



XII. References

1. Higgins JPT, Green S, (editors). *Cochrane Handbook for Systematic Reviews of Interventions*, Vol. Version 5.1.0 [updated March 2011]: The Cochrane Collaboration. 2011.
2. Augustin M, Alvaro-Gracia JM, Bagot M *et al*. A framework for improving the quality of care for people with psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2012; **26 Suppl 4**: 1-16.
3. Campanati A, Ganzetti G, Giuliadori K, Molinelli E, Offidani A. Biologic Therapy in Psoriasis: Safety Profile. *Current drug safety* 2016; **11**: 4-11.
4. International Federation of Psoriasis Association. Position Statement of biosimilars - IFPA. In. 2019; p. 2.
5. International Federation of Psoriasis Association. IFPA Advocacy Toolkit for UNIVERSAL HEALTH COVERAGE. In. 2019.
6. Dubertret L, Mrowietz U, Ranki A *et al*. European patient perspectives on the impact of psoriasis: the EUROPSO patient membership survey. *The British journal of dermatology* 2006; **155**: 729-36.
7. Mease PJ, Menter MA. Quality-of-life issues in psoriasis and psoriatic arthritis: outcome measures and therapies from a dermatological perspective. *J Am Acad Dermatol* 2006; **54**: 685-704.
8. Löfvendahl S. Burden of Disease in Psoriasis and Psoriatic Arthritis. Occurrence, Healthcare Use, Costs and Health Outcome. In. 2016.
9. Fredriksson T, Pettersson U. Severe psoriasis--oral therapy with a new retinoid. *Dermatologica* 1978; **157**: 238-44.
10. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI)--a simple practical measure for routine clinical use. *Clinical and experimental dermatology* 1994; **19**: 210-6.
11. Mrowietz U, Kragballe K, Reich K *et al*. Definition of treatment goals for moderate to severe psoriasis: a European consensus. *Archives of dermatological research* 2011; **303**: 1-10.
12. Khilji FA, Gonzalez M, Finlay AY. Clinical meaning of change in Dermatology Life Quality Index scores. *The British journal of dermatology* 2002; **147 Suppl 62**: 50.
13. Augustin M, Kruger K, Radtke MA, Schwiippel I, Reich K. Disease severity, quality of life and health care in plaque-type psoriasis: a multicenter cross-sectional study in Germany. *Dermatology* 2008; **216**: 366-72.
14. Katugampola RP, Lewis VJ, Finlay AY. The Dermatology Life Quality Index: assessing the efficacy of biological therapies for psoriasis. *The British journal of dermatology* 2007; **156**: 945-50.
15. Strober B, Ryan C, van de Kerkhof P *et al*. Recategorization of psoriasis severity: Delphi consensus from the International Psoriasis Council. *J Am Acad Dermatol* 2020; **82**: 117-22.
16. Dauden E, Puig L, Ferrandiz C, Sanchez-Carazo JL, Hernanz-Hermosa JM. Consensus document on the evaluation and treatment of moderate-to-severe psoriasis: Psoriasis Group of the Spanish Academy of Dermatology and Venereology. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2016; **30 Suppl 2**: 1-18.
17. Nast A, Gisondi P, Ormerod AD *et al*. European S3-Guidelines on the systemic treatment of psoriasis vulgaris--Update 2015--Short version--EDF in cooperation with EADV and IPC. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2015; **29**: 2277-94.
18. Nast A, Spuls PI, van der Kraaij G *et al*. European S3-Guideline on the systemic treatment of psoriasis vulgaris - Update Apremilast and Secukinumab - EDF in cooperation with EADV and IPC. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2017; **31**: 1951-63.



19. Mrowietz U, de Jong EM, Kragballe K *et al.* A consensus report on appropriate treatment optimization and transitioning in the management of moderate-to-severe plaque psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2014; **28**: 438-53.
20. Torres T, Puig L. Treatment goals for psoriasis: Should PASI 90 become the standard of care? *Actas dermo-sifiliograficas* 2015; **106**: 155-7.
21. Mahil SK, Wilson N, Dand N *et al.* Psoriasis treat to target: defining outcomes in psoriasis using data from a real-world, population-based cohort study (the British Association of Dermatologists Biologics and Immunomodulators Register, BADBIR). *The British journal of dermatology* 2020; **182**: 1158-66.
22. Seston EM, Ashcroft DM, Griffiths CEM. Balancing the Benefits and Risks of Drug Treatment: A Stated-Preference, Discrete Choice Experiment With Patients With Psoriasis. *Archives of dermatology* 2007; **143**: 1175-9.
23. Egeberg A, Andersen YMF, Halling-Overgaard AS *et al.* Systematic review on rapidity of onset of action for interleukin-17 and interleukin-23 inhibitors for psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2020; **34**: 39-46.
24. Nast A, Sporbeck B, Rosumeck S *et al.* Which antipsoriatic drug has the fastest onset of action? Systematic review on the rapidity of the onset of action. *The Journal of investigative dermatology* 2013; **133**: 1963-70.
25. Pham PA, Dressler C, Eisert L, Nast A, Werner RN. Time until onset of action when treating psoriatic arthritis: meta-analysis and novel approach of generating confidence intervals. *Rheumatol Int* 2019; **39**: 605-18.
26. Nast A, Dilleen M, Liyanage W, Aikman L, Szczypa P, Dressler C. Time, Psoriasis Area and Severity Index and Dermatology Life Quality Index of patients with psoriasis who drop out of clinical trials on etanercept because of lack of efficacy: a pooled analysis from 10 clinical trials. *The British journal of dermatology* 2018; **178**: 400-5.
27. Zidane M, Dressler C, Gaskins M, Nast A. Decision-Analytic Modeling for Time-Effectiveness of the Sequence of Induction Treatments for Moderate to Severe Plaque Psoriasis. *JAMA dermatology* 2019.
28. Guyatt G, Oxman AD, Akl EA *et al.* GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. *Journal of clinical epidemiology* 2011; **64**: 383-94.
29. Guyatt GH, Oxman AD, Schunemann HJ, Tugwell P, Knottnerus A. GRADE guidelines: a new series of articles in the Journal of Clinical Epidemiology. *Journal of clinical epidemiology* 2011; **64**: 380-2.
30. The GRADE Working Group. In, Vol. 2018. 2018.
31. Werner RN, Nikkels AF, Marinovic B *et al.* European consensus-based (S2k) Guideline on the Management of Herpes Zoster - guided by the European Dermatology Forum (EDF) in cooperation with the European Academy of Dermatology and Venereology (EADV), Part 1: Diagnosis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2017; **31**: 9-19.
32. Werner RN, Nikkels AF, Marinovic B *et al.* European consensus-based (S2k) Guideline on the Management of Herpes Zoster - guided by the European Dermatology Forum (EDF) in cooperation with the European Academy of Dermatology and Venereology (EADV), Part 2: Treatment. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2017; **31**: 20-9.
33. Sbidian E, Chaimani A, Garcia-Doval I *et al.* Systemic pharmacological treatments for chronic plaque psoriasis: a network meta-analysis. *Cochrane Database of Systematic Reviews* 2021.
34. Sbidian E, Chaimani A, Afach S *et al.* Systemic pharmacological treatments for chronic plaque psoriasis: a network meta-analysis. *The Cochrane database of systematic reviews* 2020; **1**: Cd011535.



35. Pathirana D, Ormerod AD, Saiag P *et al.* European S3-guidelines on the systemic treatment of psoriasis vulgaris. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2009; **23 Suppl 2**: 1-70.
36. Gisondi P, Altomare G, Ayala F *et al.* Italian guidelines on the systemic treatments of moderate-to-severe plaque psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2017; **31**: 774-90.
37. Kragballe K, Jansen CT, Geiger JM *et al.* A double-blind comparison of acitretin and etretinate in the treatment of severe psoriasis. Results of a Nordic multicentre study. *Acta dermato-venereologica* 1989; **69**: 35-40.
38. Samarasekera E, Sawyer L, Parnham J, Smith CH. Assessment and management of psoriasis: summary of NICE guidance. *Bmj* 2012; **345**: e6712.
39. van der Kraaij GE, Balak DMW, Busard CI *et al.* Highlights of the updated Dutch evidence- and consensus-based guideline on psoriasis 2017. *The British journal of dermatology* 2019; **180**: 31-42.
40. Amatore F, Villani AP, Tauber M, Viguier M, Guillot B. French guidelines on the use of systemic treatments for moderate-to-severe psoriasis in adults. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019; **33**: 464-83.
41. Carretero G, Ribera M, Belinchon I *et al.* Guidelines for the use of acitretin in psoriasis. Psoriasis Group of the Spanish Academy of Dermatology and Venereology. *Actas dermo-sifiliograficas* 2013; **104**: 598-616.
42. Menter A, Korman NJ, Elmets CA *et al.* Guidelines of care for the management of psoriasis and psoriatic arthritis: section 4. Guidelines of care for the management and treatment of psoriasis with traditional systemic agents. *J Am Acad Dermatol* 2009; **61**: 451-85.
43. Mrowietz U, Morrison PJ, Suhrkamp I, Kumanova M, Clement B. The Pharmacokinetics of Fumaric Acid Esters Reveal Their In Vivo Effects. *Trends in pharmacological sciences* 2018; **39**: 1-12.
44. Malaviya AN. Methotrexate intolerance in the treatment of rheumatoid arthritis (RA): effect of adding caffeine to the management regimen. *Clinical rheumatology* 2017; **36**: 279-85.
45. Duhra P. Treatment of gastrointestinal symptoms associated with methotrexate therapy for psoriasis. *J Am Acad Dermatol* 1993; **28**: 466-9.
46. Ortiz Z, Shea B, Suarez Almazor M, Moher D, Wells G, Tugwell P. Folic acid and folinic acid for reducing side effects in patients receiving methotrexate for rheumatoid arthritis. *The Cochrane database of systematic reviews* 2000: CD000951.
47. van Ede AE, Laan RF, Rood MJ *et al.* Effect of folic or folinic acid supplementation on the toxicity and efficacy of methotrexate in rheumatoid arthritis: a forty-eight week, multicenter, randomized, double-blind, placebo-controlled study. *Arthritis and rheumatism* 2001; **44**: 1515-24.
48. Haque Hussain SS, Wallace M, Belham M *et al.* Infective endocarditis complicating adalimumab therapy for psoriasis. *Clinical and experimental dermatology* 2014; **39**: 555-6.
49. Burmester GR, Panaccione R, Gordon KB, McIlraith MJ, Lacerda AP. Adalimumab: long-term safety in 23 458 patients from global clinical trials in rheumatoid arthritis, juvenile idiopathic arthritis, ankylosing spondylitis, psoriatic arthritis, psoriasis and Crohn's disease. *Annals of the rheumatic diseases* 2013; **72**: 517-24.
50. Alwawi EA, Mehlis SL, Gordon KB. Treating psoriasis with adalimumab. *Therapeutics and clinical risk management* 2008; **4**: 345-51.
51. Tracey D, Klareskog L, Sasso EH, Salfeld JG, Tak PP. Tumor necrosis factor antagonist mechanisms of action: a comprehensive review. *Pharmacology & therapeutics* 2008; **117**: 244-79.



52. Traczewski P, Rudnicka L. Adalimumab in dermatology. *British journal of clinical pharmacology* 2008.
53. Esposito M, Giunta A, Mazzotta A *et al.* Efficacy and safety of subcutaneous anti-tumor necrosis factor- α agents, etanercept and adalimumab, in elderly patients affected by psoriasis and psoriatic arthritis: an observational long-term study. *Dermatology* 2012; **225**: 312-9.
54. Collamer AN, Guerrero KT, Henning JS, Battafarano DF. Psoriatic skin lesions induced by tumor necrosis factor antagonist therapy: a literature review and potential mechanisms of action. *Arthritis and rheumatism* 2008; **59**: 996-1001.
55. Ko JM, Gottlieb AB, Kerbleski JF. Induction and exacerbation of psoriasis with TNF-blockade therapy: a review and analysis of 127 cases. *The Journal of dermatological treatment* 2009; **20**: 100-8.
56. Melo FJ, Magina S. Clinical management of Anti-TNF- α -induced psoriasis or psoriasiform lesions in inflammatory bowel disease patients: a systematic review. *International journal of dermatology* 2018; **57**: 1521-32.
57. Pappas DA, Giles JT. Do antitumor necrosis factor agents increase the risk of postoperative orthopedic infections? *Current opinion in rheumatology* 2008; **20**: 450-6.
58. den Broeder AA, Creemers MC, Franssen J *et al.* Risk factors for surgical site infections and other complications in elective surgery in patients with rheumatoid arthritis with special attention for anti-tumor necrosis factor: a large retrospective study. *J Rheumatol* 2007; **34**: 689-95.
59. Busard C, Zweegers J, Limpens J, Langendam M, Spuls PI. Combined use of systemic agents for psoriasis: a systematic review. *JAMA dermatology* 2014; **150**: 1213-20.
60. Davila-Seijo P, Dauden E, Descalzo MA *et al.* Infections in Moderate to Severe Psoriasis Patients Treated with Biological Drugs Compared to Classic Systemic Drugs: Findings from the BIOBADADERM Registry. *The Journal of investigative dermatology* 2017; **137**: 313-21.
61. European Medicines Agency. Humira [Humira: EPAR - Product Information]. In. 2014.
62. European Medicines Agency. Otezla - Summary of product characteristics (Annex I). 08/07/2016 Otezla -EMA/H/C/003746 -PSUSA/10338/201506. In. 2016.
63. Papp K, Cather JC, Rosoph L *et al.* Efficacy of apremilast in the treatment of moderate to severe psoriasis: a randomised controlled trial. *Lancet* 2012; **380**: 738-46.
64. Papp K, Reich K, Leonardi CL *et al.* Apremilast, an oral phosphodiesterase 4 (PDE4) inhibitor, in patients with moderate to severe plaque psoriasis: Results of a phase III, randomized, controlled trial (Efficacy and Safety Trial Evaluating the Effects of Apremilast in Psoriasis [ESTEEM] 1). *J Am Acad Dermatol* 2015; **73**: 37-49.
65. Paul C, Cather J, Gooderham M *et al.* Efficacy and safety of apremilast, an oral phosphodiesterase 4 inhibitor, in patients with moderate-to-severe plaque psoriasis over 52 weeks: a phase III, randomized controlled trial (ESTEEM 2). *The British journal of dermatology* 2015; **173**: 1387-99.
66. Papp KA, Kaufmann R, Thaci D, Hu C, Sutherland D, Rohane P. Efficacy and safety of apremilast in subjects with moderate to severe plaque psoriasis: results from a phase II, multicenter, randomized, double-blind, placebo-controlled, parallel-group, dose-comparison study. *Journal of the European Academy of Dermatology & Venereology* 2013; **27**: e376-83.
67. Liu Y, Zhou S, Wan Y, Wu A, Palmisano M. The impact of co-administration of ketoconazole and rifampicin on the pharmacokinetics of apremilast in healthy volunteers. *British journal of clinical pharmacology* 2014; **78**: 1050-7.
68. Reich K, Papp KA, Blauvelt A *et al.* Bimekizumab versus ustekinumab for the treatment of moderate to severe plaque psoriasis (BE VIVID): efficacy and safety from a 52-week,



- multicentre, double-blind, active comparator and placebo controlled phase 3 trial. *Lancet* 2021; **397**: 487-98.
69. Gordon KB, Foley P, Krueger JG *et al.* Bimekizumab efficacy and safety in moderate to severe plaque psoriasis (BE READY): a multicentre, double-blind, placebo-controlled, randomised withdrawal phase 3 trial. *Lancet* 2021; **397**: 475-86.
70. Freitas E, Blauvelt A, Torres T. Bimekizumab for the Treatment of Psoriasis. *Drugs* 2021; **81**: 1751-62.
71. Warren RB, Blauvelt A, Bagel J *et al.* Bimekizumab versus Adalimumab in Plaque Psoriasis. *The New England journal of medicine* 2021; **385**: 130-41.
72. Reich K, Warren RB, Lebwohl M *et al.* Bimekizumab versus Secukinumab in Plaque Psoriasis. *The New England journal of medicine* 2021; **385**: 142-52.
73. Blauvelt A, Chiricozzi A. The Immunologic Role of IL-17 in Psoriasis and Psoriatic Arthritis Pathogenesis. *Clin Rev Allergy Immunol* 2018; **55**: 379-90.
74. Glatt S, Baeten D, Baker T *et al.* Dual IL-17A and IL-17F neutralisation by bimekizumab in psoriatic arthritis: evidence from preclinical experiments and a randomised placebo-controlled clinical trial that IL-17F contributes to human chronic tissue inflammation. *Annals of the rheumatic diseases* 2018; **77**: 523-32.
75. Langley RG, Elewski BE, Lebwohl M *et al.* Secukinumab in plaque psoriasis--results of two phase 3 trials. *New England Journal of Medicine* 2014; **371**: 326-38.
76. Whibley N, Tritto E, Traggiai E *et al.* Antibody blockade of IL-17 family cytokines in immunity to acute murine oral mucosal candidiasis. *J Leukoc Biol* 2016; **99**: 1153-64.
77. Saunte DM, Mrowietz U, Puig L, Zachariae C. Candida infections in patients with psoriasis and psoriatic arthritis treated with interleukin-17 inhibitors and their practical management. *The British journal of dermatology* 2017; **177**: 47-62.
78. Pappas PG, Kauffman CA, Andes DR *et al.* Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. *Clin Infect Dis* 2016; **62**: e1-50.
79. Lortholary O, Petrikos G, Akova M *et al.* ESCMID* guideline for the diagnosis and management of Candida diseases 2012: patients with HIV infection or AIDS. *Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases* 2012; **18 Suppl 7**: 68-77.
80. Puig L, Lebwohl M, Bachelez H, Sobell J, Jacobson AA. Long-term efficacy and safety of brodalumab in the treatment of psoriasis: 120-week results from the randomized, double-blind, placebo- and active comparator-controlled phase 3 AMAGINE-2 trial. *J Am Acad Dermatol* 2019.
81. Lebwohl MG, Blauvelt A, Menter A *et al.* Efficacy, Safety, and Patient-Reported Outcomes in Patients with Moderate-to-Severe Plaque Psoriasis Treated with Brodalumab for 5 Years in a Long-Term, Open-Label, Phase II Study. *American journal of clinical dermatology* 2019.
82. Lebwohl M, Strober B, Menter A *et al.* Phase 3 Studies Comparing Brodalumab with Ustekinumab in Psoriasis. *The New England journal of medicine* 2015; **373**: 1318-28.
83. Lebwohl MG, Papp KA, Marangell LB *et al.* Psychiatric adverse events during treatment with brodalumab: Analysis of psoriasis clinical trials. *J Am Acad Dermatol* 2018; **78**: 81-9.e5.
84. European Medicines Agency. Summary of product characteristics Brodalumab In.
85. Hashim PW, Chen T, Lebwohl MG, Marangell LB, Kircik LH. What Lies Beneath the Face Value of a BOX WARNING: A Deeper Look at Brodalumab. *Journal of drugs in dermatology : JDD* 2018; **17**: s29-s34.
86. Targan SR, Feagan B, Vermeire S *et al.* A Randomized, Double-Blind, Placebo-Controlled Phase 2 Study of Brodalumab in Patients With Moderate-to-Severe Crohn's Disease. *The American journal of gastroenterology* 2016; **111**: 1599-607.



87. Gottlieb AB, Blauvelt A, Thaci D *et al.* Certolizumab pegol for the treatment of chronic plaque psoriasis: Results through 48 weeks from 2 phase 3, multicenter, randomized, double-blinded, placebo-controlled studies (CIMPASI-1 and CIMPASI-2). *J Am Acad Dermatol* 2018; **79**: 302-14.e6.
88. Lebwohl M, Blauvelt A, Paul C *et al.* Certolizumab pegol for the treatment of chronic plaque psoriasis: Results through 48 weeks of a phase 3, multicenter, randomized, double-blind, etanercept- and placebo-controlled study (CIMPACT). *J Am Acad Dermatol* 2018; **79**: 266-76.e5.
89. Wang X, Liu Q, Wu L, Nie Z, Mei Z. Risk of non-melanoma skin cancer in patients with psoriasis: An updated evidence from systematic review with meta-analysis. *Journal of Cancer* 2020; **11**: 1047-55.
90. Tyring S, Gordon KB, Poulin Y *et al.* Long-term safety and efficacy of 50 mg of etanercept twice weekly in patients with psoriasis. *Archives of dermatology* 2007; **143**: 719-26.
91. Papp KA, Poulin Y, Bissonnette R *et al.* Assessment of the long-term safety and effectiveness of etanercept for the treatment of psoriasis in an adult population. *J Am Acad Dermatol* 2012; **66**: e33-45.
92. Wyeth Europa Ltd. Fachinformation Enbrel 50 mg Fertigspritze. In. Taplow, Maidenhead. 2007.
93. European Medicines Agency. Taltz [Taltz: EPAR - Product Information]. In.
94. European Medicines Agency. Summary of product characteristics Ixekizumab. In. 2019.
95. Menter A, Warren RB, Langley RG *et al.* Efficacy of ixekizumab compared to etanercept and placebo in patients with moderate-to-severe plaque psoriasis and non-pustular palmoplantar involvement: results from three phase 3 trials (UNCOVER-1, UNCOVER-2 and UNCOVER-3). *Journal of the European Academy of Dermatology and Venereology : JEADV* 2017; **31**: 1686-92.
96. Blauvelt A, Gooderham M, Iversen L *et al.* Efficacy and safety of ixekizumab for the treatment of moderate-to-severe plaque psoriasis: Results through 108 weeks of a randomized, controlled phase 3 clinical trial (UNCOVER-3). *J Am Acad Dermatol* 2017; **77**: 855-62.
97. Lebwohl MG, Gordon KB, Gallo G, Zhang L, Paul C. Ixekizumab sustains high level of efficacy and favourable safety profile over 4 years in patients with moderate psoriasis: results from UNCOVER-3 study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019.
98. Papp K, Maari C, Cauthen A *et al.* An indirect comparison of long-term efficacy of every-two-week dosing versus recommended dosing of ixekizumab in patients who had sPGA>1 at week 12. *The British journal of dermatology* 2019.
99. European Medicines Agency. Skyrizi - EMEA/H/C/004759 - IA/0006. In. 2019.
100. Khatri A, Cheng L, Camez A, Ignatenko S, Pang Y, Othman AA. Lack of Effect of 12-Week Treatment with Risankizumab on the Pharmacokinetics of Cytochrome P450 Probe Substrates in Patients with Moderate to Severe Chronic Plaque Psoriasis. *Clinical pharmacokinetics* 2019; **58**: 805-14.
101. European Medicines Agency. Cosentyx - Summary of product characteristics (Annex I). 01/04/2016 Cosentyx -EMEA/H/C/003729 -II/0008. In. 2016.
102. Deodhar A, Mease PJ, McInnes IB *et al.* Long-term safety of secukinumab in patients with moderate-to-severe plaque psoriasis, psoriatic arthritis, and ankylosing spondylitis: integrated pooled clinical trial and post-marketing surveillance data. *Arthritis research & therapy* 2019; **21**: 111.
103. Hueber W, Sands BE, Lewitzky S *et al.* Secukinumab, a human anti-IL-17A monoclonal antibody, for moderate to severe Crohn's disease: unexpected results of a randomised, double-blind placebo-controlled trial. *Gut* 2012; **61**: 1693-700.



104. Novartis Pharmaceuticals Corporation. Secukinumab (AIN457) - ADVISORY COMMITTEE BRIEFING MATERIAL: AVAILABLE FOR PUBLIC RELEASE In. U.S. Food and Drug Administration. 2014.
105. Swiss Specialist Information Ilumetri. In. 2018.
106. Reich K, Warren RB, Iversen L *et al.* Long-term efficacy and safety of tildrakizumab for moderate-to-severe psoriasis: pooled analyses of two randomized phase III clinical trials (reSURFACE 1 and reSURFACE 2) through 148 weeks. *The British journal of dermatology* 2019.
107. European Medicines Agency. Ilumetri™ (Tildrakizumab) Summary of product characteristics. In. 2019.
108. Cerrone M, Wang X, Neary M *et al.* Pharmacokinetics of Efavirenz 400 mg Once Daily Coadministered With Isoniazid and Rifampicin in Human Immunodeficiency Virus-Infected Individuals. *Clin Infect Dis* 2019; **68**: 446-52.
109. European Medicines Agency. Questions and answers on biosimilar medicines (similar biological medicinal products). In. 2012.
110. Gerdes S, Thaci D, Griffiths CEM *et al.* Multiple switches between GP2015, an etanercept biosimilar, with originator product do not impact efficacy, safety and immunogenicity in patients with chronic plaque-type psoriasis: 30-week results from the phase 3, confirmatory EGALITY study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2018; **32**: 420-7.
111. Elmamoun M, Chandran V. Role of Methotrexate in the Management of Psoriatic Arthritis. *Drugs* 2018; **78**: 611-9.
112. McInnes IB, Nash P, Ritchlin C *et al.* Secukinumab for psoriatic arthritis: comparative effectiveness versus licensed biologics/apremilast: a network meta-analysis. *Journal of comparative effectiveness research* 2018; **7**: 1107-23.
113. Mease PJ, Smolen JS, Behrens F *et al.* A head-to-head comparison of the efficacy and safety of ixekizumab and adalimumab in biological-naïve patients with active psoriatic arthritis: 24-week results of a randomised, open-label, blinded-assessor trial. *Annals of the rheumatic diseases* 2020; **79**: 123-31.
114. Nash P, McInnes IB, Mease PJ *et al.* Secukinumab Versus Adalimumab for Psoriatic Arthritis: Comparative Effectiveness up to 48 Weeks Using a Matching-Adjusted Indirect Comparison. *Rheumatology and therapy* 2018; **5**: 99-122.
115. Dressler C, Eisert L, Pham PA, Nast A. Efficacy and safety of systemic treatments in psoriatic arthritis: a systematic review, meta-analysis and GRADE evaluation. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019; **33**: 1249-60.
116. Murashima A, Watanabe N, Ozawa N, Saito H, Yamaguchi K. Etanercept during pregnancy and lactation in a patient with rheumatoid arthritis: drug levels in maternal serum, cord blood, breast milk and the infant's serum. *Annals of the rheumatic diseases* 2009; **68**: 1793-4.
117. Gossec L, Smolen JS, Gaujoux-Viala C *et al.* European League Against Rheumatism recommendations for the management of psoriatic arthritis with pharmacological therapies. *Annals of the rheumatic diseases* 2012; **71**: 4-12.
118. Nast A, Amelunxen L, Augustin M *et al.* S3 Guideline for the treatment of psoriasis vulgaris, update - Short version part 2 - Special patient populations and treatment situations. *Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology : JDDG* 2018; **16**: 806-13.
119. Elmetts CA, Leonardi CL, Davis DMR *et al.* Joint AAD-NPF guidelines of care for the management and treatment of psoriasis with awareness and attention to comorbidities. *J Am Acad Dermatol* 2019; **80**: 1073-113.



120. Augustin M, Glaeske G, Radtke MA, Christophers E, Reich K, Schafer I. Epidemiology and comorbidity of psoriasis in children. *The British journal of dermatology* 2010; **162**: 633-6.
121. Augustin M, Reich K, Glaeske G, Schaefer I, Radtke M. Co-morbidity and age-related prevalence of psoriasis: Analysis of health insurance data in Germany. *Acta dermato-venereologica* 2010; **90**: 147-51.
122. Armstrong A, Paul C, Puig L *et al.* Safety of Ixekizumab Treatment for up to 5 Years in Adult Patients with Moderate-to-Severe Psoriasis: Results from Greater Than 17,000 Patient-Years of Exposure. *Dermatology and therapy* 2019.
123. Feagan BG, Sandborn WJ, D'Haens G *et al.* Induction therapy with the selective interleukin-23 inhibitor risankizumab in patients with moderate-to-severe Crohn's disease: a randomised, double-blind, placebo-controlled phase 2 study. *Lancet* 2017; **389**: 1699-709.
124. Reich K, Armstrong AW, Langley RG *et al.* Guselkumab versus secukinumab for the treatment of moderate-to-severe psoriasis (ECLIPSE): results from a phase 3, randomised controlled trial. *Lancet* 2019; **394**: 831-9.
125. Whitlock SM, Enos CW, Armstrong AW *et al.* Management of psoriasis in patients with inflammatory bowel disease: From the Medical Board of the National Psoriasis Foundation. *J Am Acad Dermatol* 2018; **78**: 383-94.
126. Feagan BG, Panes J, Ferrante M *et al.* Risankizumab in patients with moderate to severe Crohn's disease: an open-label extension study. *The lancet. Gastroenterology & hepatology* 2018; **3**: 671-80.
127. Visvanathan S, Baum P, Salas A *et al.* Selective IL-23 Inhibition by Risankizumab Modulates the Molecular Profile in the Colon and Ileum of Patients With Active Crohn's Disease: Results From a Randomised Phase II Biopsy Sub-study. *Journal of Crohn's & colitis* 2018; **12**: 1170-9.
128. Grossberg LB. A Case Report of Successful Treatment of Crohn's Disease and Psoriasis With Guselkumab. *Inflammatory bowel diseases* 2019; **25**: e84.
129. Berman HS, Villa NM, Shi VY, Hsiao JL. Guselkumab in the treatment of concomitant hidradenitis suppurativa, psoriasis, and Crohn's disease. *The Journal of dermatological treatment* 2019: 1-3.
130. Danese S, Neurath M, Kopon A *et al.* OP006 Apremilast for active ulcerative colitis: a phase 2, randomised, double-blind, placebo-controlled induction study. *Journal of Crohn's and Colitis* 2018; **12**: S004-S.
131. Patel V, Wang Y, MacDonald JK, McDonald JW, Chande N. Methotrexate for maintenance of remission in Crohn's disease. *The Cochrane database of systematic reviews* 2014: Cd006884.
132. McDonald JW, Wang Y, Tsoulis DJ, MacDonald JK, Feagan BG. Methotrexate for induction of remission in refractory Crohn's disease. *The Cochrane database of systematic reviews* 2014: Cd003459.
133. Chande N, Wang Y, MacDonald JK, McDonald JW. Methotrexate for induction of remission in ulcerative colitis. *The Cochrane database of systematic reviews* 2014: Cd006618.
134. Herfarth H, Barnes EL, Valentine JF *et al.* Methotrexate Is Not Superior to Placebo in Maintaining Steroid-Free Response or Remission in Ulcerative Colitis. *Gastroenterology* 2018; **155**: 1098-108.e9.
135. Laharie D, Bourreille A, Branche J *et al.* Long-term outcome of patients with steroid-refractory acute severe UC treated with ciclosporin or infliximab. *Gut* 2018; **67**: 237-43.
136. Dhana A, Yen H, Yen H, Cho E. All-cause and cause-specific mortality in psoriasis: A systematic review and meta-analysis. *J Am Acad Dermatol* 2019; **80**: 1332-43.
137. Vaengebjerger S, Skov L, Egeberg A, Loft ND. Prevalence, Incidence, and Risk of Cancer in Patients With Psoriasis and Psoriatic Arthritis: A Systematic Review and Meta-analysis. *JAMA dermatology* 2020.



138. Peleva E, Exton LS, Kelley K, Kleyn CE, Mason KJ, Smith CH. Risk of cancer in patients with psoriasis on biological therapies: a systematic review. *The British journal of dermatology* 2018; **178**: 103-13.
139. Lebwohl M, Deodhar A, Griffiths CEM *et al.* The risk of malignancy in patients with secukinumab-treated psoriasis, psoriatic arthritis and ankylosing spondylitis: analysis of clinical trial and postmarketing surveillance data with up to five years of follow-up. *The British journal of dermatology* 2021.
140. Thaci D, Piaserico S, Warren RB *et al.* Five-year efficacy and safety of tildrakizumab in patients with moderate-to-severe psoriasis who respond at week 28: pooled analyses of two randomized phase III clinical trials (reSURFACE 1 and reSURFACE 2). *The British journal of dermatology* 2021; **185**: 323-34.
141. Garcia-Doval I, Hernandez MV, Vanaclocha F, Sellas A, de la Cueva P, Montero D. Should tumour necrosis factor antagonist safety information be applied from patients with rheumatoid arthritis to psoriasis? Rates of serious adverse events in the prospective rheumatoid arthritis BIOBADASER and psoriasis BIOBADADERM cohorts. *The British journal of dermatology* 2017; **176**: 643-9.
142. Holroyd CR, Seth R, Bukhari M *et al.* The British Society for Rheumatology biologic DMARD safety guidelines in inflammatory arthritis. *Rheumatology* 2019; **58**: e3-e42.
143. Luo X, Deng C, Fei Y *et al.* Malignancy development risk in psoriatic arthritis patients undergoing treatment: A systematic review and meta-analysis. *Seminars in arthritis and rheumatism* 2019; **48**: 626-31.
144. Kim SC, Schneeweiss S, Liu J *et al.* Biologic Disease-Modifying Antirheumatic Drugs and Risk of High-Grade Cervical Dysplasia and Cervical Cancer in Rheumatoid Arthritis: A Cohort Study. *Arthritis & rheumatology (Hoboken, N.J.)* 2016; **68**: 2106-13.
145. Mercer LK, Low AS, Galloway JB *et al.* Anti-TNF therapy in women with rheumatoid arthritis with a history of carcinoma in situ of the cervix. *Annals of the rheumatic diseases* 2013; **72**: 143-4.
146. Micic D, Komaki Y, Alavanja A, Rubin DT, Sakuraba A. Risk of Cancer Recurrence Among Individuals Exposed to Antitumor Necrosis Factor Therapy: A Systematic Review and Meta-Analysis of Observational Studies. *Journal of clinical gastroenterology* 2019; **53**: e1-e11.
147. Scott FI, Mamtani R, Brensinger CM *et al.* Risk of Nonmelanoma Skin Cancer Associated With the Use of Immunosuppressant and Biologic Agents in Patients With a History of Autoimmune Disease and Nonmelanoma Skin Cancer. *JAMA dermatology* 2016; **152**: 164-72.
148. Shelton E, Laharie D, Scott FI *et al.* Cancer Recurrence Following Immune-Suppressive Therapies in Patients With Immune-Mediated Diseases: A Systematic Review and Meta-analysis. *Gastroenterology* 2016; **151**: 97-109.e4.
149. Cohen BE, Martires KJ, Ho RS. Psoriasis and the Risk of Depression in the US Population: National Health and Nutrition Examination Survey 2009-2012. *JAMA dermatology* 2016; **152**: 73-9.
150. Egeberg A, Thyssen JP, Wu JJ, Skov L. Risk of first-time and recurrent depression in patients with psoriasis: a population-based cohort study. *The British journal of dermatology* 2019; **180**: 116-21.
151. Fleming P, Roubille C, Richer V *et al.* Effect of biologics on depressive symptoms in patients with psoriasis: a systematic review. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2015; **29**: 1063-70.
152. Tribo MJ, Turroja M, Castano-Vinyals G *et al.* Patients with Moderate to Severe Psoriasis Associate with Higher Risk of Depression and Anxiety Symptoms: Results of a Multivariate Study of 300 Spanish Individuals with Psoriasis. *Acta dermato-venereologica* 2019; **99**: 417-22.



153. Abbott R, Whear R, Nikolaou V *et al.* Tumour necrosis factor-alpha inhibitor therapy in chronic physical illness: A systematic review and meta-analysis of the effect on depression and anxiety. *J Psychosom Res* 2015; **79**: 175-84.
154. Carrascosa JM, Rebollo F, Gomez S, De-la-Cueva P. Effects of etanercept on the patient-perceived results (PROs) in patients with moderate-to-severe plaque psoriasis: systematic review of the literature and meta-analysis. *The Journal of dermatological treatment* 2018; **29**: 806-11.
155. Gordon KB, Armstrong AW, Han C *et al.* Anxiety and depression in patients with moderate-to-severe psoriasis and comparison of change from baseline after treatment with guselkumab vs. adalimumab: results from the Phase 3 VOYAGE 2 study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2018; **32**: 1940-9.
156. Griffiths CEM, Fava M, Miller AH *et al.* Impact of Ixekizumab Treatment on Depressive Symptoms and Systemic Inflammation in Patients with Moderate-to-Severe Psoriasis: An Integrated Analysis of Three Phase 3 Clinical Studies. *Psychother Psychosom* 2017; **86**: 260-7.
157. Schmieder A, Poppe M, Hametner C *et al.* Impact of fumaric acid esters on cardiovascular risk factors and depression in psoriasis: a prospective pilot study. *Archives of dermatological research* 2015; **307**: 413-24.
158. Kim SJ, Park MY, Pak K *et al.* Improvement of depressive symptoms in patients with moderate-to-severe psoriasis treated with ustekinumab: an open label trial validated using beck depression inventory, Hamilton depression rating scale measures and (18)fluorodeoxyglucose (FDG) positron emission tomography (PET). *The Journal of dermatological treatment* 2018; **29**: 761-8.
159. Strober B, Gooderham M, de Jong E *et al.* Depressive symptoms, depression, and the effect of biologic therapy among patients in Psoriasis Longitudinal Assessment and Registry (PSOLAR). *J Am Acad Dermatol* 2018; **78**: 70-80.
160. Arican O, Sasmaz S, Ozbulut O. Increased suicidal tendency in a case of psoriasis vulgaris under acitretin treatment. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2006; **20**: 464-5.
161. Henderson CA, Highet AS. Depression induced by etretinate. *Bmj* 1989; **298**: 964.
162. Hayes J, Koo J. Depression and acitretin: a true association or a class labeling? *Journal of drugs in dermatology : JDD* 2011; **10**: 409-12.
163. Starling J, 3rd, Koo J. Evidence based or theoretical concern? Pseudotumor cerebri and depression as acitretin side effects. *Journal of drugs in dermatology : JDD* 2005; **4**: 690-6.
164. European Medicines Agency. Retinoid-containing medicinal products. In. 2018.
165. European Medicines Agency. Acitretin SmPC and Patient Leaflet. In: The electronic medicines compendium. Last updated 22 Oct 2019.
166. Lebwohl M, Strober B, Menter A *et al.* Phase 3 Studies Comparing Brodalumab with Ustekinumab in Psoriasis. *New Engl J Med* 2015; **373**: 1318-28.
167. Papp KA, Reich K, Paul C *et al.* A prospective phase III, randomized, double-blind, placebo-controlled study of brodalumab in patients with moderate-to-severe plaque psoriasis. *The British journal of dermatology* 2016; **175**: 273-86.
168. Beck KM, Koo J. Brodalumab for the treatment of plaque psoriasis: up-to-date. *Expert Opin Biol Ther* 2019; **19**: 287-92.
169. European Medicines Agency. Kyntheum SmPC and Patient Leaflet. In: The electronic medicines compendium. Last updated 25 sep 2017.
170. Crowley J, Thaci D, Joly P *et al.* Long-term safety and tolerability of apremilast in patients with psoriasis: Pooled safety analysis for ≥ 156 weeks from 2 phase 3, randomized, controlled trials (ESTEEM 1 and 2). *J Am Acad Dermatol* 2017; **77**: 310-7 e1.



171. Kavanaugh A, Gladman DD, Edwards CJ *et al.* Long-term experience with apremilast in patients with psoriatic arthritis: 5-year results from a PALACE 1-3 pooled analysis. *Arthritis research & therapy* 2019; **21**: 118.
172. European Medicines Agency. Otezla (apremilast): New important advice regarding suicidal ideation and behaviour. In: Celgene Europe Limited. 2016.
173. European Medicines Agency. Otezla SmPC and Patient Leaflet. In: The electronic medicines compendium. Last updated 10 Sep 2019.
174. Armstrong AW, Harskamp CT, Armstrong EJ. Psoriasis and the risk of diabetes mellitus: a systematic review and meta-analysis. *JAMA dermatology* 2013; **149**: 84-91.
175. Mamizadeh M, Tardeh Z, Azami M. The association between psoriasis and diabetes mellitus: A systematic review and meta-analysis. *Diabetes & metabolic syndrome* 2019; **13**: 1405-12.
176. Coto-Segura P, Eiris-Salvado N, Gonzalez-Lara L *et al.* Psoriasis, psoriatic arthritis and type 2 diabetes mellitus: a systematic review and meta-analysis. *The British journal of dermatology* 2013; **169**: 783-93.
177. Lee MS, Lin RY, Lai MS. Increased risk of diabetes mellitus in relation to the severity of psoriasis, concomitant medication, and comorbidity: a nationwide population-based cohort study. *J Am Acad Dermatol* 2014; **70**: 691-8.
178. Dregan A, Charlton J, Chowienzyk P, Gulliford MC. Chronic inflammatory disorders and risk of type 2 diabetes mellitus, coronary heart disease, and stroke: a population-based cohort study. *Circulation* 2014; **130**: 837-44.
179. Armstrong AW, Harskamp CT, Armstrong EJ. The association between psoriasis and obesity: a systematic review and meta-analysis of observational studies. *Nutr Diabetes* 2012; **2**.
180. Dehpouri T, Rokni GR, Narenjbon NA *et al.* Evaluation of the glycemic effect of methotrexate in psoriatic arthritis patients with metabolic syndrome: A pilot study. *Dermatology reports* 2019; **11**: 7965.
181. Owczarczyk-Saczonek A, Drozdowski M, Maciejewska-Radomska A, Choszcz D, Placek W. The effect of subcutaneous methotrexate on markers of metabolic syndrome in psoriatic patients - preliminary report. *Postepy dermatologii i alergologii* 2018; **35**: 53-9.
182. Wu JJ, Liu L, Asgari MM *et al.* Initiation of TNF inhibitor therapy and change in physiologic measures in psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2014; **28**: 1380-7.
183. Rosenberg P, Urwitz H, Johannesson A *et al.* Psoriasis patients with diabetes type 2 are at high risk of developing liver fibrosis during methotrexate treatment. *J Hepatol* 2007; **46**: 1111-8.
184. Singh JA, Guyatt G, Ogdie A *et al.* Special Article: 2018 American College of Rheumatology/National Psoriasis Foundation Guideline for the Treatment of Psoriatic Arthritis. *Arthritis care & research* 2019; **71**: 2-29.
185. Gisondi P, Cazzaniga S, Chimenti S *et al.* Metabolic abnormalities associated with initiation of systemic treatment for psoriasis: evidence from the Italian Psocare Registry. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2013; **27**: 30-41.
186. Cotovio P, Neves M, Rodrigues L *et al.* New-onset diabetes after transplantation: assessment of risk factors and clinical outcomes. *Transplant Proc* 2013; **45**: 1079-83.
187. Sato T, Inagaki A, Uchida K *et al.* Diabetes mellitus after transplant: relationship to pretransplant glucose metabolism and tacrolimus or cyclosporine A-based therapy. *Transplantation* 2003; **76**: 1320-6.
188. Lestre S, Diamantino F, Veloso L, Fidalgo A, Ferreira A. Effects of etanercept treatment on lipid profile in patients with moderate-to-severe chronic plaque psoriasis: a retrospective cohort study. *Eur J Dermatol* 2011; **21**: 916-20.



189. Gisondi P, Cotena C, Tessari G, Girolomoni G. Anti-tumour necrosis factor-alpha therapy increases body weight in patients with chronic plaque psoriasis: a retrospective cohort study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2008; **22**: 341-4.
190. Renzo LD, Saraceno R, Schipani C *et al*. Prospective assessment of body weight and body composition changes in patients with psoriasis receiving anti-TNF-alpha treatment. *Dermatologic therapy* 2011; **24**: 446-51.
191. Gisondi P, Conti A, Galdo G, Piaserico S, De Simone C, Girolomoni G. Ustekinumab does not increase body mass index in patients with chronic plaque psoriasis: a prospective cohort study. *The British journal of dermatology* 2013; **168**: 1124-7.
192. Kaushik SB, Lebwohl MG. Psoriasis: Which therapy for which patient: Psoriasis comorbidities and preferred systemic agents. *J Am Acad Dermatol* 2019; **80**: 27-40.
193. da Silva BS, Bonfa E, de Moraes JC *et al*. Effects of anti-TNF therapy on glucose metabolism in patients with ankylosing spondylitis, psoriatic arthritis or juvenile idiopathic arthritis. *Biologicals : journal of the International Association of Biological Standardization* 2010; **38**: 567-9.
194. Costa L, Caso F, Atteno M *et al*. Impact of 24-month treatment with etanercept, adalimumab, or methotrexate on metabolic syndrome components in a cohort of 210 psoriatic arthritis patients. *Clinical rheumatology* 2014; **33**: 833-9.
195. Martinez-Abundis E, Reynoso-von Drateln C, Hernandez-Salazar E, Gonzalez-Ortiz M. Effect of etanercept on insulin secretion and insulin sensitivity in a randomized trial with psoriatic patients at risk for developing type 2 diabetes mellitus. *Archives of dermatological research* 2007; **299**: 461-5.
196. Kofoed K, Clemmensen A, Mikkelsen UR, Simonsen L, Andersen O, Gniadecki R. Effects of anti-tumor necrosis factor therapy on body composition and insulin sensitivity in patients with psoriasis. *Archives of dermatology* 2012; **148**: 1089-91.
197. Campanati A, Ganzetti G, Di Sario A *et al*. The effect of etanercept on hepatic fibrosis risk in patients with non-alcoholic fatty liver disease, metabolic syndrome, and psoriasis. *Journal of gastroenterology* 2013; **48**: 839-46.
198. Marra M, Campanati A, Testa R *et al*. Effect of etanercept on insulin sensitivity in nine patients with psoriasis. *Int J Immunopathol Pharmacol* 2007; **20**: 731-6.
199. Pina T, Armesto S, Lopez-Mejias R *et al*. Anti-TNF-alpha therapy improves insulin sensitivity in non-diabetic patients with psoriasis: a 6-month prospective study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2015; **29**: 1325-30.
200. Al-Mutairi N, Shabaan D. Effects of tumor necrosis factor alpha inhibitors extend beyond psoriasis: insulin sensitivity in psoriasis patients with type 2 diabetes mellitus. *Cutis* 2016; **97**: 235-41.
201. Gerdes S, Pinter A, Papavassilis C, Reinhardt M. Effects of secukinumab on metabolic and liver parameters in plaque psoriasis patients. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019.
202. Gisondi P, Del Giglio M, Di Francesco V, Zamboni M, Girolomoni G. Weight loss improves the response of obese patients with moderate-to-severe chronic plaque psoriasis to low-dose cyclosporine therapy: a randomized, controlled, investigator-blinded clinical trial. *Am J Clin Nutr* 2008; **88**: 1242-7.
203. Jensen P, Zachariae C, Christensen R *et al*. Effect of weight loss on the severity of psoriasis: a randomized clinical study. *JAMA dermatology* 2013; **149**: 795-801.
204. Naldi L, Conti A, Cazzaniga S *et al*. Diet and physical exercise in psoriasis: a randomized controlled trial. *The British journal of dermatology* 2014; **170**: 634-42.



205. Ford AR, Siegel M, Bagel J *et al.* Dietary Recommendations for Adults With Psoriasis or Psoriatic Arthritis From the Medical Board of the National Psoriasis Foundation: A Systematic Review. *JAMA dermatology* 2018; **154**: 934-50.
206. Pinter A, Gerdes S, Papavassilis C, Reinhardt M. Characterization of responder groups to secukinumab treatment in moderate to severe plaque psoriasis. *The Journal of dermatological treatment* 2019: 1-7.
207. Koenig AS, Szumski A, Pedersen R, Robertson D. Impact of Etanercept Therapy on Glycemic Control in a Cohort of Psoriatic Patients: The PRISTINE Trial. In. 2010.
208. Balato N, Patruno C, Napolitano M, Patri A, Ayala F, Scarpa R. Managing moderate-to-severe psoriasis in the elderly. *Drugs & aging* 2014; **31**: 233-8.
209. Spuls PI, Witkamp L, Bossuyt PM, Bos JD. A systematic review of five systemic treatments for severe psoriasis. *The British journal of dermatology* 1997; **137**: 943-9.
210. Hong JR, Lee YW, Choe YB, Ahn KJ. Risk factors for increased serum creatinine level in patients with psoriasis treated with cyclosporine in a real-world practice. *Dermatologic therapy* 2019; **32**: e12875.
211. Knuuti J, Wijns W, Saraste A *et al.* 2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes. *European heart journal* 2020; **41**: 407-77.
212. Piepoli MF, Hoes AW, Agewall S *et al.* 2016 European Guidelines on cardiovascular disease prevention in clinical practice: The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts) Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). *European heart journal* 2016; **37**: 2315-81.
213. Mach F, Baigent C, Catapano AL *et al.* 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardiovascular risk. *European heart journal* 2020; **41**: 111-88.
214. Boehncke W-H, Gladman DD, Chandran V. Cardiovascular comorbidities in psoriasis and psoriatic arthritis: pathogenesis, consequences for patient management, and future research agenda: a report from the GRAPPA 2009 annual meeting. *J Rheumatol* 2011; **38**: 567-71.
215. Kimball AB, Szapary P, Mrowietz U *et al.* Underdiagnosis and undertreatment of cardiovascular risk factors in patients with moderate to severe psoriasis. *J Am Acad Dermatol* 2012; **67**: 76-85.
216. Wakkee M, Herings RM, Nijsten T. Psoriasis may not be an independent risk factor for acute ischemic heart disease hospitalizations: results of a large population-based Dutch cohort. *The Journal of investigative dermatology* 2010; **130**: 962-7.
217. Stern RS, Huibregtse A. Very severe psoriasis is associated with increased noncardiovascular mortality but not with increased cardiovascular risk. *The Journal of investigative dermatology* 2011; **131**: 1159-66.
218. Samarasekera EJ, Neilson JM, Warren RB, Parnham J, Smith CH. Incidence of cardiovascular disease in individuals with psoriasis: a systematic review and meta-analysis. *The Journal of investigative dermatology* 2013; **133**: 2340-6.
219. Gaeta M, Castelvechchio S, Ricci C, Pigatto P, Pellissero G, Cappato R. Role of psoriasis as independent predictor of cardiovascular disease: a meta-regression analysis. *International journal of cardiology* 2013; **168**: 2282-8.
220. Kaiser H, Abdulla J, Henningsen KMA, Skov L, Hansen PR. Coronary Artery Disease Assessed by Computed Tomography in Patients with Psoriasis: A Systematic Review and Meta-Analysis. *Dermatology* 2019; **235**: 478-87.



221. Davidovici BB, Sattar N, Prinz JC *et al.* Psoriasis and systemic inflammatory diseases: potential mechanistic links between skin disease and co-morbid conditions. *The Journal of investigative dermatology* 2010; **130**: 1785-96.
222. Ghazizadeh R, Shimizu H, Tosa M, Ghazizadeh M. Pathogenic mechanisms shared between psoriasis and cardiovascular disease. *Int J Med Sci* 2010; **7**: 284-9.
223. Chappe SG, Roenigk HH, Miller AJ, Beeaff DE, Tyrpin L. The effect of photochemotherapy on the cardiovascular system. *J Am Acad Dermatol* 1981; **4**: 561-6.
224. Hugh J, Van Voorhees AS, Nijhawan RI *et al.* From the Medical Board of the National Psoriasis Foundation: The risk of cardiovascular disease in individuals with psoriasis and the potential impact of current therapies. *J Am Acad Dermatol* 2014; **70**: 168-77.
225. Katz HI, Waalen J, Leach EE. Acitretin in psoriasis: an overview of adverse effects. *J Am Acad Dermatol* 1999; **41**: 7.
226. Robert N, Wong GW, Wright JM. Effect of cyclosporine on blood pressure. *The Cochrane database of systematic reviews* 2010: CD007893.
227. Choi HK, Hernan MA, Seeger JD, Robins JM, Wolfe F. Methotrexate and mortality in patients with rheumatoid arthritis: a prospective study. *Lancet* 2002; **359**: 1173-7.
228. Prodanovich S, Prodanowich S, Ma F *et al.* Methotrexate reduces incidence of vascular diseases in veterans with psoriasis or rheumatoid arthritis. *J Am Acad Dermatol* 2005; **52**: 262-7.
229. Westlake SL, Colebatch AN, Baird J *et al.* The effect of methotrexate on cardiovascular disease in patients with rheumatoid arthritis: a systematic literature review. *Rheumatology* 2010; **49**: 295-307.
230. Roubille C, Richer V, Starnino T *et al.* The effects of tumour necrosis factor inhibitors, methotrexate, non-steroidal anti-inflammatory drugs and corticosteroids on cardiovascular events in rheumatoid arthritis, psoriasis and psoriatic arthritis: a systematic review and meta-analysis. *Annals of the rheumatic diseases* 2015; **74**: 480-9.
231. Ahlehoff O, Skov L, Gislasen G *et al.* Cardiovascular outcomes and systemic anti-inflammatory drugs in patients with severe psoriasis: 5-year follow-up of a Danish nationwide cohort. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2015; **29**: 1128-34.
232. Martinez-Lopez A, Blasco-Morente G, Perez-Lopez I, Tercedor-Sanchez J, Arias-Santiago S. Studying the effect of systemic and biological drugs on intima-media thickness in patients suffering from moderate and severe psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2018; **32**: 1492-8.
233. Imam F, Al-Harbi NO, Al-Harbi MM *et al.* Apremilast prevent doxorubicin-induced apoptosis and inflammation in heart through inhibition of oxidative stress mediated activation of NF-kappaB signaling pathways. *Pharmacological reports : PR* 2018; **70**: 993-1000.
234. Peters MJL, Watt P, Cherry L *et al.* Lack of effect of TNFalpha blockade therapy on circulating adiponectin levels in patients with autoimmune disease: results from two independent prospective studies. *Annals of the rheumatic diseases* 2010; **69**: 1687-90.
235. Strober B, Teller C, Yamauchi P *et al.* Effects of etanercept on C-reactive protein levels in psoriasis and psoriatic arthritis. *The British journal of dermatology* 2008; **159**: 322-30.
236. Gisondi P, Lora V, Bonauguri C, Russo A, Lippi G, Girolomoni G. Serum chemerin is increased in patients with chronic plaque psoriasis and normalizes following treatment with infliximab. *The British journal of dermatology* 2013; **168**: 749-55.
237. Eder L, Joshi AA, Dey AK *et al.* Association of Tumor Necrosis Factor Inhibitor Treatment With Reduced Indices of Subclinical Atherosclerosis in Patients With Psoriatic Disease. *Arthritis & rheumatology (Hoboken, N.J.)* 2018; **70**: 408-16.



238. Gelfand JM, Shin DB, Alavi A *et al.* A Phase IV, Randomized, Double-Blind, Placebo-Controlled Crossover Study of the Effects of Ustekinumab on Vascular Inflammation in Psoriasis (the VIP-U Trial). *The Journal of investigative dermatology* 2020; **140**: 85-93.e2.
239. Bilsborough W, Keen H, Taylor A, O'Driscoll GJ, Arnolda L, Green DJ. Anti-tumour necrosis factor-alpha therapy over conventional therapy improves endothelial function in adults with rheumatoid arthritis. *Rheumatol Int* 2006; **26**: 1125-31.
240. Tam LS, Li EK, Shang Q *et al.* Tumour necrosis factor alpha blockade is associated with sustained regression of carotid intima-media thickness for patients with active psoriatic arthritis: a 2-year pilot study. *Annals of the rheumatic diseases* 2011; **70**: 705-6.
241. Pina T, Corrales A, Lopez-Mejias R *et al.* Anti-tumor necrosis factor-alpha therapy improves endothelial function and arterial stiffness in patients with moderate to severe psoriasis: A 6-month prospective study. *The Journal of dermatology* 2016; **43**: 1267-72.
242. von Stebut E, Reich K, Thaci D *et al.* Impact of Secukinumab on Endothelial Dysfunction and Other Cardiovascular Disease Parameters in Psoriasis Patients over 52 Weeks. *The Journal of investigative dermatology* 2019; **139**: 1054-62.
243. Abuabara K, Lee H, Kimball AB. The effect of systemic psoriasis therapies on the incidence of myocardial infarction: a cohort study. *The British journal of dermatology* 2011; **165**: 1066-73.
244. Leisner MZ, Lindorff Riis J, Gniadecki R, Iversen L, Olsen M. Psoriasis and risk of myocardial infarction before and during an era with biological therapy: a population-based follow-up study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2018; **32**: 2185-90.
245. Ryan C, Leonardi CL, Krueger JG *et al.* Association between biologic therapies for chronic plaque psoriasis and cardiovascular events: a meta-analysis of randomized controlled trials. *JAMA* 2011; **306**: 864-71.
246. Wu JJ, Poon K-YT, Channual JC, Shen AY-J. Association between tumor necrosis factor inhibitor therapy and myocardial infarction risk in patients with psoriasis. *Archives of dermatology* 2012; **148**: 1244-50.
247. Ahlehoff O, Skov L, Gislasen G *et al.* Cardiovascular disease event rates in patients with severe psoriasis treated with systemic anti-inflammatory drugs: a Danish real-world cohort study. *J Intern Med* 2013; **273**: 197-204.
248. Wu JJ, Guerin A, Sundaram M, Dea K, Cloutier M, Mulani P. Cardiovascular event risk assessment in psoriasis patients treated with tumor necrosis factor-alpha inhibitors versus methotrexate. *J Am Acad Dermatol* 2017; **76**: 81-90.
249. Reich K, Langley RG, Lebwohl M *et al.* Cardiovascular safety of ustekinumab in patients with moderate to severe psoriasis: results of integrated analyses of data from phase II and III clinical studies. *The British journal of dermatology* 2011; **164**: 862-72.
250. Papp KA, Griffiths CE, Gordon K *et al.* Long-term safety of ustekinumab in patients with moderate-to-severe psoriasis: final results from 5 years of follow-up. *The British journal of dermatology* 2013; **168**: 844-54.
251. Rungapiromnan W, Yiu ZZN, Warren RB, Griffiths CEM, Ashcroft DM. Impact of biologic therapies on risk of major adverse cardiovascular events in patients with psoriasis: systematic review and meta-analysis of randomized controlled trials. *The British journal of dermatology* 2017; **176**: 890-901.
252. Champs B, Degboe Y, Barnetche T, Cantagrel A, Ruysse-Witrand A, Constantin A. Short-term risk of major adverse cardiovascular events or congestive heart failure in patients with psoriatic arthritis or psoriasis initiating a biological therapy: a meta-analysis of randomised controlled trials. *RMD open* 2019; **5**: e000763.



253. Rungapiromnan W, Mason KJ, Lunt M *et al.* Risk of major cardiovascular events in patients with psoriasis receiving biologic therapies: a prospective cohort study. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019.
254. Lee MP, Desai RJ, Jin Y, Brill G, Ogdie A, Kim SC. Association of Ustekinumab vs TNF Inhibitor Therapy With Risk of Atrial Fibrillation and Cardiovascular Events in Patients With Psoriasis or Psoriatic Arthritis. *JAMA dermatology* 2019; **155**: 700-7.
255. Ponikowski P, Voors AA, Anker SD *et al.* 2016 ESC Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure. *Revista espanola de cardiologia (English ed.)* 2016; **69**: 1167.
256. Yokoyama T, Vaca L, Rossen RD, Durante W, Hazarika P, Mann DL. Cellular basis for the negative inotropic effects of tumor necrosis factor-alpha in the adult mammalian heart. *The Journal of clinical investigation* 1993; **92**: 2303-12.
257. Torre-Amione G, Bozkurt B, Deswal A, Mann DL. An overview of tumor necrosis factor alpha and the failing human heart. *Current opinion in cardiology* 1999; **14**: 206-10.
258. Deswal A, Bozkurt B, Seta Y *et al.* Safety and efficacy of a soluble P75 tumor necrosis factor receptor (Enbrel, etanercept) in patients with advanced heart failure. *Circulation* 1999; **99**: 3224-6.
259. Coletta AP, Clark AL, Banarjee P, Cleland JG. Clinical trials update: RENEWAL (RENAISSANCE and RECOVER) and ATTACH. *European journal of heart failure* 2002; **4**: 559-61.
260. Chung ES, Packer M, Lo KH, Fasanmade AA, Willerson JT, Anti TNFTACHFI. Randomized, double-blind, placebo-controlled, pilot trial of infliximab, a chimeric monoclonal antibody to tumor necrosis factor-alpha, in patients with moderate-to-severe heart failure: results of the anti-TNF Therapy Against Congestive Heart Failure (ATTACH) trial. *Circulation* 2003; **107**: 3133-40.
261. Singh JA, Wells GA, Christensen R *et al.* Adverse effects of biologics: a network meta-analysis and Cochrane overview. *The Cochrane database of systematic reviews* 2011: CD008794.
262. Wan J, Wang S, Haynes K, Denburg MR, Shin DB, Gelfand JM. Risk of moderate to advanced kidney disease in patients with psoriasis: population based cohort study. *Bmj* 2013; **347**: f5961.
263. Garcia-Doval I, Carretero G, Vanaclocha F *et al.* Risk of serious adverse events associated with biologic and nonbiologic psoriasis systemic therapy: patients ineligible vs eligible for randomized controlled trials. *Archives of dermatology* 2012; **148**: 463-70.
264. Ormerod AD, Campalani E, Goodfield MJ, Unit BADCS. British Association of Dermatologists guidelines on the efficacy and use of acitretin in dermatology. *The British journal of dermatology* 2010; **162**: 952-63.
265. Bath-Hextall F, Leonardi-Bee J, Somchand N, Webster A, Delitt J, Perkins W. Interventions for preventing non-melanoma skin cancers in high-risk groups. *The Cochrane database of systematic reviews* 2007; **4**: CD005414.
266. Stuck AE, Brindley CJ, Busslinger A, Frey FJ. Pharmacokinetics of acitretin and its 13-cis metabolite in patients on haemodialysis. *British journal of clinical pharmacology* 1989; **27**: 301-4.
267. Chimenti MS, Gramiccia T, Saraceno R *et al.* Apremilast for the treatment of psoriasis. *Expert opinion on pharmacotherapy* 2015; **16**: 2083-94.
268. Cada DJ, Levien TL, Baker DE. Dimethyl fumarate. *Hospital pharmacy* 2013; **48**: 668-79.
269. Rostami-Yazdi M, Clement B, Mrowietz U. Pharmacokinetics of anti-psoriatic fumaric acid esters in psoriasis patients. *Archives of dermatological research* 2010; **302**: 531-8.
270. Rostami-Yazdi M, Clement B, Schmidt TJ, Schinor D, Mrowietz U. Detection of metabolites of fumaric acid esters in human urine: implications for their mode of action. *The Journal of investigative dermatology* 2009; **129**: 231-4.



271. Maza A, Montaudie H, Sbidian E *et al.* Oral cyclosporin in psoriasis: a systematic review on treatment modalities, risk of kidney toxicity and evidence for use in non-plaque psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2011; **25 Suppl 2**: 19-27.
272. Issa N, Kukla A, Ibrahim HN. Calcineurin inhibitor nephrotoxicity: a review and perspective of the evidence. *American journal of nephrology* 2013; **37**: 602-12.
273. Chadban SJ, Barraclough KA, Campbell SB *et al.* KHA-CARI guideline: KHA-CARI adaptation of the KDIGO Clinical Practice Guideline for the Care of Kidney Transplant Recipients. *Nephrology* 2012; **17**: 204-14.
274. Kremer JM, Petrillo GF, Hamilton RA. Pharmacokinetics and renal function in patients with rheumatoid arthritis receiving a standard dose of oral weekly methotrexate: association with significant decreases in creatinine clearance and renal clearance of the drug after 6 months of therapy. *J Rheumatol* 1995; **22**: 38-40.
275. Bressolle F, Bologna C, Kinowski JM, Sany J, Combe B. Effects of moderate renal insufficiency on pharmacokinetics of methotrexate in rheumatoid arthritis patients. *Annals of the rheumatic diseases* 1998; **57**: 110-3.
276. Rheumatoid Arthritis Clinical Trial Archive Group. The effect of age and renal function on the efficacy and toxicity of methotrexate in rheumatoid arthritis. *J Rheumatol* 1995; **22**: 218-23.
277. Willner N, Storch S, Tadmor T, Schiff E. Almost a tragedy: severe methotrexate toxicity in a hemodialysis patient treated for ectopic pregnancy. *European journal of clinical pharmacology* 2014; **70**: 261-3.
278. Le Boedec M, Marhadour T, Devauchelle-Pensec V *et al.* Baseline laboratory test abnormalities are common in early arthritis but rarely contraindicate methotrexate: study of three cohorts (ESPOIR, VErA, and Brittany). *Seminars in arthritis and rheumatism* 2013; **42**: 474-81.
279. Bechstein WO. Neurotoxicity of calcineurin inhibitors: impact and clinical management. *Transplant international : official journal of the European Society for Organ Transplantation* 2000; **13**: 313-26.
280. Ellis CN, Fradin MS, Messana JM *et al.* Cyclosporine for plaque-type psoriasis. Results of a multidose, double-blind trial. *The New England journal of medicine* 1991; **324**: 277-84.
281. Tan TC, Robinson PJ. Mechanisms of calcineurin inhibitor-induced neurotoxicity. *Transplantation Reviews* 2006; **20**: 49-60.
282. Arnold R, Pussell BA, Pianta TJ, Lin CS, Kiernan MC, Krishnan AV. Association between calcineurin inhibitor treatment and peripheral nerve dysfunction in renal transplant recipients. *American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons* 2013; **13**: 2426-32.
283. Thompson CB, Sullivan KM, June CH, Thomas ED. Association between Cyclosporin Neurotoxicity and Hypomagnesemia. *Lancet* 1984; **2**: 1116-20.
284. Venci JV, Gandhi MA. Dimethyl fumarate (Tecfidera): a new oral agent for multiple sclerosis. *The Annals of pharmacotherapy* 2013; **47**: 1697-702.
285. van Oosten BW, Killestein J, Barkhof F, Polman CH, Wattjes MP. PML in a patient treated with dimethyl fumarate from a compounding pharmacy. *The New England journal of medicine* 2013; **368**: 1658-9.
286. Ermis U, Weis J, Schulz JB. PML in a patient treated with fumaric acid. *The New England journal of medicine* 2013; **368**: 1657-8.
287. Stoppe M, Thoma E, Liebert UG *et al.* Cerebellar manifestation of PML under fumarate and after efalizumab treatment of psoriasis. *Journal of neurology* 2014; **261**: 1021-4.
288. Sweetser MT, Dawson KT, Bozic C. Manufacturer's response to case reports of PML. *The New England journal of medicine* 2013; **368**: 1659-61.



289. Buttman M, Stoll G. Case reports of PML in patients treated for psoriasis. *The New England journal of medicine* 2013; **369**: 1081.
290. Bartsch T, Rempe T, Wrede A *et al.* Progressive neurologic dysfunction in a psoriasis patient treated with dimethyl fumarate. *Ann Neurol* 2015; **78**: 501-14.
291. Nieuwkamp DJ, Murk JL, van Oosten BW *et al.* PML in a patient without severe lymphocytopenia receiving dimethyl fumarate. *The New England journal of medicine* 2015; **372**: 1474-6.
292. Dammeier N, Schubert V, Hauser TK, Bornemann A, Bischof F. Case report of a patient with progressive multifocal leukoencephalopathy under treatment with dimethyl fumarate. *BMC Neurol* 2015; **15**: 108.
293. Hoepner R, Faissner S, Klasing A *et al.* Progressive multifocal leukoencephalopathy during fumarate monotherapy of psoriasis. *Neurol Neuroimmunol Neuroinflamm* 2015; **2**: e85.
294. Paudyal B, Viets R, Skliut M. A case of low-dose oral methotrexate-induced reversible neurotoxicity. *AJNR. American journal of neuroradiology* 2010; **31**: E77.
295. Sommer WH, Ganiere V, Gachoud D *et al.* Neurological and pulmonary adverse effects of subcutaneous methotrexate therapy. *Scandinavian journal of rheumatology* 2008; **37**: 306-9.
296. Kaltsonoudis E, Voulgari PV, Konitsiotis S, Drosos AA. Demyelination and other neurological adverse events after anti-TNF therapy. *Autoimmunity reviews* 2014; **13**: 54-8.
297. van Oosten BW, Barkhof F, Truyen L *et al.* Increased MRI activity and immune activation in two multiple sclerosis patients treated with the monoclonal anti-tumor necrosis factor antibody cA2. *Neurology* 1996; **47**: 1531-4.
298. Gregory AP, Dendrou CA, Atfield KE *et al.* TNF receptor 1 genetic risk mirrors outcome of anti-TNF therapy in multiple sclerosis. *Nature* 2012; **488**: 508-11.
299. Mahil SK, Andrews TC, Brierley C, Barker JN, Smith CH. Demyelination during tumour necrosis factor antagonist therapy for psoriasis: a case report and review of the literature. *The Journal of dermatological treatment* 2013; **24**: 38-49.
300. Bosch X, Saiz A, Ramos-Casals M, Group BS. Monoclonal antibody therapy-associated neurological disorders. *Nature reviews. Neurology* 2011; **7**: 165-72.
301. Kay J, Fleischmann R, Keystone E *et al.* Golimumab 3-year safety update: an analysis of pooled data from the long-term extensions of randomised, double-blind, placebo-controlled trials conducted in patients with rheumatoid arthritis, psoriatic arthritis or ankylosing spondylitis. *Annals of the rheumatic diseases* 2015; **74**: 538-46.
302. Maillart E, Papeix C, Mellerio C, Bertrand A, Lubetzki C, Louapre C. Extensive and severe CNS demyelination associated with golimumab therapy. *Journal of neurology* 2016; **263**: 1869-71.
303. Barreras P, Mealy MA, Pardo CA. TNF-alpha inhibitor associated myelopathies: A neurological complication in patients with rheumatologic disorders. *J Neurol Sci* 2017; **373**: 303-6.
304. Hare NC, Hunt DP, Venugopal K *et al.* Multiple sclerosis in the context of TNF blockade and inflammatory bowel disease. *Qjm* 2014; **107**: 51-5.
305. Lommers E, Depierreux F, Hansen I, Dive D, Maquet P. NMOSD with anti-MOG antibodies following anti-TNFalpha therapy: A case report. *Mult Scler Relat Disord* 2018; **26**: 37-9.
306. Boggs JME, Barnes L. Demyelination during anti-tumour necrosis factor therapy for psoriasis. *Clinical and experimental dermatology* 2018; **43**: 577-8.
307. Honda Y, Otsuka A, Egawa G *et al.* Multiple neurological abnormalities, including pontine hemorrhage, multiple sclerosis and aseptic meningitis, during anti-TNF-alpha therapy in psoriatic arthritis. *Eur J Dermatol* 2015; **25**: 487-8.
308. Motuzova Y, Di Sapio A, Capobianco M *et al.* Peculiar Cytological Cerebrospinal Fluid Pattern in a Case of Encephalomyelitis During Anti-Tumor Necrosis Factor-alpha Therapy. *Neurol Ther* 2015; **4**: 53-60.



309. Theibich A, Dreyer L, Magyari M, Locht H. Demyelinating neurological disease after treatment with tumor necrosis factor alpha-inhibiting agents in a rheumatological outpatient clinic: description of six cases. *Clinical rheumatology* 2014; **33**: 719-23.
310. Escalas J, Knopf N, Martin-Santiago A, Calles C. Acute transverse myelitis during treatment with etanercept for severe plaque psoriasis. *J Am Acad Dermatol* 2014; **70**: e17-8.
311. Sarathchandran P, Alboudi A, AlSuwaidi R, Almadani AA. Iatrogenic transverse myelitis in a patient with rheumatoid arthritis. *BMJ Case Reports* 2019; **12**: e227584.
312. Baumer FM, Ouahed J, Verhave M, Rivkin MJ. Fatal Central Nervous System Disease Following First Infliximab Infusion in a Child With Inflammatory Bowel Disease. *Pediatr Neurol* 2016; **57**: 91-4.
313. Signore SC, Brauns B, Schutze G *et al*. Infliximab-Associated Chronic Inflammatory Central Nervous System Disease and Peroneal Nerve Injury in a Psoriatic Patient Refractory to Treatment: Case Report with 10-Year Follow-Up. *Case Rep Neurol* 2018; **10**: 12-7.
314. Bernatsky S, Renoux C, Suissa S. Demyelinating events in rheumatoid arthritis after drug exposures. *Annals of the rheumatic diseases* 2010; **69**: 1691-3.
315. Ramiro S, Gaujoux-Viala C, Nam JL *et al*. Safety of synthetic and biological DMARDs: a systematic literature review informing the 2013 update of the EULAR recommendations for management of rheumatoid arthritis. *Annals of the rheumatic diseases* 2014; **73**: 529-35.
316. Lozeron P, Denier C, Lacroix C, Adams D. Long-term course of demyelinating neuropathies occurring during tumor necrosis factor-alpha-blocker therapy. *Archives of neurology* 2009; **66**: 490-7.
317. Badat Y, Meissner WG, Laharie D. Demyelination in a patient receiving ustekinumab for refractory Crohn's disease. *Journal of Crohn's & colitis* 2014; **8**: 1138-9.
318. Fukushima T, Nakajima K, Nozawa H *et al*. [A case of Crohn's disease complicated by Guillain-Barre syndrome during ustekinumab therapy]. *Nihon Shokakibyō Gakkai Zasshi* 2019; **116**: 324-9.
319. Acer E, Iğrek A, Erdogan HK, Saracoglu ZN. Ustekinumab in psoriasis: Five-year real life experience from a single tertiary centre. *Dermatologic therapy* 2020: e13224.
320. Gratton D, Szapary P, Goyal K, Fakhrazadeh S, Germain V, Saltiel P. Reversible posterior leukoencephalopathy syndrome in a patient treated with ustekinumab: case report and review of the literature. *Archives of dermatology* 2011; **147**: 1197-202.
321. Kolbinger F, Huppertz C, Mir A, Padova FD. IL-17A and Multiple Sclerosis: Signaling Pathways, Producing Cells and Target Cells in the Central Nervous System. *Curr Drug Targets* 2016; **17**: 1882-93.
322. Havrdova E, Belova A, Goloborodko A *et al*. Activity of secukinumab, an anti-IL-17A antibody, on brain lesions in RRMS: results from a randomized, proof-of-concept study. *Journal of neurology* 2016; **263**: 1287-95.
323. Diebold M, Muller S, Derfuss T, Decard BF. A case of concomitant psoriasis and multiple sclerosis: Secukinumab and rituximab exert dichotomous effects in two autoimmune conditions. *Mult Scler Relat Disord* 2019; **31**: 38-40.
324. Assefa GT, Kaneko S, Oguro H, Morita E. Treatment of psoriasis and psoriatic arthritis with secukinumab after unsatisfactory response to ustekinumab in multiple sclerosis patient. *The Journal of dermatology* 2019; **46**: e112-e3.
325. Venturini M, Zanca A, Venturuzzo A *et al*. Secukinumab for patients with plaque psoriasis affected by multiple sclerosis: a mini-review with a representative case report. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019.
326. Cortese A, Lucchetti R, Altobelli A *et al*. Secukinumab may be a valid treatment option in patients with CNS demyelination and concurrent ankylosing spondylitis: Report of two clinical cases. *Mult Scler Relat Disord* 2019; **35**: 193-5.



327. Ebers GC, Bulman DE, Sadovnick AD *et al.* A population-based study of multiple sclerosis in twins. *The New England journal of medicine* 1986; **315**: 1638-42.
328. Siva A. Asymptomatic MS. *Clinical neurology and neurosurgery* 2013; **115 Suppl 1**: S1-5.
329. Tang KT, Chen YM, Chang SN, Lin CH, Chen DY. Psoriatic patients with chronic viral hepatitis do not have an increased risk of liver cirrhosis despite long-term methotrexate use: Real-world data from a nationwide cohort study in Taiwan. *J Am Acad Dermatol* 2018; **79**: 652-8.
330. Lewinsohn DM, Leonard MK, LoBue PA *et al.* Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention Clinical Practice Guidelines: Diagnosis of Tuberculosis in Adults and Children. *Clin Infect Dis* 2017; **64**: 111-5.
331. Desai N, Raste Y, Cooke NT, Harland CC. QuantiFERON-TB Gold testing for tuberculosis in psoriasis patients commencing anti-tumour necrosis factor alpha therapy. *The British journal of dermatology* 2008; **158**: 1137-8.
332. Ehlers S. Tumor necrosis factor and its blockade in granulomatous infections: differential modes of action of infliximab and etanercept? *Clin Infect Dis* 2005; **41 Suppl 3**: S199-203.
333. World Health Organization. WHO Guidelines Approved by the Guidelines Review Committee. In: *Latent tuberculosis infection: updated and consolidated guidelines for programmatic management*. Geneva: World Health Organization (c) World Health Organization 2018. 2018.
334. Golden MP, Vikram HR. Extrapulmonary tuberculosis: an overview. *American family physician* 2005; **72**: 1761-8.
335. Christensen WI. Genitourinary tuberculosis: review of 102 cases. *Medicine* 1974; **53**: 377-90.
336. Simon HB, Weinstein AJ, Pasternak MS, Swartz MN, Kunz LJ. Genitourinary tuberculosis. Clinical features in a general hospital population. *The American journal of medicine* 1977; **63**: 410-20.
337. National Collaborating Centre for Chronic C, Centre for Clinical Practice at, Nice,,. National Institute for Health and Clinical Excellence: Guidance. In: *Tuberculosis: Clinical Diagnosis and Management of Tuberculosis, and Measures for Its Prevention and Control*. London: National Institute for Health and Clinical Excellence (UK) Royal College of Physicians of London. Updated text, Copyright (c) 2011, National Institute for Health and Clinical Excellence. 2011.
338. Schaberg T, Bauer T, Brinkmann F *et al.* [Tuberculosis Guideline for Adults - Guideline for Diagnosis and Treatment of Tuberculosis including LTBI Testing and Treatment of the German Central Committee (DZK) and the German Respiratory Society (DGP)]. *Pneumologie (Stuttgart, Germany)* 2017; **71**: 325-97.
339. Doherty SD, Van Voorhees A, Lebwohl MG *et al.* National Psoriasis Foundation consensus statement on screening for latent tuberculosis infection in patients with psoriasis treated with systemic and biologic agents. *J Am Acad Dermatol* 2008; **59**: 209-17.
340. Arias-Guillen M, Sanchez Menendez MM, Alperi M *et al.* High rates of tuberculin skin test positivity due to methotrexate therapy: False positive results? *Seminars in arthritis and rheumatism* 2018; **48**: 538-46.
341. Cantini F, Nannini C, Niccoli L, Petrone L, Ippolito G, Goletti D. Risk of Tuberculosis Reactivation in Patients with Rheumatoid Arthritis, Ankylosing Spondylitis, and Psoriatic Arthritis Receiving Non-Anti-TNF-Targeted Biologics. *Mediators of inflammation* 2017; **2017**: 8909834.
342. Snast I, Bercovici E, Solomon-Cohen E *et al.* Active Tuberculosis in Patients with Psoriasis Receiving Biologic Therapy: A Systematic Review. *American journal of clinical dermatology* 2019; **20**: 483-91.
343. Kaushik SB, Lebwohl MG. Psoriasis: Which therapy for which patient: Focus on special populations and chronic infections. *J Am Acad Dermatol* 2019; **80**: 43-53.



344. Epstein DJ, Dunn J, Deresinski S. Infectious Complications of Multiple Sclerosis Therapies: Implications for Screening, Prophylaxis, and Management. *Open forum infectious diseases* 2018; **5**: ofy174.
345. Fox RJ, Kita M, Cohan SL *et al.* BG-12 (dimethyl fumarate): a review of mechanism of action, efficacy, and safety. *Current medical research and opinion* 2014; **30**: 251-62.
346. Cantini F, Niccoli L, Capone A, Petrone L, Goletti D. Risk of tuberculosis reactivation associated with traditional disease modifying anti-rheumatic drugs and non-anti-tumor necrosis factor biologics in patients with rheumatic disorders and suggestion for clinical practice. *Expert opinion on drug safety* 2019; **18**: 415-25.
347. Crowley J, Thaci D, Joly P *et al.* Long-term safety and tolerability of apremilast in patients with psoriasis: Pooled safety analysis for \geq 156 weeks from 2 phase 3, randomized, controlled trials (ESTEEM 1 and 2). *J Am Acad Dermatol* 2017; **77**: 310-7.e1.
348. Baddley JW, Cantini F, Goletti D *et al.* ESCMID Study Group for Infections in Compromised Hosts (ESGICH) Consensus Document on the safety of targeted and biological therapies: an infectious diseases perspective (Soluble immune effector molecules [I]: anti-tumor necrosis factor-alpha agents). *Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases* 2018; **24 Suppl 2**: S10-s20.
349. Cantini F, Niccoli L, Goletti D. Adalimumab, etanercept, infliximab, and the risk of tuberculosis: data from clinical trials, national registries, and postmarketing surveillance. *J Rheumatol Suppl* 2014; **91**: 47-55.
350. Winthrop KL, Mariette X, Silva JT *et al.* ESCMID Study Group for Infections in Compromised Hosts (ESGICH) Consensus Document on the safety of targeted and biological therapies: an infectious diseases perspective (Soluble immune effector molecules [II]: agents targeting interleukins, immunoglobulins and complement factors). *Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases* 2018; **24 Suppl 2**: S21-s40.
351. Elewski BE, Baddley JW, Deodhar AA *et al.* Association of Secukinumab Treatment With Tuberculosis Reactivation in Patients With Psoriasis, Psoriatic Arthritis, or Ankylosing Spondylitis. *JAMA dermatology* 2021; **157**: 43-51.
352. Crowley JJ, Warren RB, Cather JC. Safety of selective IL-23p19 inhibitors for the treatment of psoriasis. *Journal of the European Academy of Dermatology and Venereology : JEADV* 2019; **33**: 1676-84.
353. Gordon KB, Strober B, Lebwohl M *et al.* Efficacy and safety of risankizumab in moderate-to-severe plaque psoriasis (UltIMMa-1 and UltIMMa-2): results from two double-blind, randomised, placebo-controlled and ustekinumab-controlled phase 3 trials. *Lancet* 2018; **392**: 650-61.
354. Boyd AS, Morris LF, Phillips CM, Menter MA. Psoriasis and pregnancy: hormone and immune system interaction. *International journal of dermatology* 1996; **35**: 169-72.
355. Murase JE, Chan KK, Garite TJ, Cooper DM, Weinstein GD. Hormonal effect on psoriasis in pregnancy and post partum. *Archives of dermatology* 2005; **141**: 601-6.
356. Bobotsis R, Gulliver WP, Monaghan K, Lynde C, Fleming P. Psoriasis and adverse pregnancy outcomes: a systematic review of observational studies. *The British journal of dermatology* 2016; **175**: 464-72.
357. Yang Y-W, Chen C-S, Chen Y-H, Lin H-C. Psoriasis and pregnancy outcomes: a nationwide population-based study. *J Am Acad Dermatol* 2011; **64**: 71-7.
358. Lima XT, Janakiraman V, Hughes MD, Kimball AB. The impact of psoriasis on pregnancy outcomes. *The Journal of investigative dermatology* 2012; **132**: 85-91.



359. Bandoli G, Johnson DL, Jones KL *et al.* Potentially modifiable risk factors for adverse pregnancy outcomes in women with psoriasis. *The British journal of dermatology* 2010; **163**: 334-9.
360. European Medicines Agency. Acitretin 25mg Capsules - Summary of Product Characteristics (SmPC) - (emc). In.
361. European Medicines Agency. Otezla 30 mg Film-Coated Tablets - Summary of Product Characteristics (SmPC) - (emc). In.
362. Rademaker M, Agnew K, Andrews M *et al.* Psoriasis in those planning a family, pregnant or breast-feeding. The Australasian Psoriasis Collaboration. *Australas. J. Dermatol.* 2018; **59**: 86-100.
363. Gerosa M, Argolini LM, Artusi C, Chighizola CB. The use of biologics and small molecules in pregnant patients with rheumatic diseases. *Expert Rev Clin Pharmacol* 2018; **11**: 987-98.
364. European Medicines Agency. Neoral Soft Gelatin Capsules - Summary of Product Characteristics (SmPC) - (emc). In.
365. European Medicines Agency. Skilarence 30 mg Gastro-resistant Tablets - Summary of Product Characteristics (SmPC) - (emc). In.
366. Mrowietz U, Barker J, Boehncke WH *et al.* Clinical use of dimethyl fumarate in moderate-to-severe plaque-type psoriasis: a European expert consensus. *Journal of the European Academy of Dermatology and Venereology: JEADV* 2018; **32 Suppl 3**: 3-14.
367. Verberne EA, de Haan E, van Tintelen JP, Lindhout D, van Haelst MM. Fetal methotrexate syndrome: A systematic review of case reports. *Reprod. Toxicol.* 2019; **87**: 125-39.
368. European Medicines Agency. Methotrexate 2.5mg Tablets - Summary of Product Characteristics (SmPC) - (emc). In.
369. European Medicines Agency. Nordimet - EPAR. In. 2016.
370. Warren RB, Weatherhead SC, Smith CH *et al.* British Association of Dermatologists' guidelines for the safe and effective prescribing of methotrexate for skin disease 2016. *The British journal of dermatology* 2016; **175**: 23-44.
371. Smith CH, Jabbar-Lopez ZK, Yiu ZZ *et al.* British Association of Dermatologists guidelines for biologic therapy for psoriasis 2017. *The British journal of dermatology* 2017; **177**: 628-36.
372. Kane SV, Acquah LA. Placental transport of immunoglobulins: a clinical review for gastroenterologists who prescribe therapeutic monoclonal antibodies to women during conception and pregnancy. *The American journal of gastroenterology* 2009; **104**: 228-33.
373. Malek A, Sager R, Kuhn P, Nicolaides KH, Schneider H. Evolution of maternofetal transport of immunoglobulins during human pregnancy. *Am. J. Reprod. Immunol.* 1996; **36**: 248-55.
374. Pottinger E, Woolf RT, Exton LS, Burden AD, Nelson-Piercy C, Smith CH. Exposure to biological therapies during conception and pregnancy: a systematic review. *The British journal of dermatology* 2018; **178**: 95-102.
375. Ferrante M, Vermeire S, Rutgeerts PJ. Drug safety evaluation of certolizumab pegol. *Expert opinion on drug safety* 2014; **13**: 255-66.
376. Mahadevan U, Wolf DC, Dubinsky M *et al.* Placental transfer of anti-tumor necrosis factor agents in pregnant patients with inflammatory bowel disease. *Clin. Gastroenterol. Hepatol.* 2013; **11**: 286-92; quiz e24.
377. Mariette X, Förger F, Abraham B *et al.* Lack of placental transfer of certolizumab pegol during pregnancy: results from CRIB, a prospective, postmarketing, pharmacokinetic study. *Annals of the rheumatic diseases* 2018; **77**: 228-33.
378. Clowse ME, Förger F, Hwang C *et al.* Minimal to no transfer of certolizumab pegol into breast milk: results from CRADLE, a prospective, postmarketing, multicentre, pharmacokinetic study. *Annals of the rheumatic diseases* 2017; **76**: 1890-6.



379. Carman WJ, Accortt NA, Anthony MS, Iles J, Enger C. Pregnancy and infant outcomes including major congenital malformations among women with chronic inflammatory arthritis or psoriasis, with and without etanercept use. *Pharmacoepidemiol Drug Saf* 2017; **26**: 1109-18.
380. Burmester GR, Landewé R, Genovese MC *et al.* Adalimumab long-term safety: infections, vaccination response and pregnancy outcomes in patients with rheumatoid arthritis. *Annals of the rheumatic diseases* 2017; **76**: 414-7.
381. Bröms G, Granath F, Stephansson O, Kieler H. Preterm birth in women with inflammatory bowel disease - the association with disease activity and drug treatment. *Scand. J. Gastroenterol.* 2016; **51**: 1462-9.
382. Bröms G, Granath F, Ekblom A *et al.* Low Risk of Birth Defects for Infants Whose Mothers Are Treated With Anti-Tumor Necrosis Factor Agents During Pregnancy. *Clin. Gastroenterol. Hepatol.* 2016; **14**: 234-41.e1-5.
383. Luu M, Benzenine E, Doret M *et al.* Continuous Anti-TNF α Use Throughout Pregnancy: Possible Complications For the Mother But Not for the Fetus. A Retrospective Cohort on the French National Health Insurance Database (EVASION). *The American journal of gastroenterology* 2018; **113**: 1669-77.
384. Casanova MJ, Chaparro M, Domènech E *et al.* Safety of thiopurines and anti-TNF- α drugs during pregnancy in patients with inflammatory bowel disease. *The American journal of gastroenterology* 2013; **108**: 433-40.
385. Cooper WO, Cheetham TC, Li D-K *et al.* Brief report: Risk of adverse fetal outcomes associated with immunosuppressive medications for chronic immune-mediated diseases in pregnancy. *Arthritis & rheumatology (Hoboken, N.J.)* 2014; **66**: 444-50.
386. Weber-Schoendorfer C, Oppermann M, Wacker E *et al.* Pregnancy outcome after TNF- α inhibitor therapy during the first trimester: a prospective multicentre cohort study. *British journal of clinical pharmacology* 2015; **80**: 727-39.
387. Diav-Citrin O, Otcheretianski-Volodarsky A, Shechtman S, Ornoy A. Pregnancy outcome following gestational exposure to TNF-alpha-inhibitors: a prospective, comparative, observational study. *Reprod. Toxicol.* 2014; **43**: 78-84.
388. Schnitzler F, Fidler H, Ferrante M *et al.* Outcome of pregnancy in women with inflammatory bowel disease treated with antitumor necrosis factor therapy. *Inflammatory bowel diseases* 2011; **17**: 1846-54.
389. Seirafi M, de Vroey B, Amiot A *et al.* Factors associated with pregnancy outcome in anti-TNF treated women with inflammatory bowel disease. *Aliment. Pharmacol. Ther.* 2014; **40**: 363-73.
390. Verstappen SMM, King Y, Watson KD, Symmons DPM, Hyrich KL, BSRBR Control Centre Consortium BSRBR. Anti-TNF therapies and pregnancy: outcome of 130 pregnancies in the British Society for Rheumatology Biologics Register. *Annals of the rheumatic diseases* 2011; **70**: 823-6.
391. Clowse MEB, Scheuerle AE, Chambers C *et al.* Pregnancy Outcomes After Exposure to Certolizumab Pegol: Updated Results From a Pharmacovigilance Safety Database. *Arthritis & rheumatology (Hoboken, N.J.)* 2018; **70**: 1399-407.
392. Parsch EM, Ruzicka T, Przybilla B, Schill WB. Andrological investigations in men treated with acitretin (Ro 10-1670). *Andrologia* 1990; **22**: 479-82.
393. Geiger JM, Walker M. Is there a reproductive safety risk in male patients treated with acitretin (neotigason/soriatane)? *Dermatology (Basel)* 2002; **205**: 105-7.
394. Mouyis M, Flint JD, Giles IP. Safety of anti-rheumatic drugs in men trying to conceive: A systematic review and analysis of published evidence. *Seminars in arthritis and rheumatism* 2019; **48**: 911-20.



395. Semet M, Paci M, Saias-Magnan J *et al.* The impact of drugs on male fertility: a review. *Andrology* 2017; **5**: 640-63.
396. Egeberg A, Gislason GH, Nast A. Birth Outcomes in Children Fathered by Men Treated with Immunosuppressant Drugs before Conception-A Danish Population-Based Cohort Study. *The Journal of investigative dermatology* 2017; **137**: 1790-2.
397. Pandhi D, Gupta R, Singal A. Gynaecomastia with oligospermia: an unusual complication of low-dose methotrexate for pustular psoriasis. *Clinical and experimental dermatology* 2006; **31**: 138-40.
398. Sussman A, Leonard JM. Psoriasis, methotrexate, and oligospermia. *Archives of dermatology* 1980; **116**: 215-7.
399. El-Beheiry A, El-Mansy E, Kamel N, Salama N. Methotrexate and fertility in men. *Arch. Androl.* 1979; **3**: 177-9.
400. Grunnet E, Nyfors A, Hansen KB. Studies of human semen in topical corticosteroid-treated and in methotrexate-treated psoriatics. *Dermatologica* 1977; **154**: 78-84.
401. Eck LK, Jensen TB, Mastrogiannis D *et al.* Risk of Adverse Pregnancy Outcome After Paternal Exposure to Methotrexate Within 90 Days Before Pregnancy. *Obstet Gynecol* 2017; **129**: 707-14.
402. Winter RW, Larsen MD, Magnussen B, Friedman S, Kammerlander H, Nørgård BM. Birth outcomes after preconception paternal exposure to methotrexate: A nationwide cohort study. *Reprod. Toxicol.* 2017; **74**: 219-23.
403. Friedman S, Larsen MD, Magnussen B, Jølling LR, de Silva P, Nørgård BM. Paternal use of azathioprine/6-mercaptopurine or methotrexate within 3 months before conception and long-term health outcomes in the offspring-A nationwide cohort study. *Reprod. Toxicol.* 2017; **73**: 196-200.
404. Puchner R, Danninger K, Puchner A, Pieringer H. Impact of TNF-blocking agents on male sperm characteristics and pregnancy outcomes in fathers exposed to TNF-blocking agents at time of conception. *Clin. Exp. Rheumatol.* 2012; **30**: 765-7.
405. Wagner N, Assmus F, Arendt G *et al.* Impfen bei Immundefizienz : Anwendungshinweise zu den von der Ständigen Impfkommision empfohlenen Impfungen. (IV) Impfen bei Autoimmunkrankheiten, bei anderen chronisch-entzündlichen Erkrankungen und unter immunmodulatorischer Therapie. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz* 2019; **62**: 494-515.
406. Papp KA, Haraoui B, Kumar D *et al.* Vaccination Guidelines for Patients With Immune-Mediated Disorders on Immunosuppressive Therapies. *Journal of cutaneous medicine and surgery* 2019; **23**: 50-74.
407. European Medicines Agency. Tremfya [Tremfya: EPAR - Product Information]. In. 2017.
408. European Medicines Agency. Stelara [INN-Ustekinumab: EPAR - Product Information]. In. 2009.
409. Goss SL, Klein CE, Jin Z *et al.* Methotrexate Dose in Patients With Early Rheumatoid Arthritis Impacts Methotrexate Polyglutamate Pharmacokinetics, Adalimumab Pharmacokinetics, and Efficacy: Pharmacokinetic and Exposure-response Analysis of the CONCERTO Trial. *Clin Ther* 2018; **40**: 309-19.
410. Strik AS, van den Brink GR, Ponsioen C, Mathot R, Lowenberg M, D'Haens GR. Suppression of anti-drug antibodies to infliximab or adalimumab with the addition of an immunomodulator in patients with inflammatory bowel disease. *Aliment Pharmacol Ther* 2017; **45**: 1128-34.
411. Van der Kraaij GE, *et al.* EADV Congress Poster, FC02.06. In. 2019.
412. Centre of Evidence Based Dermatology. CEBD Coronavirus Dermatology Resource. In. 2020.



413. Russell B, Moss C, George G *et al.* Associations between immune-suppressive and stimulating drugs and novel COVID-19-a systematic review of current evidence. *Ecancermedicalscience* 2020; **14**: 1022.
414. Cantini F, Niccoli L, Matarrese D, Nicastrì E, Stobbione P, Goletti D. Baricitinib therapy in COVID-19: A pilot study on safety and clinical impact. *J Infect* 2020.
415. Feldmann M, Maini RN, Woody JN *et al.* Trials of anti-tumour necrosis factor therapy for COVID-19 are urgently needed. *Lancet* 2020; **395**: 1407-9.
416. A multicenter, randomized controlled trial for the efficacy and safety of tocilizumab in the treatment of new coronavirus pneumonia (COVID-19) In. Anhui, China: Chinese Clinical Trial Registry: ChiCTR2000029765. 2020.
417. A randomized, open-label, controlled trial for the efficacy and safety of Adalimumab Injection in the treatment of patients with severe novel coronavirus pneumonia (COVID-19) In. Shanghai, China: Chinese Clinical Trial Registry: ChiCTR2000030089; 2020. 2020.
418. Evaluation of the Efficacy and Safety of Sarilumab in Hospitalized Patients With COVID-19. In. NLM identifier: NCT04315298. 2020.
419. A randomized, blinded, controlled, multicenter clinical trial to evaluate the efficacy and safety of Ixekizumab combined with conventional antiviral drugs in patients with novel coronavirus pneumonia (COVID-19). In. CHICTR. 2020.