

7. Literaturangaben

1. Jourdanet D. De l'anémie des altitudes et de l'anémie en general dans ses rapports avec la pression de l'atmosphère. Balliere, Paris, 1836
2. Carnot P, Deflandre C. Sur l'activité hémopoïétique du sérum au cours de la régénération du sang. C R Acad Sci (Paris) 1906; 143: 384-386
3. Bonsdorff E, Jalavisto E. A humoral mechanism in anoxic erythrocytosis. Acta Physiol Scand 1948; 16: 150-170
4. Jacobson LO, Goldwasser E, Fried W, Plzak L. Role of the kidney in erythropoiesis. Nature 1957; 179: 633-634
5. Kuratowska Z, Lewartowski B, Michalak E. Studies on the production of erythropoietin by isolated perfused organs. Blood 1961; 18: 527-534
6. Fisher JW, Birdwell BJ. The production of an erythropoietic factor by the in situ perfused kidney. Acta Haematol 1961; 26: 224-232
7. Jelkmann W, Bauer C. Demonstration of high levels of erythropoietin in rat kidney following hypoxic hypoxia. Pflügers Arch 1981; 392: 34-39
8. Jacobs K, Shoemaker C, Rudersdorf R, Neill SD, Kaufman RJ, Mufson A, Seehra J, Jones SS, Hewick R, Fritsch EF, Kawakita M, Shimizu T, Miyake T. Isolation and characterization of genomic and cDNA clones of human erythropoietin. Nature 1985; 313: 806-810
9. Lin FK, Suggs S, Lin CH, Browne JK, Smalling R, Egrie JC, Chen KK, Fox GM, Martin F, Stabinsky Z, Badrawi SM, Lai PH, Goldwasser E. Cloning and expression of the human erythropoietin gene. Proc Natl Acad Sci USA 1985; 82: 7580-7584
10. Davis JM, Arakawa T, Strickland TW, Yphantis DA. Characterization of recombinant human erythropoietin produced in chinese hamster ovary cells. Biochemistry 1987; 26: 2633-2638
11. Jelkmann W. Use of recombinant human erythropoietin as an antianemic and performance enhancing drug. Curr Pharmaceut Biotech 2000; 1: 11-31
12. Recny MA, Scoble HA, Kim Y. Structural characterization of natural human urinary and recombinant DNA-derived erythropoietin. J Biol Chem 1987; 262: 17156-17163
13. Lappin TRJ, Maxwell AP. Chemistry and assays of erythropoietin. In: Jelkmann W, Gross AJ (Hrsg) Erythropoietin. Springer, Berlin, 1989: 7-18
14. Lai PH, Everett R, Wang FF, Arakawa T, Goldwasser E. Structural characterization of human erythropoietin. J Biol Chem 1986; 261: 3116-3121
15. Powell JS, Berkner KL, Lebo RV, Adamson JW. Human erythropoietin gene: high level expression in stably transfected mammalian cells and chromosome localization. Proc Natl Acad Sci USA 1986; 83: 6465-6469
16. Watkins PC, Eddy R, Hoffman N, Stanislovitis P, Beck AK, Galli J, Vellucci V, Gusella JF, Shows TB. Regional assignment of the erythropoietin gene to human chromosome region 7pter-q22. Cytogenet Cell Genet 1986; 42: 214-218
17. McDonald JD, Lin FK, Goldwasser E. Cloning, sequencing and evolutionary compounds on renal production of erythropoietin. Endocrinology 1999; 140: 641-645

18. Lin FK, Lin CH, Lai PH, Browne JK, Egrie JC, Smalling R, Fox GM, Chen KK, Castro M, Suggs S. Monkey erythropoietin gene: cloning, expression and comparison with the human erythropoietin gene. *Gene* 1986; 44: 201-209
19. Koury MJ. Programmed cell death (apoptosis) in hematopoiesis. *Exp Hematol* 1992; 20: 391-394
20. D'Andrea AD, Zon LI. Erythropoietin receptor: subunit structure and activation. *J Clin Invest* 1990; 86: 681-687
21. Goldberg MA. Biology of erythropoietin. In: Garnick MB (Hrsg): *Erythropoietin in Clinical Applications*. Dekker, New York, 1990: 59-104
22. Bert P. *La Pression Barométrique*. Masson et Cie, Paris, 1878
23. Hüfner G. Über das Gesetz der Dissociation des Oxyhaemoglobins und über einige daran sich knüpfende wichtige Fragen aus der Biologie. *Arch Anat Physiol* 1890; 1-27
24. Viault F. Sur l'augmentation considérable du nombre des globules rouges dans le sang chez les habitants des hauts plateaux de l'Amérique du Sud. *CR Acad Sci (Paris)* 1890; 111: 917-918
25. Miescher F. Über die Beziehungen zwischen Meereshöhe und Beschaffenheit des Blutes. *Correspondenz-Blatt Schweizer Ärzte* 1893; 23: 809-830
26. Carnot P, Deflandre C. Sur l'activité hémopoïétique des différents organes au cours de la régénération du sang. *CR Acad Sci (Paris)* 1906: 143 : 432-435
27. Erslev AJ, Caro J, Besarab A. Why the kidney? *Nephron* 1985; 41: 213-216
28. Bauer C, Kurtz A. Oxygen sensing in the kidney and its relation to erythropoietin production. *Annu Rev Physiol* 1989; 51: 845-856
29. Pagel H, Jelkmann W, Weiss C. Isolated serum-free perfused rat kidneys release immunoreactive erythropoietin in response to hypoxia. *Endocrinology* 1991; 128: 2633-2638
30. Goldberg MA, Glass GA, Cunningham JM, Bunn HF. The regulated expression of erythropoietin by two human hepatoma cell lines. *Proc Natl Acad Sci USA* 1987; 84: 7972-7976
31. Schuster SJ, Wilson JH, Erslev AJ, Caro J. Physiologic regulation and tissue localization of renal erythropoietin messenger RNA. *Blood* 1987; 70: 316-318
32. Maxwell PH, Pugh CW, Ratcliffe PJ. Inducible operation of the erythropoietin 3' enhancer in multiple cell lines: evidence for a widespread oxygen-sensing mechanism. *Proc Natl Acad Sci USA* 1993; 90: 2423-2427
33. Grützmacher P, Schoeppe W. Renal artery stenosis and renal polyglobulia. In : Jelkmann W, Gross AJ (Hrsg) *Erythropoietin*. Springer, Berlin, 1989: 111-121
34. Pagel H, Jelkmann W, Weiss C. A comparison of the effects of renal artery constriction and anemia on the production of erythropoietin. *Pflügers Arch* 1988; 413: 62-66
35. Pagel H, Jelkmann W, Weiss C. O₂-supply to the kidneys and the production of erythropoietin. *Resp Physiol* 1989; 77: 111-118
36. Bourgoignie JJ, Gallagher NI, Perry HM, Kurz L, Warnecke MA, Donati RM. Renin and erythropoietin in normotensive and in hypertensive patients. *J Lab Clin Med* 1968; 71: 523-536
37. Taneichi K, Konno T, Shibaki H, Kubota K, Kajigaya S, Miura Y. Secondary erythrocytosis due to left renal artery stenosis. *Rinsho Ketsueki Jap J Clin Hematol* 1986; 27: 526-529
38. Luke RG, Kennedy AC, Stirling WB, McDonald GA. Renal artery stenosis, hypertension and polycythaemia. *Brit Med J* 1965; 1: 164-166

39. Tarazi RC, Frohlich ED, Dustan HP, Gifford RW, Page IH. Hypertension and high hematocrit. *Am J Cardiol* 1966; 18: 855-858
40. Hudgson P, Pearce JMS, Yeates WK. Renal artery stenosis with hypertension and high hematocrit. *Brit Med J* 1967; 1: 18-21
41. Pavlovic-Kantera V, Hall DP, Bragassa C, Lange RD. Unilateral renal hypoxia and production of erythropoietin. *J Lab Clin Med* 1965; 65: 577-588
42. Fisher JW, Samuels AI. Relationship between renal blood flow and erythropoietin production in dogs. *Proc Soc Exp Biol Med* 1967; 125: 482-485
43. Murphy GP, Mirand EA, Takita H, Schoonees R, Groenewald JH. The effects of hypoxia and ischemia on erythropoietin and renin release in dogs. *Invest Urol* 1971; 8: 521-525
44. Cooper GW, Nocenti MR. Unilateral renal ischaemia and erythropoietin. *Proc Soc Exp Biol Med* 1961; 108: 546-549
45. Zivny J, Kolc J, Malek P, Neuwirt J. Renal ischaemia, hypoxic hypoxia and erythropoietin production. *Scand J Hamatol* 1972; 9: 470-476
46. Peschle C, Rappaport IA, Magli MC, Marone G, Lettieri F, Cillo C, Gordon AS. Role of the hypophysis in erythropoietin production during hypoxia. *Blood* 1978; 51: 1117-1124
47. Halvorsen S. The central nervous system in regulation of erythropoiesis. *Acta Haematol* 1966; 35: 65-79
48. Wenger RH. Cellular adaptation to hypoxia: O₂-sensing protein hydroxylases, hypoxia-inducible transcription factors, and O₂-regulated gene expression. *FASEB J* 2002; 16: 1151-1162
49. Ema M, Hirota K, Mimura J, Abe H, Yodoi J, Sogawa K, Poellinger L, Fujii-Kuriyama Y. Molecular mechanisms of transcription activation by HLF and HIF-1 α in response to hypoxia: their stabilization and redox signal-induced interaction with CBP/p300. *EMBO J* 1999; 18: 1905-1914
50. Wang GL, Jiang BH, Rue EA, Semenza GL. Hypoxia-inducible factor 1 is a basic-helix-loop-helix-PAS heterodimer regulated by cellular O₂ tension. *Proc Natl Acad Sci USA* 1995; 92: 5510-5514
51. Semenza GL. Regulation of mammalian O₂ homeostasis by hypoxia-inducible factor 1. *Annu Rev Cell Dev Biol* 1999; 78: 1551-15578
52. Maxwell PH, Wiesener MS, Chang GW, Clifford SC, Vaux EC, Cockman ME, Wykoff CC, Pugh CW, Maher ER, Ratcliffe PJ. The tumour suppressor protein VHL targets hypoxia-inducible factors for oxygen-dependent proteolysis. *Nature* 1999; 399: 271-275
53. Salceda S, Caro J. Hypoxia-inducible factor 1 α (HIF-1 α) protein is rapidly degraded by the ubiquitin-proteasome system under normoxic conditions. Its stabilization by hypoxia depends on redox-induced changes. *J Biol Chem* 1997; 272: 22642-22647
54. Ivan M, Kondo K, Yang H, Kim W, Valiando J, Ohh M, Salic A, Asara JM, Lane WS, Kaelin WG. HIF-1 α targeted for VHL-mediated destruction by proline hydroxylation: implications for O₂ sensing. *Science* 2001; 292: 464-468
55. Jaakkola P, Mole DR, Tian YM, Wilson MI, Gielbert J, Gaskell SJ, Kriegsheim A, Hebestreit HF, Mukherji M, Schofield CJ, Maxwell PH, Pugh CW, Ratcliffe PJ. Targeting of HIF-1 α to the von Hippel-Lindau ubiquitylation complex by O₂-regulated prolyl hydroxylation. *Science* 2001; 292: 468-472
56. Zhu H, Bunn HF. Signal transduction. How do cells sense oxygen? *Science* 2001; 292: 449-451
57. Bruick RK, McKnight SL. A conserved family of prolyl-4-hydroxylases that modify HIF. *Science* 2001; 294: 1337-1340

58. Epstein ACR, Gleadle JM, McNeill LA, Hewitson KS, O'Rourke J, Mole DR, Mukherji M, Metzen E, Wilson MI, Dhanda A, Tian YM, Masson N, Hamilton DL, Jaakkola P, Barstead R, Hodgkin J, Maxwell PH, Pugh CW, Schofield CJ, Ratcliffe PJ. C. elegans EGL-9 and mammalian homologs define a family of dioxygenases that regulate HIF by prolyl hydroxylation. *Cell* 2001; 107: 43-57
59. Metzen E, Ratcliffe PJ. HIF hydroxylation and cellular oxygen sensing. *Biol Chem* 2004; 385 (im Druck)
60. Brauer LP, Prieshof B, Wiedemann GJ, Weiss C, Kriz W, Schramm U, Robins HI, Pagel H. Whole-body hyperthermia combined with ifosfamide and carboplatin causes hypotension and nephrotoxicity. *J Cancer Res Clin Oncol* 1998; 124: 549-554
61. Ross DT, Duhaime AC. Degeneration of neurons in the thalamic reticular nucleus following transient ischemia due to raised intracranial pressure: excitotoxic degeneration mediated via non-NMDA-receptors? *Brain Res* 1989; 501: 129-143
62. Cotes PM, Bangham DR. Bio-assay of erythropoietin in mice made polycythaemic by exposure to air at reduced pressure. *Nature* 1961; 191: 1065-1067
63. Ringer DH, Dabich L. Hematology and clinical biochemistry. In: Baker HJ, Lindsey JR, Weisbroth SH (Hrsg) *The Laboratory Rat*, Bd 1. Academic Press, New York, 1979: 105-121
64. Fisher JW. Erythropoietin: physiology and pharmacology update. *Exp Biol Med* 2003; 228: 1-14
65. Fisher JW. Prostaglandins and kidney erythropoietin production. *Nephron* 1980; 25: 53-56
66. Paul P, Rothmann SA, Meagher RC. Modulation of erythropoietin production by adenosine. *J Lab Clin Med* 1988; 112: 168-173
67. Fandrey J, Pagel H, Frede S, Wolff M, Jelkmann W. Thyroid hormones enhance hypoxia-induced erythropoietin production in vitro. *Exp Hematol* 1994; 22: 272-277
68. Beynon G. The influence of the autonomic nervous system in the control of erythropoietin secretion in the hypoxic rat. *J Physiol Lond* 1977; 266: 347-360
69. Engel A, Pagel H. Increased production of erythropoietin after application of antidiuretic hormone. *Exp Clin Endocrinol* 1995; 103: 303-307
70. Jelkmann W, Pagel H, Hellwig T, Fandrey J. Effects of antioxidant vitamins on renal and hepatic erythropoietin production. *Kidney Int* 1997; 51: 497-501
71. Neumcke I, Schneider B, Fandrey J, Pagel H. Effects of pro- and antioxidative compounds on renal production of erythropoietin. *Endocrinology* 1999; 140: 641-645
72. Erslev AJ, Wilson J, Caro J. Erythropoietin titers in anemic, nonuremic patients. *J Lab Clin Med* 1987; 109: 429-433
73. Takaku F, Hirashima K, Nakao K. Studies on the mechanism of erythropoietin production: effect of unilateral constriction of the renal artery. *J Lab Clin Med* 1962; 59: 815-820
74. Mujovic VM, Fisher JW. The effects of indomethacin on erythropoietin production in dogs following renal artery constriction: the possible role of prostaglandins in the generation of erythropoietin by the kidney. *J Pharmacol Exp Ther* 1974; 191: 575-580
75. Gross DM, Brookins J, Fink GD, Fisher JW. Effects of prostaglandins A, E and F on erythropoietin production. *J Pharmacol Exp Ther* 1976; 198: 489-496
76. Mitus WJ, Galbraith P, Gollerkeri M, Toyama K. Experimental renal erythrocytosis. Effects of pressure and vascular interference. *Blood* 1964; 24: 343-355
77. Fisher JW, Schofield R, Porteous DD. Effects of renal hypoxia on erythropoietin production. *Brit J Haematol* 1965; 11: 382-388

78. Hansen P. Polycythaemia produced by constriction of the renal artery in a rabbit. *Acta Pathol* 1964; 60: 465-472
79. Pagel H, Engel A, Jelkmann W. Erythropoietin induction by hypoxia: a comparison of in vitro and in vivo experiments. *Adv Exp Med Biol* 1992; 317: 515-519
80. Fink GD, Fisher JW. Role of the sympathetic nervous system in the control of erythropoietin production. In: Fisher JW (Hrsg) *Kidney Hormones*, Bd 2. Academic Press, New York, 1977: 387-413
81. Sun CH, Ward HJ, Paul WL, Koyle MA, Yanagawa N, Lee DBN. Serum erythropoietin levels after renal transplantation. *N Engl J Med* 1989; 321: 151-157
82. Wolff M, Jelkmann W. Erythropoiesis and erythropoietin levels in renal transplant recipients. *Klin Wochenschr* 1991; 69: 53-58
83. Goch JF, Birgegard G, Wikström B, Tufveson G, Danielson BG. Serum erythropoietin levels in the immediate kidney-posttransplant period. *Nephron* 1992; 60: 30-34
84. Eckardt KU, LeHir M, Tan CC, Ratcliffe PJ, Kaissling B, Kurtz A. Renal innervation plays no role in oxygen-dependent control of erythropoietin mRNA levels. *Am J Physiol* 1992; 263: F925-F930
85. Pagel H, Frackowski U, Weiss C. Transfusion of blood from exhypoxic rats augments the production of erythropoietin in recipients. *Clin Invest* 1994; 72: B5
86. Schooley JC, Mahlmann LJ. Evidence for the de novo synthesis of erythropoietin in hypoxic rats. *Blood* 1972; 40: 662-670
87. Halvorsen S, Roh BL, Fisher JW. Erythropoietin production in nephrectomized and hypophysectomized animals. *Am J Physiol* 1968; 215: 349-352
88. Halvorsen S. Plasma erythropoietin levels following hypothalamic stimulation in the rabbit. *Scand J Clin Lab Invest* 1961; 13: 564-575
89. Halvorsen S. Effects of hypothalamic stimulation on erythropoiesis and on the production of erythropoiesis-stimulating factors in intact and nephrectomized rabbits. *Ann NY Acad Sci* 1968; 149: 84-93
90. Mirand EA. Extra-renal and renal control of erythropoietin production. *Ann NY Acad Sci* 1968; 149: 94-106
91. Fleckenstein W, Maas AIR, Nollert G, Jong DA. Oxygen pressure in cerebrospinal fluid: dynamics of oxygen transfer at normal, increased and decreased oxygen offer. In: Ehrly AM, Fleckenstein W, Hauss J, Huch R (Hrsg) *Clinical Oxygen Pressure Measurement II*. Blackwell, Berlin, 1990: 368-385
92. Fleckenstein W, Maas AIR, Nollert G, Jong DA. Oxygen pressure in cerebrospinal fluid: effects of hypocapnia and hypercapnia. In: Ehrly AM, Fleckenstein W, Hauss J, Huch R (Hrsg) *Clinical Oxygen Pressure Measurement II*. Blackwell, Berlin, 1990: 386-395
93. Nollert G. Tierexperimentelle Untersuchungen zur Aussagekraft kontinuierlicher pO₂-Messungen in der cerebrospinalen Flüssigkeit. Dissertation, Lübeck, 1988
94. Fleckenstein W, Nowak G, Kehler U, Maas AIR, Dellbrügge HJ, Jong DA, Hess M, Nollert G. Oxygen pressure measurements in cerebrospinal fluid. *Medizintechnik* 1990; 110: 44-53
95. Maas AIR, Fleckenstein W, Jong DA, Wolf M. Effect of increased ICP and decreased cerebral perfusion pressure on brain tissue and cerebrospinal fluid oxygen tension. In: Avezaat CJJ, Eijndhoven JHM, Maas AIR, Tans JTJ (Hrsg) *Intracranial Pressure VIII*. Springer, Berlin, 1993: 233-237
96. Zanjani ED, Poster J, Burlington H, Mann LI, Wasserman LR. Liver as the primary site of erythropoietin formation in the fetus. *J Lab Clin Med* 1977; 89: 640-644
97. Clemons GK, Fitzsimmons SL, DeManincor D. Immunoreactive erythropoietin concentrations in fetal and neonatal rats and the effect of hypoxia. *Blood* 1986; 68: 892-899

98. Fandrey J, Bunn HF. In vivo and in vitro regulation of erythropoietin mRNA: measurement by competitive polymerase chain reaction. *Blood* 1993; 81: 617-623
99. Mirand EA, Grace JT, Johnston GS, Murphy GP. Effects of hypothalamic stimulation on the erythropoietic response in the rhesus monkey. *Nature* 1964; 204: 1163-1165
100. Berlin NI, Van Dyke DC, Siri WE, Williams CP. The effect of hypophysectomy on the total circulating red cell volume of the rat. *Endocrinology* 1950; 47: 429-435
101. Cotes PM, Brozovic B. Diurnal variation of serum immunoreactive erythropoietin in a normal subject. *Clin Endocrinol* 1982; 17: 419-422
102. Wide L, Bengtsson C, Birgegård G. Circadian rhythm of erythropoietin in human serum. *Brit J Haematol* 1989; 72: 85-90
103. Buemi M, Allegra A, Aloisi C, Mannino G, Trusso S, Vitulo F, Privitera M, Morabito N, Frisina N. The circadian rhythm of erythropoietin in subjects with pre-terminal uremia. *Clin Nephrol* 1992; 37: 159-160
104. Cahan C, Decker MJ, Arnold JL, Washington LH, Veldhuis JD, Goldwasser E, Strohl KP. Diurnal variations in serum erythropoietin levels in healthy subjects and sleep apnea patients. *J Appl Physiol* 1992; 72: 2112-2117