

Therapie der Plaque-Psoriasis, Teil 2: Biologika

Traitement du psoriasis en plaques, 2^{ème} partie: Biomédicaments

Literatur / Références

1. Eghlileb AM, Davies EE, Finlay AY. Psoriasis has a major secondary impact on the lives of family members and partners. *Br J Dermatol.* 2007;156(6):1245–50
2. Bhosle MJ, Kulkarni A, Feldman SR et al. Quality of life in patients with psoriasis. *Health Qual Life Outcomes.* 2006 6;4:35.
3. Papp KA, Leonardi C, Menter A et al. Brodalumab, an anti-interleukin-17–receptor antibody for psoriasis. *N Engl J Med.* 2012;366:1181–9.
4. Leonardi C, Matheson R, Zachariae C et al. Anti-interleukin-17 monoclonal antibody ixekizumab in chronic plaque psoriasis. *N Engl J Med.* 2012;366:1190–9.
5. A study of the safety and efficacy of ustekinumab in patients with psoriatic arthritis; PSUMMIT1 www.clinicaltrials.com; Identifier: NCT010090086.
6. A study of the safety and efficacy of ustekinumab in patients with psoriatic arthritis with and without prior exposure to anti-TNF Agents; PSUMMIT2 www.clinicaltrials.com; Identifier: NCT01077362.
7. Persönliche Information durch Janssen-Cilag AG, 25.9.12
8. Navarini A, Trüeb RM. Psoriasis. *Therapeutische Umschau* 2010; 67: 153–165
9. Arzneimittelkompendium der Schweiz 2012. www.compendium.ch
10. Van Lümig PP, Driessen RJ, Roelofs-Thijssen MA. Relevance of laboratory investigations in monitoring patients with psoriasis on etanercept or adalimumab. *Br J Dermatol.* 2011;165:375–82.
11. Beglinger C, Dudler J, Mottet C. Screening for tuberculosis infection before the initiation of an anti-TNF-alpha therapy. *Swiss Med Wkly.* 2007;137:620–2.
12. Jost L. TNF-Blockade und Krebsleiden. *Schweiz Med Forum* 2012;12(5):104–5
13. Reich K et al. Ustekinumab improves quality of life outcomes in psoriasis patients transitioned from methotrexate regardless of transition strategy: Week 16 results from the TRANSIT study. Poster PO1123, 20th Congress of the European Academy of Dermatology and Venereology, 2011, Lissabon.
14. Navarani A, Anlikar M D, Arnold A et al, Swiss Recommendations for Biologics Treatment in Psoriasis from the Swiss Essex Chemie AG Advisory board members. *Dermatologica helvetica* 2011;:26–29.
15. Gottlieb A, Menter A, Mendelsohn A. Ustekinumab, a human interleukin 12/23 monoclonal antibody, for psoriatic arthritis: randomised, double-blind, placebo-controlled, crossover trial. *Lancet.* 2009;373:3633–40.
16. Puig L. Obesity and psoriasis: body weight and body mass index influence the response to biological treatment. *J Eur Acad Dermatol Venereol.* 2011;25:1007–11.
17. Bremmer S, Van Voorhees AS, Hsu et al. National Psoriasis Foundation. Obesity and psoriasis: from the Medical Board of the National Psoriasis Foundation. *J Am Acad Dermatol.* 2010;63:1058–69.
18. Clark L, Lebwohl M. The effect of weight on the efficacy of biologic therapy in patients with psoriasis. *J Am Acad Dermatol.* 2008;58:443–6.
19. Menter A, Gordon K, Gu Y et al. Efficacy and safety of adalimumab are consistent across weight quartiles in patients with moderate to severe psoriasis: subanalysis of REVEAL. In: AAD. San Francisco; 2009.
20. Mrowietz U, Kragballe K, Reich K et al. Definition of treatment goals for moderate to severe psoriasis: a European consensus. *Arch Dermatol Res.* 2011;303:1–10.
21. Clemmensen A, Spon M, Skov L, Zachariae C et al. Responses to ustekinumab in the anti-TNF agent-naïve vs. anti-TNF agent-exposed patients with psoriasis vulgaris. *J Eur Acad Dermatol Venereol.* 2011 25:1037–40.
22. Yawalkar N. Praktische Erfahrung mit Biologikas in der Therapie der Plaque-Psoriasis, Lunchsymposium. Jahrestagung der SGD/SSDV 2012.
23. Yawalkar N. Interview: Viele Patienten werden unter Biologics weitgehend beschwerdefrei. *Ars Medici* (9) 2010; 350–353.
24. Gniadecki R, Kragballe K, Dam TN et al. Comparison of drug survival rates for adalimumab, etanercept and infliximab in patients with psoriasis vulgaris. *Br J Dermatol.* 2011 164:1091–6.
25. Mössner, R, Reich, K, Yawalkar N (ed): Management of Severe Psoriasis with TNF Antagonists. Management of Psoriasis. *Curr Probl Dermatol.* Basel, Karger, 2009, 38, 107–136.
26. Griffiths CE, Strober BE, van de Kerkhof P et al. ACCEPT Study Group. Comparison of ustekinumab and etanercept for moderate-to-severe psoriasis. *N Engl J Med.* 2010;362:118–28.

27. Reich K, Burden AD, Eaton JN et al. Efficacy of biologics in the treatment of moderate to severe psoriasis: a network meta-analysis of randomized controlled trials. *Br J Dermatol*. 2012;166:179–88.
28. Langley RG, Strober BE, Gu Y et al. Benefit-risk assessment of tumour necrosis factor antagonists in the treatment of psoriasis. *Br J Dermatol*. 2010; 162:1349–58.
29. Papoutsaki M, Talamonti M, Giunta A et al. The impact of methodological approaches for presenting long-term clinical data on estimates of efficacy in psoriasis illustrated by three-year treatment data on infliximab. *Dermatology*. 2010;221 Suppl 1:43–7.
30. Kimball A et al. Long term efficacy and safety of ustekinumab in patients with moderate to severe psoriasis through 5 years of follow-up: Results from PHOENIX1 long-term extension. Poster P582, EADV annual meeting, Verona, 2012
31. Ben-Horin S, Yavzori M, Katz L et al. Adalimumab level in breast milk of a nursing mother. *Clin Gastroenterol Hepatol*. 2010 May;8(5):475–6
32. Kane S, Ford J, Cohen R et al. Absence of infliximab in infants and breast milk from nursing mothers receiving therapy for Crohn's disease before and after delivery. *J Clin Gastroenterol*. 2009;43(7):613–6
33. Cush JJ: Biological drug use: US perspectives on indications and monitoring. *Ann Rheum Dis* 2005; 64(suppl 4):iv18–iv23.
34. Puig L, Barco D, Alomar A. Treatment of psoriasis with anti-TNF drugs during pregnancy: case report and review of the literature. *Dermatology*. 2010;220(1):71–6. Review
35. Verstappen SM, King Y, et al. Anti-TNF therapies and pregnancy: outcome of 130 pregnancies in the British Society for Rheumatology Biologics Register. *Ann Rheum Dis*. 2011 May;70(5):823–6.
36. Carter JD, Ladhani A, Ricca LR et al. A safety assessment of tumor necrosis factor antagonists during pregnancy: a review of the Food and Drug Administration database. *J Rheumatol* 2009; 36: 635–641.
37. Paller AS, Siegfried EC, Langley RG et al. Etanercept treatment for children and adolescents with plaque psoriasis. *N Engl J Med*. 2008;358(3):241–51.
38. <http://clinicaltrials.gov/ct2/show/NCT01251614?term=adalimumab+psoriasis&rank=8> (9.10.12)
39. Leonardi C, Papp K, Strober B et al. The long-term safety of adalimumab treatment in moderate to severe psoriasis: a comprehensive analysis of all adalimumab exposure in all clinical trials. *Am J Clin Dermatol*. 2011, 1;12(5):321–37.
40. Scherer K, Spoerl D, Bircher AJ. Adverse drug reactions to biologics. *J Dtsch Dermatol Ges*. 2010;8:411–26.
41. Dommasch ED, Abuabara K, Shin DB et al. The risk of infection and malignancy with tumor necrosis factor antagonists in adults with psoriatic disease: a systematic review and meta-analysis of randomized controlled trials. *J Am Acad Dermatol*. 2011;64(6):1035–50. Review.
42. Van Lümig PP, Driessen RJ, Berends MA. Safety of treatment with biologics for psoriasis in daily practice: 5–year data. *J Eur Acad Dermatol Venereol*. 2012;26(3):283–91.
43. Bongartz T, Sutton AJ, Sweeting MJ et al. Anti-TNF antibody therapy in rheumatoid arthritis and the risk of serious infections and malignancies: systematic review and meta-analysis of rare harmful effects in randomized controlled trials. *JAMA*. 2006 17;295):2275–85.
44. Dixon WG, Watson K, Lunt M et al. Rates of serious infection, including site-specific and bacterial intracellular infection, in rheumatoid arthritis patients receiving anti-tumor necrosis factor therapy: results from the British Society for Rheumatology Biologics Register. *Arthritis Rheum*. 2006;54:2368–76.
45. Wallis RS, Broder MS, Wong JY et al. Granulomatous infectious diseases associated with tumor necrosis factor antagonists. *Clin Infect Dis*. 2004 1;38(9):1261–5. Epub 2004 Apr 15.
46. Keane J, Gershon S, Wise RP et al. Tuberculosis associated with infliximab, a tumor necrosis factor alpha-neutralizing agent. *N Engl J Med*. 2001;345:1098–104.
47. Domm S, Cinatl J, Mrowietz U. The impact of treatment with tumour necrosis factor-alpha antagonists on the course of chronic viral infections: a review of the literature. *Br J Dermatol*. 2008;159:1217–28.
48. Kim SY, Solomon DH. Tumor necrosis factor blockade and the risk of viral infection. *Nat Rev Rheumatol*. 2010;6:165–74. Epub 2010. Review
49. Zein NN; Etanercept Study Group. Etanercept as an adjuvant to interferon and ribavirin in treatment-naive patients with chronic hepatitis C virus infection: a phase 2 randomized, double-blind, placebo-controlled study. *J Hepatol*. 2005;42(3):315–22.
50. Cansu DU, Kalifoglu T, Korkmaz C. Short-term course of chronic hepatitis B and C under treatment with etanercept associated with different disease modifying antirheumatic drugs without antiviral prophylaxis. *J Rheumatol*. 2008;35(3):421–4.
51. Mikhail M, Weinberg JM, Smith BL. Successful treatment with etanercept of von Zumbusch pustular psoriasis in a patient with human immunodeficiency virus. *Arch Dermatol*. 2008;144:453–6.
52. Lee ES, Heller MM, Kamangar. Long-term etanercept use for severe generalized psoriasis in an HIV-infected individual: a case study. *J Drugs Dermatol*. 2012;11:413–4.
53. Sellam J, Bouvard B, Masson C. Use of infliximab to treat psoriatic arthritis in HIV-positive patients. *Joint Bone Spine*. 2007;74:197–200.
54. Ting PT, Koo JY. Use of etanercept in human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) patients. *Int J Dermatol*. 2006;45:689–92. Review
55. Collamer AN, Battafarano DF. Psoriatic skin lesions induced by tumor necrosis factor antagonist therapy: clinical features and possible immunopathogenesis. *Semin Arthritis Rheum*. 2010;40:233–40. Review
56. De Bandt M, Sibilia J, Le Loët X et al. Systemic lupus erythematosus induced by anti-tumour necrosis factor alpha therapy: a French national survey. *Arthritis Res Ther*. 2005;7:R545–51.
57. Prinz JC. Autoimmune-like syndromes during TNF blockade: does infection have a role? *Nat Rev Rheumatol*. 2011;7(7):429–34.
58. Skoie IM, Wildhagen K, Omdal R. Development of sarcoidosis following etanercept treatment: a report of three cases. *Rheumatol Int*. 2012;32(4):1049–53.
59. Asarch A, Gottlieb AB, Lee J et al. Lichen planus-like eruptions: an emerging side effect of tumor necrosis factor-alpha antagonists. *J Am Acad Dermatol*. 2009;61(1):104–11.
60. Klein R, Rosenbach M, Kim EJ. Tumor necrosis factor inhibitor-associated dermatomyositis. *Arch Dermatol*. 2010;146:780–4.
61. Fujikawa K, Kawakami A, Hayashi T et al. Cutaneous vasculitis induced by TNF inhibitors: a report of three cases. *Mod Rheumatol*. 2010;20:86–9.
62. Wu JJ, Nguyen TU, Poon KY, Herrinton LJ. The association of psoriasis with autoimmune diseases. *J Am Acad Dermatol*. 2012 [Epub ahead of print].

63. Patel RV, Clark LN, Lebwohl M. Treatments for psoriasis and the risk of malignancy. *J Am Acad Dermatol.* 2009;60:1001–17
64. Paul CF, Ho VC, McGeown C et al. Risk of malignancies in psoriasis patients treated with cyclosporine: a 5 y cohort study. *J Invest Dermatol.* 2003;120(2):211–6.
65. Marcil I, Stern RS. Squamous-cell cancer of the skin in patients given PUVA and cyclosporin: nested cohort crossover study. *Lancet.* 2001; 29;358(9287):1042–5.
66. Kwon HJ, Coté TR, Cuffe MS. Case reports of heart failure after therapy with a tumor necrosis factor antagonist. *Ann Intern Med.* 2003;138(10):807–11.
67. Ryan C, Leonardi CL, Krueger JG. Association between biologic therapies for chronic plaque psoriasis and cardiovascular events: a meta-analysis of randomized controlled trials. *JAMA.* 2011;306(8):864–71.
68. Xiao J, Chen LH, Tu YT. Prevalence of myocardial infarction in patients with psoriasis in central China. *J Eur Acad Dermatol Venereol.* 2009;23(11):1311–5.
69. Gelfand JM, Neimann AL, Shin DB, et al. Risk of myocardial infarction in patients with psoriasis. *JAMA* 2006; 296:1735.
70. Kimball AB, Guerin A, Latremouille-Viau D, et al. Coronary heart disease and stroke risk in patients with psoriasis: retrospective analysis. *Am J Med* 2010; 123:350.
71. Ahlehoff O, Gislasen GH, Charlott M, et al. Psoriasis is associated with clinically significant cardiovascular risk: a Danish nationwide cohort study. *J Intern Med* 2011; 270:147.
72. Stern RS. Psoriasis is not a useful independent risk factor for cardiovascular disease. *J Invest Dermatol* 2010; 130:917.
73. 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. *J Invest Dermatol* 2010; 130:962.
74. Stern RS, Huibregtse A. Very severe psoriasis is associated with increased noncardiovascular mortality but not with increased cardiovascular risk. *J Invest Dermatol* 2011; 131:1159.
75. Kumar D, Bouldin TW, Berger RG. A case of progressive multifocal leukoencephalopathy in a patient treated with infliximab. *Arthritis Rheum.* 2010;62(11):3191–5
76. Simsek I, Erdem H. Optic neuritis occurring with anti-tumour necrosis factor alpha therapy. *Ann Rheum Dis.* 2007;66(9):1255.
77. Shin IS, Baer AN, Kwon HJ et al. Guillain-Barré and Miller Fisher syndromes occurring with tumor necrosis factor alpha antagonist therapy. *Arthritis Rheum.* 2006;54(5):1429
78. Eguren C, Díaz Ley B et al. Peripheral neuropathy in two patients with psoriasis in treatment with infliximab. *Muscle Nerve.* 2009;;40(3):488
79. Zamvar V, Sugarman ID, Tawfik RF et al. Posterior reversible encephalopathy syndrome following infliximab infusion. *J Pediatr Gastroenterol Nutr.* 2009;48(1):102–5.
80. Kastrup O, Diener HC. TNF-antagonist etanercept induced reversible posterior leukoencephalopathy syndrome. *J Neurol.* 2008;255(3):452–3.2008
81. Gratton D, Szapary P, Goyal K. Reversible posterior leukoencephalopathy syndrome in a patient treated with ustekinumab: case report and review of the literature. *Arch Dermatol.* 2011;147(10):1197–202
82. Cosottini M, Lazzarotti G, Ceravolo R Eur J Neurol. Cyclosporine-related posterior reversible encephalopathy syndrome (PRES) in non-transplant patient: a case report and literature review.2003;10(4):461–2.
83. Renard D, Westhovens R, Vandebussche E. Reversible posterior leukoencephalopathy during oral treatment with methotrexate. *J Neurol.* 2004;251(2):226–8.
84. Menter A, Feldman SR, Weinstein GD et al. A randomized comparison of continuous vs. intermittent infliximab maintenance regimens over 1 year in the treatment of moderate-to-severe plaque psoriasis. *J Am Acad Dermatol.* 2007;56(1):31.e1–15
85. Phelan C, Wooltorton E. Infliximab and serious hematologic events. *CMAJ.* 2004 26;171(9):1045.
86. Montané E, Sallés M, Barriocanal A. Antitumor necrosis factor-induced neutropenia: a case report with double positive rechallenges. *Clin Rheumatol.* 2007;26(9):1527–9.
87. Prignano F, Pescitelli L, Ricceri F Development of MGUS in psoriatic patients: a possible undiagnosed event during anti-TNF- α -treatment. *J Eur Acad Dermatol Venereol.* 2011. doi: 10.1111/j.1468–3083.2011.04216
88. Knudson RM, Tefferi A, Pittelkow MR. Development of myelodysplastic syndrome evolving to acute myeloid leukemia in a patient receiving etanercept for psoriasis. *J Am Acad Dermatol.* 2011;65(3):673–4.
89. Nair B, Raval G, Mehta P. TNF-alpha inhibitor etanercept and hematologic malignancies: report of a case and review of the literature. *Am J Hematol.* 2007 Nov;82(11):1022–4. Review.
90. Bakland G, Nossent H. Acute myelogenous leukaemia following etanercept therapy. *Rheumatology (Oxford).* 2003;42(7):900–1.
91. Bachmeyer C, Thiolière B, Khosrotehrani K et al. Acute myelogenous leukemia in a patient receiving etanercept for psoriasis. *J Am Acad Dermatol.* 2007 Jan;56(1):169–70
92. Hofer T, Käslin S. Psoriasis en plaques: Was darf es denn kosten? *Schweiz Med Forum* 2011;11(14):253–255
93. AWMF-Leitlinie zur Therapie der Psoriasis vulgaris, Updat 2011.
94. Schmitt-Rau T, Rosenbach T, Radtkea MA. Cost-effectiveness of biological therapy in remission induction of moderate to severe plaque psoriasis. *Dermatology* 2010; 221:236–242.
95. www.swissmedicin.ch. Stand der Informationen: Humira – Sept. 2012; Remicade – Juni 2012; Enbrel (August 2012); Stelara (März 2012).
96. Spezialitätenliste der Schweiz. Stand 1. Dezember 2012. www.sl.bag.admin.ch.
97. Navarini A, Lafitte E, Conrad C. Estimation of cost-of-illness in patients with psoriasis in Switzerland. *Swiss Medical Weekly.* 2010;140(5-6):85–91. doi: smw-12756.