

**Scientific Publications**  
(Abstracts not listed)

**Invited book chapters and reviews**

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## Scientific Publications

Reichart, F., Maltsev, O. V., Kapp, T. G., Räder, A. F. B., Weinmüller, M., Marelli, U. K., Notni, J., Wurzer, A., Beck, R., Wester, H. J., Steiger, K., Di Maro, S., Di Leva, F. S., Marinelli, L., Nieberler, M., **Reuning, U.**, Schwaiger, M. & Kessler, H. Selective targeting of integrin  $\alpha\beta 8$  by a highly active cyclic peptide. *Journal of Medicinal Chemistry*, 2019, in press.

Nieberler, M., **Reuning, U.**, Kessler, H., Reichart, F., Weirich, G. & Wolff, K.-D. Fluorescence imaging of invasive head and neck carcinoma cells with integrin  $\alpha\beta 6$ -targeting RGD-peptides: an approach to a fluorescence-assisted intraoperative cytological assessment of bony resection margins. *British Journal of Oral and Maxillofacial Surgery*, in press, 2018

**Reuning, U.**, Magdolen, V., Courty, Y., Clements, J. A., Yousef, G.M., Scorilas, A., Talieri, M. & Diamandis, E. P. Manfred Schmitt (1947-2018). *Biological Chemistry* 399: 923-924, 2018.

Miller, J., Dreyer, T. F., Bächer, A. S., Sinner, E. K., Heinrich, C., Benge, A., Gross, E., Preis, S., Rother, J., Roberts, A., Nelles, G., Miteva, T. & **Reuning, U.** Differential tumor biological role of the tumor suppressor KAI1 and its splice variant in human breast cancer cells. *Oncotarget* 9: 6369-6390, 2018.

Nieberler, M., **Reuning, U.**, Reichart, F., Notni, J., Wester, H. J., Schwaiger, M., Weinmüller, M., Räder, A., Steiger, K. & Kessler, H. Exploring the role of RGD-recognizing integrins in cancer. *Cancers (Basel)* 9(9). pii: E116, 2017.

Yang, F., Aubele, M., Walch, A., Gross, E., Napieralski, R., Zhao, S., Ahmed, N., Kiechle, M., **Reuning, U.**, Dorn, J., Sweep, F., Magdolen, V. & Schmitt, M. Tissue kallikrein-related peptidase 4 (KLK4), a novel biomarker in triple-negative breast cancer. *Biological Chemistry* 398: 1151-1164, 2017.

Kapp, T. G., Rechenmacher, F., Neubauer, S., Maltsev, O. V., Cavalcanti-Adam, E. A., Zarka, R., **Reuning, U.**, Notni, J., Wester, H. J., Mas-Moruno, C., Spatz, J., Geiger, B. & Kessler, H. A Comprehensive evaluation of the activity and selectivity profile of ligands for RGD-binding integrins. *Scientific Reports* 7: 39805, 2017.

Bronger, H., Singer, J., Windmüller, C., **Reuning, U.**, Zech, D., Delbridge, C., Dorn, J., Kiechle, M., Schmalfeldt, B., Schmitt, M. & Avril, S. CXCL9 and CXCL10 predict survival and are regulated by cyclooxygenase inhibition in advanced serous ovarian cancer. *British Journal of Cancer* 115: 553-563, 2016.

Maltsev, O. V., Marelli, U. K., Kapp, T. G., Di Leva, F. S., Di Maro, S., Nieberler, M., **Reuning, U.**, Schwaiger, M., Novellino, E., Marinelli, L. & Kessler H. Stable peptides instead of stapled peptides: highly potent  $\alpha\beta6$ -selective integrin ligands. *Angewandte Chemie International Edition (Engl.)* 55: 1535-1539, 2016.

Zaba, C., Ritz, S., Tan, C.D., Zayni, S., Müller, M., **Reuning, U.** & Sinner, E. K. Functional cell adhesion receptors (integrins) in polymeric architectures. *Chembiochem* 16: 1740-1743, 2015.

Iturri, J., García-Fernández, L., **Reuning, U.**, García, A. J., Campo, A. D. & Salierno, M. J. Synchronized cell attachment triggered by photo-activatable adhesive ligands allows QCM-based detection of early integrin binding. *Scientific Reports* 5: 9533, 2015.

Upheber, S., Karle, A., Miller, J., Schlaugk, S., Gross, E. & **Reuning U.** Alternative splicing of KAI1 abrogates its tumor-suppressive effects on integrin  $\alpha\beta3$ -mediated ovarian cancer biology. *Cellular Signalling* 27: 652-662, 2015.

Seubert, B., Cui, H., Simonavicius, N., Honert, K., Schäfer, S., **Reuning, U.**, Heikenwalder, M., Mari, B. & Krüger, A. Tetraspanin CD63 acts as a pro-metastatic factor via  $\beta$ -catenin stabilization. *International Journal of Cancer* 136: 2304-2315, 2015.

Cui, H., Seubert, B., Stahl, E., Dietz, H., **Reuning, U.**, Moreno-Leon, L., Ilie, M., Hofman, P., Nagase, H., Mari, B. & Krüger, A. Tissue inhibitor of metalloproteinases-1 induces a pro-tumourigenic increase of miR-210 in lung adenocarcinoma cells and their exosomes. *Oncogene* 34: 3640-3650, 2015.

Müller, M. A., Brunie, L., Bächer, A. S., Kessler, H., Gottschalk, K. E. & **Reuning, U.** Cytoplasmic salt bridge formation in integrin  $\alpha\beta3$  stabilizes its inactive state affecting integrin-mediated cell biological effects. *Cellular Signalling* 26: 2493-2503, 2014.

Neubauer, S., Rechenmacher, F., Beer, A. J., Curnis, F., Pohle, K., D'Alessandria, C., Wester, H. J., **Reuning, U.**, Corti, A., Schwaiger, M. & Kessler, H. Selective imaging of the angiogenic relevant integrins  $\alpha5\beta1$  and  $\alpha\beta3$ . *Angewandte Chemie International Edition (Engl.)* 52: 11656-11659, 2013.

Müller, M. A., Opfer, J., Brunie, L., Volkhardt, L. A., Sinner, E. K., Boettiger, D., Bochen, A., Kessler, H., Gottschalk, K. E. & **Reuning, U.** The glycophorin A transmembrane sequence within integrin  $\alpha\beta 3$  creates a non-signaling integrin with low basal affinity that is strongly adhesive under force. *Journal of Molecular Biology* 425: 2988-3006, 2013.

Volkman, J., **Reuning, U.**, Rudelius, M., Häfner, N., Schuster, T., Becker, V. Rose, A., Weimer, J., Hilpert, F., Kiechle, M., Dürst, M., Arnold, N., Schmalfeldt, B., Meindl & Ramser, J. High expression of crystallin  $\alpha B$  represents an independent molecular marker for unfavourable ovarian cancer patient outcome and impairs TRAIL- and cisplatin-induced apoptosis in human ovarian cancer cells. *International Journal of Cancer* 132: 2820-2832, 2013.

Mas-Moruno, C., Dorfner, P., Manzenrieder, F., Neubauer, S., **Reuning, U.**, Burgkart, R. & Kessler, H. Behavior of primary human osteoblasts on trimmed and sandblasted Ti6Al4V surfaces functionalized with integrin  $\alpha\beta 3$ -selective cyclic RGD peptides. *Journal of Biomedical Materials Research: Part A* 101: 87-97, 2013.

Saucedo-Zeni, N., Mewes, S., Niestroj, R., Gasiorowski, L., Murawa, D., Nowaczyk, P., Tomasi, T., Weber, E., Dworacki, G., Morgenthaler, N. G., Jansen, H., Propping, C., Sterzynska, K., Dyszkiewicz, W., Zabel, M., Kiechle, M., **Reuning, U.**, Schmitt, M. & Lücke, L. A novel method for the *in vivo* isolation of circulating tumor cells (CTC) from peripheral blood of cancer patients using a functionalized and structured medical wire. *International Journal of Oncology* 41: 1241-1250, 2012.

Preissner, K. T. & **Reuning, U.** Vitronectin in vascular context: facets of a multitaled matrix protein. *Seminars in Thrombosis and Hemostasis* 37: 408-424, 2011.

**Reuning, U.** Integrin  $\alpha\beta 3$  promotes vitronectin gene expression in human ovarian cancer cells by implicating rel transcription factors. *Journal of Cellular Biochemistry* 112: 1909-1919, 2011.

Schmitt, M., Mengele, K., Napieralski, R., Gkazepis, A., Magdolen, V., **Reuning, U.**, Sweep, F., Brünner, N., Foekens, J. & Harbeck, N. Clinical utility of Level-of-Evidence-1 disease forecast cancer biomarkers urokinase-type plasminogen activator (uPA) and its inhibitor PAI-1. *Expert Review Molecular Diagnostics* 10: 1051-1067, 2010.

Mengele, K., Napieralski, R., Gkazepis, A., Magdolen, M., **Reuning, U.**, Sweep, F., Brünner, N., Foekens, J., Harbeck, N. & Schmitt, M. Characteristics of the Level-of-Evidence-1 disease forecast cancer biomarkers urokinase-type plasminogen activator (uPA) and its inhibitor PAI-1. *Expert Review in Molecular Diagnostics* 10: 947-962, 2010.

Sato, S., Kopitz, C., Grismayer, B., Beaufort, N., **Reuning, U.**, Schmitt, M., Luther, T., Kotsch, M., Krüger, A. & Magdolen, V. Overexpression of the urokinase receptor mRNA splice variant uPAR-del4/5 affects tumor-associated processes of breast cancer cells *in vitro* and *in vivo*. *Breast Cancer Research Treatment* 127: 649-657, 2011.

Ruseva, Z., Geiger, P.X.C., Hutzler, P., Kotsch, M., Lubber, B., Schmitt, M., Groß, E. & **Reuning, U.** Tumor suppressor KAI1 affects integrin  $\alpha\beta 3$ -mediated ovarian cancer cell adhesion, motility and proliferation. *Experimental Cell Research* 315: 1759-1771, 2009.

Lössner, D., Abou-Ajram, C., Benge, A., Aumercier, M., Schmitt, M. & **Reuning, U.** Integrin  $\alpha\beta 3$  upregulates integrin-linked kinase expression in human ovarian cancer cells via enhancement of ILK gene transcription. *Journal of Cellular Physiology* 220: 367-375, 2009.

Schmitt, M., Mengele, K., Gkazepis, A., Napieralski, R., Magdolen, V., **Reuning, U.** & Harbeck, N. Assessment of urokinase-type plasminogen activator and its inhibitor PAI-1 in breast cancer tissue: historical aspects and future prospects. *Breast Care* 3: 3-10, 2008.

Lössner, D., Abou-Ajram, C., Benge, A. & **Reuning, U.** Integrin  $\alpha\beta 3$  mediates upregulation of epidermal growth-factor receptor expression and activity in human ovarian cancer cells. *International Journal of Biochemistry and Cell Biology* 40: 2746-2761, 2008.

Lössner, D., Kessler, H., Thumshirn, G., Dahmen, C., Wiltschi, B., Tanaka, M., Knoll, W., Sinner, E. K. & **Reuning, U.** Binding of small mono- and oligomeric integrin ligands to membrane-embedded integrins monitored by surface plasmon-enhanced fluorescence spectroscopy. *Analytical Chemistry* 78: 4524-4533, 2006.

Krupka, S. S., Wiltschi, B., **Reuning, U.**, Hölscher, K., Hara, M. & Sinner, E.-K. In vivo detection of membrane protein expression using surface plasmon enhanced fluorescence spectroscopy (SPFS). *Biosensors & Bioelectronics* 22: 260-267, 2006.

**Reuning, U.**, Schmitt, M., Lubber, B., Beck, V. & Magdolen, V. Methods to analyze the effects of the urokinase system on cancer cell adhesion, proliferation, migration, and signal transduction events. *Methods in Molecular Medicine* 120: 427-440, 2006.

Naal, F. D., Mengele, K., Schauwecker, J., Gollwitzer, H., Gerdesmeyer, L., **Reuning, U.**, Mittelmeier, W., Gradinger, R., Schmitt, M. & Diehl, P. High hydrostatic pressure-induced cell death in human chondrocytes and chondrosarcoma cells. *Anticancer Research* 25: 1977-1982, 2005.

Mengele, K., Harbeck, N., **Reuning, U.**, Magdolen, V. & Schmitt, M. Tumor-associated prognostic factors of the plasminogen activator family: determination and clinical value of u-PA, t-PA, PAI-1, and PAI-2. *Hamostaseologie* 25: 301-310, 2005.

Beck, V., Herold, H., Bengel, A., Lubber, B., Hutzler, P., Tschesche, H., Kessler, H., Schmitt, M., Geppert, H. G. & **Reuning, U.** ADAM15 decreases integrin  $\alpha\beta 3$ /vitronectin-mediated ovarian cancer cell adhesion and motility in an RGD-dependent fashion. *International Journal of Biochemistry and Cell Biology* 37: 590-603, 2005.

Li, J., Thielemann, C., Pax, M., **Reuning, U.** & Johannsmann, D. Monitoring of integrin-mediated adhesion of human ovarian cancer cells to model protein surfaces by quartz crystal resonators: evaluation in the impedance analysis mode. *Biosensors & Bioelectronics* 1333-1340, 2005.

Sinner, E.-K., **Reuning, U.**, Saccà, B., Moroder, L., Knoll, K. & Oesterhelt, D. Incorporation of cell adhesion receptors in artificial planar lipid membranes-characterization by plasmon enhanced fluorescence spectroscopy. *Analytical Biochemistry* 333: 216-224, 2004.

Diehl, P., **Reuning, U.**, Gollwitzer, H., Magdolen, U., Tübel, J., Mittelmeier, W. & Schmitt, M. Effect of extracorporeal high hydrostatic pressure on tumor cell adherence and viability. *Oncology Reports* 12: 369-373, 2004.

Hiendlmeyer, E., Regus, S., Wassermann, S., Hlubek, F., Haynl, A., Dimmler, A., Koch, C., Knoll, C., van Beest, M., **Reuning, U.**, Brabletz, T., Kirchner, T. & Jung, A. Beta-catenin up-regulates the expression of the urokinase plasminogen activator in human colorectal tumors. *Cancer Research* 64:1209-1214, 2004.

**Reuning, U.**, Magdolen, V., Hapke, S. & Schmitt, M. Molecular and functional interdependence of the urokinase-type plasminogen activator system with integrins. *Biological Chemistry* 384: 1119-1131, 2003.

Hapke, S., Kessler, H., Lubber, B., Bengel, A., Hutzler, P., Höfler, H., Schmitt, M. & **Reuning, U.** Ovarian cancer cell proliferation and motility is induced by engagement of integrin  $\alpha\beta 3$ /vitronectin interaction. *Biological Chemistry* 384: 1073-1083, 2003.

**Reuning, U.**, Sperl, S., Kopitz, C., Kessler, H., Krüger, A., Schmitt, M. & Magdolen, V. Urokinase-type plasminogen activator (uPA) and its receptor (uPAR): development of antagonists of uPA/uPAR interaction and their effects in vitro and in vivo. *Current Pharmaceutical Design* 9: 1529-1543, 2003.

Schmitt, M., Magdolen, V. & **Reuning, U.** Theme Issue: update on the role of the fibrinolysis/plasminogen activation system in a cellular context. *Thrombosis & Haemostasis* 89: 596-598, 2003.

Fuchs, M., Hutzler, P., Brunner, I., Schlegel, J., Mages, J., **Reuning, U.**, Hapke, S., Duyster, J., Hirohashi, S., Genda, T., Sakamoto, M., Überall, F., Höfler, H., Becker, K. F. & Lubber, B. Motility enhancement by tumor-derived mutant E-cadherin is sensitive to treatment with epidermal growth factor receptor and phosphatidylinositol 3-kinase inhibitors. *Experimental Cell Research* 276: 129-141, 2002.

Lutz, V., **Reuning, U.**, Krüger, A., Luther, T., von Steinburg, S. P., Graeff, H., Schmitt, M., Wilhelm, O. G. & Magdolen, V. High level synthesis of recombinant soluble urokinase receptor (CD87) by ovarian cancer cells reduces intraperitoneal tumor growth and spread in nude mice. *Biological Chemistry* 382: 789-798, 2001.

Hapke, S., Kessler, H., Arroyo de Prada, N., Benge, A., Schmitt, M., Lengyel, E. & **Reuning, U.** Integrin  $\alpha\beta 3$ /vitronectin interaction affects expression of the urokinase system in human ovarian cancer cells. *Journal of Biological Chemistry* 276: 26340-26348, 2001.

Hapke, S., Gawaz, M., Dehne, K., Köhler, J., Marshall, J. F., Graeff, H., Schmitt, M., **Reuning, U.** & Lengyel, E.  $\beta 3$ A-integrin downregulates the urokinase-type plasminogen activator receptor (u-PAR) through a PEA3/ets transcriptional silencing element in the u-PAR promoter. *Molecular and Cellular Biology* 21: 2118-2132, 2001.

Mühlenweg, B., Schnelzer, A., Türkmen, B., Lengyel, E., **Reuning, U.**, Graeff, H., Schmitt, M. & Magdolen, V. RFLP Molecular analysis of the urokinase-type plasminogen activator gene. *Methods in Molecular Medicine* 39: 299-306, 2001.

Magdolen, V., Arroyo de Prada, N., Sperl, S., Muehlenweg, B., Luther, T., Wilhelm, O. G., Magdolen, U., Graeff, H., Reuning, **U.** & Schmitt, M. Natural and synthetic inhibitors of the tumor-associated serine protease urokinase-type plasminogen activator. *Advances in Experimental Medicinal Biology* 477: 331-341, 2000.

Haubner, R., Wester, H. J., **Reuning, U.**, Senekowitsch-Schmidtke, R., Diefenbach, B., Kessler, H., Stöcklin, G. & Schwaiger, M. Radiolabeled  $\alpha v \beta 3$  integrin antagonists: a new class of tracers for tumor targetting. *Journal of Nuclear Medicine* 40: 1061-1071, 1999.

Marschall, C., Lengyel, E., Nobutoh, T., Braungart, E., Douwes, K., Simon, A., Magdolen, V., **Reuning, U.** & Degitz, K. UVB increases urokinase-type plasminogen activator receptor (uPAR) expression. *Journal of Investigative Dermatology* 113: 69-76, 1999.

Kuhn, W., Schmalfeldt, B., **Reuning, U.**, Berger, U., Ulm, K., Harbeck, N., Dettmar, P., Höfler, H., Jänicke, F., Schmitt, M. & Graeff, H. Prognostic significance of urokinase (uPA) and its inhibitor PAI-1 for survival in advanced ovarian carcinoma stage FIGO IIIc. *British Journal of Cancer* 79: 1746-1751, 1999.

**Reuning, U.**, Guerrini, L., Nishiguchi, T., Magdolen, V., Seibold, H., Schmitt, M. & Graeff, H. Rel transcription factors contribute to elevated urokinase expression in human ovarian carcinoma cells. *European Journal of Biochemistry* 138: 1-7, 1998.

Fischer, K., Lutz, V., Schmitt, M., Luther, T., Heiss, P., Graeff, H., Wilhelm, O., Magdolen, V. & **Reuning, U.** Urokinase induces proliferation of human ovarian cancer cells: characterization of structural elements required for growth factor function. *FEBS Letters* 438: 101-105, 1998.

**Reuning, U.**, Magdolen, V., Wilhelm, O., Fischer, K., Lutz, V., Graeff, H. & Schmitt, M. Multifunctional potential of the plasminogen activation system in tumor invasion and metastasis. *International Journal of Oncology* 13: 893-906, 1998.

Schmitt, M., Harbeck, N., Thomssen, C., Wilhelm, O., Magdolen, V., **Reuning, U.**, Ulm, K., Höfler, H., Jänicke, F. & Graeff, H. Clinical impact of the plasminogen activation system in tumor invasion and metastasis: Prognostic relevance and target for therapy. *Thrombosis & Haemostasis* 78: 285-296, 1997.

Ma, S. F., **Reuning, U.**, Garcia, J. G. N., Little, S. P., Bang, N. U. & Dixon, E. P. Thrombin induces thrombomodulin mRNA expression via the proteolytically activated thrombin receptor in cultured bovine smooth muscle cells. *Journal of Laboratory and Clinical Medicine* 129: 611-619, 1997.



Bürgele, M., Koppitz, M., Riemer, C., Kessler, H., König, B., Weidle, U., **Kellermann, J.**, Lottspeich, F., Graeff, H., Schmitt, M., Goretzki, L., **Reuning, U.**, Wilhelm, O. & Magdolen, V. Inhibition of the interaction of urokinase-type plasminogen activator (uPA) with its receptor (uPAR) by synthetic peptides. *Biological Chemistry* 378: 231-237, 1997.

**Reuning, U.**, Little, S. P., Dixon, E. P. & Bang, N. U. Mitogen crosstalk accompanying urokinase receptor expression in stimulated vascular smooth muscle cells. *FEBS Letters* 392: 125-128, 1996.

**Reuning, U.**, Wilhelm, O., Nishiguchi, T., Guerrini, L., Blasi, F., Graeff, H. & Schmitt, M. Inhibition of NF- $\kappa$ B-RelA expression by antisense oligodeoxynucleotides suppresses synthesis of urokinase-type plasminogen activator (uPA) but not its inhibitor PAI-1. *Nucleic Acids Research* 23: 3887-3893, 1995.

Schmalfeldt, B., Kuhn, W., **Reuning, U.**, Pache, L., Dettmar, P., Schmitt, M., Jänicke, F., Höfler, H. & Graeff, H. Primary tumor and metastasis in ovarian cancer differ in their content of urokinase-type plasminogen activator (uPA), its receptor (uPA-R), and inhibitors type-1 (PAI-1) and type-2 (PAI-2). *Cancer Research* 55: 3958-3963, 1995.

Schmitt, M., Wilhelm, O., Jänicke, F., Magdolen, V., **Reuning, U.**, Ohi, H., Moniwa, N., Kobayashi, H., Weidle, U. & Graeff, H. Urokinase-type plasminogen activator (uPA) and its receptor (CD87). A new target in tumor invasion and metastasis. *Journal of Obstetrics & Gynecology* 21: 151-165, 1995.

Wilhelm, O., **Reuning, U.**, Jänicke, F., Schmitt, M. & Graeff, H. The role of proteases in tumor invasion and metastasis: Prognostic impact and therapeutical challenge? *Onkologie* 17: 358-366, 1994.

**Reuning, U.**, Little, S. P., Dixon, E. P. & Bang, N. U. Effect of thrombin, the thrombin receptor activation peptide and other mitogens on vascular smooth muscle cell urokinase receptor mRNA levels. *Blood* 84: 3700-3708, 1994.

**Reuning, U.**, Little, S.P., Dixon, E. P., Johnstone, E. M. & Bang, N. U. Molecular cloning of cDNA for the bovine urokinase-type plasminogen activator receptor. *Thrombosis Research* 72: 59-70, 1993.

**Reuning, U.**, Preissner, K. T. & Müller-Berghaus, G. Two independent binding sites on monolayers of human endothelial cells are responsible for the interaction with coagulation factor VII and factor VIIa. *Thrombosis & Haemostasis* 69: 197-204, 1993.

**Reuning, U.** & Bang, N. U. Regulation of the urokinase-type plasminogen activator receptor on vascular smooth muscle cells is under the control of thrombin and other mitogens. *Arteriosclerosis & Thrombosis* 12: 1161-1170, 1992.

### **Invited book chapters and reviews**

**Reuning, U.**, Lössner, D., Wiltschi, B., Knoll, W. & Sinner, E. K. Integrin-functionalized artificial membranes as test platforms for monitoring small integrin ligand binding by surface plasmon-enhanced fluorescence spectroscopy. In: *Handbook of Biofunctional Surfaces*. Knoll, W., ed., Pan Stanford Publishing, chapter 20, pp. 705-745, 2013.

Schmitt, M., Magdolen, V., Mengele, K., **Reuning, U.**, Foekens, J., Diamandis, E. P. & Harbeck, N. Fibrinolytics, enzyme inhibitors, and cancer survival. *Haematologica*, 2006.

**Reuning, U.**, Schmitt, M., Lubber, B., Beck, V. & Magdolen, V. Methods to analyze the effects of the urokinase system on cancer cell adhesion, proliferation, migration, and signal transduction events. *Methods Mol Med*. 120: 427-440, 2006.

Mengele, K., Harbeck, N., **Reuning, U.**, Magdolen, V. & Schmitt, M. Tumor-associated prognostic factors of the plasminogen activator family: determination and clinical value of u-PA, t-PA, PAI-1, and PAI-2. *Haemostaseologie* 25: 301-310, 2005.

Arndt, T., Arndt, U., **Reuning, U.** & Kessler, H. Integrins in angiogenesis and implications for therapy. In *Cancer Therapy: Molecular Targets in Tumor-Host Interactions*; Weber, G. F., ed., Horizon Bioscience: Norfolk, U.K., pp 93-141, 2005.

Magdolen, V., Krüger, A., Sato, S., Nagel, J., Sperl, S., **Reuning, U.**, Rettenberger, P., Magdolen, U. & Schmitt, M. Inhibition of the tumor-associated urokinase-type plasminogen activation system: effects of high-level synthesis of soluble urokinase receptor in ovarian and breast cancer cells *in vitro* and *in vivo*. *Recent Results in Cancer Research* 162: 43-63, 2003.

Schmitt, M., Lienert, S., Prechtel, D., Sedlacek, E., Welk, A., **Reuning, U.**, Magdolen, V., Jänicke, F., Sweep, C.G.J. & Harbeck, N. The urokinase protease system as a target for breast cancer prognosis and therapy: technical considerations. *Journal of Clinical Ligand Assay* 25: 43–52, 2002.

Schmitt, M., Magdolen, V., **Reuning, U.** & Harbeck, N. uPA and PAI-1 in breast cancer. In: Tumor Markers. Physiology, Pathobiology, Technology, and Clinical Applications. Diamandis, E. P., Fritsche, H. A., Lilja, H., Chan, D. W., und Schwartz, M.K., eds., AACCC Press, Washington, DC, chapter 41, pp. 445-448, 2002.

Schmitt, M., Wilhelm, O. G., **Reuning, U.**, Krüger, A., Harbeck, N., Lengyel, E., Graeff, H., Gänsbacher, B., Kessler, H., Bürgle, M., Stürzebecher, J. & Magdolen, V. The urokinase plasminogen activator system as a novel target for tumour therapy. Fibrinolysis and Proteolysis 14: 114-132, 2000.

**Reuning, U.**, Hapke, S., Fischer, K., Lutz, V., Wilhelm, O., Magdolen, V., Graeff, H. & Schmitt, M. Die multifunktionale Rolle des Plasminogenaktivatorsystems bei Tumorinvasion und Metastasierung. In: Onkologie und Hämostasesystem. 41. Hamburger Symposion über Blutgerinnung 1998. Matthias, F.R. und Rasche, H., eds., Editiones Roche, Basel, pp. 39-59, 1998.

Schmitt, M., Thomssen, C., Jänicke, F., Höfler, H., Ulm, K., Magdolen, V., **Reuning, U.**, Wilhelm, O. & Graeff, H. Clinical significance of the serine protease uPA (urokinase) and its inhibitor PAI-1 as well as the cysteine proteases cathepsin B and L in breast cancer. In: Breast Cancer. Advances in Biology and Therapeutics. Calvo, F., Crépin, M., Magdelenat, H., eds., John Libbey Eurotext, Montrouge, pp. 191-200, 1996.

Oi, H., Magdolen, V., Lopens, A., Creutzburg, S., Rettenberger, P., Goretzki, L., **Reuning, U.**, Wilhelm, O., Schmitt, M. & Graeff, H. Bakterielle Produktion und Reinigung verschiedener humaner uPA-Rezeptorfragmente. In: Aktuelle Onkologie, Band 86. Aktuelle Aspekte der Tumorimmunologie in der Gynäkologie. Kreienberg, R., Grill, H.-J., Möbus, V., Koldovsky, U. (eds.), Zuckschwerdt-Verlag, München, Bern, Wien, New York, pp. 292-295, 1995.

Schmitt, M., Wilhelm, O., Magdolen, V., **Reuning, U.**, Goretzki, L., Thomssen, C., Kuhn, W., Weidle, U., Jänicke, F. & Graeff, H. Urokinase-Typ Plasminogenaktivator (uPA), sein Inhibitor PAI-1 und sein Rezeptor (CD87) sind an Tumorinvasion und Metastasierung solider maligner Tumoren beteiligt. In: Malignome und Hämostase. Spanuth, E., ed., Springer-Verlag, Berlin, pp. 167-188, 1995.

Schmitt, M., Lopens, A., Rettenberger, P., Goretzki, L., Wilhelm, O., **Reuning, U.**, Magdolen, V., Jänicke, F. & Graeff, H. Zelloberflächenassoziierte Proteasen als Faktoren der Tumorinvasion und Metastasierung. In: Gemeinsame Tagung der Bayerischen Gesellschaft für Geburtshilfe und Frauenheilkunde eV und der Österreichischen Gesellschaft für Gynäkologie und Geburtshilfe. Zusammenfassender Bericht, 14. bis 17. Juni 1995 Erlangen, München, pp. 60-64, 1995.

Schmitt, M., Jänicke, F., Wilhelm, O., Magdolen, V., **Reuning, U.**, Weidle, U. & Graeff, H. Clinical relevance of breast cancer-associated proteases in tumor cell invasion and metastasis. In: Hormone-Dependent Tumors. Basic Research and Clinical Studies. Jonat, W., Kaufmann, M., and Munk, K., eds., Karger-Verlag, Basel, pp. 73-87, 1995.

Schmitt, M., Wilhelm, O., Jänicke, F., Magdolen, V., **Reuning, U.**, Ohi, H., Moniwa, N., Kobayashi, H., Weidle, U. & Graeff, H. Urokinase-type plasminogen activator (uPA) and its receptor (CD87). A new target in tumor invasion and metastasis. Journal of Obstetrics and Gynaecology 21: 151-165, 1995.

Wilhelm, O., **Reuning, U.**, Jänicke, F., Schmitt, M. & Graeff, H. The role of proteases in tumor invasion and metastasis: Prognostic impact and therapeutical challenge? Onkologie 17: 358-366, 1994.

Wilhelm, O., Schmitt, M., Senekowitsch, R., Höhl, S., Wilhelm, S., Will, C., Rettenberger, P., **Reuning, U.**, Weidle, U., Magdolen, V. & Graeff, H. The urokinase/urokinase receptor system: a new target for cancer therapy? In: Prospects in Diagnosis and Treatment of Cancer. International Congress Series, Excerpta Medica 1050, Schmitt, M., Graeff, H., Kindermann, G., eds. Elsevier, Amsterdam, pp. 145- 156, 1994.