta Radiol* 2002;43:425-7.
58. Dussault RG, Kaplan PA, Anderson MW. Fluoroscopy-guided sacroiliac joint injections. *Radiology* 2000;214:273-7.
59. Eder L, Chandran V, Ueng J, Bhella S, Lee KA, Rahman P, et al. Predictors of response to intra-articular steroid injection in psoriatic arthritis. *Rheumatology (Oxford)* 2010;49:1367-73.
60. Haibel H, Fendler C, Listing J, Callhoff J, Braun J, Sieper J. Efficacy of oral prednisolone in active ankylosing spondylitis: Results of a double-blind, randomised, placebo-controlled short-term trial. *Ann Rheum Dis* 2014 1;73:243-6.
61. Ejstrup L, Peters ND. Intravenous methylprednisolone pulse therapy in ankylosing spondylitis. *Dan Med Bull* 1985;32:231-3.
62. Peters ND, Ejstrup L. Intravenous methylprednisolone pulse therapy in ankylosing spondylitis. *Scand J Rheumatol* 1992;21:134-8.
63. Zink A, Thiele K, Huscher D, Listing J, Sieper J, Krause A, et al. Healthcare and burden of disease in psoriatic arthritis. A comparison with rheumatoid arthritis and ankylosing spondylitis. *J Rheumatol* 2006;33:86-90.
64. Chen J, Veras MM, Liu C, Lin J. Methotrexate for ankylosing spondylitis. *Cochrane Database Syst Rev* 2013;2:CD004524.
65. Altan L, Bingol U, Karakoc Y, Aydinler S, Yurtkuran M, Yurtkuran M. Clinical investigation of methotrexate in the treatment of ankylosing spondylitis. *Scand J Rheumatol* 2001;30:255-9.
66. Gonzalez-Lopez L, Garcia-Gonzalez A, Vazquez-Del-Mercado M, Munoz-Valle JF, Gamez-Nava JI. Efficacy of methotrexate in ankylosing spondylitis: A randomized, double blind, placebo controlled trial. *J Rheumatol* 2004;31:1568-74.
67. Roychowdhury B, Bintley-Bagot S, Bulgen DY, Thompson RN, Tunn EJ, Moots RJ. Is methotrexate effective in ankylosing spondylitis? *Rheumatology (Oxford)* 2002;41:1330-2.
68. Haibel H, Brandt HC, Song IH, Brandt A, Listing J, Rudwaleit M, et al. No efficacy of subcutaneous methotrexate in active ankylosing spondylitis: A 16-week open-label trial. *Ann Rheum Dis* 2007;66:419-21.
69. Biasi D, Carletto A, Caramaschi P, Pacor ML, Maleknia T, Bambara LM. Efficacy of methotrexate in the treatment of ankylosing spondylitis: A three-year open study. *Clin Rheumatol* 2000;19:114-7.
70. Chen J, Liu C. Sulfasalazine for ankylosing spondylitis. *Cochrane Database Syst Rev* 2005:CD004800.
71. Chen J, Liu C. Is sulfasalazine effective in ankylosing spondylitis? A systematic review of randomized controlled trials. *J Rheumatol* 2006;33:722-31.

72. Clegg DO, Reda DJ, Mejjias E, Cannon GW, Weisman MH, Taylor T, et al. Comparison of sulfasalazine and placebo in the treatment of psoriatic arthritis. A department of veterans affairs cooperative study. *Arthritis Rheum* 1996;39:2013-20.
73. Corkill MM, Jobanputra P, Gibson T, Macfarlane DG. A controlled trial of sulphasalazine treatment of chronic ankylosing spondylitis: Failure to demonstrate a clinical effect. *Br J Rheumatol* 1990;29:41-5.
74. Davis MJ, Dawes PT, Beswick E, Lewin IV, Stanworth DR. Sulphasalazine therapy in ankylosing spondylitis: Its effect on disease activity, immunoglobulin A and the complex immunoglobulin A-alpha-1-antitrypsin. *Br J Rheumatol* 1989;28:410-3.
75. Dougados M, Boumier P, Amor B. Sulphasalazine in ankylosing spondylitis: A double blind controlled study in 60 patients. *Br Med J (Clin Res Ed)* 1986;293:911-4.
76. Feltelius N, Hallgren R. Sulphasalazine in ankylosing spondylitis. *Ann Rheum Dis* 1986;45:396-9.
77. Kirwan J, Edwards A, Huitfeldt B, Thompson P, Currey H. The course of established ankylosing spondylitis and the effects of sulphasalazine over 3 years. *Br J Rheumatol* 1993;32:729-33.
78. Krajnc I. Sulfasalazine in the treatment of ankylosing spondylitis. *Lijec Vjesn* 1990;112:171-4.
79. Nissila M, Lehtinen K, Leirisalo-Repo M, Luukkainen R, Mutru O, Yli-Kerttula U. Sulfasalazine in the treatment of ankylosing spondylitis. A twenty-six-week, placebo-controlled clinical trial. *Arthritis Rheum* 1988;31:1111-6.
80. Schmidt WA, Wierth S, Milleck D, Droste U, Gromnica-Ihle E. Sulfasalazine in ankylosing spondylitis: A prospective, randomized, double-blind placebo-controlled study and comparison with other controlled studies. *Z Rheumatol* 2002;61:159-67.
81. Taggart A, Gardiner P, McEvoy F, Hopkins R, Bird H. Which is the active moiety of sulfasalazine in ankylosing spondylitis? A randomized, controlled study. *Arthritis Rheum* 1996;39:1400-5.
82. Taylor HG, Beswick EJ, Dawes PT. Sulphasalazine in ankylosing spondylitis. A radiological, clinical and laboratory assessment. *Clin Rheumatol* 1991;10:43-8.
83. Winkler V. Sulfasalazine therapy in spondylarthritis ankylopoietica. *Orv Hetil* 1989 8;130:77-81.
84. Steiman AJ, Pope JE, Thiessen-Philbrook H, Li L, Barnabe C, Kalache F, et al. Non-biologic disease-modifying antirheumatic drugs (DMARD) improve pain in inflammatory arthritis (IA): A systematic literature review of randomized controlled trials. *Rheumatol Int* 2013;33:1105-20.
85. Braun J, van der Horst-Bruinsma IE, Huang F, Burgos-Vargas R, Vlahos B, Koenig AS, et al. Clinical efficacy and safety of etanercept versus sulfasalazine in patients with ankylosing spondylitis: A randomized, double-blind trial. *Arthritis Rheum* 2011;63:1543-51.
86. Song IH, Hermann K, Haibel H, Althoff CE, Listing J, Burmester G, et al. Effects of etanercept versus sulfasalazine in early axial spondyloarthritis on active inflammatory lesions as detected by whole-body MRI (ESTHER): A 48-week randomised controlled trial. *Ann Rheum Dis* 2011;70:590-6.
87. van der Heijde D, Braun J, Dougados M, Sieper J, Pedersen R, Szumski A, et al. Sensitivity and discriminatory ability of the ankylosing spondylitis disease activity score in patients treated with etanercept or sulphasalazine in the ASCEND trial. *Rheumatology (Oxford)* 2012;51:1894-905.
88. Song IH, Althoff CE, Haibel H, Hermann KG, Poddubnyy D, Listing J, et al. Frequency and duration of drug-free remission after 1 year of treatment with etanercept versus sulfasalazine in early axial spondyloarthritis: 2 year data of the ESTHER trial. *Ann Rheum Dis* 2012;71:1212-5.
89. van Denderen JC, van der Paardt M, Nurmohamed MT, de Ryck YM, Dijkmans BA, van der Horst-Bruinsma IE. Double blind, randomised, placebo controlled study of leflunomide in the treatment of active ankylosing spondylitis. *Ann Rheum Dis* 2005;64:1761-4.
90. Haibel H, Rudwaleit M, Braun J, Sieper J. Six months open label trial of leflunomide in active ankylosing spondylitis. *Ann Rheum Dis* 2005;64:124-6.
91. Ash Z, Gaujoux-Viala C, Gossec L, Hensor EM, FitzGerald O, Winthrop K, et al. A systematic literature review of drug therapies for the treatment of psoriatic arthritis: Current evidence and metaanalysis informing the EULAR recommendations for the management of psoriatic arthritis. *Ann Rheum Dis* 2012;71:319-26.
92. BLACK RL, O'BRIEN WM, VANSCOTT EJ, AUERBACH R, EISEN AZ, BUNIM JJ. Methotrexate therapy in psoriatic arthritis; double-blind study on 21 patients. *JAMA* 1964;189:743-7.
93. Scarpa R, Peluso R, Atteno M, Manguso F, Spano A, Iervolino S, et al. The effectiveness of a traditional therapeutical approach in early psoriatic arthritis: Results of a pilot randomised 6-month trial with methotrexate. *Clin Rheumatol* 2008;27:823-6.
94. Willkens RF, Williams HJ, Ward JR, Egger MJ, Reading JC, Clements PJ, et al. Randomized, double-blind, placebo controlled trial of low-dose pulse methotrexate in psoriatic arthritis. *Arthritis Rheum* 1984;27:376-81.
95. Abu-Shakra M, Gladman DD, Thorne JC, Long J, Gough J, Farewell VT. Longterm methotrexate therapy in psoriatic arthritis: Clinical and radiological outcome. *J Rheumatol* 1995;22:241-5.
96. Espinoza LR, Zakraoui L, Espinoza CG, Gutierrez F, Jara LJ, Silveira LH, et al. Psoriatic arthritis: Clinical response and side effects to methotrexate therapy. *J Rheumatol* 1992;19:872-7.
97. Kane D, Gogarty M, O'leary J, Silva I, Bermingham N, Bresnihan B, et al. Reduction of synovial sublining layer inflammation and proinflammatory cytokine expression in psoriatic arthritis treated with methotrexate. *Arthritis Rheum* 2004;50:3286-95.

98. Kragballe K, Zachariae E, Zachariae H. Methotrexate in psoriatic arthritis: A retrospective study. *Acta Derm Venereol*. 1983;63(2):165-7.
99. Ranza R, Marchesoni A, Rossetti A, Tosi S, Gibelli E. Methotrexate in psoriatic polyarthritis. *J Rheumatol*. 1993;20(10):1804-5.
100. Ricci M, De Marco G, Desiati F, Mazzocchi D, Rotunno L, Battafarano N, et al. Long-term survival of methotrexate in psoriatic arthritis. *Reumatismo*. 2009;61(2):125-31.
101. Zachariae H, Zachariae E. Methotrexate treatment of psoriatic arthritis. *Acta Derm Venereol* 1987;67:270-3.
102. Kingsley GH, Kowalczyk A, Taylor H, Ibrahim F, Packham JC, McHugh NJ, et al. A randomized placebo-controlled trial of methotrexate in psoriatic arthritis. *Rheumatology (Oxford)* 2012;51:1368-77.
103. Dougados M. Methotrexate in peripheral spondyloarthritis including psoriatic arthritis: A need for further evaluation. *Rheumatology (Oxford)* 2012;51:1343-4.
104. Combe B, Goupille P, Kuntz JL, Tebib J, Liote F, Bregeon C. Sulphasalazine in psoriatic arthritis: A randomized, multicentre, placebo-controlled study. *Br J Rheumatol* 1996;35:664-8.
105. Farr M, Kitas GD, Waterhouse L, Jubb R, Felix-Davies D, Bacon PA. Sulphasalazine in psoriatic arthritis: A double-blind placebo-controlled study. *Br J Rheumatol* 1990;29:46-9.
106. Fraser SM, Hopkins R, Hunter JA, Neumann V, Capell HA, Bird HA. Sulphasalazine in the management of psoriatic arthritis. *Br J Rheumatol* 1993;32:923-5.
107. Gupta AK, Grober JS, Hamilton TA, Ellis CN, Siegel MT, Voorhees JJ, et al. Sulfasalazine therapy for psoriatic arthritis: A double blind, placebo controlled trial. *J Rheumatol* 1995;22:894-8.
108. Salvarani C, Macchioni P, Olivieri I, Marchesoni A, Cutolo M, Ferraccioli G, et al. A comparison of cyclosporine, sulfasalazine, and symptomatic therapy in the treatment of psoriatic arthritis. *J Rheumatol* 2001;28:2274-82.
109. Kumar N, Kay LJ, Walker DJ. The treatment of enthesitis in psoriatic arthritis. *J Rheumatol* 2004;31:2311,2; author reply 2312-3.
110. Rahman P, Gladman DD, Cook RJ, Zhou Y, Young G. The use of sulfasalazine in psoriatic arthritis: A clinic experience. *J Rheumatol* 1998;25:1957-61.
111. Kaltwasser JP, Nash P, Gladman D, Rosen CF, Behrens F, Jones P, et al. Efficacy and safety of leflunomide in the treatment of psoriatic arthritis and psoriasis: A multinational, double-blind, randomized, placebo-controlled clinical trial. *Arthritis Rheum* 2004;50:1939-50.
112. Liang GC, Barr WG. Open trial of leflunomide for refractory psoriasis and psoriatic arthritis. *J Clin Rheumatol* 2001;7:366-70.
113. Thami GP, Garg G. Leflunomide in psoriasis and psoriatic arthritis: A preliminary study. *Arch Dermatol* 2004;140:1288-9.
114. Behrens F, Finkenwirth C, Pavelka K, Stolfa J, Sipek-Dolnicar A, Thaci D, et al. Leflunomide in psoriatic arthritis: Results from a large european prospective observational study. *Arthritis Care Res (Hoboken)* 2013;65:464-70.
115. Sakellariou GT, Sayegh FE, Anastasilakis AD, Kapetanios GA. Leflunomide addition in patients with articular manifestations of psoriatic arthritis resistant to methotrexate. *Rheumatol Int* 2013;33:2917-20.
116. Fraser AD, van Kuijk AW, Westhovens R, Karim Z, Wakefield R, Gerards AH, et al. A randomised, double blind, placebo controlled, multicentre trial of combination therapy with methotrexate plus ciclosporin in patients with active psoriatic arthritis. *Ann Rheum Dis* 2005;64:859-64.
117. Coates LC, Navarro-Coy N, Brown SR, Brown S, McParland L, Collier H, et al. The TICOPA protocol (Tight Control of psoriatic arthritis): A randomised controlled trial to compare intensive management versus standard care in early psoriatic arthritis. *BMC Musculoskelet Disord* 2013;14:101,2474-14-101.
118. Barber CE, Kim J, Inman RD, Esdaile JM, James MT. Antibiotics for treatment of reactive arthritis: A systematic review and metaanalysis. *J Rheumatol* 2013;40:916-28.
119. Carter JD, Espinoza LR, Inman RD, Sneed KB, Ricca LR, Vasey FB, et al. Combination antibiotics as a treatment for chronic chlamydia-induced reactive arthritis: A double-blind, placebo-controlled, prospective trial. *Arthritis Rheum* 2010;62:1298-307.
120. Putschky N, Pott HG, Kuipers JG, Zeidler H, Hammer M, Wollenhaupt J. Comparing 10-day and 4-month doxycycline courses for treatment of chlamydia trachomatis-reactive arthritis: A prospective, double-blind trial. *Ann Rheum Dis* 2006;65:1521-4.
121. Smieja M, MacPherson DW, Kean W, Schmuck ML, Goldsmith CH, Buchanan W, et al. Randomised, blinded, placebo controlled trial of doxycycline for chronic seronegative arthritis. *Ann Rheum Dis* 2001;60:1088-94.
122. Toivanen A, Yli-Kerttula T, Luukkainen R, Merilahti-Palo R, Granfors K, Seppala J. Effect of antimicrobial treatment on chronic reactive arthritis. *Clin Exp Rheumatol* 1993;11:301-7.
123. Bykerk VP, Akhavan P, Hazlewood GS, Schieir O, Dooley A, Haraoui B, et al. Canadian rheumatology association recommendations for pharmacological management of rheumatoid arthritis with traditional and biologic disease-modifying antirheumatic drugs. *J Rheumatol* 2012;39:1559-82.
124. Baraliakos X, van den Berg R, Braun J, van der Heijde D. Update of the literature review on treatment with biologics as a basis for the first update of the ASAS/EULAR management recommendations of ankylosing spondylitis. *Rheumatology (Oxford)* 2012;51:1378-87.

125. Heldmann F, Brandt J, van der Horst-Bruinsma IE, Landewe R, Sieper J, Burmester GR, et al. The european ankylosing spondylitis infliximab cohort (EASIC): A european multicentre study of long term outcomes in patients with ankylosing spondylitis treated with infliximab. *Clin Exp Rheumatol* 2011;29:672-80.
126. Baraliakos X, Haibel H, Listing J, Sieper J, Braun J. Continuous long-term anti-TNF therapy does not lead to an increase in the rate of new bone formation over 8 years in patients with ankylosing spondylitis. *Ann Rheum Dis* 2013 Mar 27.
127. Saougou I, Markatseli TE, Voulgari PV, Drosos AA. Maintained clinical response of infliximab treatment in ankylosing spondylitis: A 6-year long-term study. *Joint Bone Spine* 2010;77:325-9.
128. Konsta M, Sfrikakis PP, Bournia VK, Karras D, Iliopoulos A. Absence of radiographic progression of hip arthritis during infliximab treatment for ankylosing spondylitis. *Clin Rheumatol* 2013;32:1229-32.
129. Tenga G, Goeb V, Lequerre T, Bacquet-Deschryver H, Daragon A, Pouplin S, et al. A 3 mg/kg starting dose of infliximab in active spondyloarthritis resistant to conventional treatments is efficient, safe and lowers costs. *Joint Bone Spine* 2011;78:50-5.
130. Inman RD, Maksymowych WP, CANDLE Study Group. A double-blind, placebo-controlled trial of low dose infliximab in ankylosing spondylitis. *J Rheumatol* 2010;37:1203-10.
131. Maksymowych WP, Salonen D, Inman RD, Rahman P, Lambert RG, CANDLE Study Group. Low-dose infliximab (3 mg/kg) significantly reduces spinal inflammation on magnetic resonance imaging in patients with ankylosing spondylitis: A randomized placebo-controlled study. *J Rheumatol* 2010 1;37:1728-34.
132. Morck B, Pullerits R, Geijer M, Bremell T, Forsblad-d'Elia H. Infliximab dose reduction sustains the clinical treatment effect in active HLAB27 positive ankylosing spondylitis: A two-year pilot study. *Mediators Inflamm* 2013;2013:289845.
133. Ertenli I, Ozer S, Kiraz S, Apras SB, Akdogan A, Karadag O, et al. Infliximab, a TNF-alpha antagonist treatment in patients with ankylosing spondylitis: The impact on depression, anxiety and quality of life level. *Rheumatol Int* 2012;32:323-30.
134. Giardina AR, Ferrante A, Ciccia F, Impastato R, Miceli MC, Principato A, et al. A 2-year comparative open label randomized study of efficacy and safety of etanercept and infliximab in patients with ankylosing spondylitis. *Rheumatol Int* 2010;30:1437-40.
135. Sieper J, Lenaerts J, Wollenhaupt J, Rudwaleit M, Mazurov VI, Myasoutova L, et al. Efficacy and safety of infliximab plus naproxen versus naproxen alone in patients with early, active axial spondyloarthritis: Results from the double-blind, placebo-controlled INFAST study, part 1. *Ann Rheum Dis* 2013 May 21.
136. Song IH, Weiss A, Hermann KG, Haibel H, Althoff CE, Poddubnyy D, et al. Similar response rates in patients with ankylosing spondylitis and non-radiographic axial spondyloarthritis after 1 year of treatment with etanercept: Results from the ESTHER trial. *Ann Rheum Dis* 2013;72:823-5.
137. Song IH, Hermann KG, Haibel H, Althoff CE, Poddubnyy D, Listing J, et al. Relationship between active inflammatory lesions in the spine and sacroiliac joints and new development of chronic lesions on whole-body MRI in early axial spondyloarthritis: Results of the ESTHER trial at week 48. *Ann Rheum Dis* 2011;70:1257-63.
138. Lubrano E, Spadaro A, Marchesoni A, Olivieri I, Scarpa R, D'Angelo S, et al. The effectiveness of a biologic agent on axial manifestations of psoriatic arthritis. A twelve months observational study in a group of patients treated with etanercept. *Clin Exp Rheumatol* 2011;29:80-4.
139. Sieper J, van der Heijde D, Dougados M, Mease PJ, Maksymowych WP, Brown MA, et al. Efficacy and safety of adalimumab in patients with non-radiographic axial spondyloarthritis: Results of a randomised placebo-controlled trial (ABILITY-1). *Ann Rheum Dis* 2013;72:815-22.
140. Haibel H, Heldmann F, Braun J, Listing J, Kupper H, Sieper J. Long-term efficacy of adalimumab after drug withdrawal and retreatment in patients with active non-radiographically evident axial spondyloarthritis who experience a flare. *Arthritis Rheum* 2013;65:2211-3.
141. Sieper J, van der Heijde D, Dougados M, Brown LS, Lavie F, Pangan AL. Early response to adalimumab predicts long-term remission through 5 years of treatment in patients with ankylosing spondylitis. *Ann Rheum Dis* 2012;71:700-6.
142. Kimel M, Revicki D, Rao S, Fryback D, Feeny D, Harnam N, et al. Norms-based assessment of patient-reported outcomes associated with adalimumab monotherapy in patients with ankylosing spondylitis. *Clin Exp Rheumatol* 2011;29:624-32.
143. Rudwaleit M, Gooch K, Michel B, Herold M, Thorner A, Wong R, et al. Adalimumab improves sleep and sleep quality in patients with active ankylosing spondylitis. *J Rheumatol* 2011;38:79-86.
144. Maksymowych WP, Gooch KL, Wong RL, Kupper H, van der Heijde D. Impact of age, sex, physical function, health-related quality of life, and treatment with adalimumab on work status and work productivity of patients with ankylosing spondylitis. *J Rheumatol* 2010;37:385-92.
145. Braun J, Rudwaleit M, Kary S, Kron M, Wong RL, Kupper H. Clinical manifestations and responsiveness to adalimumab are similar in patients with ankylosing spondylitis with and without concomitant psoriasis. *Rheumatology (Oxford)* 2010;49:1578-89.
146. Rudwaleit M, Claudepierre P, Kron M, Kary S, Wong R, Kupper H. Effectiveness of adalimumab in treating patients with ankylosing spondylitis associated with enthesitis and peripheral arthritis. *Arthritis Res Ther* 2010;12:R43.
147. Rudwaleit M, Van den Bosch F, Kron M, Kary S, Kupper H. Effectiveness and safety of adalimumab in patients with ankylosing spondylitis or psoriatic arthritis and history of anti-tumor necrosis factor therapy. *Arthritis Res Ther* 2010;12:R117.

148. Kobayashi S, Harigai M, Mozaffarian N, Pangan AL, Sharma S, Brown LS, et al. A multicenter, open-label, efficacy, pharmacokinetic, and safety study of adalimumab in Japanese patients with ankylosing spondylitis. *Mod Rheumatol* 2012;22:589-97.
149. Huang F, Gu J, Zhu P, Bao C, Xu J, Xu H, et al. Efficacy and safety of adalimumab in Chinese adults with active ankylosing spondylitis: Results of a randomised, controlled trial. *Ann Rheum Dis* 2013 Mar 8.
150. Inman RD, Davis JC, Jr, Heijde D, Diekman L, Sieper J, Kim SI, et al. Efficacy and safety of golimumab in patients with ankylosing spondylitis: Results of a randomized, double-blind, placebo-controlled, phase III trial. *Arthritis Rheum* 2008;58:3402-12.
151. Braun J, Deodhar A, Inman RD, van der Heijde D, Mack M, Xu S, et al. Golimumab administered subcutaneously every 4 weeks in ankylosing spondylitis: 104-week results of the GO-RAISE study. *Ann Rheum Dis* 2012;71:661-7.
152. Deodhar A, Braun J, Inman RD, Mack M, Parasuraman S, Buchanan J, et al. Golimumab reduces sleep disturbance in patients with active ankylosing spondylitis: Results from a randomized, placebo-controlled trial. *Arthritis Care Res (Hoboken)* 2010;62:1266-71.
153. Braun J, Baraliakos X, Hermann KG, van der Heijde D, Inman RD, Deodhar AA, et al. Golimumab reduces spinal inflammation in ankylosing spondylitis: MRI results of the randomised, placebo-controlled GO-RAISE study. *Ann Rheum Dis* 2012;71:878-84.
154. van der Heijde D, Braun J, Deodhar A, Inman RD, Xu S, Mack ME, et al. Comparison of three enthesitis indices in a multicentre, randomized, placebo-controlled trial of golimumab in ankylosing spondylitis (GO-RAISE). *Rheumatology (Oxford)* 2013;52:321-5.
155. Wagner C, Visvanathan S, Braun J, van der Heijde D, Deodhar A, Hsu B, et al. Serum markers associated with clinical improvement in patients with ankylosing spondylitis treated with golimumab. *Ann Rheum Dis* 2012;71:674-80.
156. Landewe R, Braun J, Deodhar A, Dougados M, Maksymowych WP, Mease PJ, et al. Efficacy of certolizumab pegol on signs and symptoms of axial spondyloarthritis including ankylosing spondylitis: 24-week results of a double-blind randomised placebo-controlled phase 3 study. *Ann Rheum Dis* 2013 Nov 14.
157. Brooks M. Medscape: FDA clears certolizumab (cimzia) for ankylosing spondylitis.
158. Coates LC, Tillett W, Chandler D, Helliwell PS, Korendowych E, Kyle S, et al. The 2012 BSR and BHRP guideline for the treatment of psoriatic arthritis with biologics. *Rheumatology (Oxford)* 2013;52:1754-7.
159. Esposito M, Giunta A, Mazzotta A, Zangrilli A, Babino G, Bavetta M, et al. Efficacy and safety of subcutaneous anti-tumor necrosis factor-alpha agents, etanercept and adalimumab, in elderly patients affected by psoriasis and psoriatic arthritis: An observational long-term study. *Dermatology* 2012;225:312-9.
160. Scarpa R, Atteno M, Lubrano E, Provenzano G, D'Angelo S, Spadaro A, et al. The effectiveness and safety of TNF-alpha blockers in the treatment of early psoriatic arthritis: An Italian multicentre longitudinal observational pilot study. *Clin Rheumatol* 2011;30:1063-7.
161. De Agustin JJ, Moragues C, De Miguel E, Moller I, Acebes C, Naredo E, et al. A multicentre study on high-frequency ultrasound evaluation of the skin and joints in patients with psoriatic arthritis treated with infliximab. *Clin Exp Rheumatol* 2012;30:879-85.
162. Di Minno MN, Iervolino S, Peluso R, Russolillo A, Lupoli R, Scarpa R, et al. Hepatic steatosis and disease activity in subjects with psoriatic arthritis receiving tumor necrosis factor-alpha blockers. *J Rheumatol* 2012;39:1042-6.
163. Iervolino S, Di Minno MN, Peluso R, Lofrano M, Russolillo A, Di Minno G, et al. Predictors of early minimal disease activity in patients with psoriatic arthritis treated with tumor necrosis factor-alpha blockers. *J Rheumatol* 2012;39:568-73.
164. Migliore A, Bizzi E, Broccoli S, Lagana B. Indirect comparison of etanercept, infliximab, and adalimumab for psoriatic arthritis: Mixed treatment comparison using placebo as common comparator. *Clin Rheumatol* 2012;31:133-7.
165. Eder L, Thavaneswaran A, Chandran V, Gladman DD. Tumor necrosis factor alpha blockers are more effective than methotrexate in the inhibition of radiographic joint damage progression among patients with psoriatic arthritis. *Ann Rheum Dis* 2013 Apr 25.
166. Marzo-Ortega H, McGonagle D, O'Connor P, Emery P. Efficacy of etanercept in the treatment of the enthesal pathology in resistant spondylarthropathy: A clinical and magnetic resonance imaging study. *Arthritis Rheum* 2001;44:2112-7.
167. Dougados M, van der Linden S, Leirisalo-Repo M, Huitfeldt B, Juhlin R, Veys E, et al. Sulfasalazine in the treatment of spondylarthropathy. A randomized, multicenter, double-blind, placebo-controlled study. *Arthritis Rheum* 1995;38:618-27.
168. Dougados M, Combe B, Braun J, Landewe R, Sibia J, Cantagrel A, et al. A randomised, multicentre, double-blind, placebo-controlled trial of etanercept in adults with refractory heel enthesitis in spondyloarthritis: The HEEL trial. *Ann Rheum Dis* 2010;69:1430-5.
169. Antoni C, Krueger GG, de Vlam K, Birbara C, Beutler A, Guzzo C, et al. Infliximab improves signs and symptoms of psoriatic arthritis: Results of the IMPACT 2 trial. *Ann Rheum Dis* 2005;64:1150-7.
170. Antoni CE, Kavanaugh A, Kirkham B, Tutuncu Z, Burmester GR, Schneider U, et al. Sustained benefits of infliximab therapy for dermatologic and articular manifestations of psoriatic arthritis: Results from the infliximab multinational psoriatic arthritis controlled trial (IMPACT). *Arthritis Rheum* 2005;52:1227-36.
171. Gladman DD, ACCLAIM Study Investigators, Sampalis JS, Illouz O, Guerette B. Responses to adalimumab in patients with active psoriatic arthritis who have not adequately responded to prior therapy: Effectiveness and safety results from an open-label study. *J Rheumatol* 2010;37:1898-906.

172. Genovese MC, Mease PJ, Thomson GT, Kivitz AJ, Perdok RJ, Weinberg MA, et al. Safety and efficacy of adalimumab in treatment of patients with psoriatic arthritis who had failed disease modifying antirheumatic drug therapy. *J Rheumatol*. 2007;34:1040-50.
173. Kavanaugh A, McInnes I, Mease P, Krueger GG, Gladman D, Gomez-Reino J, et al. Golimumab, a new human tumor necrosis factor alpha antibody, administered every four weeks as a subcutaneous injection in psoriatic arthritis: Twenty-four-week efficacy and safety results of a randomized, placebo-controlled study. *Arthritis Rheum* 2009;60:976-86.
174. Kavanaugh A, Mease P. Treatment of psoriatic arthritis with tumor necrosis factor inhibitors: Longer-term outcomes including enthesitis and dactylitis with golimumab treatment in the longterm extension of a randomized, placebo-controlled study (GO-REVEAL). *J Rheumatol Suppl* 2012;89:90-3.
175. Mease PJ, Fleischmann R, Deodhar AA, Wollenhaupt J, Khraishi M, Kielar D, et al. Effect of certolizumab pegol on signs and symptoms in patients with psoriatic arthritis: 24-week results of a phase 3 double-blind randomised placebo-controlled study (RAPID-PsA). *Ann Rheum Dis* 2014;73:48-55.
176. Gladman DD, Ziouzzina O, Thavaneswaran A, Chandran V. Dactylitis in psoriatic arthritis: Prevalence and response to therapy in the biologic era. *J Rheumatol* 2013;40:1357-9.
177. Ritchlin CT, Kavanaugh A, Gladman DD, Mease PJ, Helliwell P, Boehncke WH, et al. Treatment recommendations for psoriatic arthritis. *Ann Rheum Dis* 2009;68:1387-94.
178. Health Canada. [Internet. Accessed January 16, 2015.] Available from: www.hc-sc.gc.ca/index-eng.php
179. Braun J, Baraliakos X, Listing J, Sieper J. Decreased incidence of anterior uveitis in patients with ankylosing spondylitis treated with the anti-tumor necrosis factor agents infliximab and etanercept. *Arthritis Rheum* 2005;52:2447-51.
180. Rudwaleit M, Rodevand E, Holck P, Vanhoof J, Kron M, Kary S, et al. Adalimumab effectively reduces the rate of anterior uveitis flares in patients with active ankylosing spondylitis: Results of a prospective open-label study. *Ann Rheum Dis* 2009;68:696-701.
181. Gao X, Wendling D, Botteman MF, Carter JA, Rao S, Cifaldi M. Clinical and economic burden of extra-articular manifestations in ankylosing spondylitis patients treated with anti-tumor necrosis factor agents. *J Med Econ* 2012;15:1054-63.
182. Breban M, Ravaut P, Claudepierre P, Baron G, Henry YD, Hudry C, et al. Maintenance of infliximab treatment in ankylosing spondylitis: Results of a one-year randomized controlled trial comparing systematic versus on-demand treatment. *Arthritis Rheum* 2008;58:88-97.
183. Li EK, Griffith JF, Lee VW, Wang YX, Li TK, Lee KK, et al. Short-term efficacy of combination methotrexate and infliximab in patients with ankylosing spondylitis: A clinical and magnetic resonance imaging correlation. *Rheumatology (Oxford)* 2008;47:1358-63.
184. Marzo-Ortega H, McGonagle D, Jarrett S, Haugeberg G, Hensor E, O'connor P, et al. Infliximab in combination with methotrexate in active ankylosing spondylitis: A clinical and imaging study. *Ann Rheum Dis* 2005;64:1568-75.
185. Ternant D, Mulleman D, Lauferon F, Vignault C, Ducourau E, Wendling D, et al. Influence of methotrexate on infliximab pharmacokinetics and pharmacodynamics in ankylosing spondylitis. *Br J Clin Pharmacol* 2012;73:55-65.
186. Mulleman D, Lauferon F, Wendling D, Ternant D, Ducourau E, Paintaud G, et al. Infliximab in ankylosing spondylitis: Alone or in combination with methotrexate? A pharmacokinetic comparative study. *Arthritis Res Ther* 2011;13:R82.
187. Mease PJ, Kivitz AJ, Burch FX, Siegel EL, Cohen SB, Ory P, et al. Etanercept treatment of psoriatic arthritis: Safety, efficacy, and effect on disease progression. *Arthritis Rheum* 2004;50:2264-72.
188. Gladman DD, Mease PJ, Ritchlin CT, Choy EH, Sharp JT, Ory PA, et al. Adalimumab for long-term treatment of psoriatic arthritis: Forty-eight week data from the adalimumab effectiveness in psoriatic arthritis trial. *Arthritis Rheum* 2007;56:476-88.
189. Mease PJ, Gladman DD, Ritchlin CT, Ruderman EM, Steinfeld SD, Choy EH, et al. Adalimumab for the treatment of patients with moderately to severely active psoriatic arthritis: Results of a double-blind, randomized, placebo-controlled trial. *Arthritis Rheum* 2005 Oct;52:3279-89.
190. Heiberg MS, Koldingsnes W, Mikkelsen K, Rodevand E, Kaufmann C, Mowinckel P, et al. The comparative one-year performance of anti-tumor necrosis factor alpha drugs in patients with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis: Results from a longitudinal, observational, multicenter study. *Arthritis Rheum* 2008;59:234-40.
191. Kristensen LE, Gulfe A, Saxne T, Geborek P. Efficacy and tolerability of anti-tumour necrosis factor therapy in psoriatic arthritis patients: Results from the south swedish arthritis treatment group register. *Ann Rheum Dis* 2008;67:364-9.
192. Kristensen LE, Geborek P, Saxne T. Dose escalation of infliximab therapy in arthritis patients is related to diagnosis and concomitant methotrexate treatment: Observational results from the south swedish arthritis treatment group register. *Rheumatology (Oxford)* 2009;48:243-5.
193. Saad AA, Ashcroft DM, Watson KD, Hyrich KL, Noyce PR, Symmons DP, et al. Persistence with anti-tumour necrosis factor therapies in patients with psoriatic arthritis: Observational study from the british society of rheumatology biologics register. *Arthritis Res Ther* 2009;11:R52.
194. Glinborg B, Ostergaard M, Krogh NS, Andersen MD, Tarp U, Loft AG, et al. Clinical response, drug survival, and predictors thereof among 548 patients with psoriatic arthritis who switched tumor necrosis factor alpha inhibitor therapy: Results from the danish nationwide DANBIO registry. *Arthritis Rheum* 2013;65:1213-23.
195. Glinborg B, Ostergaard M, Krogh NS, Tarp U, Manilo N, Loft AG, et al. Clinical response, drug survival and predictors thereof in 432 ankylosing spondylitis patients after switching tumour necrosis factor alpha inhibitor therapy: Results from the danish nationwide DANBIO registry. *Ann Rheum Dis* 2013;72:1149-55.

196. Lie E, van der Heijde D, Uhlig T, Mikkelsen K, Rodevand E, Koldingsnes W, et al. Effectiveness of switching between TNF inhibitors in ankylosing spondylitis: Data from the NOR-DMARD register. *Ann Rheum Dis* 2011;70:157-63.
197. Coates LC, Cawkwell LS, Ng NW, Bennett AN, Bryer DJ, Fraser AD, et al. Real life experience confirms sustained response to long-term biologics and switching in ankylosing spondylitis. *Rheumatology (Oxford)* 2008;47:897-900.
198. Dadoun S, Geri G, Paternotte S, Dougados M, Gossec L. Switching between tumour necrosis factor blockers in spondyloarthritis: A retrospective monocentre study of 222 patients. *Clin Exp Rheumatol* 2011;29:1010-3.
199. Spadaro A, Lubrano E, Marchesoni A, D'Angelo S, Ramonda R, Addimanda O, et al. Remission in ankylosing spondylitis treated with anti-TNF-alpha drugs: A national multicentre study. *Rheumatology (Oxford)* 2013;52:1914-9.
200. Cantini F, Niccoli L, Benucci M, Chindamo D, Nannini C, Olivieri I, et al. Switching from infliximab to once-weekly administration of 50 mg etanercept in resistant or intolerant patients with ankylosing spondylitis: Results of a fifty-four-week study. *Arthritis Rheum* 2006;55:812-6.
201. Fagerli KM, Lie E, van der Heijde D, Heiberg MS, Kalstad S, Rodevand E, et al. Switching between TNF inhibitors in psoriatic arthritis: Data from the NOR-DMARD study. *Ann Rheum Dis* 2013;72:1840-4.
202. Coates LC, Cawkwell LS, Ng NW, Bennett AN, Bryer DJ, Fraser AD, et al. Sustained response to long-term biologics and switching in psoriatic arthritis: Results from real life experience. *Ann Rheum Dis* 2008;67:717-9.
203. Pitarch G, Sanchez-Carazo JL, Mahiques L, Perez-Ferriols MA, Fortea JM. Treatment of psoriasis with adalimumab. *Clin Exp Dermatol* 2007;32:18-22.
204. Papoutsaki M, Chimenti MS, Costanzo A, Talamonti M, Zangrilli A, Giunta A, et al. Adalimumab for severe psoriasis and psoriatic arthritis: An open-label study in 30 patients previously treated with other biologics. *J Am Acad Dermatol* 2007;57:269-75.
205. Paccou J, Solau-Gervais E, Houvenagel E, Salleron J, Luraschi H, Philippe P, et al. Efficacy in current practice of switching between anti-tumour necrosis factor- alpha agents in spondyloarthropathies. *Rheumatology (Oxford)* 2011;50:714-20.
206. Gomez-Reino JJ, Carmona L, BIOBADASER Group. Switching TNF antagonists in patients with chronic arthritis: An observational study of 488 patients over a four-year period. *Arthritis Res Ther* 2006;8:R29.
207. Conti F, Ceccarelli F, Marocchi E, Magrini L, Spinelli FR, Spadaro A, et al. Switching tumour necrosis factor alpha antagonists in patients with ankylosing spondylitis and psoriatic arthritis: An observational study over a 5-year period. *Ann Rheum Dis* 2007;66:1393-7.
208. Delaunay C, Farrenq V, Marini-Portugal A, Cohen JD, Chevalier X, Claudepierre P. Infliximab to etanercept switch in patients with spondyloarthropathies and psoriatic arthritis: Preliminary data. *J Rheumatol* 2005;32:2183-5.
209. Spadaro A, Punzi L, Marchesoni A, Lubrano E, Mathieu A, Cantini F, et al. Switching from infliximab or etanercept to adalimumab in resistant or intolerant patients with spondyloarthritis: A 4-year study. *Rheumatology (Oxford)* 2010;49:1107-11.
210. Song IH, Heldmann F, Rudwaleit M, Listing J, Appel H, Braun J, et al. Different response to rituximab in tumor necrosis factor blocker-naive patients with active ankylosing spondylitis and in patients in whom tumor necrosis factor blockers have failed: A twenty-four-week clinical trial. *Arthritis Rheum* 2010;62:1290-7.
211. Song IH, Heldmann F, Rudwaleit M, Listing J, Appel H, Haug-Rost I, et al. One-year follow-up of ankylosing spondylitis patients responding to rituximab treatment and re-treated in case of a flare. *Ann Rheum Dis* 2013;72:305-6.
212. Wendling D, Dougados M, Berenbaum F, Brocq O, Schaeffer T, Mazieres B, et al. Rituximab treatment for spondyloarthritis. A nationwide series: Data from the AIR registry of the french society of rheumatology. *J Rheumatol* 2012;39:2327-31.
213. Jimenez-Boj E, Stamm TA, Sadlonova M, Rovensky J, Raffayova H, Leeb B, et al. Rituximab in psoriatic arthritis: An exploratory evaluation. *Ann Rheum Dis* 2012;71:1868-71.
214. Huang Y, Cheng F, Zhang X, Tang J. Marked reduction of sacroiliac joint inflammation on magnetic resonance imaging in a patient with ankylosing spondylitis after rituximab treatment. *J Rheumatol* 2011;38:2083-4.
215. Rodriguez-Escalera C, Fernandez-Nebro A. The use of rituximab to treat a patient with ankylosing spondylitis and hepatitis B. *Rheumatology (Oxford)* 2008;47:1732-3.
216. Cohen JD. Successful treatment of psoriatic arthritis with rituximab. *Ann Rheum Dis* 2008;67:1647-8.
217. McInnes IB, Kavanaugh A, Gottlieb AB, Puig L, Rahman P, Ritchlin C, et al. Efficacy and safety of ustekinumab in patients with active psoriatic arthritis: 1 year results of the phase 3, multicentre, double-blind, placebo-controlled PSUMMIT 1 trial. *Lancet* 2013;382:780-9.
218. Gottlieb A, Menter A, Mendelsohn A, Shen YK, Li S, Guzzo C, et al. Ustekinumab, a human interleukin 12/23 monoclonal antibody, for psoriatic arthritis: Randomised, double-blind, placebo-controlled, crossover trial. *Lancet* 2009;373:633-40.
219. Kavanaugh A, Menter A, Mendelsohn A, Shen YK, Lee S, Gottlieb AB. Effect of ustekinumab on physical function and health-related quality of life in patients with psoriatic arthritis: A randomized, placebo-controlled, phase II trial. *Curr Med Res Opin* 2010;26:2385-92.
220. Song IH, Heldmann F, Rudwaleit M, Haibel H, Weiss A, Braun J, et al. Treatment of active ankylosing spondylitis with abatacept: An open-label, 24-week pilot study. *Ann Rheum Dis* 2011;70:1108-10.
221. Lekpa FK, Farrenq V, Canoui-Poitaine F, Paul M, Chevalier X, Bruckert R, et al. Lack of efficacy of abatacept in axial spondylarthropathies refractory to tumor-necrosis-factor inhibition. *Joint Bone Spine* 2012;79:47-50.

222. Mease P, Genovese MC, Gladstein G, Kivitz AJ, Ritchlin C, Tak PP, et al. Abatacept in the treatment of patients with psoriatic arthritis: Results of a six-month, multicenter, randomized, double-blind, placebo-controlled, phase II trial. *Arthritis Rheum* 2011;63:939-48.
223. Sieper J, Porter-Brown B, Thompson L, Harari O, Dougados M. Assessment of short-term symptomatic efficacy of tocilizumab in ankylosing spondylitis: Results of randomised, placebo-controlled trials. *Ann Rheum Dis* 2014;73:95-100.
224. Cohen JD, Ferreira R, Jorgensen C. Ankylosing spondylitis refractory to tumor necrosis factor blockade responds to tocilizumab. *J Rheumatol*. 2011;38:1527.
225. Henes JC, Horger M, Guenaydin I, Kanz L, Koetter I. Mixed response to tocilizumab for ankylosing spondylitis. *Ann Rheum Dis* 2010;69:2217-8.
226. Hughes M, Chinoy H. Successful use of tocilizumab in a patient with psoriatic arthritis. *Rheumatology (Oxford)* 2013;52:1728-9.
227. Ogata A, Umegaki N, Katayama I, Kumanogoh A, Tanaka T. Psoriatic arthritis in two patients with an inadequate response to treatment with tocilizumab. *Joint Bone Spine* 2012;79:85-7.
228. Tanaka T, Kuwahara Y, Shima Y, Hirano T, Kawai M, Ogawa M, et al. Successful treatment of reactive arthritis with a humanized anti-interleukin-6 receptor antibody, tocilizumab. *Arthritis Rheum* 2009;61:1762-4.
229. Tan AL, Marzo-Ortega H, O'Connor P, Fraser A, Emery P, McGonagle D. Efficacy of anakinra in active ankylosing spondylitis: A clinical and magnetic resonance imaging study. *Ann Rheum Dis* 2004;63:1041-5.
230. Bennett AN, Tan AL, Coates LC, Emery P, Marzo-Ortega H, McGonagle D. Sustained response to anakinra in ankylosing spondylitis. *Rheumatology (Oxford)* 2008;47:223-4.
231. Haibel H, Rudwaleit M, Listing J, Sieper J. Open label trial of anakinra in active ankylosing spondylitis over 24 weeks. *Ann Rheum Dis* 2005;64:296-8.
232. Vander Cruyssen B, Munoz-Gomariz E, Font P, Mulero J, de Vlam K, Boonen A, et al. Hip involvement in ankylosing spondylitis: Epidemiology and risk factors associated with hip replacement surgery. *Rheumatology (Oxford)* 2010;49:73-81.
233. Burki V, Gossec L, Payet J, Durnez A, Elhai M, Fabreguet I, et al. Prevalence and characteristics of hip involvement in spondyloarthritis: A single-centre observational study of 275 patients. *Clin Exp Rheumatol* 2012;30:481-6.
234. Tang WM, Chiu KY. Primary total hip arthroplasty in patients with ankylosing spondylitis. *J Arthroplasty* 2000;15:52-8.
235. Sweeney S, Gupta R, Taylor G, Calin A. Total hip arthroplasty in ankylosing spondylitis: Outcome in 340 patients. *J Rheumatol* 2001;28:1862-6.
236. Bhan S, Eachempati KK, Malhotra R. Primary cementless total hip arthroplasty for bony ankylosis in patients with ankylosing spondylitis. *J Arthroplasty* 2008;23:859-66.
237. Joshi AB, Markovic L, Hardinge K, Murphy JC. Total hip arthroplasty in ankylosing spondylitis: An analysis of 181 hips. *J Arthroplasty* 2002;17:427-33.
238. Lehtimäki MY, Lehto MU, Kautiainen H, Lehtinen K, Hamalainen MM. Charnley total hip arthroplasty in ankylosing spondylitis: Survivorship analysis of 76 patients followed for 8-28 years. *Acta Orthop Scand* 2001;72:233-6.
239. Sochart DH, Porter ML. Long-term results of total hip replacement in young patients who had ankylosing spondylitis. eighteen to thirty-year results with survivorship analysis. *J Bone Joint Surg Am*. 1997;79:1181-9.
240. Brinker MR, Rosenberg AG, Kull L, Cox DD. Primary noncemented total hip arthroplasty in patients with ankylosing spondylitis. clinical and radiographic results at an average follow-up period of 6 years. *J Arthroplasty* 1996;11:802-12.
241. Shih LY, Chen TH, Lo WH, Yang DJ. Total hip arthroplasty in patients with ankylosing spondylitis: Longterm followup. *J Rheumatol* 1995;22:1704-9.
242. Walker LG, Sledge CB. Total hip arthroplasty in ankylosing spondylitis. *Clin Orthop Relat Res* 1991;198-204.
243. Kilgus DJ, Namba RS, Gorek JE, Cracchiolo A, 3rd, Amstutz HC. Total hip replacement for patients who have ankylosing spondylitis. the importance of the formation of heterotopic bone and of the durability of fixation of cemented components. *J Bone Joint Surg Am* 1990;72:834-9.
244. Calin A, Elswood J. The outcome of 138 total hip replacements and 12 revisions in ankylosing spondylitis: High success rate after a mean followup of 7.5 years. *J Rheumatol* 1989;16:955-8.
245. Sundaram NA, Murphy JC. Heterotopic bone formation following total hip arthroplasty in ankylosing spondylitis. *Clin Orthop Relat Res* 1986;223-6.
246. Nystad TW, Furnes O, Havelin LI, Skredderstuen AK, Lie SA, Fevang BT. Hip replacement surgery in patients with ankylosing spondylitis. *Ann Rheum Dis* 2013 Nov 27.
247. Wang Y, Zhang Y, Mao K, Zhang X, Wang Z, Zheng G, et al. Transpedicular bivertebrae wedge osteotomy and discectomy in lumbar spine for severe ankylosing spondylitis. *J Spinal Disord Tech* 2010;23:186-91.
248. Belanger TA, Milam RA, 4th, Roh JS, Bohlman HH. Cervicothoracic extension osteotomy for chin-on-chest deformity in ankylosing spondylitis. *J Bone Joint Surg Am* 2005;87:1732-8.
249. Chang KW, Chen HC, Chen YY, Lin CC, Hsu HL, Cai YH. Sagittal translation in opening wedge osteotomy for the correction of thoracolumbar kyphotic deformity in ankylosing spondylitis. *Spine (Phila Pa 1976)* 2006;31:1137-42.
250. Kim KT, Suk KS, Cho YJ, Hong GP, Park BJ. Clinical outcome results of pedicle subtraction osteotomy in ankylosing spondylitis with kyphotic deformity. *Spine (Phila Pa 1976)* 2002;27:612-8.

251. Langeloo DD, Journee HL, Pavlov PW, de Kleuver M. Cervical osteotomy in ankylosing spondylitis: Evaluation of new developments. *Eur Spine J* 2006;15:493-500.
252. Simmons ED, DiStefano RJ, Zheng Y, Simmons EH. Thirty-six years experience of cervical extension osteotomy in ankylosing spondylitis: Techniques and outcomes. *Spine (Phila Pa 1976)* 2006;31:3006-12.
253. Qian BP, Wang XH, Qiu Y, Wang B, Zhu ZZ, Jiang J, et al. The influence of closing-opening wedge osteotomy on sagittal balance in thoracolumbar kyphosis secondary to ankylosing spondylitis: A comparison with closing wedge osteotomy. *Spine (Phila Pa 1976)* 2012;37:1415-23.
254. Brox JI, Helle A, Sorensen R, Gunderson R, Riise R, Reikeras O. Functional outcome after lumbar closing wedge osteotomy in ankylosing spondylitis. *Int Orthop* 2009;33:1049-53.
255. Weale AE, Marsh CH, Yeoman PM. Secure fixation of lumbar osteotomy. surgical experience with 50 patients. *Clin Orthop Relat Res* 1995;216-22.
256. van Royen BJ, Slot GH. Closing-wedge posterior osteotomy for ankylosing spondylitis. partial corporectomy and transpedicular fixation in 22 cases. *J Bone Joint Surg Br* 1995;77:117-21.
257. Hehne HJ, Zielke K, Bohm H. Polysegmental lumbar osteotomies and transpedicled fixation for correction of long-curved kyphotic deformities in ankylosing spondylitis. report on 177 cases. *Clin Orthop Relat Res* 1990:49-55.
258. Min K, Hahn F, Leonardi M. Lumbar spinal osteotomy for kyphosis in ankylosing spondylitis: The significance of the whole body kyphosis angle. *J Spinal Disord Tech* 2007;20:149-53.
259. Chang KW, Chen YY, Lin CC, Hsu HL, Pai KC. Closing wedge osteotomy versus opening wedge osteotomy in ankylosing spondylitis with thoracolumbar kyphotic deformity. *Spine (Phila Pa 1976)* 2005;30:1584-93.
260. Kim KT, Lee SH, Suk KS, Lee JH, Im YJ. Spinal pseudarthrosis in advanced ankylosing spondylitis with sagittal plane deformity: Clinical characteristics and outcome analysis. *Spine (Phila Pa 1976)*. 2007;32:1641-7.
261. Chang KW, Tu MY, Huang HH, Chen HC, Chen YY, Lin CC. Posterior correction and fixation without anterior fusion for pseudoarthrosis with kyphotic deformity in ankylosing spondylitis. *Spine (Phila Pa 1976)* 2006;31:E408-13.
262. Tse SM, Burgos-Vargas R, Colbert RA. Juvenile spondyloarthritis treatment recommendations. *Am J Med Sci* 2012;343:367-70.
263. van Brussel M, Lelieveld OT, van der Net J, Engelbert RH, Helders PJ, Takken T. Aerobic and anaerobic exercise capacity in children with juvenile idiopathic arthritis. *Arthritis Rheum* 2007;57:891-7.
264. Lelieveld OT, van Brussel M, Takken T, van Weert E, van Leeuwen MA, Armbrust W. Aerobic and anaerobic exercise capacity in adolescents with juvenile idiopathic arthritis. *Arthritis Rheum* 2007;57:898-904.
265. Takken T, Van Brussel M, Engelbert RH, Van Der Net J, Kuis W, Helders PJ. Exercise therapy in juvenile idiopathic arthritis: A cochrane review. *Eur J Phys Rehabil Med* 2008;44:287-97.
266. Taracki E, Yeldan I, Baydogan SN, Olgar S, Kasapcopur O. Efficacy of a land-based home exercise programme for patients with juvenile idiopathic arthritis: A randomized, controlled, single-blind study. *J Rehabil Med* 2012;44:962-7.
267. Singh-Grewal D, Schneiderman-Walker J, Wright V, Bar-Or O, Beyene J, Selvadurai H, et al. The effects of vigorous exercise training on physical function in children with arthritis: A randomized, controlled, single-blinded trial. *Arthritis Rheum* 2007;57:1202-10.
268. Powell M, Seid M, Szer IS. Efficacy of custom foot orthotics in improving pain and functional status in children with juvenile idiopathic arthritis: A randomized trial. *J Rheumatol* 2005;32:943-50.
269. Fischer T, Biedermann T, Hermann KG, Diekmann F, Braun J, Hamm B, et al. Sacroiliitis in children with spondyloarthropathy: Therapeutic effect of CT-guided intra-articular corticosteroid injection. *Rofo* 2003;175:814-21.
270. Papadopoulou C, Kostik M, Gonzalez-Fernandez MI, Bohm M, Nieto-Gonzalez JC, Pistorio A, et al. Delineating the role of multiple intraarticular corticosteroid injections in the management of juvenile idiopathic arthritis in the biologic era. *Arthritis Care Res (Hoboken)* 2013;65:1112-20.
271. Young CM, Shiels WE, 2nd, Coley BD, Hogan MJ, Murakami JW, Jones K, et al. Ultrasound-guided corticosteroid injection therapy for juvenile idiopathic arthritis: 12-year care experience. *Pediatr Radiol* 2012;42:1481-9.
272. Habibi S, Ellis J, Strike H, Ramanan AV. Safety and efficacy of US-guided CS injection into temporomandibular joints in children with active JIA. *Rheumatology (Oxford)* 2012;51:874-7.
273. Ringold S, Torgerson TR, Egbert MA, Wallace CA. Intraarticular corticosteroid injections of the temporomandibular joint in juvenile idiopathic arthritis. *J Rheumatol* 2008;35:1157-64.
274. Cahill AM, Cho SS, Baskin KM, Beukelman T, Cron RQ, Kaye RD, et al. Benefit of fluoroscopically guided intraarticular, long-acting corticosteroid injection for subtalar arthritis in juvenile idiopathic arthritis. *Pediatr Radiol* 2007;37:544-8.
275. Ravelli A, Manzoni SM, Viola S, Pistorio A, Ruperto N, Martini A. Factors affecting the efficacy of intraarticular corticosteroid injection of knees in juvenile idiopathic arthritis. *J Rheumatol* 2001 Sep;28:2100-2.
276. Burgos-Vargas R, Vazquez-Mellado J, Pacheco-Tena C, Hernandez-Garduno A, Goycochea-Robles MV. A 26 week randomised, double blind, placebo controlled exploratory study of sulfasalazine in juvenile onset spondyloarthropathies. *Ann Rheum Dis* 2002;61:941-2.
277. van Rossum MA, Fiselier TJ, Franssen MJ, Zwinderman AH, ten Cate R, van Suijlekom-Smit LW, et al. Sulfasalazine in the treatment of juvenile chronic arthritis: A randomized, double-blind, placebo-controlled, multicenter study. dutch juvenile chronic arthritis study group. *Arthritis Rheum* 1998;41:808-16.

278. van Rossum MA, van Soesbergen RM, Boers M, Zwinderman AH, Fiselier TJ, Franssen MJ, et al. Long-term outcome of juvenile idiopathic arthritis following a placebo-controlled trial: Sustained benefits of early sulfasalazine treatment. *Ann Rheum Dis* 2007;66:1518-24.
279. Huang JL, Chen LC. Sulphasalazine in the treatment of children with chronic arthritis. *Clin Rheumatol* 1998;17:359-63.
280. Imundo LF, Jacobs JC. Sulfasalazine therapy for juvenile rheumatoid arthritis. *J Rheumatol* 1996;23:360-6.
281. Job-Deslandre C, Menkes CJ. Treatment of juvenile spondyloarthropathies with sulfasalazine. *Rev Rhum Ed Fr* 1993;60:489-91.
282. Suschke HJ. Treatment of juvenile spondylarthritis and reactive arthritis with sulfasalazine. *Monatsschr Kinderheilkd* 1992;140:658-60.
283. Chen CC, Lin YT, Yang YH, Chiang BL. Sulfasalazine therapy for juvenile rheumatoid arthritis. *J Formos Med Assoc* 2002;101:110-6.
284. Brooks CD. Sulfasalazine for the management of juvenile rheumatoid arthritis. *J Rheumatol* 2001;28:845-53.
285. Varbanova BB, Dyankov ED. Sulphasalazine. an alternative drug for second-line treatment of juvenile chronic arthritis. *Adv Exp Med Biol* 1999;455:331-6.
286. Gedalia A, Barash J, Press J, Buskila D. Sulphasalazine in the treatment of pauciarticular-onset juvenile chronic arthritis. *Clin Rheumatol* 1993;12:511-4.
287. Hoza J, Kadlecova T, Nemcova D, Havelka S. Sulphasalazine and delagil--a comparative study in patients with juvenile chronic arthritis. *Acta Univ Carol Med (Praha)* 1991;37:80-3.
288. Joos R, Veys EM, Mielants H, van Werveke S, Goemaere S. Sulfasalazine treatment in juvenile chronic arthritis: An open study. *J Rheumatol* 1991;18:880-4.
289. Ansell BM, Hall MA, Loftus JK, Woo P, Neumann V, Harvey A, et al. A multicentre pilot study of sulphasalazine in juvenile chronic arthritis. *Clin Exp Rheumatol* 1991;9:201-3.
290. Ozdogan H, Turunc M, Deringol B, Yurdakul S, Yazici H. Sulphasalazine in the treatment of juvenile rheumatoid arthritis: A preliminary open trial. *J Rheumatol* 1986;13:124-5.
291. Giannini EH, Brewer EJ, Kuzmina N, Shaikov A, Maximov A, Vorontsov I, et al. Methotrexate in resistant juvenile rheumatoid arthritis. results of the U.S.A.-U.S.S.R. double-blind, placebo-controlled trial. the pediatric rheumatology collaborative study group and the cooperative children's study group. *N Engl J Med* 1992;326:1043-9.
292. Ruperto N, Murray KJ, Gerloni V, Wulffraat N, de Oliveira SK, Falcini F, et al. A randomized trial of parenteral methotrexate comparing an intermediate dose with a higher dose in children with juvenile idiopathic arthritis who failed to respond to standard doses of methotrexate. *Arthritis Rheum* 2004;50:2191-201.
293. Woo P, Southwood TR, Prieur AM, Dore CJ, Grainger J, David J, et al. Randomized, placebo-controlled, crossover trial of low-dose oral methotrexate in children with extended oligoarticular or systemic arthritis. *Arthritis Rheum* 2000;43:1849-57.
294. Klein A, Kaul I, Foeldvari I, Ganser G, Urban A, Horneff G. Efficacy and safety of oral and parenteral methotrexate therapy in children with juvenile idiopathic arthritis: An observational study with patients from the german methotrexate registry. *Arthritis Care Res (Hoboken)* 2012;64:1349-56.
295. Cespedes-Cruz A, Gutierrez-Suarez R, Pistorio A, Ravelli A, Loy A, Murray KJ, et al. Methotrexate improves the health-related quality of life of children with juvenile idiopathic arthritis. *Ann Rheum Dis* 2008;67:309-14.
296. Brik R, Gepstein V, Berkovitz D. Low-dose methotrexate treatment for oligoarticular juvenile idiopathic arthritis nonresponsive to intra-articular corticosteroids. *Clin Rheumatol* 2005;24:612-4.
297. Reiff A, Shaham B, Wood BP, Bernstein BH, Stanley P, Szer IS. High dose methotrexate in the treatment of refractory juvenile rheumatoid arthritis. *Clin Exp Rheumatol* 1995 Jan-;13:113-8.
298. Halle F, Prieur AM. Evaluation of methotrexate in the treatment of juvenile chronic arthritis according to the subtype. *Clin Exp Rheumatol* 1991;9:297-302.
299. Silverman E, Mouy R, Spiegel L, Jung LK, Saurenmann RK, Lahdenne P, et al. Leflunomide or methotrexate for juvenile rheumatoid arthritis. *N Engl J Med* 2005;352:1655-66.
300. Silverman E, Spiegel L, Hawkins D, Petty R, Goldsmith D, Schanberg L, et al. Long-term open-label preliminary study of the safety and efficacy of leflunomide in patients with polyarticular-course juvenile rheumatoid arthritis. *Arthritis Rheum* 2005;52:554-62.
301. Burgos-Vargas R, Gutierrez-Suarez C. Efficacy, safety and tolerability of infliximab in juvenile-onset spondyloarthropathies (JO-SpA): results of a three-month, randomized, double-blind, placebo-controlled trial phase. *Arthritis and Rheumatism* 2007;56:S319.
302. Burgos-Vargas R, Gutierrez-Suarez C. A 3-month, double-blind, placebo-controlled, randomized trial of infliximab in juvenile-onset spondyloarthritis (SpA) and a 52-week open extension. *Clin.Exp.Rheumatol* 2008;26:745.
303. Tse SM, Burgos-Vargas R, Laxer RM. Anti-tumor necrosis factor alpha blockade in the treatment of juvenile spondylarthropathy. *Arthritis Rheum* 2005;52:2103-8.
304. Sulpice M, Deslandre CJ, Quartier P. Efficacy and safety of TNFalpha antagonist therapy in patients with juvenile spondyloarthropathies. *Joint Bone Spine* 2009;76:24-7.
305. Otten MH, Prince FH, Twilt M, Ten Cate R, Armbrust W, Hoppenreijns EP, et al. Tumor necrosis factor-blocking agents for children with enthesitis-related arthritis--data from the dutch arthritis and biologicals in children register, 1999-2010. *J Rheumatol* 2011;38:2258-63.

306. Henrickson M, Reiff A. Prolonged efficacy of etanercept in refractory enthesitis-related arthritis. *J Rheumatol* 2004;31:2055-61.

307. Burgos-Vargas R. A case of childhood-onset ankylosing spondylitis: Diagnosis and treatment. *Nat Clin Pract Rheumatol* 2009;5:52-7.

308. Schmeling H, Horneff G. Infliximab in two patients with juvenile ankylosing spondylitis. *Rheumatol Int* 2004;24:173-6.

309. Tse SM, Laxer RM, Babyn PS, Doria AS. Radiologic improvement of juvenile idiopathic arthritis-enthesitis-related arthritis following anti-tumor necrosis factor-alpha blockade with etanercept. *J Rheumatol* 2006;33:1186-8.

310. Burgos-Vargas R, Tse SM, Horneff G, Pangan AL, Unnebrink K, Anderson JK. A3: Efficacy and safety of adalimumab in pediatric patients with enthesitis related arthritis. *Arthritis Rheumatol* 2014;66 Suppl 11:S4.

311. Paramarta JE, De Rycke L, Heijda TF, Ambarus CA, Vos K, Dinant HJ et. al. Efficacy and safety of adalimumab for the treatment of peripheral arthritis in spondyloarthritis patients without ankylosing spondylitis or psoriatic arthritis. *Ann Rheum Dis* 2013;72:1793-9.