

## 7 Literaturverzeichnis

- 1 Axel L. Cerebral blood flow determination by rapid-sequence computed tomography: theoretical analysis. *Radiology* 1980; 137(3):679-686.
- 2 Konig M. Brain perfusion CT in acute stroke: current status. *Eur J Radiol* 2003; 45 Suppl 1:S11-S22.
- 3 Tomandl BF, Klotz E, Handschu R et al. Comprehensive imaging of ischemic stroke with multislice CT. *Radiographics* 2003; 23(3):565-592.
- 4 Eastwood JD, Lev MH, Azhari T et al. CT perfusion scanning with deconvolution analysis: pilot study in patients with acute middle cerebral artery stroke. *Radiology* 2002; 222(1):227-236.
- 5 Miles KA. Functional computed tomography in oncology. *Eur J Cancer* 2002; 38(16):2079-2084.
- 6 Lee TY, Purdie TG, Stewart E. CT imaging of angiogenesis. *Q J Nucl Med* 2003; 47(3):171-187.
- 7 Lee TY, Ellis RJ, Dunscombe PB et al. Quantitative computed tomography of the brain with xenon enhancement: a phantom study with the GE9800 scanner. *Phys Med Biol* 1990; 35(7):925-935.
- 8 Meier P, Zierler KL. On the theory of the indicator-dilution method for measurement of blood flow and volume. *J Appl Physiol* 1954; 6(12):731-744.
- 9 Zierler KL. Theoretical basis of indicator-dilution methods for measuring flow and volume. *Circ Res* 1962; 10:393-497.
- 10 Cenic A, Nabavi DG, Craen RA, Gelb AW, Lee TY. A CT method to measure hemodynamics in brain tumors: validation and application of cerebral blood flow maps. *AJNR Am J Neuroradiol* 2000; 21(3):462-470.
- 11 Peters AM. Fundamentals of tracer kinetics for radiologists. *Br J Radiol* 1998; 71(851):1116-1129.
- 12 Miles KA. Perfusion CT for the assessment of tumour vascularity: which protocol? *Br J Radiol* 2003; 76 Suppl 1:S36-S42.
- 13 Perthen JE, Calamante F, Gadian DG, Connelly A. Is quantification of bolus tracking MRI reliable without deconvolution? *Magn Reson Med* 2002; 47(1):61-67.
- 14 Mullani NA, Gould KL. First-pass measurements of regional blood flow with external detectors. *J Nucl Med* 1983; 24(7):577-581.
- 15 Blomley MJ, Coulden R, Bufkin C, Lipton MJ, Dawson P. Contrast bolus dynamic computed tomography for the measurement of solid organ perfusion. *Invest Radiol* 1993; 28 Suppl 5:S72-S77.

- 16 Zierler KL. Equations for measuring blood flow by external monitoring of radioisotopes. *Circ Res* 1965; 16:309-321.
- 17 Miles KA, Griffiths MR. Perfusion CT: a worthwhile enhancement? *Br J Radiol* 2003; 76(904):220-231.
- 18 Axel L. Tissue mean transit time from dynamic computed tomography by a simple deconvolution technique. *Invest Radiol* 1983; 18(1):94-99.
- 19 Gobbel GT, Fike JR. A deconvolution method for evaluating indicator-dilution curves. *Phys Med Biol* 1994; 39(11):1833-1854.
- 20 Henderson E, Sykes J, Drost D et al. Simultaneous MRI measurement of blood flow, blood volume, and capillary permeability in mammary tumors using two different contrast agents. *J Magn Reson Imaging* 2000; 12(6):991-1003.
- 21 Henderson E, Milosevic MF, Haider MA, Yeung IW. Functional CT imaging of prostate cancer. *Phys Med Biol* 2003; 48(18):3085-3100.
- 22 Koh TS, Zeman V, Darko J et al. The inclusion of capillary distribution in the adiabatic tissue homogeneity model of blood flow. *Phys Med Biol* 2001; 46(5):1519-1538.
- 23 Cenic A, Nabavi DG, Craen RA, Gelb AW, Lee TY. Dynamic CT measurement of cerebral blood flow: a validation study. *AJNR Am J Neuroradiol* 1999; 20(1):63-73.
- 24 Purdie TG, Henderson E, Lee TY. Functional CT imaging of angiogenesis in rabbit VX2 soft-tissue tumour. *Phys Med Biol* 2001; 46(12):3161-3175.
- 25 Wintermark M, Maeder P, Thiran JP, Schnyder P, Meuli R. Quantitative assessment of regional cerebral blood flows by perfusion CT studies at low injection rates: a critical review of the underlying theoretical models. *Eur Radiol* 2001; 11(7):1220-1230.
- 26 Berninger WH, Axel L, Norman D, Napel S, Redington RW. Functional imaging of the brain using computed tomography. *Radiology* 1981; 138(3):711-716.
- 27 Miles KA. Tumour angiogenesis and its relation to contrast enhancement on computed tomography: a review. *Eur J Radiol* 1999; 30(3):198-205.
- 28 Johnson JA, Wilson TA. A model for capillary exchange. *Am J Physiol* 1966; 210(6):1299-1303.
- 29 St Lawrence KS, Lee TY. An adiabatic approximation to the tissue homogeneity model for water exchange in the brain: I. Theoretical derivation. *J Cereb Blood Flow Metab* 1998; 18(12):1365-1377.
- 30 St Lawrence KS, Lee TY. An adiabatic approximation to the tissue homogeneity model for water exchange in the brain: II. Experimental validation. *J Cereb Blood Flow Metab* 1998; 18(12):1378-1385.
- 31 Miles KA. Brain perfusion: computed tomography applications. *Neuroradiology* 2004; 46 Suppl 2:s194-s200.

- 32 Wintermark M, Maeder P, Verdun FR et al. Using 80 kVp versus 120 kVp in perfusion CT measurement of regional cerebral blood flow. *AJNR Am J Neuroradiol* 2000; 21(10):1881-1884.
- 33 Wintermark M, Smith WS, Ko NU et al. Dynamic perfusion CT: optimizing the temporal resolution and contrast volume for calculation of perfusion CT parameters in stroke patients. *AJNR Am J Neuroradiol* 2004; 25(5):720-729.
- 34 Eastwood JD, Lev MH, Provenzale JM. Perfusion CT with iodinated contrast material. *AJR Am J Roentgenol* 2003; 180(1):3-12.
- 35 Roberts HC, Roberts TP, Smith WS et al. Multisection dynamic CT perfusion for acute cerebral ischemia: the "toggling-table" technique. *AJNR Am J Neuroradiol* 2001; 22(6):1077-1080.
- 36 Siewert JR, Allgöwer M, Brumm R. Chirurgie. 7., komplett überarb. und teilw. neu verf. Aufl. Berlin [u.a.]: Springer, 2001.
- 37 Youssefzadeh S, Pamberger P, Baumgartner W et al. [Malignant tumors of the mouth cavity and oropharynx. Stage classification]. *Radiologe* 1999; 39(7):513-524.
- 38 Lenz M, Greess H, Baum U, Dobritz M, Kersting-Sommerhoff B. Oropharynx, oral cavity, floor of the mouth: CT and MRI. *Eur J Radiol* 2000; 33(3):203-215.
- 39 Deutsches Krebsforschungszentrum Heidelberg, Becker N. Internet-Seiten zum Krebsatlas. (Stand: 23.06.2005, Zugriff: 01.02.2006, URL: [http://www.dkfz.de/epi/Home\\_d/Programm/AG/Praevent/Krebshom/main/deutsch/frame.htm](http://www.dkfz.de/epi/Home_d/Programm/AG/Praevent/Krebshom/main/deutsch/frame.htm))
- 40 Myers EN, J.Y.Suen. Cancer of the head and neck. 3rd ed. Philadelphia: Saunders, 1996.
- 41 Hunter KD, Parkinson EK, Harrison PR. Profiling early head and neck cancer. *Nat Rev Cancer* 2005; 5(2):127-135.
- 42 Gorsky M, Epstein JB, Oakley C et al. Carcinoma of the tongue: a case series analysis of clinical presentation, risk factors, staging, and outcome. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2004; 98(5):546-552.
- 43 Wittekind Ch, Meyer HJ, Bootz F, [Hrsg.], International Union Against Cancer. TNM Klassifikation maligner Tumoren. 6. Aufl. Berlin [u.a.]: Springer, 2003.
- 44 Bootz F, Lenz M, Skalej M, Bongers H. Computed tomography (CT) and magnetic resonance imaging (MRI) in T-stage evaluation of oral and oropharyngeal carcinomas. *Clin Otolaryngol* 1992; 17(5):421-429.
- 45 Lohr F, Wenz F. Strahlentherapie kompakt. 1. Aufl. München, Jena: Urban und Fischer, 2003.
- 46 Dt.Krebsgesellschaft. Kurzgefasste Interdisziplinäre Leitlinien 2002. 3. Aufl. 2002.
- 47 O'Brien CJ, Traynor SJ, McNeil E, McMahon JD, Chaplin JM. The use of clinical criteria alone in the management of the clinically negative neck among patients with

squamous cell carcinoma of the oral cavity and oropharynx. Arch Otolaryngol Head Neck Surg 2000; 126(3):360-365.

- 48 Selek U, Garden AS, Morrison WH et al. Radiation therapy for early-stage carcinoma of the oropharynx. Int J Radiat Oncol Biol Phys 2004; 59(3):743-751.
- 49 Dellian M, Eichhorn ME, Strieth S. [Antivascular strategies--a new concept for diagnosis and therapy of head and neck cancer. A review]. Laryngorhinootologie 2002; 81(7):509-515.
- 50 Sakamoto H, Nakai Y, Ohashi Y, Okamura T, Ochi H. Positron emission tomographic imaging of head and neck lesions. Eur Arch Otorhinolaryngol 1997; 254 Suppl 1:S123-S126.
- 51 Vogl TJ, [Hrsg.]. Kopf - Hals. Berlin: Springer, 2002.
- 52 Lufkin RB, Wortham DG, Dietrich RB et al. Tongue and oropharynx: findings on MR imaging. Radiology 1986; 161(1):69-75.
- 53 Wiener E, Pautke C, Link TM, Neff A, Kolk A. Comparison of 16-slice MSCT and MRI in the assessment of squamous cell carcinoma of the oral cavity. Eur J Radiol 2006; 58(1):113-118.
- 54 Muraki AS, Mancuso AA, Harnsberger HR, Johnson LP, Meads GB. CT of the oropharynx, tongue base, and floor of the mouth: normal anatomy and range of variations, and applications in staging carcinoma. Radiology 1983; 148(3):725-731.
- 55 Leslie A, Fyfe E, Guest P, Goddard P, Kabala JE. Staging of squamous cell carcinoma of the oral cavity and oropharynx: a comparison of MRI and CT in T- and N-staging. J Comput Assist Tomogr 1999; 23(1):43-49.
- 56 Keberle M, Tschaummler A, Berning K, Hahn D. Spiral CT of the neck: When do neck malignancies delineate best during contrast enhancement? Eur Radiol 2001; 11(10):1986-1990.
- 57 Spiro RH, Huvos AG, Wong GY et al. Predictive value of tumor thickness in squamous carcinoma confined to the tongue and floor of the mouth. Am J Surg 1986; 152(4):345-350.
- 58 Williams JK, Carlson GW, Cohen C et al. Tumor angiogenesis as a prognostic factor in oral cavity tumors. Am J Surg 1994; 168(5):373-380.
- 59 Lim SC, Zhang S, Ishii G et al. Predictive markers for late cervical metastasis in stage I and II invasive squamous cell carcinoma of the oral tongue. Clin Cancer Res 2004; 10(1 Pt 1):166-172.
- 60 Rahima B, Shingaki S, Nagata M, Saito C. Prognostic significance of perineural invasion in oral and oropharyngeal carcinoma. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2004; 97(4):423-431.

- 61 Hogmo A, Kuylensierna R, Lindholm J, Munck-Wikland E. Predictive value of malignancy grading systems, DNA content, p53, and angiogenesis for stage I tongue carcinomas. *J Clin Pathol* 1999; 52(1):35-40.
- 62 Hegde PU, Brenski AC, Caldarelli DD et al. Tumor angiogenesis and p53 mutations: prognosis in head and neck cancer. *Arch Otolaryngol Head Neck Surg* 1998; 124(1):80-85.
- 63 Leedy DA, Trune DR, Kronz JD, Weidner N, Cohen JI. Tumor angiogenesis, the p53 antigen, and cervical metastasis in squamous carcinoma of the tongue. *Otolaryngol Head Neck Surg* 1994; 111(4):417-422.
- 64 Folkman J. Tumor angiogenesis: therapeutic implications. *N Engl J Med* 1971; 285(21):1182-1186.
- 65 Carmeliet P. Angiogenesis in health and disease. *Nat Med* 2003; 9(6):653-660.
- 66 Bikfalvi A, Bicknell R. Recent advances in angiogenesis, anti-angiogenesis and vascular targeting. *Trends Pharmacol Sci* 2002; 23(12):576-582.
- 67 Carmeliet P, Jain RK. Angiogenesis in cancer and other diseases. *Nature* 2000; 407(6801):249-257.
- 68 Jain RK. Determinants of tumor blood flow: a review. *Cancer Res* 1988; 48(10):2641-2658.
- 69 Kuszyk BS, Corl FM, Franano FN et al. Tumor transport physiology: implications for imaging and imaging-guided therapy. *AJR Am J Roentgenol* 2001; 177(4):747-753.
- 70 Maehara N. Experimental microcomputed tomography study of the 3D microangioarchitecture of tumors. *Eur Radiol* 2003; 13(7):1559-1565.
- 71 Hlatky L, Hahnfeldt P, Folkman J. Clinical application of antiangiogenic therapy: microvessel density, what it does and doesn't tell us. *J Natl Cancer Inst* 2002; 94(12):883-893.
- 72 Tozer GM. Measuring tumour vascular response to antivascular and antiangiogenic drugs. *Br J Radiol* 2003; 76 Spec No 1:S23-S35.
- 73 Padhani AR, Neeman M. Challenges for imaging angiogenesis. *Br J Radiol* 2001; 74(886):886-890.
- 74 Teicher BA, Sotomayor EA, Huang ZD. Antiangiogenic agents potentiate cytotoxic cancer therapies against primary and metastatic disease. *Cancer Res* 1992; 52(23):6702-6704.
- 75 Gorski DH, Mauceri HJ, Salloum RM et al. Potentiation of the antitumor effect of ionizing radiation by brief concomitant exposures to angiostatin. *Cancer Res* 1998; 58(24):5686-5689.
- 76 Jain RK. Normalization of tumor vasculature: an emerging concept in antiangiogenic therapy. *Science* 2005; 307(5706):58-62.

- 77 Brem S, Cotran R, Folkman J. Tumor angiogenesis: a quantitative method for histologic grading. *J Natl Cancer Inst* 1972; 48(2):347-356.
- 78 Hennen EJ, Riediger D. The quantification of angiogenesis in relation to metastasis in oral cancer: a review. *Int J Oral Maxillofac Surg* 2004; 33(1):2-7.
- 79 Macluskey M, Chandrachud LM, Pazouki S et al. Apoptosis, proliferation, and angiogenesis in oral tissues. Possible relevance to tumour progression. *J Pathol* 2000; 191(4):368-375.
- 80 Ravi D, Ramadas K, Mathew BS et al. Angiogenesis during tumor progression in the oral cavity is related to reduced apoptosis and high tumor cell proliferation. *Oral Oncol* 1998; 34(6):543-548.
- 81 Pazouki S, Chisholm DM, Adi MM et al. The association between tumour progression and vascularity in the oral mucosa. *J Pathol* 1997; 183(1):39-43.
- 82 Ranieri G, Labriola A, Achille G et al. Microvessel density, mast cell density and thymidine phosphorylase expression in oral squamous carcinoma. *Int J Oncol* 2002; 21(6):1317-1323.
- 83 Gallo O, Masini E, Morbidelli L et al. Role of nitric oxide in angiogenesis and tumor progression in head and neck cancer. *J Natl Cancer Inst* 1998; 90(8):587-596.
- 84 Tae K, El-Naggar AK, Yoo E et al. Expression of vascular endothelial growth factor and microvessel density in head and neck tumorigenesis. *Clin Cancer Res* 2000; 6(7):2821-2828.
- 85 Moriyama M, Kumagai S, Kawashiri S et al. Immunohistochemical study of tumour angiogenesis in oral squamous cell carcinoma. *Oral Oncol* 1997; 33(5):369-374.
- 86 Schimming R. [Tumor angiogenesis--value and significance in squamous epithelial carcinoma of the mouth cavity]. *Mund Kiefer Gesichtschir* 2002; 6(4):217-230.
- 87 Schimming R, Reusch P, Kuschnierz J, Schmelzeisen R. Angiogenic factors in squamous cell carcinoma of the oral cavity: do they have prognostic relevance? *J Craniomaxillofac Surg* 2004; 32(3):176-181.
- 88 Gleich LL, Biddinger PW, Pavelic ZP, Gluckman JL. Tumor angiogenesis in T1 oral cavity squamous cell carcinoma: role in predicting tumor aggressiveness. *Head Neck* 1996; 18(4):343-346.
- 89 Gleich LL, Biddinger PW, Duperier FD, Gluckman JL. Tumor angiogenesis as a prognostic indicator in T2-T4 oral cavity squamous cell carcinoma: a clinical-pathologic correlation. *Head Neck* 1997; 19(4):276-280.
- 90 Hennen EJ, van der Laak JA, Manni JJ et al. Improved prediction of metastasis in tongue carcinomas, combining vascular and nuclear tumor parameters. *Cancer* 2001; 92(7):1881-1887.

- 91 Hennen EJ, van der Laak JA, Manni JJ et al. Computer assisted analysis of the microvasculature in metastasized and nonmetastasized squamous cell carcinomas of the tongue. Head Neck 2002; 24(7):643-650.
- 92 Petruzzelli GJ. The biology of tumor invasion, angiogenesis and lymph node metastasis. ORL J Otorhinolaryngol Relat Spec 2000; 62(4):178-185.
- 93 Shpitzer T, Chaimoff M, Gal R et al. Tumor angiogenesis as a prognostic factor in early oral tongue cancer. Arch Otolaryngol Head Neck Surg 1996; 122(8):865-868.
- 94 Ravi D, Ramadas K, Mathew BS et al. Apoptosis, angiogenesis and proliferation: trifunctional measure of tumour response to radiotherapy for oral cancer. Oral Oncol 2001; 37(2):164-171.
- 95 Zatterstrom UK, Brun E, Willen R, Kjellen E, Wennerberg J. Tumor angiogenesis and prognosis in squamous cell carcinoma of the head and neck. Head Neck 1995; 17(4):312-318.
- 96 Miller JC, Pien HH, Sahani D, Sorensen AG, Thrall JH. Imaging angiogenesis: applications and potential for drug development. J Natl Cancer Inst 2005; 97(3):172-187.
- 97 Delorme S, Knopp MV. Non-invasive vascular imaging: assessing tumour vascularity. Eur Radiol 1998; 8(4):517-527.
- 98 Cosgrove D. Angiogenesis imaging--ultrasound. Br J Radiol 2003; 76 Spec No 1:S43-S49.
- 99 Lassau N, Mercier S, Koscielny S et al. Prognostic value of high-frequency sonography and color Doppler sonography for the preoperative assessment of melanomas. AJR Am J Roentgenol 1999; 172(2):457-461.
- 100 Raza S, Baum JK. Solid breast lesions: evaluation with power Doppler US. Radiology 1997; 203(1):164-168.
- 101 Padhani AR. Dynamic contrast-enhanced MRI studies in human tumours. Br J Radiol 1999; 72(857):427-431.
- 102 Laking GR, Price PM. Positron emission tomographic imaging of angiogenesis and vascular function. Br J Radiol 2003; 76 Spec No 1:S50-S59.
- 103 Schroder RJ, Rost B, Hidajat N et al. [Value of contrast-enhanced ultrasound vs. CT and MRI in palpable enlarged lymph nodes of the head and neck]. Rofo 2002; 174(9):1099-1106.
- 104 Hoskin PJ, Saunders MI, Goodchild K et al. Dynamic contrast enhanced magnetic resonance scanning as a predictor of response to accelerated radiotherapy for advanced head and neck cancer. Br J Radiol 1999; 72(863):1093-1098.
- 105 Schmitt P, Kotas M, Tobermann A, Haase A, Flentje M. Quantitative tissue perfusion measurements in head and neck carcinoma patients before and during radiation therapy with a non-invasive MR imaging spin-labeling technique. Radiother Oncol 2003; 67(1):27-34.

- 106 Bhattacharya A, Toth K, Mazurchuk R et al. Lack of microvessels in well-differentiated regions of human head and neck squamous cell carcinoma A253 associated with functional magnetic resonance imaging detectable hypoxia, limited drug delivery, and resistance to irinotecan therapy. *Clin Cancer Res* 2004; 10(23):8005-8017.
- 107 Phongkitkarun S, Kobayashi S, Kan Z, Lee TY, Charnsangavej C. Quantification of angiogenesis by functional computed tomography in a Matrigel model in rats. *Acad Radiol* 2004; 11(5):573-582.
- 108 Leggett DA, Miles KA, Kelley BB. Blood-brain barrier and blood volume imaging of cerebral glioma using functional CT: a pictorial review. *Eur J Radiol* 1999; 30(3):185-190.
- 109 Harvey C, Dooher A, Morgan J, Blomley M, Dawson P. Imaging of tumour therapy responses by dynamic CT. *Eur J Radiol* 1999; 30(3):221-226.
- 110 Harvey CJ, Blomley MJ, Dawson P et al. Functional CT imaging of the acute hyperemic response to radiation therapy of the prostate gland: early experience. *J Comput Assist Tomogr* 2001; 25(1):43-49.
- 111 Chen WX, Min PQ, Song B et al. Single-level dynamic spiral CT of hepatocellular carcinoma: correlation between imaging features and density of tumor microvessels. *World J Gastroenterol* 2004; 10(1):67-72.
- 112 Miles KA, Leggett DA, Kelley BB et al. In vivo assessment of neovascularization of liver metastases using perfusion CT. *Br J Radiol* 1998; 71(843):276-281.
- 113 Rumboldt Z, Al-Okaili R, Deveikis JP. Perfusion CT for head and neck tumors: pilot study. *AJNR Am J Neuroradiol* 2005; 26(5):1178-1185.
- 114 Gandhi D, Hoeffner EG, Carlos RC, Case I, Mukherji SK. Computed tomography perfusion of squamous cell carcinoma of the upper aerodigestive tract. Initial results. *J Comput Assist Tomogr* 2003; 27(5):687-693.
- 115 Gandhi D, Chepeha DB, Miller T et al. Correlation between Initial and Early Follow-Up CT Perfusion Parameters with Endoscopic Tumor Response in Patients with Advanced Squamous Cell Carcinomas of the Oropharynx Treated with Organ-Preservation Therapy. *AJNR Am J Neuroradiol* 2006; 27(1):101-106.
- 116 Hermans R, Lambin P, Van den BW et al. Non-invasive tumour perfusion measurement by dynamic CT: preliminary results. *Radiother Oncol* 1997; 44(2):159-162.
- 117 Hermans R, Lambin P, Van der GA et al. Tumoural perfusion as measured by dynamic computed tomography in head and neck carcinoma. *Radiother Oncol* 1999; 53(2):105-111.
- 118 Hermans R, Meijerink M, Van den BW et al. Tumor perfusion rate determined noninvasively by dynamic computed tomography predicts outcome in head-and-neck cancer after radiotherapy. *Int J Radiat Oncol Biol Phys* 2003; 57(5):1351-1356.
- 119 Goh V, Halligan S, Hugill JA, Gartner L, Bartram CI. Quantitative colorectal cancer perfusion measurement using dynamic contrast-enhanced multidetector-row computed

tomography: effect of acquisition time and implications for protocols. *J Comput Assist Tomogr* 2005; 29(1):59-63.

- 120 Kealey SM, Loving VA, Delong DM, Eastwood JD. User-defined vascular input function curves: influence on mean perfusion parameter values and signal-to-noise ratio. *Radiology* 2004; 231(2):587-593.
- 121 Sanelli PC, Lev MH, Eastwood JD, Gonzalez RG, Lee TY. The effect of varying user-selected input parameters on quantitative values in CT perfusion maps. *Acad Radiol* 2004; 11(10):1085-1092.
- 122 Fiorella D, Heiserman J, Prenger E, Partovi S. Assessment of the reproducibility of postprocessing dynamic CT perfusion data. *AJNR Am J Neuroradiol* 2004; 25(1):97-107.
- 123 Calamante F, Gadian DG, Connelly A. Delay and dispersion effects in dynamic susceptibility contrast MRI: simulations using singular value decomposition. *Magn Reson Med* 2000; 44(3):466-473.
- 124 Miles KA, Griffiths MR, Fuentes MA. Standardized perfusion value: universal CT contrast enhancement scale that correlates with FDG PET in lung nodules. *Radiology* 2001; 220(2):548-553.
- 125 Montermini D, Winlove CP, Michel C. Effects of perfusion rate on permeability of frog and rat mesenteric microvessels to sodium fluorescein. *J Physiol* 2002; 543(Pt 3):959-975.
- 126 Timar J, Dome B, Fazekas K, Janovics A, Paku S. Angiogenesis-dependent diseases and angiogenesis therapy. *Pathol Oncol Res* 2001; 7(2):85-94.
- 127 Vaupel P, Harrison L. Tumor hypoxia: causative factors, compensatory mechanisms, and cellular response. *Oncologist* 2004; 9 Suppl 5:4-9.
- 128 Dunst J, Stadler P, Becker A et al. Tumor volume and tumor hypoxia in head and neck cancers. The amount of the hypoxic volume is important. *Strahlenther Onkol* 2003; 179(8):521-526.
- 129 Beasley NJ, Prevo R, Banerji S et al. Intratumoral lymphangiogenesis and lymph node metastasis in head and neck cancer. *Cancer Res* 2002; 62(5):1315-1320.
- 130 Ninck S, Reisser C, Dyckhoff G et al. Expression profiles of angiogenic growth factors in squamous cell carcinomas of the head and neck. *Int J Cancer* 2003; 106(1):34-44.
- 131 Niimi K, Yoshizawa M, Nakajima T, Saku T. Vascular invasion in squamous cell carcinomas of human oral mucosa. *Oral Oncol* 2001; 37(4):357-364.
- 132 Brakenhoff RH, Stroomer JG, ten BC et al. Sensitive detection of squamous cells in bone marrow and blood of head and neck cancer patients by E48 reverse transcriptase-polymerase chain reaction. *Clin Cancer Res* 1999; 5(4):725-732.