

9 Literaturverzeichnis

- Alon, T., Hemo, I., Itin, A., Pe'er, J., Stone, J. & Keshet, E. 1995. Vascular endothelial growth factor acts as a survival factor for newly formed retinal vessels and has implications for retinopathy of prematurity. *Nat.Med.* 1: 1024-1028.
- Andersen, H. R., Maeng, M., Thorwest, M. & Falk, E. 1996. Remodeling rather than neointimal formation explains luminal narrowing after deep vessel wall injury: insights from a porcine coronary (re)stenosis model. *Circulation* 93: 1716-1724.
- Asahara, T., Bauters, C., Pastore, C., Kearney, M., Rossow, S., Bunting, S., Ferrara, N., Symes, J. F. & Isner, J. M. 1995. Local delivery of vascular endothelial growth factor accelerates reendothelialization and attenuates intimal hyperplasia in balloon-injured rat carotid artery. *Circulation* 91: 2793-2801.
- Assiri, A., Veinot, J. P., Woodend, K., Kimura, T., Nobuyoshi, M., Schwartz, S. M. & O'Brien, E. R. 2001. Abundance of plaque microvessels is associated with constrictive remodeling in angioplastied human coronary arteries. *Jpn.Circ.J.* 65: 429-433.
- Ausprunk, D. H. & Folkman, J. 1977. Migration and proliferation of endothelial cells in preformed and newly formed blood vessels during tumor angiogenesis. *Microvasc.Res.* 14: 53-65.
- Axel, D. I., Kunert, W., Goggelmann, C., Oberhoff, M., Herdeg, C., Kuttner, A., Wild, D. H., Brehm, B. R., Riessen, R., Koveker, G. & Karsch, K. R. 1997. Paclitaxel inhibits arterial smooth muscle cell proliferation and migration in vitro and in vivo using local drug delivery. *Circulation* 96: 636-645.
- Barger, A. C., Beeuwkes, R., III, Lainey, L. L. & Silverman, K. J. 1984. Hypothesis: vasa vasorum and neovascularization of human coronary arteries. A possible role in the pathophysiology of atherosclerosis. *N.Engl.J.Med.* 19;310: 175-177.
- Barker, S. G., Talbert, A., Cottam, S., Baskerville, P. A. & Martin, J. F. 1993. Arterial intimal hyperplasia after occlusion of the adventitial vasa vasorum in the pig. *Arterioscler.Thromb.* 13: 70-77.
- Bhardwaj, S., Roy, H., Gruchala, M., Viita, H., Kholova, I., Kokina, I., Achen, M. G., Stacker, S. A., Hedman, M., Alitalo, K. & Yla-Herttuala, S. 2003. Angiogenic responses of vascular endothelial growth factors in periadventitial tissue. *Hum.Gene Ther.* 14: 1451-1462.
- Birgelen von, C., Mintz, G. S., de Vrey, E. A. & et al. 1998. Atherosclerotic coronary lesions with inadequate compensatory enlargement have smaller plaque and vessel volumes: observations with three dimensional intravascular ultrasound in vivo. *Heart* 79: 137-142.
- Block, P. C. 1990. Restenosis after percutaneous transluminal coronary angioplasty - anatomic and pathophysiological mechanisms: strategies for prevention. *Circulation* 81(Suppl.IV): IV-2-IV-4.
- Burke, A. P., Kolodgie, F. D., Farb, A., Weber, D. & Virmani, R. 2002. Morphological predictors of arterial remodeling in coronary atherosclerosis. *Circulation* 105: 297-303.

- Califf, R. M., Fortin, D. F., Frid, D. J., Harlan, W. R., III, Ohman, E. M., Bengtson, J. R., Nelson, C. L., Tchong, J. E., Mark, D. B. & Stack, R. S. 1991. Restenosis after coronary angioplasty: an overview. *J.Am.Coll.Cardiol.* 17: 2B-13B.
- Casscells, W., Engler, D. & Willerson, J. 1994. Mechanisms of restenosis. *Texas Heart Inst.J.* 21: 68-77.
- Celletti, F. L., Hilfiker, P. R., Ghafouri, P. & Dake, M. D. 2001. Effect of human recombinant vascular endothelial growth factor165 on progression of atherosclerotic plaque. *J.Am.Coll.Cardiol.* 37: 2126-2130.
- Darby, I., Skalli, O. & Gabbiani, G. 1990. Alpha-smooth muscle actin is transiently expressed by myofibroblasts during experimental wound healing. *Lab Invest* 63: 21-29.
- Darland, D. C., Massingham, L. J., Smith, S. R., Piek, E., Saint-Geniez, M. & D'Amore, P. A. 2003. Pericyte production of cell-associated VEGF is differentiation-dependent and is associated with endothelial survival. *Dev.Biol.* 264: 275-288.
- Davies, M. J. 1998. Coronary artery remodelling and the assessment of stenosis by pathologists. *Histopathology* 33: 497-500.
- De Martin, R., Hoeth, M., Hofer-Warbinek, R. & Schmid, J. A. 2000. The transcription factor NF-kappa B and the regulation of vascular cell function. *Arterioscler.Thromb.Vasc.Biol.* 20: E83-E88.
- Doornekamp, F. N. G., Post, M. J. & Borst, C. 1995. Influence of presence or absence of medial necrosis on endothelial regeneration and intimal hyperplasia in the rabbit. *J.Am.Coll.Cardiol.* Suppl.: 420A.
- Ehrlich, H. P., Rockwell, W. B., Cornwell, T. L. & Rajaratnam, J. B. 1991. Demonstration of a direct role for myosin light chain kinase in fibroblast-populated collagen lattice contraction. *J.Cell Physiol.* 146: 1.
- Epstein, S. E., Kornowski, R., Fuchs, S. & Dvorak, H. F. 2001. Angiogenesis therapy: amidst the hype, the neglected potential for serious side effects. *Circulation* 104: 115-119.
- Faxon, D. P. 2002. Systemic drug therapy for restenosis: "deja vu all over again". *Circulation* 106: 2296-2298.
- Felgner, P. L., Gadek, T. R., Holm, M., Roman, R., Chan, H. W., Wenz, M., Northrop, J. P., Ringold, G. M. & Danielsen, M. 1987. Lipofection: a highly efficient, lipid-mediated DNA-transfection procedure. *Proc.Natl.Acad.Sci.U.S.A* 84: 7413-7417.
- Ferrara, N., Houck, K. A., Jakeman, L. B., Winer, J. & Leung, D. W. 1991. The vascular endothelial growth factor family of polypeptides. *J.Cell Biochem.* 47: 211-218.
- Folkman, J., Merler, E., Abernathy, C. & Williams, G. 1971. Isolation of a tumor factor responsible for angiogenesis. *J.Exp.Med.* 133: 275-288.

- Fong, G. H., Rossant, J., Gertsenstein, M. & Breitman, M. L. 1995. Role of the Flt-1 receptor tyrosine kinase in regulating the assembly of vascular endothelium. *Nature* 376: 66-70.
- Franklin, S. M. & Faxon, D. P. 1993. Pharmacologic prevention of restenosis after coronary angioplasty: review of randomized clinical trials. *Coron.Artery Dis.* 4: 232-242.
- Geary, R. L., Nikkari, S. T., Wagner, W. D., Williams, J. K., Adams, M. R. & Dean, R. H. 1998. Wound healing: a paradigm for lumen narrowing after arterial reconstruction. *J.Vasc.Surg.* 27: 96-106.
- Gerber, H. P., Dixit, V. & Ferrara, N. 1998a. Vascular endothelial growth factor induces expression of the antiapoptotic proteins Bcl-2 and A1 in vascular endothelial cells. *J.Biol.Chem.* 273: 13313-13316.
- Gerber, H. P., McMurtrey, A., Kowalski, J., Yan, M., Keyt, B. A., Dixit, V. & Ferrara, N. 1998b. Vascular endothelial growth factor regulates endothelial cell survival through the phosphatidylinositol 3'-kinase/Akt signal transduction pathway. Requirement for Flk-1/KDR activation. *J.Biol.Chem.* 273: 30336-30343.
- Gibbons, G. H. & Dzau, V. J. 1994. The emerging concept of vascular remodeling. *N.Engl.J.Med.* 330: 1431-1438.
- Glagov, S. & Zarins, C. K. 1983. Quantitating atherosclerosis: problems of definition. In Bond, M. G., Insull, W. J., Glagov, S., Chandler, A. B. & Cornhill, J. F. (Eds) *Clinical diagnosis of atherosclerosis: quantitative methods of evaluation* (pp. 11-35). New York: Springer Verlag.
- Gorman, C. M., Gies, R. D. & McCray, G. 1990. Transient Production of Proteins Using an Adenovirus Transformed Cell Line. *unknown* 2: 3-10.
- Gossl, M., Malyar, N. M., Rosol, M., Beighley, P. E. & Ritman, E. L. 2003. Impact of coronary vasa vasorum functional structure on coronary vessel wall perfusion distribution. *Am.J.Physiol Heart Circ.Physiol* ..
- Gradus-Pizlo, I., Wilensky, R. L., March, K. L., Fineberg, N., Michaels, M., Sandusky, G. E. & Hathaway, D. R. 1995. Local delivery of biodegradable microparticles containing colchicine or a colchicine analogue: effects on restenosis and implications for catheter-based drug delivery. *J.Am.Coll.Cardiol.* 26: 1549-1557.
- Gravanis, M. B. & Roubin, G. S. 1989. Histopathologic phenomena at the site of percutaneous transluminal coronary angioplasty: the problem of restenosis. *Hum.Pathol.* 20: 477-485.
- Gruberg, L., Waksman, R., Satler, L. F., Pichard, A. D. & Kent, K. M. 2000. Novel approaches for the prevention of restenosis. *Expert.Opin.Investig.Drugs* 9: 2555-2578.
- Haensler, J. & Szoka, F. C., Jr. 1993. Polyamidoamine cascade polymers mediate efficient transfection of cells in culture. *Bioconj.Chem.* 4: 372-379.
- Hariawala, M. D., Horowitz, J. R., Esakof, D., Sheriff, D. D., Walter, D. H., Keyt, B., Isner, J. M. & Symes, J. F. 1996. VEGF improves myocardial blood flow but produces EDRF-

- mediated hypotension in porcine hearts. *J.Surg.Res.* 63: 77-82.
- Houck, K. A., Ferrara, N., Winer, J., Cachianes, G., Li, B. & Leung, D. W. 1991. The vascular endothelial growth factor family: identification of a fourth molecular species and characterization of alternative splicing of RNA. *Mol.Endocrinol.* 5: 1806-1814.
- Isner, J. M. 1994. Vascular remodeling. Honey, I think I shrunk the artery. *Circulation* 89: 2937-2941.
- Isner, J. M. & Losordo, D. W. 1999. Therapeutic angiogenesis for heart failure. *Nat.Med.* 5: 491-492.
- Isner, J. M., Walsh, K., Symes, J., Pieczek, A., Takeshita, S., Lowry, J., Rossow, S., Rosenfield, K., Weir, L., Brogi, E. & . 1995. Arterial gene therapy for therapeutic angiogenesis in patients with peripheral artery disease. *Circulation* 91: 2687-2692.
- Kahlon, R., Shapero, J. & Gottlieb, A. I. 1992. Angiogenesis in atherosclerosis. *Can.J.Cardiol.* 8: 60-64.
- Kakuta, T., Currier, J. W., Haudenschild, C. C., Ryan, T. J. & Faxon, D. P. 1994. Differences in compensatory vessel enlargement, not intimal formation, account for restenosis after angioplasty in the hypercholesterolemic rabbit model. *Circulation* 89: 2809-2815.
- Kalnins, A., Otto, K., Ruther, U. & Muller-Hill, B. 1983. Sequence of the lacZ gene of Escherichia coli. *EMBO J.* 2: 593-597.
- Karim, M. A., Miller, D. D., Farrar, M. A., Eleftheriades, E., Reddy, B. H., Breland, C. M. & Samarel, A. M. 1995. Histomorphometric and biochemical correlates of arterial procollagen gene expression during vascular repair after experimental angioplasty. *Circulation* 91: 2049.
- Keck, P. J., Hauser, S. D., Krivi, G., Sanzo, K., Warren, T., Feder, J. & Connolly, D. T. 1989. Vascular permeability factor, an endothelial cell mitogen related to PDGF. *Science* 246: 1309-1312.
- Kingston, P. A., Sinha, S., Appleby, C. E., David, A., Verakis, T., Castro, M. G., Lowenstein, P. R. & Heagerty, A. M. 2003. Adenovirus-mediated gene transfer of transforming growth factor-beta3, but not transforming growth factor-beta1, inhibits constrictive remodeling and reduces luminal loss after coronary angioplasty. *Circulation* 108: 2819-2825.
- Kingston, P. A., Sinha, S., David, A., Castro, M. G., Lowenstein, P. R. & Heagerty, A. M. 2001. Adenovirus-mediated gene transfer of a secreted transforming growth factor-beta type II receptor inhibits luminal loss and constrictive remodeling after coronary angioplasty and enhances adventitial collagen deposition. *Circulation* 104: 2595-2601.
- Kiriakidis, S., Andreakos, E., Monaco, C., Foxwell, B., Feldmann, M. & Paleolog, E. 2003. VEGF expression in human macrophages is NF-kappaB-dependent: studies using adenoviruses expressing the endogenous NF-kappaB inhibitor IkappaBalpha and a kinase-defective form of the IkappaB kinase 2. *J.Cell Sci.* 116: 665-674.

- Knighton, D. R., Hunt, T. K., Scheuenstuhl, H., Halliday, B. J., Werb, Z. & Banda, M. J. 1983. Oxygen tension regulates the expression of angiogenesis factor by macrophages. *Science* 221: 1283-1285.
- Koch, A. E., Harlow, L. A., Haines, G. K., Amento, E. P., Unemori, E. N., Wong, W. L., Pope, R. M. & Ferrara, N. 1994. Vascular endothelial growth factor. A cytokine modulating endothelial function in rheumatoid arthritis. *J.Immunol.* 152: 4149-4156.
- Kolpakov, V., Gordon, D. & Kulik, T. J. 1995. Nitric oxide-generating compounds inhibit total protein and collagen synthesis in cultured vascular smooth muscle cells. *Circ.Res.* 76: 305-309.
- Kwon, H. M., Kang, S., Hong, B. K., Kim, D., Park, H. Y., Shin, M. S. & Byun, K. H. 1999. Ultrastructural changes of the external elastic lamina in experimental hypercholesterolemic porcine coronary arteries. *Yonsei Med.J.* 40: 273-282.
- Kwon, H. M., Sangiorgi, G., Ritman, E. L., Lerman, A., McKenna, C., Virmani, R., Edwards, W. D., Holmes, D. R. & Schwartz, R. S. 1998. Adventitial vasa vasorum in balloon-injured coronary arteries: visualization and quantitation by a microscopic three-dimensional computed tomography technique. *J.Am.Coll.Cardiol.* 32: 2072-2079.
- Lafont, A., Guzman, L. A., Whitlow, P. L., Goormastic, M., Cornhill, J. F. & Chisolm, G. M. 1995. Restenosis after experimental angioplasty. Intimal, medial, and adventitial changes associated with constrictive remodeling. *Circ.Res.* 76: 996-1002.
- Laitinen, M., Hartikainen, J., Hiltunen, M. O., Eranen, J., Kiviniemi, M., Narvanen, O., Makinen, K., Manninen, H., Syvanne, M., Martin, J. F., Laakso, M. & Yla-Herttuala, S. 2000. Catheter-mediated vascular endothelial growth factor gene transfer to human coronary arteries after angioplasty. *Hum.Gene Ther.* 20;11: 263-270.
- Laitinen, M., Pakkanen, T., Donetti, E., Baetta, R., Luoma, J., Lehtolainen, P., Viita, H., Agrawal, R., Miyahara, A., Friedmann, T., Risau, W., Martin, J. F., Soma, M. & Yla-Herttuala, S. 1997a. Gene transfer into the carotid artery using an adventitial collar: comparison of the effectiveness of the plasmid-liposome complexes, retroviruses, pseudotyped retroviruses, and adenoviruses. *Hum.Gene Ther.* 8: 1645-1650.
- Laitinen, M., Zachary, I., Breier, G., Pakkanen, T., Hakkinen, T., Luoma, J., Abedi, H., Risau, W., Soma, M., Laakso, M., Martin, J. F. & Yla-Herttuala, S. 1997b. VEGF gene transfer reduces intimal thickening via increased production of nitric oxide in carotid arteries. *Hum.Gene Ther.* 8: 1737-1744.
- Langille, B. L. 1993. Remodeling of developing and mature arteries: endothelium, smooth muscle, and matrix. *J.Cardiovasc.Pharmacol.* 21(Suppl.): S11-S17.
- Lee, R. J., Springer, M. L., Blanco-Bose, W. E., Shaw, R., Ursell, P. C. & Blau, H. M. 2000. VEGF gene delivery to myocardium: deleterious effects of unregulated expression. *Circulation* 102: 898-901.
- Lehmann, K. G., Popma, J. J., Werner, J. A., Lansky, A. J. & Wilensky, R. L. 2000. Vascular remodeling and the local delivery of cytochalasin B after coronary angioplasty in humans. *J.Am.Coll.Cardiol.* 35: 583-591.

- Leung, D. W., Cachianes, G., Kuang, W. J., Goeddel, D. V. & Ferrara, N. 1989. Vascular endothelial growth factor is a secreted angiogenic mitogen. *Science* 246: 1306-1309.
- Lincoff, A. M., Furst, J. G., Ellis, S. G., Tuch, R. J. & Topol, E. J. 1997. Sustained local delivery of dexamethasone by a novel intravascular eluting stent to prevent restenosis in the porcine coronary injury model. *J.Am.Coll.Cardiol.* 29: 808-816.
- Liu, M. W., Roubin, G. S. & King, S. B. I. 1989. Restenosis after coronary angioplasty: potential biologic determinants and the role of intimal hyperplasia. *Circulation* 79: 1374-1387.
- Losordo, D. W., Pickering, J. G., Takeshita, S., Leclerc, G., Gal, D., Weir, L., Kearney, M., Jekanowski, J. & Isner, J. M. 1994. Use of the rabbit ear artery to serially assess foreign protein secretion after site-specific arterial gene transfer in vivo. Evidence that anatomic identification of successful gene transfer may underestimate the potential magnitude of transgene expression. *Circulation* 89: 785-792.
- Losordo, D. W., Vale, P. R., Hendel, R. C., Milliken, C. E., Fortuin, F. D., Cummings, N., Schatz, R. A., Asahara, T., Isner, J. M. & Kuntz, R. E. 2002. Phase 1/2 placebo-controlled, double-blind, dose-escalating trial of myocardial vascular endothelial growth factor 2 gene transfer by catheter delivery in patients with chronic myocardial ischemia. *Circulation* 105: 2012-2018.
- Makinen, K., Manninen, H., Hedman, M., Matsi, P., Mussalo, H., Alhava, E. & Yla-Herttuala, S. 2002. Increased vascularity detected by digital subtraction angiography after VEGF gene transfer to human lower limb artery: a randomized, placebo-controlled, double-blinded phase II study. *Mol.Ther.* 6: 127-133.
- Mintz, G. S., Popma, J. J., Pichard, A. D., Kent, K. M., Satler, L. F., Wong, C., Hong, M. K., Kovach, J. A. & Leon, M. B. 1996. Arterial remodeling after coronary angioplasty: a serial intravascular ultrasound study. *Circulation* 94: 35-43.
- Mintz, G. S., Tinana, A., Hong, M. K., Lee, C. W., Kim, J. J., Fearnot, N. E., Park, S. W., Park, S. J. & Weissman, N. J. 2003. Impact of preinterventional arterial remodeling on neointimal hyperplasia after implantation of (non-polymer-encapsulated) paclitaxel-coated stents: a serial volumetric intravascular ultrasound analysis from the ASian Paclitaxel-Eluting Stent Clinical Trial (ASPECT). *Circulation* 108: 1295-1298.
- Murohara, T., Horowitz, J. R., Silver, M., Tsurumi, Y., Chen, D., Sullivan, A. & Isner, J. M. 1998. Vascular endothelial growth factor/vascular permeability factor enhances vascular permeability via nitric oxide and prostacyclin. *Circulation* 97: 99-107.
- Nikol, S., Engelmann, M. G., Pelisek, J., Fuchs, A., Golda, A., Shimizu, M., Mekkaoui, C. & Rolland, P. H. 2002. Local perivascular application of low amounts of a plasmid encoding for vascular endothelial growth factor (VEGF165) is efficient for therapeutic angiogenesis in pigs. *Acta Physiol Scand.* 176: 151-159.
- Noutsias, M., Fechner, H., de Jonge, H., Wang, X., Dekkers, D., Houtsmuller, A. B., Pauschinger, M., Bergelson, J., Warraich, R., Yacoub, M., Hetzer, R., Lamers, J., Schultheiss, H. P. & Poller, W. 2001. Human coxsackie-adenovirus receptor is colocalized with integrins alpha(v)beta(3) and alpha(v)beta(5) on the cardiomyocyte sarcolemma and upregulated in dilated cardiomyopathy: implications for cardiotropic viral infections. *Circulation* 104: 275-280.

- Noutsias, M., Pauschinger, M., Ostermann, K., Escher, F., Blohm, J. H., Schultheiss, H. & Kuhl, U. 2002. Digital image analysis system for the quantification of infiltrates and cell adhesion molecules in inflammatory cardiomyopathy. *Med.Sci.Monit.* 8: MT59-MT71.
- Pasterkamp, G., Hillen, B. & Borst, C. 1997. Arterial remodelling by atherosclerosis. *Semin.Interv.Cardiol.* 2: 147-152.
- Pauschinger, M., Knopf, D., Petschauer, S., Doerner, A., Poller, W., Schwimmbeck, P. L., Kuhl, U. & Schultheiss, H. P. 1999. Dilated cardiomyopathy is associated with significant changes in collagen type I/III ratio. *Circulation* 99: 2750-2756.
- Pels, K., Labinaz, M., Hoffert, C. & O'Brien, E. R. 1999. Adventitial angiogenesis early after coronary angioplasty : correlation with arterial remodeling. *Arterioscler.Thromb.Vasc.Biol.* 19: 229-238.
- Phillips, H. S., Hains, J., Leung, D. W. & Ferrara, N. 1990. Vascular endothelial growth factor is expressed in rat corpus luteum. *Endocrinology* 127: 965-967.
- Pipp, F., Heil, M., Issbrucker, K., Ziegelhoeffer, T., Martin, S., van den, H. J., Weich, H., Fernandez, B., Golomb, G., Carmeliet, P., Schaper, W. & Clauss, M. 2003. VEGFR-1-selective VEGF homologue PIGF is arteriogenic: evidence for a monocyte-mediated mechanism. *Circ.Res.* 92: 378-385.
- Post, M. J., Borst, C. & Kuntz, R. E. 1994. The relative importance of arterial remodeling compared with intimal hyperplasia in lumen renarrowing after balloon angioplasty. A study in the normal rabbit and the hypercholesterolemic Yucatan micropig. *Circulation* 89: 2816-2821.
- Rosanio, S., Tocchi, M., Patterson, C. & Runge, M. S. 1999. Prevention of restenosis after percutaneous coronary interventions: the medical approach. *Thromb.Haemost.* 82 Suppl 1:164-70.: 164-170.
- Rosengart, T. K., Lee, L. Y., Patel, S. R., Sanborn, T. A., Parikh, M., Bergman, G. W., Hachamovitch, R., Szulc, M., Kligfield, P. D., Okin, P. M., Hahn, R. T., Devereux, R. B., Post, M. R., Hackett, N. R., Foster, T., Grasso, T. M., Lesser, M. L., Isom, O. W. & Crystal, R. G. 1999. Angiogenesis gene therapy: phase I assessment of direct intramyocardial administration of an adenovirus vector expressing VEGF121 cDNA to individuals with clinically significant severe coronary artery disease. *Circulation* 100: 468-474.
- Rosenthal, E. A., Bohlmeyer, T. J., Monnet, E., MacPhail, C., Robertson, A. D., Horwitz, M. A., Burchenal, J. E. & Horwitz, L. D. 2001. An iron-binding exochelin prevents restenosis due to coronary artery balloon injury in a porcine model. *Circulation* 104: 2222-2227.
- Rudic, R. D., Shesely, E. G., Maeda, N., Smithies, O., Segal, S. S. & Sessa, W. C. 1998. Direct evidence for the importance of endothelium-derived nitric oxide in vascular remodeling. *J.Clin.Invest* 101: 731-736.
- Schurch, W., Seemayer, T. A. & Gabbiani, G. 1998. The myofibroblast: a quarter century after its discovery. *Am.J.Surg.Pathol.* 22: 141-147.

- Scott, N. A., Cipolla, G. D., Ross, C. E., Dunn, B., Martin, F. H., Simonet, L. & Wilcox, J. N. 1996. Identification of a potential role for the adventitia in vascular lesion formation after balloon overstretch injury of porcine coronary arteries. *Circulation* 93: 2178-2187.
- Scott, N. A., Ross, C., Subramanian, R., Martin, F., Simonet, L. & Wilcox, J. N. 1995. Characterization of the cellular response to coronary injury. *Circulation* 90: 1-392.
- Senger, D. R., Galli, S. J., Dvorak, A. M., Perruzzi, C. A., Harvey, V. S. & Dvorak, H. F. 1983. Tumor cells secrete a vascular permeability factor that promotes accumulation of ascites fluid. *Science* 219: 983-985.
- Shalaby, F., Rossant, J., Yamaguchi, T. P., Gertsenstein, M., Wu, X. F., Breitman, M. L. & Schuh, A. C. 1995. Failure of blood-island formation and vasculogenesis in Flk-1-deficient mice. *Nature* 376: 62-66.
- Shi, Y., Fard, A., Galeo, A., Hutchinson, H. G., Vermani, P., Dodge, G. R., Hall, D. J., Shaheen, F. & Zalewski, A. 1994. Transcatheter delivery of c-myc antisense oligomers reduces neointimal formation in a porcine model of coronary artery balloon injury. *Circulation* 90: 944-951.
- Sibinga, N. E., Foster, L. C., Hsieh, C. M., Perrella, M. A., Lee, W. S., Endege, W. O., Sage, E. H., Lee, M. E. & Haber, E. 1997. Collagen VIII is expressed by vascular smooth muscle cells in response to vascular injury. *Circ.Res.* 80: 532-541.
- Singer, A. J. & Clark, R. A. 1999. Cutaneous wound healing. *N.Engl.J.Med.* 341: 738-746.
- Stefanadis, C., Vlachopoulos, C., Karayannacos, P., Boudoulas, H., Stratos, C., Filippides, T., Agapitos, M. & Toutouzas, P. 1995. Effect of vasa vasorum flow on structure and function of the aorta in experimental animals. *Circulation* 91: 2669-2678.
- Sugitani, H., Wachi, H., Tajima, S. & Seyama, Y. 2001. Nitric oxide stimulates elastin expression in chick aortic smooth muscle cells. *Biol.Pharm.Bull.* 24: 461-464.
- Tischer, E., Mitchell, R., Hartman, T., Silva, M., Gospodarowicz, D., Fiddes, J. C. & Abraham, J. A. 1991. The human gene for vascular endothelial growth factor. Multiple protein forms are encoded through alternative exon splicing. *J.Biol Chem.* 266: 11947-11954.
- Vale, P. R., Losordo, D. W., Milliken, C. E., McDonald, M. C., Gravelin, L. M., Curry, C. M., Esakof, D. D., Maysky, M., Symes, J. F. & Isner, J. M. 2001. Randomized, single-blind, placebo-controlled pilot study of catheter-based myocardial gene transfer for therapeutic angiogenesis using left ventricular electromechanical mapping in patients with chronic myocardial ischemia. *Circulation* 103: 2138-2143.
- Van Belle, E., Tio, F. O., Chen, D., Maillard, L., Chen, D., Kearney, M. & Isner, J. M. 1997. Passivation of metallic stents after arterial gene transfer of phVEGF165 inhibits thrombus formation and intimal thickening. *J.Am.Coll.Cardiol.* 29: 1371-1379.
- Varnava, A. 1998. Coronary artery remodelling. *Heart* 79: 109-110.
- Varnava, A. M. & Davies, M. J. 2001. Relation between coronary artery remodelling

- (compensatory dilatation) and stenosis in human native coronary arteries. *Heart* 86: 207-211.
- Verma, I. M. & Somia, N. 1997. Gene therapy -- promises, problems and prospects. *Nature* 389: 239-242.
- Ward, M. R., Kanellakis, P., Ramsey, D., Funder, J. & Bobik, A. 2001. Eplerenone suppresses constrictive remodeling and collagen accumulation after angioplasty in porcine coronary arteries. *Circulation* 104: 467-472.
- Witte, M. B., Thornton, F. J., Efron, D. T. & Barbul, A. 2000. Enhancement of fibroblast collagen synthesis by nitric oxide. *Nitric.Oxide*. 4: 572-582.
- Wu, G. Y. & Wu, C. H. 1988. Receptor-mediated gene delivery and expression in vivo. *J.Biol.Chem.* 263: 14621-14624.
- Yamagishi, S., Yonekura, H., Yamamoto, Y., Fujimori, H., Sakurai, S., Tanaka, N. & Yamamoto, H. 1999. Vascular endothelial growth factor acts as a pericyte mitogen under hypoxic conditions. *Lab Invest* 79: 501-509.
- Zalewski, A. & Shi, Y. 1997. Vascular myofibroblasts. Lessons from coronary repair and remodeling. *Arterioscler.Thromb.Vasc.Biol.* 17: 417-422.
- Zenke, M., Steinlein, P., Wagner, E., Cotten, M., Beug, H. & Birnstiel, M. L. 1990. Receptor-mediated endocytosis of transferrin-polycation conjugates: an efficient way to introduce DNA into hematopoietic cells. *Proc.Natl.Acad.Sci.U.S.A* 87: 3655-3659.