

- Abrahamson M und Grubb A, (1994): *Increased body temperature accelerates aggregation of the Leu-68-->Gln mutant cystatin C, the amyloid-forming protein in hereditary cystatin C amyloid angiopathy.* Proc Natl Acad Sci U S A, 91, 1416-1420.
- Adams JM und Cory S, (1998): *The Bcl-2 protein family: arbiters of cell survival.* Science, 281, 1322-1326.
- Amsterdam A und Sasson R, (2002): *The anti-inflammatory action of glucocorticoids is mediated by cell type specific regulation of apoptosis.* Mol Cell Endocrinol, 189, 1-9.
- An S und Knox KA, (1996): *Ligation of CD40 rescues Ramos-Burkitt lymphoma B cells from calcium ionophore- and antigen receptor-triggered apoptosis by inhibiting activation of the cysteine protease CPP32/Yama and cleavage of its substrate PARP.* FEBS Lett, 386, 115-122.
- Andrade F, Casciola-Rosen LA und Rosen A, (2004): *Granzyme B-induced cell death.* Acta Haematol, 111, 28-41.
- Antonsson B, Conti F, Ciavatta A, Montessuit S, Lewis S, Martinou I, Bernasconi L, Bernard A, Mermod JJ, Mazzei G, Maundrell K, Gambale F, Sadoul R und Martinou JC, (1997): *Inhibition of Bax channel-forming activity by Bcl-2.* Science, 277, 370-372.
- Atallah E und Flaherty L, (2005): *Treatment of metastatic malignant melanoma.* Curr Treat Options Oncol, 6, 185-193.
- Athauda SB und Takahashi K, (2002): *Distinct cleavage specificity of human cathepsin E at neutral pH with special preference for Arg-Arg bonds.* Protein Pept Lett, 9, 15-22.
- Aubert C, Rouge F und Galindo JR, (1980): *Tumorigenicity of human malignant melanocytes in nude mice in relation to their differentiation in vitro.* J Natl Cancer Inst, 64, 1029-1040.
- Aubert C, Rouge F, Reillaudou M und Metge P, (1993): *Establishment and characterization of human ocular melanoma cell lines.* Int J Cancer, 54, 784-792.
- Bang B, Baadsgaard O, Skov L und Jaattela M, (2004): *Inhibitors of cysteine cathepsin and calpain do not prevent ultraviolet-B-induced apoptosis in human keratinocytes and HeLa cells.* Arch Dermatol Res, 296, 67-73.
- Bartek J und Lukas J, (2003): *Chk1 and Chk2 kinases in checkpoint control and cancer.* Cancer Cell, 3, 421-429.
- Berdowska I, (2004): *Cysteine proteases as disease markers.* Clin Chim Acta, 342, 41-69.
- Beroud C und Soussi T, (1998): *p53 gene mutation: software and database.* Nucleic Acids Res, 26, 200-204.
- Bidere N, Lorenzo HK, Carmona S, Laforge M, Harper F, Dumont C und Senik A, (2003): *Cathepsin D triggers Bax activation, resulting in selective apoptosis-inducing factor (AIF) relocation in T lymphocytes entering the early commitment phase to apoptosis.* J Biol Chem, 278, 31401-31411.
- Bohley P und Seglen PO, (1992): *Proteases and proteolysis in the lysosome.* Experientia, 48, 151-157.

- Boise LH, Gonzalez-Garcia M, Postema CE, Ding L, Lindsten T, Turka LA, Mao X, Nunez G und Thompson CB, (1993): *bcl-x, a bcl-2-related gene that functions as a dominant regulator of apoptotic cell death.* Cell, 74, 597-608.
- Borner C, (2003): *The Bcl-2 protein family: sensors and checkpoints for life-or-death decisions.* Mol Immunol, 39, 615-647.
- Bossy-Wetzel E, Newmeyer DD und Green DR, (1998): *Mitochondrial cytochrome c release in apoptosis occurs upstream of DEVD-specific caspase activation and independently of mitochondrial transmembrane depolarization.* EMBO J, 17, 37-49.
- Botto M, (2004): *Phosphatidylserine receptor and apoptosis: consequences of a non-ingested meal.* Arthritis Res Ther, 6, 147-150.
- Bouillet P, Cory S, Zhang LC, Strasser A und Adams JM, (2001): *Degenerative disorders caused by Bcl-2 deficiency prevented by loss of its BH3-only antagonist Bim.* Dev Cell, 1, 645-653.
- Boya P, Andreau K, Poncet D, Zamzami N, Perfettini JL, Metivier D, Ojcius DM, Jaattela M und Kroemer G, (2003): *Lysosomal membrane permeabilization induces cell death in a mitochondrion-dependent fashion.* J Exp Med, 197, 1323-1334.
- Boyd JM, Gallo GJ, Elangovan B, Houghton AB, Malstrom S, Avery BJ, Ebb RG, Subramanian T, Chittenden T, Lutz RJ und .., (1995): *Bik, a novel death-inducing protein shares a distinct sequence motif with Bcl-2 family proteins and interacts with viral and cellular survival-promoting proteins.* Oncogene, 11, 1921-1928.
- Broker LE, Huisman C, Span SW, Rodriguez JA, Kruyt FA und Giaccone G, (2004): *Cathepsin B mediates caspase-independent cell death induced by microtubule stabilizing agents in non-small cell lung cancer cells.* Cancer Res, 64, 27-30.
- Broker LE, Kruyt FA und Giaccone G, (2005): *Cell death independent of caspases: a review.* Clin Cancer Res, 11, 3155-3162.
- Bruggen J, Fogh J und Sorg C, (1981): *Tumor production in the nude mouse, fibrinolytic activity and cross-reactivity with antimelanoma sera of various human tumor cell lines.* J Cancer Res Clin Oncol, 102, 141-152.
- Brunk UT, Dalen H, Roberg K und Hellquist HB, (1997): *Photo-oxidative disruption of lysosomal membranes causes apoptosis of cultured human fibroblasts.* Free Radic Biol Med, 23, 616-626.
- Brunk UT, Neuzil J und Eaton JW, (2001): *Lysosomal involvement in apoptosis.* Redox Rep, 6, 91-97.
- Brunk UT und Svensson I, (1999): *Oxidative stress, growth factor starvation and Fas activation may all cause apoptosis through lysosomal leak.* Redox Rep, 4, 3-11.
- Canu N und Calissano P, (2003): *In vitro cultured neurons for molecular studies correlating apoptosis with events related to Alzheimer disease.* Cerebellum, 2, 270-278.
- Carey TE, Takahashi T, Resnick LA, Oettgen HF und Old LJ, (1976): *Cell surface antigens of human malignant melanoma: mixed hemadsorption assays for humoral immunity to cultured autologous melanoma cells.* Proc Natl Acad Sci U S A, 73, 3278-3282.

- Casey CA, Baldwin CR, Kubik JL, Hindemith AM und McVicker BL, (2004): *Use of Flow Cytometric Analysis to Examine the Uptake of Apoptotic Bodies by Healthy Hepatocytes.* Comp Hepatol, 3 Suppl 1:S40., S40.
- Castedo M, Perfettini JL, Roumier T, Andreau K, Medema R und Kroemer G, (2004): *Cell death by mitotic catastrophe: a molecular definition.* Oncogene, 23, 2825-2837.
- Chao DT und Korsmeyer SJ, (1998): *BCL-2 family: regulators of cell death.* Annu Rev Immunol, 16:395-419., 395-419.
- Chappell DB, Zaks TZ, Rosenberg SA und Restifo NP, (1999): *Human melanoma cells do not express Fas (Apo-1/CD95) ligand.* Cancer Res, 59, 59-62.
- Chen W, Li N, Chen T, Han Y, Li C, Wang Y, He W, Zhang L, Wan T und Cao X, (2005): *The lysosome-associated apoptosis-inducing protein containing the pleckstrin homology (PH) and FYVE domains (LAPF), representative of a novel family of PH and FYVE domain-containing proteins, induces caspase-independent apoptosis via the lysosomal-mitochondrial pathway.* J Biol Chem, 280, 40985-40995.
- Cheng EH, Wei MC, Weiler S, Flavell RA, Mak TW, Lindsten T und Korsmeyer SJ, (2001): *BCL-2, BCL-X(L) sequester BH3 domain-only molecules preventing BAX- and BAK-mediated mitochondrial apoptosis.* Mol Cell, 8, 705-711.
- Chipuk JE und Green DR, (2005): *Do inducers of apoptosis trigger caspase-independent cell death?* Nat Rev Mol Cell Biol, 6, 268-275.
- Cizeau J, Ray R, Chen G, Gietz RD und Greenberg AH, (2000): *The C. elegans orthologue ceBNIP3 interacts with CED-9 and CED-3 but kills through a BH3- and caspase-independent mechanism.* Oncogene, 19, 5453-5463.
- Coultas L, Bouillet P, Loveland KL, Meachem S, Perlman H, Adams JM und Strasser A, (2005): *Concomitant loss of proapoptotic BH3-only Bcl-2 antagonists Bik and Bim arrests spermatogenesis.* EMBO J, 24, 3963-3973.
- Coultas L, Bouillet P, Stanley EG, Brodnicki TC, Adams JM und Strasser A, (2004): *Proapoptotic BH3-only Bcl-2 family member Bik/Blk/Nbk is expressed in hemopoietic and endothelial cells but is redundant for their programmed death.* Mol Cell Biol, 24, 1570-1581.
- Crompton M, (1999): *The mitochondrial permeability transition pore and its role in cell death.* Biochem J, 341, 233-249.
- Cygler M und Mort JS, (1997): *Proregion structure of members of the papain superfamily. Mode of inhibition of enzymatic activity.* Biochimie, 79, 645-652.
- Dai H, Kramer DL, Yang C, Murti KG, Porter CW und Cleveland JL, (1999): *The polyamine oxidase inhibitor MDL-72,527 selectively induces apoptosis of transformed hematopoietic cells through lysosomotropic effects.* Cancer Res, 59, 4944-4954.
- Daleke DL, (2003): *Regulation of transbilayer plasma membrane phospholipid asymmetry.* J Lipid Res, 44, 233-242.
- Danial NN und Korsmeyer SJ, (2004): *Cell death: critical control points.* Cell, 116, 205-219.
- Daniel PT, Pun KT, Ritschel S, Sturm I, Holler J, Dorken B und Brown R, (1999): *Expression of the death gene Bik/Nbk promotes sensitivity to drug-induced apoptosis in corticosteroid-*

- resistant T-cell lymphoma and prevents tumor growth in severe combined immunodeficient mice. *Blood*, 94, 1100-1107.
- Daniel PT, Schulze-Osthoff K, Belka C und Guner D, (2003): *Guardians of cell death: the Bcl-2 family proteins*. *Essays Biochem*, 39:73-88., 73-88.
- Daniel PT, Wieder T, Sturm I und Schulze-Osthoff K, (2001): *The kiss of death: promises and failures of death receptors and ligands in cancer therapy*. *Leukemia*, 15, 1022-1032.
- De Ceuninck F, Poiradeau S, Pagano M, Tsagris L, Blanchard O, Willeput J und Corvol M, (1995): *Inhibition of chondrocyte cathepsin B and L activities by insulin-like growth factor-II (IGF-II) and its Ser29 variant in vitro: possible role of the mannose 6-phosphate/IGF-II receptor*. *Mol Cell Endocrinol*, 113, 205-213.
- de Vries JE, Cornain S und Rumke P, (1974): *Cytotoxicity of non-T versus T-lymphocytes from melanoma patients and healthy donors on short- and long-term cultured melanoma cells*. *Int J Cancer*, 14, 427-434.
- de Vries JE und Spits H, (1984): *Cloned human cytotoxic T lymphocyte (CTL) lines reactive with autologous melanoma cells. I. In vitro generation, isolation, and analysis to phenotype and specificity*. *J Immunol*, 132, 510-519.
- Decker P, Isenberg D und Muller S, (2000): *Inhibition of caspase-3-mediated poly(ADP-ribose) polymerase (PARP) apoptotic cleavage by human PARP autoantibodies and effect on cells undergoing apoptosis*. *J Biol Chem*, 275, 9043-9046.
- Degli EM und Dive C, (2003): *Mitochondrial membrane permeabilisation by Bax/Bak*. *Biochem Biophys Res Commun*, 304, 455-461.
- Degterev A, Boyce M und Yuan J, (2003): *A decade of caspases*. *Oncogene*, 22, 8543-8567.
- Demoz M, Castino R, Cesaro P, Baccino FM, Bonelli G und Isidoro C, (2002): *Endosomal-lysosomal proteolysis mediates death signalling by TNF α , not by etoposide, in L929 fibrosarcoma cells: evidence for an active role of cathepsin D*. *Biol Chem*, 383, 1237-1248.
- Dharap SS, Chandra P, Wang Y, Khandare JJ, Qiu B, Stein S und Minko T, (2006): *Molecular targeting of BCL2 and BCLXL proteins by synthetic BCL2 homology 3 domain peptide enhances the efficacy of chemotherapy*. *J Pharmacol Exp Ther*, 316, 992-998.
- Dietrich N, Thastrup J, Holmberg C, Gyrd-Hansen M, Fehrenbacher N, Lademann U, Lerdrup M, Herdegen T, Jaattela M und Kallunki T, (2004): *JNK2 mediates TNF-induced cell death in mouse embryonic fibroblasts via regulation of both caspase and cathepsin protease pathways*. *Cell Death Differ*, 11, 301-313.
- Eberle J, Fecker LF, Hossini AM, Wieder T, Daniel PT, Orfanos CE und Geilen CC, (2003): *CD95/Fas signaling in human melanoma cells: conditional expression of CD95L/FasL overcomes the intrinsic apoptosis resistance of malignant melanoma and inhibits growth and progression of human melanoma xenotransplants*. *Oncogene*, 22, 9131-9141.
- Eckhart L, Ban J, Fischer H und Tschachler E, (2000): *Caspase-14: analysis of gene structure and mRNA expression during keratinocyte differentiation*. *Biochem Biophys Res Commun*, 277, 655-659.
- Elangovan B und Chinnadurai G, (1997): *Functional dissection of the pro-apoptotic protein Bik. Heterodimerization with anti-apoptosis proteins is insufficient for induction of cell death*. *J Biol Chem*, 272, 24494-24498.

- Ellis RE, Yuan JY und Horvitz HR, (1991): *Mechanisms and functions of cell death*. Annu Rev Cell Biol, 7:663-98., 663-698.
- Enari M, Sakahira H, Yokoyama H, Okawa K, Iwamatsu A und Nagata S, (1998): *A caspase-activated DNase that degrades DNA during apoptosis, and its inhibitor ICAD*. Nature, 391, 43-50.
- Erdal H, Berndtsson M, Castro J, Brunk U, Shoshan MC und Linder S, (2005): *Induction of lysosomal membrane permeabilization by compounds that activate p53-independent apoptosis*. Proc Natl Acad Sci U S A, 102, 192-197.
- Fecker LF, Geilen CC, Tchernev G, Trefzer U, Assaf C, Kurbanov BM, Schwarz C, Daniel PT und Eberle J, (2006): *Loss of Proapoptotic Bcl-2-Related Multidomain Proteins in Primary Melanomas Is Associated with Poor Prognosis*. J Invest Dermatol, ..
- Fehrenbacher N, Gyrd-Hansen M, Poulsen B, Felbor U, Kallunki T, Boes M, Weber E, Leist M und Jaattela M, (2004): *Sensitization to the lysosomal cell death pathway upon immortalization and transformation*. Cancer Res, 64, 5301-5310.
- Fehrenbacher N und Jaattela M, (2005): *Lysosomes as targets for cancer therapy*. Cancer Res, 65, 2993-2995.
- Feldstein AE, Werneburg NW, Li Z, Bronk SF und Gores GJ, (2006): *Bax Inhibition Protects Against Free Fatty Acid Induced Lysosomal Permeabilization*. Am J Physiol Gastrointest Liver Physiol, ..
- Ferri KF und Kroemer G, (2001): *Organelle-specific initiation of cell death pathways*. Nat Cell Biol, 3, E255-E263.
- Fink SL und Cookson BT, (2005): *Apoptosis, pyroptosis, and necrosis: mechanistic description of dead and dying eukaryotic cells*. Infect Immun, 73, 1907-1916.
- Fire A, Xu S, Montgomery MK, Kostas SA, Driver SE und Mello CC, (1998): *Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans*. Nature, 391, 806-811.
- Fischer U, Janicke RU und Schulze-Osthoff K, (2003): *Many cuts to ruin: a comprehensive update of caspase substrates*. Cell Death Differ, 10, 76-100.
- Fischer U und Schulze-Osthoff K, (2005): *New approaches and therapeutics targeting apoptosis in disease*. Pharmacol Rev, 57, 187-215.
- Fleischer A, Rebollo A und Ayllon V, (2003): *BH3-only proteins: the lords of death*. Arch Immunol Ther Exp (Warsz), 51, 9-17.
- Foghsgaard L, Wissing D, Mauch D, Lademann U, Bastholm L, Boes M, Elling F, Leist M und Jaattela M, (2001): *Cathepsin B acts as a dominant execution protease in tumor cell apoptosis induced by tumor necrosis factor*. J Cell Biol, 153, 999-1010.
- Frohlich E, Schlagenhauff B, Mohrle M, Weber E, Klessen C und Rassner G, (2001): *Activity, expression, and transcription rate of the cathepsins B, D, H, and L in cutaneous malignant melanoma*. Cancer, 91, 972-982.
- Fuentes-Prior P und Salvesen GS, (2004): *The protein structures that shape caspase activity, specificity, activation and inhibition*. Biochem J, 384, 201-232.

- Gacko M, Bankowska A, Chyczewska E und Worowska A, (1997): *Lysosomal cysteine proteinases and their significance in pathology*. Rocznik Akademii Medycznej w Białymostku, 42 Suppl 1:60-71., 60-71.
- Garbe C und Blum A, (2001): *Epidemiology of cutaneous melanoma in Germany and worldwide*. Skin Pharmacol Appl Skin Physiol, 14, 280-290.
- Germain M, Mathai JP und Shore GC, (2002): *BH-3-only BIK functions at the endoplasmic reticulum to stimulate cytochrome c release from mitochondria*. J Biol Chem, 277, 18053-18060.
- Giard DJ, Aaronson SA, Todaro GJ, Arnstein P, Kersey JH, Dosik H und Parks WP, (1973): *In vitro cultivation of human tumors: establishment of cell lines derived from a series of solid tumors*. J Natl Cancer Inst, 51, 1417-1423.
- Gillissen B, Essmann F, Graupner V, Starck L, Radetzki S, Dorken B, Schulze-Osthoff K und Daniel PT, (2003): *Induction of cell death by the BH3-only Bcl-2 homolog Nbk/Bik is mediated by an entirely Bax-dependent mitochondrial pathway*. EMBO J, 22, 3580-3590.
- Gobeil S, Boucher CC, Nadeau D und Poirier GG, (2001): *Characterization of the necrotic cleavage of poly(ADP-ribose) polymerase (PARP-1): implication of lysosomal proteases*. Cell Death Differ, 8, 588-594.
- Goldmann T, Ribbert D, Suter L, Brode M und Otto F, (1998): *Tumor characteristics involved in the metastatic behaviour as an improvement in primary cutaneous melanoma prognostics*. J Exp Clin Cancer Res, 17, 483-489.
- Goldmann T, Suter L, Ribbert D und Otto F, (1999): *The expression of proteolytic enzymes at the dermal invading front of primary cutaneous melanoma predicts metastasis*. Pathol Res Pract, 195, 171-175.
- Gossen M und Bujard H, (1992): *Tight control of gene expression in mammalian cells by tetracycline-responsive promoters*. Proc Natl Acad Sci U S A, 89, 5547-5551.
- Gougeon ML, (2003): *Apoptosis as an HIV strategy to escape immune attack*. Nat Rev Immunol, 3, 392-404.
- Gozuacik D und Kimchi A, (2004): *Autophagy as a cell death and tumor suppressor mechanism*. Oncogene, 23, 2891-2906.
- Green DR, (2003): *Overview: apoptotic signaling pathways in the immune system*. Immunol Rev, 193:5-9., 5-9.
- Green DR und Kroemer G, (2004): *The pathophysiology of mitochondrial cell death*. Science, 305, 626-629.
- Guicciardi ME, Deussing J, Miyoshi H, Bronk SF, Svingen PA, Peters C, Kaufmann SH und Gores GJ, (2000): *Cathepsin B contributes to TNF-alpha-mediated hepatocyte apoptosis by promoting mitochondrial release of cytochrome c*. J Clin Invest, 106, 1127-1137.
- Hahne M, Rimoldi D, Schroter M, Romero P, Schreier M, French LE, Schneider P, Bornand T, Fontana A, Lienard D, Cerottini J und Tschoopp J, (1996): *Melanoma cell expression of Fas(Apo-1/CD95) ligand: implications for tumor immune escape*. Science, 274, 1363-1366.

- Han J, Flemington C, Houghton AB, Gu Z, Zambetti GP, Lutz RJ, Zhu L und Chittenden T, (2001): *Expression of bbc3, a pro-apoptotic BH3-only gene, is regulated by diverse cell death and survival signals.* Proc Natl Acad Sci U S A, 98, 11318-11323.
- Han J, Sabbatini P und White E, (1996): *Induction of apoptosis by human Nbk/Bik, a BH3-containing protein that interacts with E1B 19K.* Mol Cell Biol, 16, 5857-5864.
- Han Z, Hendrickson EA, Bremner TA und Wyche JH, (1997): *A sequential two-step mechanism for the production of the mature p17:p12 form of caspase-3 in vitro.* J Biol Chem, 272, 13432-13436.
- Hao Z, Duncan GS, Chang CC, Elia A, Fang M, Wakeham A, Okada H, Calzascia T, Jang Y, You-Ten A, Yeh WC, Ohashi P, Wang X und Mak TW, (2005): *Specific ablation of the apoptotic functions of cytochrome C reveals a differential requirement for cytochrome C and Apaf-1 in apoptosis.* Cell, 121, 579-591.
- Heinrich M, Neumeyer J, Jakob M, Hallas C, Tchikov V, Winoto-Morbach S, Wickel M, Schneider-Brachert W, Trauzold A, Hethke A und Schutze S, (2004): *Cathepsin D links TNF-induced acid sphingomyelinase to Bid-mediated caspase-9 and -3 activation.* Cell Death Differ, 11, 550-563.
- Herr I und Debatin KM, (2001): *Cellular stress response and apoptosis in cancer therapy.* Blood, 98, 2603-2614.
- Hillen W und Berens C, (1994): *Mechanisms underlying expression of Tn10 encoded tetracycline resistance.* Annu Rev Microbiol, 48:345-69., 345-369.
- Ho PK und Hawkins CJ, (2005): *Mammalian initiator apoptotic caspases.* FEBS J, 272, 5436-5453.
- Holler N, Zaru R, Micheau O, Thome M, Attinger A, Valitutti S, Bodmer JL, Schneider P, Seed B und Tschoop J, (2000): *Fas triggers an alternative, caspase-8-independent cell death pathway using the kinase RIP as effector molecule.* Nat Immunol, 1, 489-495.
- Holzmann B, Lehmann JM, Ziegler-Heitbrock HW, Funke I, Riethmuller G und Johnson JP, (1988): *Glycoprotein P3.58, associated with tumor progression in malignant melanoma, is a novel leukocyte activation antigen.* Int J Cancer, 41, 542-547.
- Hossini AM, Eberle J, Fecker LF, Orfanos CE und Geilen CC, (2003): *Conditional expression of exogenous Bcl-X(S) triggers apoptosis in human melanoma cells in vitro and delays growth of melanoma xenografts.* FEBS Lett, 553, 250-256.
- Hossini AM, Geilen CC, Fecker LF, Daniel PT und Eberle J, (2005): *A novel Bcl-x splice product, Bcl-x(AK), triggers apoptosis in human melanoma cells without BH3 domain.* Oncogene, ..
- Huang Z, (2002): *The chemical biology of apoptosis. Exploring protein-protein interactions and the life and death of cells with small molecules.* Chem Biol, 9, 1059-1072.
- Hur J, Chesnes J, Coser KR, Lee RS, Geck P, Isselbacher KJ und Shioda T, (2004): *The Bik BH3-only protein is induced in estrogen-starved and antiestrogen-exposed breast cancer cells and provokes apoptosis.* Proc Natl Acad Sci U S A, 101, 2351-2356.
- Hussein MR, Haemel AK und Wood GS, (2003a): *Apoptosis and melanoma: molecular mechanisms.* J Pathol, 199, 275-288.

- Hussein MR, Haemel AK und Wood GS, (2003b): *p53-related pathways and the molecular pathogenesis of melanoma*. Eur J Cancer Prev, 12, 93-100.
- Igney FH und Krammer PH, (2002a): *Death and anti-death: tumour resistance to apoptosis*. Nat Rev Cancer, 2, 277-288.
- Igney FH und Krammer PH, (2002b): *Immune escape of tumors: apoptosis resistance and tumor counterattack*. J Leukoc Biol, 71, 907-920.
- Ishidoh K und Kominami E, (1995): *Procathepsin L degrades extracellular matrix proteins in the presence of glycosaminoglycans in vitro*. Biochem Biophys Res Commun, 217, 624-631.
- Iwakuma T und Lozano G, (2003): *MDM2, an introduction*. Mol Cancer Res, 1, 993-1000.
- Jaattela M, (2002): *Programmed cell death: many ways for cells to die decently*. Ann Med, 34, 480-488.
- Jacobson MD, Weil M und Raff MC, (1997): *Programmed cell death in animal development*. Cell, 88, 347-354.
- Jedeszko C und Sloane BF, (2004): *Cysteine cathepsins in human cancer*. Biol Chem, 385, 1017-1027.
- Jiang A und Clark EA, (2001): *Involvement of Bik, a proapoptotic member of the Bcl-2 family, in surface IgM-mediated B cell apoptosis*. J Immunol, 166, 6025-6033.
- Johnson DE, (2000): *Noncaspase proteases in apoptosis*. Leukemia, 14, 1695-1703.
- Johnson GL und Lapadat R, (2002): *Mitogen-activated protein kinase pathways mediated by ERK, JNK, and p38 protein kinases*. Science, 298, 1911-1912.
- Johnstone RW, Ruefli AA und Lowe SW, (2002): *Apoptosis: a link between cancer genetics and chemotherapy*. Cell, 108, 153-164.
- Joselin AP, Schulze-Osthoff K und Schwerk C, (2006): *Loss of Acinus inhibits oligonucleosomal DNA fragmentation but not chromatin condensation during apoptosis*. J Biol Chem, ..
- Joza N, Susin SA, Daugas E, Stanford WL, Cho SK, Li CY, Sasaki T, Elia AJ, Cheng HY, Ravagnan L, Ferri KF, Zamzami N, Wakeham A, Hakem R, Yoshida H, Kong YY, Mak TW, Zuniga-Pflucker JC, Kroemer G und Penninger JM, (2001): *Essential role of the mitochondrial apoptosis-inducing factor in programmed cell death*. Nature, 410, 549-554.
- Kagedal K, Johansson AC, Johansson U, Heimlich G, Roberg K, Wang NS, Jurgensmeier JM und Ollinger K, (2005): *Lysosomal membrane permeabilization during apoptosis--involvement of Bax?* Int J Exp Pathol, 86, 309-321.
- Kageshita T, Yoshii A, Kimura T, Maruo K, Ono T, Himeno M und Nishimura Y, (1995): *Biochemical and immunohistochemical analysis of cathepsins B, H, L and D in human melanocytic tumours*. Arch Dermatol Res, 287, 266-272.
- Kaliberov S, Stackhouse MA, Kaliberova L, Zhou T und Buchsbaum DJ, (2004): *Enhanced apoptosis following treatment with TRA-8 anti-human DR5 monoclonal antibody and overexpression of exogenous Bax in human glioma cells*. Gene Ther, 11, 658-667.

- Kasahara K, Fujiwara Y, Sugimoto Y, Nishio K, Tamura T, Matsuda T und Saijo N, (1992): *Determinants of response to the DNA topoisomerase II inhibitors doxorubicin and etoposide in human lung cancer cell lines.* J Natl Cancer Inst, 84, 113-118.
- Kataoka T, (2005): *The caspase-8 modulator c-FLIP.* Crit Rev Immunol, 25, 31-58.
- Kerr JF, Wyllie AH und Currie AR, (1972): *Apoptosis: a basic biological phenomenon with wide-ranging implications in tissue kinetics.* Br J Cancer, 26, 239-257.
- Kim R, Emi M, Tanabe K und Toge T, (2004): *Therapeutic potential of antisense Bcl-2 as a chemosensitizer for cancer therapy.* Cancer, 101, 2491-2502.
- King KL und Cidlowski JA, (1995): *Cell cycle and apoptosis: common pathways to life and death.* J Cell Biochem, 58, 175-180.
- Kirschke H, Barrett AJ und Rawlings ND, (1995): *Proteinases 1: lysosomal cysteine proteinases.* Protein Profile, 2, 1581-1643.
- Kitanaka C und Kuchino Y, (1999): *Caspase-independent programmed cell death with necrotic morphology.* Cell Death Differ, 6, 508-515.
- Kobayashi T, Sawa H, Morikawa J, Zhang W und Shiku H, (2000): *Bax induction activates apoptotic cascade via mitochondrial cytochrome c release and Bax overexpression enhances apoptosis induced by chemotherapeutic agents in DLD-1 colon cancer cells.* Jpn J Cancer Res, 91, 1264-1268.
- Koblinski JE, Ahram M und Sloane BF, (2000): *Unraveling the role of proteases in cancer.* Clin Chim Acta, 291, 113-135.
- Koenig U, Eckhart L und Tschachler E, (2001): *Evidence that caspase-13 is not a human but a bovine gene.* Biochem Biophys Res Commun, 285, 1150-1154.
- Kormeyer SJ, Shutter JR, Veis DJ, Merry DE und Oltvai ZN, (1993): *Bcl-2/Bax: a rheostat that regulates an anti-oxidant pathway and cell death.* Semin Cancer Biol, 4, 327-332.
- Krammer PH, (2000): *CD95's deadly mission in the immune system.* Nature, 407, 789-795.
- Kroemer G und Martin SJ, (2005): *Caspase-independent cell death.* Nat Med, 11, 725-730.
- Kunz M, Ibrahim S, Koczan D, Thiesen HJ, Kohler HJ, Acker T, Plate KH, Ludwig S, Rapp UR, Brocker EB, van Muijen GN, Flory E und Gross G, (2001): *Activation of c-Jun NH₂-terminal kinase/stress-activated protein kinase (JNK/SAPK) is critical for hypoxia-induced apoptosis of human malignant melanoma.* Cell Growth Differ, 12, 137-145.
- Kuwabara M, Takahashi K und Inanami O, (2003): *Induction of apoptosis through the activation of SAPK/JNK followed by the expression of death receptor Fas in X-irradiated cells.* J Radiat Res (Tokyo), 44, 203-209.
- Lavin MF und Shiloh Y, (1997): *The genetic defect in ataxia-telangiectasia.* Annu Rev Immunol, 15:177-202., 177-202.
- Lavrik I, Krueger A, Schmitz I, Baumann S, Weyd H, Krammer PH und Kirchhoff S, (2003): *The active caspase-8 heterotetramer is formed at the CD95 DISC.* Cell Death Differ, 10, 144-145.

- Leist M und Jaattela M, (2001): *Four deaths and a funeral: from caspases to alternative mechanisms*. Nat Rev Mol Cell Biol, 2, 589-598.
- Lemasters JJ, (2005): *Dying a thousand deaths: redundant pathways from different organelles to apoptosis and necrosis*. Gastroenterology, 129, 351-360.
- Letai A, Bassik MC, Walensky LD, Sorcinelli MD, Weiler S und Korsmeyer SJ, (2002): *Distinct BH3 domains either sensitize or activate mitochondrial apoptosis, serving as prototype cancer therapeutics*. Cancer Cell, 2, 183-192.
- Li F, Srinivasan A, Wang Y, Armstrong RC, Tomaselli KJ und Fritz LC, (1997): *Cell-specific induction of apoptosis by microinjection of cytochrome c. Bcl-xL has activity independent of cytochrome c release*. J Biol Chem, 272, 30299-30305.
- Li H, Zhu H, Xu CJ und Yuan J, (1998): *Cleavage of BID by caspase 8 mediates the mitochondrial damage in the Fas pathway of apoptosis*. Cell, 94, 491-501.
- Liao SK, Dent PB und McCulloch PB, (1975): *Characterization of human malignant melanoma cell lines. I. Morphology and growth characteristics in culture*. J Natl Cancer Inst, 54, 1037-1044.
- Liaudet-Coopman E, Beaujouin M, Derocq D, Garcia M, Glondu-Lassis M, Laurent-Matha V, Prebois C, Rochefort H und Vignon F, (2005): *Cathepsin D: newly discovered functions of a long-standing aspartic protease in cancer and apoptosis*. Cancer Lett, ..
- Lin PH, Pan Z, Zheng L, Li N, Danielpour D und Ma JJ, (2005): *Overexpression of Bax sensitizes prostate cancer cells to TGF-beta induced apoptosis*. Cell Res, 15, 160-166.
- Linder S und Shoshan MC, (2005): *Lysosomes and endoplasmic reticulum: targets for improved, selective anticancer therapy*. Drug Resist Updat, 8, 199-204.
- Liu J, Yin S, Reddy N, Spencer C und Sheng S, (2004): *Bax mediates the apoptosis-sensitizing effect of maspin*. Cancer Res, 64, 1703-1711.
- Lockshin A, Giovanella BC, De Ipolyi PD, Williams LJ, Jr., Mendoza JT, Yim SO und Stehlin JS, Jr., (1985): *Exceptional lethality for nude mice of cells derived from a primary human melanoma*. Cancer Res, 45, 345-350.
- Lockshin R, Osborne B und Zakeri Z, (2000): *Cell death in the third millennium*. Cell Death Differ, 7, 2-7.
- Lockshin R und Williams C, (1965): *Programmed Cell Death--I, Cytology Of Degeneration In The Intersegmental Muscels Of The Pernyi Silkmoth*. J Insect Physiol, 11:123-33., 123-133.
- Lockshin R und Zakeri Z, (2004a): *Apoptosis, autophagy, and more*. Int J Biochem Cell Biol, 36, 2405-2419.
- Lockshin R und Zakeri Z, (2004b): *Caspase-independent cell death?* Oncogene, 23, 2766-2773.
- Loeffler M, Daugas E, Susin SA, Zamzami N, Metivier D, Nieminen AL, Brothers G, Penninger JM und Kroemer G, (2001): *Dominant cell death induction by extramitochondrially targeted apoptosis-inducing factor*. FASEB J, 15, 758-767.
- Lord SJ, Rajotte RV, Korbutt GS und Bleackley RC, (2003): *Granzyme B: a natural born killer*. Immunol Rev, 193:31-8., 31-38.

- Lozano G und Zambetti GP, (2005): *What have animal models taught us about the p53 pathway?* J Pathol, 205, 206-220.
- Lu T, Xu Y, Mericle MT und Mellgren RL, (2002): *Participation of the conventional calpains in apoptosis.* Biochim Biophys Acta, 1590, 16-26.
- Luo X, Budihardjo I, Zou H, Slaughter C und Wang X, (1998): *Bid, a Bcl2 interacting protein, mediates cytochrome c release from mitochondria in response to activation of cell surface death receptors.* Cell, 94, 481-490.
- Ly JD, Grubb DR und Lawen A, (2003): *The mitochondrial membrane potential ($\Delta\psi_m$) in apoptosis; an update.* Apoptosis, 8, 115-128.
- Mahoney JA und Rosen A, (2005): *Apoptosis and autoimmunity.* Curr Opin Immunol, 17, 583-588.
- Mathai JP, Germain M, Marcellus RC und Shore GC, (2002): *Induction and endoplasmic reticulum location of BIK/NBK in response to apoptotic signaling by E1A and p53.* Oncogene, 21, 2534-2544.
- Moll UM, Wolff S, Speidel D und Deppert W, (2005): *Transcription-independent pro-apoptotic functions of p53.* Curr Opin Cell Biol, 17, 631-636.
- Mort JS, Recklies AD und Poole AR, (1984): *Extracellular presence of the lysosomal proteinase cathepsin B in rheumatoid synovium and its activity at neutral pH.* Arthritis Rheum, 27, 509-515.
- Muchmore SW, Sattler M, Liang H, Meadows RP, Harlan JE, Yoon HS, Nettesheim D, Chang BS, Thompson CB, Wong SL, Ng SL und Fesik SW, (1996): *X-ray and NMR structure of human Bcl-xL, an inhibitor of programmed cell death.* Nature, 381, 335-341.
- Muzio M, Chinnaiyan AM, Kischkel FC, O'Rourke K, Shevchenko A, Ni J, Scaffidi C, Bretz JD, Zhang M, Gentz R, Mann M, Krammer PH, Peter ME und Dixit VM, (1996): *FLICE, a novel FADD-homologous ICE/CED-3-like protease, is recruited to the CD95 (Fas/APO-1) death--inducing signaling complex.* Cell, 85, 817-827.
- Naumann U, Schmidt F, Wick W, Frank B, Weit S, Gillissen B, Daniel P und Weller M, (2003): *Adenoviral natural born killer gene therapy for malignant glioma.* Hum Gene Ther, 14, 1235-1246.
- Nguyen M, Millar DG, Yong VW, Korsmeyer SJ und Shore GC, (1993): *Targeting of Bcl-2 to the mitochondrial outer membrane by a COOH-terminal signal anchor sequence.* J Biol Chem, 268, 25265-25268.
- Nicoletti I, Migliorati G, Pagliacci MC, Grignani F und Riccardi C, (1991): *A rapid and simple method for measuring thymocyte apoptosis by propidium iodide staining and flow cytometry.* J Immunol Methods, 139, 271-279.
- Nicotera P und Melino G, (2004): *Regulation of the apoptosis-necrosis switch.* Oncogene, 23, 2757-2765.
- Nishikawa S und Sasaki F, (1996): *Phagocytotic processing of apoptotic bodies of transitional ameloblasts by MHC Class II-expressing macrophages in rat incisor.* J Histochem Cytochem, 44, 1459-1467.

- Nylandsted J, Gyrd-Hansen M, Danielewicz A, Fehrenbacher N, Lademann U, Hoyer-Hansen M, Weber E, Multhoff G, Rohde M und Jaattela M, (2004): *Heat shock protein 70 promotes cell survival by inhibiting lysosomal membrane permeabilization.* J Exp Med, 200, 425-435.
- Ohshima K, Haraoka S, Sugihara M, Suzumiya J, Kawasaki C, Kanda M und Kikuchi M, (2000): *Amplification and expression of a decoy receptor for fas ligand (DcR3) in virus (EBV or HTLV-I) associated lymphomas.* Cancer Lett, 160, 89-97.
- Oltvai ZN, Milliman CL und Korsmeyer SJ, (1993): *Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death.* Cell, 74, 609-619.
- Ono K, Kim SO und Han J, (2003): *Susceptibility of lysosomes to rupture is a determinant for plasma membrane disruption in tumor necrosis factor alpha-induced cell death.* Mol Cell Biol, 23, 665-676.
- Orfanos CE and Garbe C. (2001). *Therapie der Hautkrankheiten.* Springer: Heidelberg.
- Orth K, Chinnaiyan AM, Garg M, Froelich CJ und Dixit VM, (1996): *The CED-3/ICE-like protease Mch2 is activated during apoptosis and cleaves the death substrate lamin A.* J Biol Chem, 271, 16443-16446.
- Orth K und Dixit VM, (1997): *Bik and Bak induce apoptosis downstream of CrmA but upstream of inhibitor of apoptosis.* J Biol Chem, 272, 8841-8844.
- Otto FJ, Goldmann T, Biess B, Lippold A, Suter L und Westhoff U, (1999): *Prognostic classification of malignant melanomas by combining clinical, histological, and immunohistochemical parameters.* Oncology, 56, 208-214.
- Paquet C, Schmitt E, Beauchemin M und Bertrand R, (2004): *Activation of multidomain and BH3-only pro-apoptotic Bcl-2 family members in p53-defective cells.* Apoptosis, 9, 815-831.
- Pepper C, Thomas A, Hoy T und Bentley P, (2002): *Antisense oligonucleotides complementary to Bax transcripts reduce the susceptibility of B-cell chronic lymphocytic leukaemia cells to apoptosis in a bcl-2 independent manner.* Leuk Lymphoma, 43, 2003-2009.
- Petit A, Kawarai T, Paitel E, Sanjo N, Maj M, Scheid M, Chen F, Gu Y, Hasegawa H, Salehi-Rad S, Wang L, Rogaeva E, Fraser P, Robinson B, George-Hyslop P und Tandon A, (2005): *Wild-type PINK1 prevents basal and induced neuronal apoptosis, a protective effect abrogated by Parkinson disease-related mutations.* J Biol Chem, 280, 34025-34032.
- Philipp-Staheli J, Kim KH, Liggitt D, Gurley KE, Longton G und Kemp CJ, (2004): *Distinct roles for p53, p27Kip1, and p21Cip1 during tumor development.* Oncogene, 23, 905-913.
- Piro LD, (2004): *Apoptosis, Bcl-2 antisense, and cancer therapy.* Oncology (Williston Park), 18, 5-10.
- Pisha E, Chai H, Lee IS, Chagwedera TE, Farnsworth NR, Cordell GA, Beecher CW, Fong HH, Kinghorn AD, Brown DM und ., (1995): *Discovery of betulinic acid as a selective inhibitor of human melanoma that functions by induction of apoptosis.* Nat Med, 1, 1046-1051.
- Puche JG, Canevari S, Fossati G, Porta GD und Vezzoni P, (1977): *Complement-dependent serum cytotoxicity of cancer patients studied by 51Cr release assay on human cancer lines.* Tumori, 63, 97-108.

- Puthalakath H, Villunger A, O'Reilly LA, Beaumont JG, Coultas L, Cheney RE, Huang DC und Strasser A, (2001): *Bmf: a proapoptotic BH3-only protein regulated by interaction with the myosin V actin motor complex, activated by anoikis.* Science, 293, 1829-1832.
- Radetzki S, Kohne CH, von Haefen C, Gillissen B, Sturm I, Dorken B und Daniel PT, (2002): *The apoptosis promoting Bcl-2 homologues Bak and Nbk/Bik overcome drug resistance in Mdr-1-negative and Mdr-1-overexpressing breast cancer cell lines.* Oncogene, 21, 227-238.
- Raffo AJ, Kim AL und Fine RL, (2000): *Formation of nuclear Bax/p53 complexes is associated with chemotherapy induced apoptosis.* Oncogene, 19, 6216-6228.
- Raisova M, Hossini AM, Eberle J, Riebeling C, Wieder T, Sturm I, Daniel PT, Orfanos CE und Geilen CC, (2001): *The Bax/Bcl-2 ratio determines the susceptibility of human melanoma cells to CD95/Fas-mediated apoptosis.* J Invest Dermatol, 117, 333-340.
- Reed JC, Cuddy M, Haldar S, Croce C, Nowell P, Makover D und Bradley K, (1990): *BCL2-mediated tumorigenicity of a human T-lymphoid cell line: synergy with MYC and inhibition by BCL2 antisense.* Proc Natl Acad Sci U S A, 87, 3660-3664.
- Reiners JJ, Jr., Caruso JA, Mathieu P, Chelladurai B, Yin XM und Kessel D, (2002): *Release of cytochrome c and activation of pro-caspase-9 following lysosomal photodamage involves Bid cleavage.* Cell Death Differ, 9, 934-944.
- Richter BW und Duckett CS, (2000): *The IAP proteins: caspase inhibitors and beyond.* Sci STKE, 2000, E1.
- Riedl SJ und Shi Y, (2004): *Molecular mechanisms of caspase regulation during apoptosis.* Nat Rev Mol Cell Biol, 5, 897-907.
- Roberg K, Johansson U und Ollinger K, (1999): *Lysosomal release of cathepsin D precedes relocation of cytochrome c and loss of mitochondrial transmembrane potential during apoptosis induced by oxidative stress.* Free Radic Biol Med, 27, 1228-1237.
- Roberg K und Ollinger K, (1998): *Oxidative stress causes relocation of the lysosomal enzyme cathepsin D with ensuing apoptosis in neonatal rat cardiomyocytes.* Am J Pathol, 152, 1151-1156.
- Roberts LR, Adjei PN und Gores GJ, (1999): *Cathepsins as effector proteases in hepatocyte apoptosis.* Cell Biochem Biophys, 30, 71-88.
- Rodriguez J und Lazebnik Y, (1999): *Caspase-9 and APAF-1 form an active holoenzyme.* Genes Dev, 13, 3179-3184.
- Rozman J, Stojan J, Kuhelj R, Turk V und Turk B, (1999): *Autocatalytic processing of recombinant human procathepsin B is a bimolecular process.* FEBS Lett, 459, 358-362.
- Ruzza P, Quintieri L, Osler A, Calderan A, Biondi B, Floreani M, Guiotto A und Borin G, (2006): *Fluorescent, internally quenched, peptides for exploring the pH-dependent substrate specificity of cathepsin B.* J Pept Sci, ..
- Sattler M, Liang H, Nettesheim D, Meadows RP, Harlan JE, Eberstadt M, Yoon HS, Shuker SB, Chang BS, Minn AJ, Thompson CB und Fesik SW, (1997): *Structure of Bcl-xL-Bak peptide complex: recognition between regulators of apoptosis.* Science, 275, 983-986.
- Satyamoorthy K, Bogenrieder T und Herlyn M, (2001): *No longer a molecular black box--new clues to apoptosis and drug resistance in melanoma.* Trends Mol Med, 7, 191-194.

- Schotte P, Declercq W, Van Huffel S, Vandenabeele P und Beyaert R, (1999): *Non-specific effects of methyl ketone peptide inhibitors of caspases*. FEBS Lett, 442, 117-121.
- Schotte P, Van Criekinge W, Van de CM, Van Loo G, Desmedt M, Grooten J, Cornelissen M, De Ridder L, Vandekerckhove J, Fiers W, Vandenabeele P und Beyaert R, (1998): *Cathepsin B-mediated activation of the proinflammatory caspase-11*. Biochem Biophys Res Commun, 251, 379-387.
- Sharpless NE, Kannan K, Xu J, Bosenberg MW und Chin L, (2003): *Both products of the mouse Ink4a/Arf locus suppress melanoma formation in vivo*. Oncogene, 22, 5055-5059.
- Sheridan JW, Bishop CJ und Simmons RJ, (1981): *Biophysical and morphological correlates of kinetic change and death in a starved human melanoma cell line*. J Cell Sci, 49:119-37., 119-137.
- Shi Y, (2002): *Mechanisms of caspase activation and inhibition during apoptosis*. Mol Cell, 9, 459-470.
- Shibata MA, Liu ML, Knudson MC, Shibata E, Yoshidome K, Bandey T, Korsmeyer SJ und Green JE, (1999): *Haploid loss of bax leads to accelerated mammary tumor development in C3(1)/SV40-TAg transgenic mice: reduction in protective apoptotic response at the preneoplastic stage*. EMBO J, 18, 2692-2701.
- Shintani T und Klionsky DJ, (2004): *Autophagy in health and disease: a double-edged sword*. Science, 306, 990-995.
- Sperandio S, de B, I und Bredesen DE, (2000): *An alternative, nonapoptotic form of programmed cell death*. Proc Natl Acad Sci U S A, 97, 14376-14381.
- Sperandio S, Poksay K, de B, I, Lafuente MJ, Liu B, Nasir J und Bredesen DE, (2004): *Paraptosis: mediation by MAP kinases and inhibition by AIP-1/Alix*. Cell Death Differ, 11, 1066-1075.
- Stennicke HR und Salvesen GS, (2000): *Caspases - controlling intracellular signals by protease zymogen activation*. Biochim Biophys Acta, 1477, 299-306.
- Sulston JE und Horvitz HR, (1977): *Post-embryonic cell lineages of the nematode, Caenorhabditis elegans*. Dev Biol, 56, 110-156.
- Sun DY, Jiang S, Zheng LM, Ojcius DM und Young JD, (1994): *Separate metabolic pathways leading to DNA fragmentation and apoptotic chromatin condensation*. J Exp Med, 179, 559-568.
- Susin SA, Daugas E, Ravagnan L, Samejima K, Zamzami N, Loeffler M, Costantini P, Ferri KF, Irinopoulou T, Prevost MC, Brothers G, Mak TW, Penninger J, Earnshaw WC und Kroemer G, (2000): *Two distinct pathways leading to nuclear apoptosis*. J Exp Med, 192, 571-580.
- Susin SA, Lorenzo HK, Zamzami N, Marzo I, Snow BE, Brothers GM, Mangion J, Jacotot E, Costantini P, Loeffler M, Larochette N, Goodlett DR, Aebersold R, Siderovski DP, Penninger JM und Kroemer G, (1999): *Molecular characterization of mitochondrial apoptosis-inducing factor*. Nature, 397, 441-446.
- Suzuki M, Youle RJ und Tjandra N, (2000): *Structure of Bax: coregulation of dimer formation and intracellular localization*. Cell, 103, 645-654.

- Takano J, Tomioka M, Tsubuki S, Higuchi M, Iwata N, Itohara S, Maki M und Saido TC, (2005): *Calpain mediates excitotoxic DNA fragmentation via mitochondrial pathways in adult brains: evidence from calpastatin mutant mice.* J Biol Chem, 280, 16175-16184.
- Talieri M, Papadopoulou S, Scorilas A, Xynopoulos D, Arnogianaki N, Plataniotis G, Yotis J und Agnanti N, (2004): *Cathepsin B and cathepsin D expression in the progression of colorectal adenoma to carcinoma.* Cancer Lett, 205, 97-106.
- Tang D und Kidd VJ, (1998): *Cleavage of DFF-45/ICAD by multiple caspases is essential for its function during apoptosis.* J Biol Chem, 273, 28549-28552.
- Theodorakis P, Lomonosova E und Chinnadurai G, (2002): *Critical requirement of BAX for manifestation of apoptosis induced by multiple stimuli in human epithelial cancer cells.* Cancer Res, 62, 3373-3376.
- Thomas DA, Du C, Xu M, Wang X und Ley TJ, (2000): *DFF45/ICAD can be directly processed by granzyme B during the induction of apoptosis.* Immunity, 12, 621-632.
- Thompson JF, Scolyer RA und Kefford RF, (2005): *Cutaneous melanoma.* Lancet, 365, 687-701.
- Tinel A und Tschopp J, (2004): *The PIDosome, a protein complex implicated in activation of caspase-2 in response to genotoxic stress.* Science, 304, 843-846.
- Tong Y, Yang Q, Vater C, Venkatesh LK, Custeau D, Chittenden T, Chinnadurai G und Gourdeau H, (2001): *The pro-apoptotic protein, Bik, exhibits potent antitumor activity that is dependent on its BH3 domain.* Mol Cancer Ther, 1, 95-102.
- Tsujimoto Y, Cossman J, Jaffe E und Croce CM, (1985): *Involvement of the bcl-2 gene in human follicular lymphoma.* Science, 228, 1440-1443.
- Turk B, Dolenc I, Turk V und Bieth JG, (1993): *Kinetics of the pH-induced inactivation of human cathepsin L.* Biochemistry, 32, 375-380.
- Unal-Cevik I, Kilinc M, Can A, Gursoy-Ozdemir Y und Dalkara T, (2004): *Apoptotic and necrotic death mechanisms are concomitantly activated in the same cell after cerebral ischemia.* Stroke, 35, 2189-2194.
- Vancompernolle K, Van Herreweghe F, Pynaert G, Van de CM, De Vos K, Totty N, Sterling A, Fiers W, Vandenabeele P und Grooten J, (1998): *Atractyloside-induced release of cathepsin B, a protease with caspase-processing activity.* FEBS Lett, 438, 150-158.
- Verma S, Zhao LJ und Chinnadurai G, (2001): *Phosphorylation of the pro-apoptotic protein BIK: mapping of phosphorylation sites and effect on apoptosis.* J Biol Chem, 276, 4671-4676.
- Vermeulen K, Van Bockstaele DR und Berneman ZN, (2005): *Apoptosis: mechanisms and relevance in cancer.* Ann Hematol, 84, 627-639.
- Vucic D, Stennicke HR, Pisabarro MT, Salvesen GS und Dixit VM, (2000): *ML-IAP, a novel inhibitor of apoptosis that is preferentially expressed in human melanomas.* Curr Biol, 10, 1359-1366.
- Walensky LD, Kung AL, Escher I, Malia TJ, Barbuto S, Wright RD, Wagner G, Verdine GL und Korsmeyer SJ, (2004): *Activation of apoptosis in vivo by a hydrocarbon-stapled BH3 helix.* Science, 305, 1466-1470.

- Wang JL, Zhang ZJ, Choksi S, Shan S, Lu Z, Croce CM, Alnemri ES, Korngold R und Huang Z, (2000): *Cell permeable Bcl-2 binding peptides: a chemical approach to apoptosis induction in tumor cells.* Cancer Res, 60, 1498-1502.
- Wang KK, (2000): *Calpain and caspase: can you tell the difference?* Trends Neurosci, 23, 20-26.
- Werneburg N, Guicciardi ME, Yin XM und Gores GJ, (2004): *TNF-alpha-mediated lysosomal permeabilization is FAN and caspase 8/Bid dependent.* Am J Physiol Gastrointest Liver Physiol, 287, G436-G443.
- Widlak P, (2000): *The DFF40/CAD endonuclease and its role in apoptosis.* Acta Biochim Pol, 47, 1037-1044.
- Widlak P und Garrard WT, (2005): *Discovery, regulation, and action of the major apoptotic nucleases DFF40/CAD and endonuclease G.* J Cell Biochem, 94, 1078-1087.
- Wood DE, Thomas A, Devi LA, Berman Y, Beavis RC, Reed JC und Newcomb EW, (1998): *Bax cleavage is mediated by calpain during drug-induced apoptosis.* Oncogene, 17, 1069-1078.
- Wright CW und Duckett CS, (2005): *Reawakening the cellular death program in neoplasia through the therapeutic blockade of IAP function.* J Clin Invest, 115, 2673-2678.
- Wyllie AH und Golstein P, (2001): *More than one way to go.* Proc Natl Acad Sci U S A, 98, 11-13.
- Xie D, Nakachi K, Wang H, Elashoff R und Koeffler HP, (2001): *Elevated levels of connective tissue growth factor, WISP-1, and CYR61 in primary breast cancers associated with more advanced features.* Cancer Res, 61, 8917-8923.
- Yamamoto K, Ichijo H und Korsmeyer SJ, (1999): *BCL-2 is phosphorylated and inactivated by an ASK1/Jun N-terminal protein kinase pathway normally activated at G(2)/M.* Mol Cell Biol, 19, 8469-8478.
- Yamashima T, (2004): *Ca2+-dependent proteases in ischemic neuronal death: a conserved 'calpain-cathepsin cascade' from nematodes to primates.* Cell Calcium, 36, 285-293.
- Yamashima T, Tonchev AB, Tsukada T, Saido TC, Imajoh-Ohmi S, Momoi T und Kominami E, (2003): *Sustained calpain activation associated with lysosomal rupture executes necrosis of the postischemic CA1 neurons in primates.* Hippocampus, 13, 791-800.
- Yan S und Sloane BF, (2003): *Molecular regulation of human cathepsin B: implication in pathologies.* Biol Chem, 384, 845-854.
- Yang E, Zha J, Jockel J, Boise LH, Thompson CB und Korsmeyer SJ, (1995): *Bad, a heterodimeric partner for Bcl-XL and Bcl-2, displaces Bax and promotes cell death.* Cell, 80, 285-291.
- Yang YL und Li XM, (2000): *The IAP family: endogenous caspase inhibitors with multiple biological activities.* Cell Res, 10, 169-177.
- Yu C, Rahmani M, Dai Y, Conrad D, Krystal G, Dent P und Grant S, (2003): *The lethal effects of pharmacological cyclin-dependent kinase inhibitors in human leukemia cells proceed through a phosphatidylinositol 3-kinase/Akt-dependent process.* Cancer Res, 63, 1822-1833.

- Yu Z, Li W, Hillman J und Brunk UT, (2004): *Human neuroblastoma (SH-SY5Y) cells are highly sensitive to the lysosomotropic aldehyde 3-aminopropanal.* Brain Res, 1016, 163-169.
- Yuan XM, Li W, Dalen H, Lotem J, Kama R, Sachs L und Brunk UT, (2002): *Lysosomal destabilization in p53-induced apoptosis.* Proc Natl Acad Sci U S A, 99, 6286-6291.
- Zajc I, Sever N, Bervar A und Lah TT, (2002): *Expression of cysteine peptidase cathepsin L and its inhibitors stefins A and B in relation to tumorigenicity of breast cancer cell lines.* Cancer Lett, 187, 185-190.
- Zamecnik PC und Stephenson ML, (1978): *Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide.* Proc Natl Acad Sci U S A, 75, 280-284.
- Zangemeister-Wittke U, Leech SH, Olie RA, Simoes-Wust AP, Gautschi O, Luedke GH, Natt F, Haner R, Martin P, Hall J, Nalin CM und Stahel RA, (2000): *A novel bispecific antisense oligonucleotide inhibiting both bcl-2 and bcl-xL expression efficiently induces apoptosis in tumor cells.* Clin Cancer Res, 6, 2547-2555.
- Zha J, Harada H, Yang E, Jockel J und Korsmeyer SJ, (1996): *Serine phosphorylation of death agonist BAD in response to survival factor results in binding to 14-3-3 not BCL-X(L).* Cell, 87, 619-628.
- Zhao M, Eaton JW und Brunk UT, (2000): *Protection against oxidant-mediated lysosomal rupture: a new anti-apoptotic activity of Bcl-2?* FEBS Lett, 485, 104-108.
- Zhao M, Eaton JW und Brunk UT, (2001): *Bcl-2 phosphorylation is required for inhibition of oxidative stress-induced lysosomal leak and ensuing apoptosis.* FEBS Lett, 509, 405-412.
- Zheng JY, Yang GS, Wang WZ, Li J, Li KZ, Guan WX und Wang WL, (2005): *Overexpression of Bax induces apoptosis and enhances drug sensitivity of hepatocellular cancer-9204 cells.* World J Gastroenterol, 11, 3498-3503.
- Zheng X, Chou PM, Mirkin BL und Rebbaa A, (2004): *Senescence-initiated reversal of drug resistance: specific role of cathepsin L.* Cancer Res, 64, 1773-1780.
- Ziegler-Heitbrock HW, Munker R, Johnson J, Petersmann I, Schmoekel C und Riethmüller G, (1985): *In vitro differentiation of human melanoma cells analyzed with monoclonal antibodies.* Cancer Res, 45, 1344-1350.