

Literaturverzeichnis

1. Atlas of End-Stage Renal Disease in the United States. *USRDS 2004 Annual Data Report* 2004
2. Frei U, Schober-Halstenberg H-J: Nierenersatztherapie in Deutschland. *QuaSi-Niere Jahresbericht 2003/2004*:1-66, 2004
3. Klahr S: Progression of chronic renal disease. *Heart Dis* 3:205-209, 2001
4. Border WA, Noble NA: Transforming growth factor beta in tissue fibrosis. *N Engl J Med* 331:1286-1292, 1994
5. Bohle A: [Importance of the renal interstitium for kidney function]. *Klin Wochenschr* 60:1186-1190, 1982
6. Taal MW, Brenner BM: Renoprotective benefits of RAS inhibition: from ACEI to Angiotensin-II antagonists. *Kidney Int* 57:1803-1817, 2000
7. Lewis EJ, Hunsicker LG, Bain RP, et al.: The effect of angiotensin-converting-enzyme inhibition on diabetic nephropathy. The Collaborative Study Group. *N Engl J Med* 329:1456-1462, 1993
8. Peters H, Border WA, Noble NA: Targeting TGF-beta overexpression in renal disease: maximizing the antifibrotic action of Angiotensin-II blockade. *Kidney Int* 54:1570-1580, 1998
9. Peters H, Border WA, Noble NA: Tandem antifibrotic actions of L-arginine supplementation and low protein diet during the repair phase of experimental glomerulonephritis. *Kidney Int* 57:992-1001, 2000
10. Rodriguez-Iturbe B, Pons H, Herrera-Acosta J, et al.: Role of immunocompetent cells in nonimmune renal diseases. *Kidney Int* 59:1626-1640, 2001
11. Roberts IS, Burrows C, Shanks JH, et al.: Interstitial myofibroblasts: predictors of progression in membranous nephropathy. *J Clin Pathol* 50:123-127, 1997
12. Goes N, Urmson J, Ramassar V, et al.: Ischemic acute tubular necrosis induces an extensive local cytokine response. Evidence for induction of interferon-gamma, transforming growth factor-beta 1, granulocyte-macrophage colony-stimulating factor, interleukin-2, and interleukin-10. *Transplantation* 59:565-572, 1995
13. Truong LD, Farhood A, Tasby J, et al.: Experimental chronic renal ischemia: morphologic and immunologic studies. *Kidney Int* 41:1676-1689, 1992
14. Lombardi D, Gordon KL, Polinsky P, et al.: Salt-sensitive hypertension develops after short-term exposure to Angiotensin-II. *Hypertension* 33:1013-1019, 1999
15. Mai M, Geiger H, Hilgers KF, et al.: Early interstitial changes in hypertension-induced renal injury. *Hypertension* 22:754-765, 1993

16. Ziyadeh FN, Goldfarb S: The renal tubulointerstitium in diabetes mellitus. *Kidney Int* 39:464-475, 1991
17. Hooke DH, Gee DC, Atkins RC: Leukocyte analysis using monoclonal antibodies in human glomerulonephritis. *Kidney Int* 31:964-972, 1987
18. Takahashi H, Calvet JP, Dittemore-Hoover D, et al.: A hereditary model of slowly progressive polycystic kidney disease in the mouse. *J Am Soc Nephrol* 1:980-989, 1991
19. Nakamura T, Ebihara I, Nagaoka I, et al.: Growth factor gene expression in kidney of murine polycystic kidney disease. *J Am Soc Nephrol* 3:1378-1386, 1993
20. Rajagopalan S, Zordan T, Tsokos GC, et al.: Pathogenic anti-DNA autoantibody-inducing T helper cell lines from patients with active lupus nephritis: isolation of CD4-8- T helper cell lines that express the gamma delta T-cell antigen receptor. *Proc Natl Acad Sci U S A* 87:7020-7024, 1990
21. Haas W, Pereira P, Tonegawa S: Gamma/delta cells. *Annu Rev Immunol* 11:637-685, 1993
22. Heng MK, Heng MC: Heat-shock protein 65 and activated gamma/delta T cells in injured arteries. *Lancet* 344:921-923, 1994
23. Brinkmann V, Cyster JG, Hla T: FTY720: sphingosine 1-phosphate receptor-1 in the control of lymphocyte egress and endothelial barrier function. *Am J Transplant* 4:1019-1025, 2004
24. Brinkmann V, Lynch KR: FTY720: targeting G-protein-coupled receptors for sphingosine 1-phosphate in transplantation and autoimmunity. *Curr Opin Immunol* 14:569-575, 2002
25. Brinkmann V, Pinschewer DD, Feng L, et al.: FTY720: altered lymphocyte traffic results in allograft protection. *Transplantation* 72:764-769, 2001
26. Bagchus WM, Hoedemaeker PJ, Rozing J, et al.: Glomerulonephritis induced by monoclonal anti-Thy 1.1 antibodies. A sequential histological and ultrastructural study in the rat. *Lab Invest* 55:680-687, 1986
27. Kawachi H, Iwanaga T, Toyabe S, et al.: Mesangial sclerotic change with persistent proteinuria in rats after two consecutive injections of monoclonal antibody 1-22-3. *Clin Exp Immunol* 90:129-134, 1992
28. Tierschutzgesetz. *Bundesgesetzblatt* Teil I, Stand: Neugefasst durch Bek. v. 25. 5.1998 I 1105, 1818; zuletzt geändert durch Art. 7b G v. 21. 6.2005 I 1666, 1972
29. Gesetz über die Beseitigung von Tierkörpern, Tierkörperteilen und tierischen Erzeugnissen (Tierkörperbeseitigungsgesetz -- TierKBG). *Bundesgesetzblatt* Teil I Nr. 16, S. 523, 2001
30. Im DS: Linking Chinese medicine and G-protein-coupled receptors. *Trends Pharmacol Sci* 24:2-4, 2003
31. Novartis: FTY720 CH. *Novartis Pharma Data Set* 1, 1998

32. Forstermann U, Closs EI, Pollock JS, et al.: Nitric oxide synthase isoforms. Characterization, purification, molecular cloning, and functions. *Hypertension* 23:1121-1131, 1994
33. Raji L, Azar S, Keane W: Mesangial immune injury, hypertension, and progressive glomerular damage in Dahl rats. *Kidney Int* 26:137-143, 1984
34. (Hrsg.) UF: Roche Lexikon Medizin. 5. Auflage:2112, 2003
35. Narita I, Border WA, Ketteler M, et al.: Nitric oxide mediates immunologic injury to kidney mesangium in experimental glomerulonephritis. *Lab Invest* 72:17-24, 1995
36. Ketteler M, Ikegaya N, Brees DK, et al.: L-arginine metabolism in immune-mediated glomerulonephritis in the rat. *Am J Kidney Dis* 28:878-887, 1996
37. Weinberg JB, Granger DL, Pisetsky DS, et al.: The role of nitric oxide in the pathogenesis of spontaneous murine autoimmune disease: increased nitric oxide production and nitric oxide synthase expression in MRL-Ipr/Ipr mice, and reduction of spontaneous glomerulonephritis and arthritis by orally administered NG-monomethyl-L-arginine. *J Exp Med* 179:651-660, 1994
38. Peters H, Border WA, Noble NA: L-Arginine supplementation increases mesangial cell injury and subsequent tissue fibrosis in experimental glomerulonephritis. *Kidney Int* 55:2264-2273, 1999
39. Okuda S, Nakamura T, Yamamoto T, et al.: Dietary protein restriction rapidly reduces transforming growth factor beta 1 expression in experimental glomerulonephritis. *Proc Natl Acad Sci U S A* 88:9765-9769, 1991
40. Peters H, Martini S, Woydt R, et al.: Moderate alcohol intake has no impact on acute and chronic progressive anti-thy1 glomerulonephritis. *Am J Physiol Renal Physiol* 284:F1105-1114, 2003
41. Klahr S: Low-protein diets and angiotensin-converting enzyme inhibition in progressive renal failure. *Am J Kidney Dis* 22:114-119, 1993
42. Brinkmann V, Davis MD, Heise CE, et al.: The immune modulator FTY720 targets sphingosine 1-phosphate receptors. *J Biol Chem* 277:21453-21457, 2002
43. Mandala S, Hajdu R, Bergstrom J, et al.: Alteration of lymphocyte trafficking by sphingosine-1-phosphate receptor agonists. *Science* 296:346-349, 2002
44. Border WA, Noble NA, Yamamoto T, et al.: Natural inhibitor of transforming growth factor-beta protects against scarring in experimental kidney disease. *Nature* 360:361-364, 1992
45. Romberger DJ: Fibronectin. *Int J Biochem Cell Biol* 29:939-943, 1997
46. Seiffert D, Mimuro J, Schleef RR, et al.: Interactions between type 1 plasminogen activator inhibitor, extracellular matrix and vitronectin. *Cell Differ Dev* 32:287-292, 1990

47. Tedesco-Silva H, Mourad G, Kahan BD, et al.: FTY720, a novel immunomodulator: efficacy and safety results from the first phase 2A study in de novo renal transplantation. *Transplantation* 77:1826-1833, 2004
48. Forrest M, Sun SY, Hajdu R, et al.: Immune cell regulation and cardiovascular effects of sphingosine 1-phosphate receptor agonists in rodents are mediated via distinct receptor subtypes. *J Pharmacol Exp Ther* 309:758-768, 2004
49. Tawadrous MN, Mabuchi A, Zimmermann A, et al.: Effects of immunosuppressant FTY720 on renal and hepatic hemodynamics in the rat. *Transplantation* 74:602-610, 2002
50. Ikezumi Y, Kawachi H, Toyabe S, et al.: An anti-CD5 monoclonal antibody ameliorates proteinuria and glomerular lesions in rat mesangioproliferative glomerulonephritis. *Kidney Int* 58:100-114, 2000
51. Shimamine R, Shibata R, Ozono Y, et al.: Anti-CD8 monoclonal antibody protects against spontaneous IgA nephropathy in ddY mice. *Nephron* 78:310-318, 1998
52. Abbate M, Zoja C, Corna D, et al.: In progressive nephropathies, overload of tubular cells with filtered proteins translates glomerular permeability dysfunction into cellular signals of interstitial inflammation. *J Am Soc Nephrol* 9:1213-1224, 1998
53. Ikezumi Y, Kanno K, Karasawa T, et al.: The role of lymphocytes in the experimental progressive glomerulonephritis. *Kidney Int* 66:1036-1048, 2004
54. Matsuura M, Imayoshi T, Okumoto T: Effect of FTY720, a novel immunosuppressant, on adjuvant- and collagen-induced arthritis in rats. *Int J Immunopharmacol* 22:323-331, 2000
55. Kitabayashi H, Isobe M, Watanabe N, et al.: FTY720 prevents development of experimental autoimmune myocarditis through reduction of circulating lymphocytes. *J Cardiovasc Pharmacol* 35:410-416, 2000
56. Kurose S, Ikeda E, Tokiwa M, et al.: Effects of FTY720, a novel immunosuppressant, on experimental autoimmune uveoretinitis in rats. *Exp Eye Res* 70:7-15, 2000
57. Okazaki H, Hirata D, Kamimura T, et al.: Effects of FTY720 in MRL-lpr/lpr mice: therapeutic potential in systemic lupus erythematosus. *J Rheumatol* 29:707-716, 2002
58. Maki T, Gottschalk R, Monaco AP: Prevention of autoimmune diabetes by FTY720 in nonobese diabetic mice. *Transplantation* 74:1684-1686, 2002
59. Hozumi Y, Kobayashi E, Miyata M, et al.: Immunotherapy for experimental rat autoimmune thyroiditis using a novel immunosuppressant, FTY720. *Life Sci* 65:1739-1745, 1999
60. Webb M, Tham CS, Lin FF, et al.: Sphingosine 1-phosphate receptor agonists attenuate relapsing-remitting experimental autoimmune encephalitis in SJL mice. *J Neuroimmunol* 153:108-121, 2004

61. Varda-Bloom N, Leor J, Ohad DG, et al.: Cytotoxic T lymphocytes are activated following myocardial infarction and can recognize and kill healthy myocytes in vitro. *J Mol Cell Cardiol* 32:2141-2149, 2000
62. Rabb H: The T cell as a bridge between innate and adaptive immune systems: implications for the kidney. *Kidney Int* 61:1935-1946, 2002
63. Morales C, Gonzalez GE, Rodriguez M, et al.: Histopathologic time course of myocardial infarct in rabbit hearts. *Cardiovasc Pathol* 11:339-345, 2002
64. Tapia E, Franco M, Sanchez-Lozada LG, et al.: Mycophenolate mofetil prevents arteriolopathy and renal injury in subtotal ablation despite persistent hypertension. *Kidney Int* 63:994-1002, 2003
65. Romero F, Rodriguez-Iturbe B, Parra G, et al.: Mycophenolate mofetil prevents the progressive renal failure induced by 5/6 renal ablation in rats. *Kidney Int* 55:945-955, 1999
66. Fujihara CK, Malheiros DM, Zatz R, et al.: Mycophenolate mofetil attenuates renal injury in the rat remnant kidney. *Kidney Int* 54:1510-1519, 1998
67. Glander P, Hambach P, Braun KP, et al.: Effect of mycophenolate mofetil on IMP dehydrogenase after the first dose and after long-term treatment in renal transplant recipients. *Int J Clin Pharmacol Ther* 41:470-476, 2003
68. Kramer S, Loof T, Martini S, et al.: Mycophenolate mofetil slows progression in anti-thy1-induced chronic renal fibrosis but is not additive to a high dose of enalapril. *Am J Physiol Renal Physiol* 289:F359-368, 2005
69. Vesey DA, Cheung C, Cuttle L, et al.: Interleukin-1beta stimulates human renal fibroblast proliferation and matrix protein production by means of a transforming growth factor-beta-dependent mechanism. *J Lab Clin Med* 140:342-350, 2002
70. Phillips AO, Topley N, Steadman R, et al.: Induction of TGF-beta 1 synthesis in D-glucose primed human proximal tubular cells by IL-1 beta and TNF alpha. *Kidney Int* 50:1546-1554, 1996
71. Fan JM, Huang XR, Ng YY, et al.: Interleukin-1 induces tubular epithelial-myofibroblast transdifferentiation through a transforming growth factor-beta1-dependent mechanism in vitro. *Am J Kidney Dis* 37:820-831, 2001
72. Wolf G, Butzmann U, Wenzel UO: The renin-angiotensin system and progression of renal disease: from hemodynamics to cell biology. *Nephron Physiol* 93:P3-13, 2003
73. Mezzano SA, Ruiz-Ortega M, Egido J: Angiotensin-II and renal fibrosis. *Hypertension* 38:635-638, 2001
74. Bohle A, Christ H, Grund KE, et al.: The role of the interstitium of the renal cortex in renal disease. *Contrib Nephrol* 16:109-114, 1979

75. Schainuck LI, Striker GE, Cutler RE, et al.: Structural-functional correlations in renal disease. II. The correlations. *Hum Pathol* 1:631-641, 1970
76. Remuzzi G, Bertani T: Pathophysiology of progressive nephropathies. *N Engl J Med* 339:1448-1456, 1998
77. Wenzel UO, Abboud HE: Chemokines and renal disease. *Am J Kidney Dis* 26:982-994, 1995
78. Zojal C, Donadelli R, Colleoni S, et al.: Protein overload stimulates RANTES production by proximal tubular cells depending on NF-kappa B activation. *Kidney Int* 53:1608-1615, 1998
79. Wang Y, Chen J, Chen L, et al.: Induction of monocyte chemoattractant protein-1 in proximal tubule cells by urinary protein. *J Am Soc Nephrol* 8:1537-1545, 1997
80. Zojal C, Morigi M, Figliuzzi M, et al.: Proximal tubular cell synthesis and secretion of endothelin-1 on challenge with albumin and other proteins. *Am J Kidney Dis* 26:934-941, 1995
81. Ross R: Atherosclerosis--an inflammatory disease. *N Engl J Med* 340:115-126, 1999
82. Lukacs NW, Hogaboam C, Chensue SW, et al.: Type 1/type 2 cytokine paradigm and the progression of pulmonary fibrosis. *Chest* 120:5S-8S, 2001
83. Colombat M, Charlotte F, Ratziu V, et al.: Portal lymphocytic infiltrate in alcoholic liver disease. *Hum Pathol* 33:1170-1174, 2002