

List of Peer-Reviewed Micromet Publications (Without Meeting Abstracts)

Blinatumomab, MT110 and Other BiTE® Antibodies

Review Articles

- High response rates in cancer patients by a BiTE antibody
Zugmaier G, Baeuerle PA. *Drug Discovery and Development*. www.dddmag.com (2009)
- Antibodies engaging T cells for cancer therapy
Baeuerle, PA, Reinhardt C *Cancer Res* 69: 4941-4944 (2009)
- Immunotherapy of lymphoma and leukemia with T-cell engaging BiTE antibody blinatumomab
Nagorsen D et al. *Leukemia and Lymphoma* 50: 1-6 (2009)
- BiTE: teaching antibodies to engage T cells for cancer therapy
Baeuerle, PA et al. *Curr Opin Mol Therapeutics* 11: 22-30 (2009)
- BiTE: A new class of antibodies that recruit T cells
Baeuerle, PA et al. *Drugs of the Future* 33: 137-147 (2008)
- Can antibodies help cure cancer?
Baeuerle, PA *Drug Discovery & Development* 11: 32-35 (2008)
- Bispecific antibody constructs with unique anti-tumor activity
Wolf, E et al. *Drug Discovery Today* 10: 1237-1244 (2005)
- A revival of bispecific antibodies
Kufer, P et al. *Trends Biotechnol* 22: 238-244 (2004)
- The promise of bispecific antibodies
Kufer, P et al. *Discovery Medicine* 4: 325-332 (2004)
- Bispecific antibodies for polyclonal T cell engagement
Baeuerle, PA et al. *Curr Opin Mol Therapeutics* 5: 413-419 (2003)

BiTE® Anti-Tumor Activity – In Vivo

- Anti-tumor activity of an EpCAM/CD3-bispecific BiTE antibody during long-term treatment of mice in the absence of T cell energy and sustained cytokine release
Amann, M et al. *J Immunother* 32: 452-467 (2009)
- Potent control of tumor growth by CEA/CD3-bispecific single-chain antibody constructs that are

not competitively inhibited by soluble CEA

Lutterbuese, R et al. *J Immunother* 32: 341-352 (2009)

- Tumor regression in cancer patients by very low doses of a T cell engaging antibody
Bargou, R et al. *Science* 321: 974-977 (2008)
- Therapeutic window of an EpCAM/CD3-bispecific BiTE antibody in mice is determined by a subpopulation of EpCAM-expressing lymphocytes that is absent in humans
Amann, M et al. *Cancer Immunol Immunother* 58: 95-109 (2009)
- Therapeutic window of muS110, a single-chain antibody construct bispecific for murine EpCAM and murine CD3.
Amann, M et al. *Canc Res* 68: 143-151 (2008)
- Selective targeting and potent control of tumor growth using an EphA2/CD3 bispecific single-chain antibody construct
Hammond, A et al. *Canc Res* 67: 3927-3935 (2007)
- MT110: A novel bispecific single-chain antibody construct with high efficacy in eradicating solid tumors
Brischwein, K et al. *Mol Immunol* 43: 1129-43 (2006)
- T cell activation and B cell depletion in chimpanzees treated with a bispecific anti-CD19/anti-CD3 single-chain bispecific antibody construct
Schlereth, B et al. *Cancer Immunol Immunother* 55: 503-14 (2006)
- Potent inhibition of local and disseminated tumor growth in immunocompetent mice by a bispecific single-chain antibody construct specific for murine CD3
Schlereth, B et al. *Cancer Immunol Immunother* 55: 785-796 (2006)
- Eradication of tumors from a human colon cancer cell line and primary ovarian cancer metastases in immunodeficient mice by a single-chain Ep-CAM-/CD3-bispecific antibody construct
Schlereth, B et al. *Canc Res* 65: 2882-2889 (2005)
- T cell costimulus-independent and very efficacious inhibition of tumor growth in mice bearing subcutaneous or leukemic human B cell lymphoma xenografts by a CD19-/CD3-bispecific single-chain antibody construct
Dreier, T et al. *J Immunol* 170: 4397-4402 (2003)

BiTE[®] Anti-Tumor Activity - In Vitro

- Mode of cytotoxic action of T cell-engaging BiTE antibody MT110
Haas, C et al. *Immunobiol* 214: 441-453 (2009)
- Lysis of cancer cells by autologous T cells in breast cancer pleural effusates treated with anti-EpCAM BiTE antibody MT110
Witthauer, J et al. *Breast Canc Res Treatment* 117: 471-481 (2009)
- Combination of rituximab and blinatumomab (MT103/MEDI-538), a T cell-engaging CD19/CD3-

bispecific antibody, for highly efficient lysis of human B lymphoma cells

D'Argouges, S et al. *Leukemia Res* 33: 465-473 (2009)

- Strictly target cell dependent activation of T cells by bispecific single-chain antibody constructs of the BiTE class

Brischwein, K et al. *J Immunother* 30: 798-807 (2007)

- The effect of dexamethasone on polyclonal T cell activation and redirected target cell lysis as induced by a CD19/CD3-bispecific single-chain antibody construct

Brandl, C et al. *Cancer Immunol Immunother* 56: 1551-1563 (2007)

- CD19/CD3-bispecific antibody of the BiTE class is far superior to tandem diabody with respect to redirected tumor cell lysis

Molhoj, M et al. *Mol Immunol* 44: 1945-1953 (2007)

- Induction of regular cytolytic T cell synapses by bispecific single-chain antibody constructs

Offner, S et al. *Mol Immunol* 43: 763-71 (2006)

- Serial killing of tumor cells by cytotoxic T cells activated through a bispecific single-chain antibody construct

Hoffmann, P et al. *Intl J Cancer* 115: 98-104 (2005)

- Efficient tumor cell lysis by autologous, tumor-resident T lymphocytes in primary ovarian cancer samples by an Ep-CAM-/CD3-bispecific antibody

Wimberger, P et al. *Int J Cancer* 105: 241-248 (2003)

- Efficient elimination of chronic lymphocytic B cells by autologous T cells with a bispecific CD19xCD3 single-chain antibody

Löffler, A et al. *Leukemia* 17: 900-909 (2003)

- Extremely potent, rapid and costimulation-independent cytotoxic T cell response against B lymphoma cells catalyzed by a single-chain bispecific antibody.

Dreier, T et al. *Intl J Cancer* 100: 690-697 (2002)

- Minimal costimulatory requirements for T cell priming and TH1 differentiation: Activation of naive human T lymphocytes by tumor cells armed with bifunctional antibody constructs

Kufer, P et al. *Cancer Immunity* 1: 10 (2001)

Adecatumumab (MT201)

- Overexpression of EpCAM in uterine serous papillary carcinoma: Implications for EpCAM-specific immunotherapy with human monoclonal antibody adecatumumab (MT201)

El-Sawhi, K et al. *Molecular Cancer Therapeutics* in press (2010)

- An open-label, randomized phase II study of adecatumumab, a fully human anti-EpCAM antibody, as monotherapy in patients with metastatic breast cancer

Schmidt, M et al. *Annals Oncol* [epub ahead of print] in press (2010)

- Exchanging human Fc γ 1 with murine Fc γ 2a highly potentiates anti-tumor activity of anti-EpCAM antibody adecatumumab in a syngeneic mouse lung cancer model
Lutterbuese, P et al. *Cancer Immunol Immunother* 56: 459-468 (2007)
- A phase I study with adecatumumab, a human antibody directed against epithelial cell adhesion molecule, in hormone refractory prostate cancer patients
Oberneder, R et al. *Eur J Cancer* 42: 2530-2538 (2006)
- High concentrations of therapeutic antibodies are needed to compensate for inhibition of antibody-dependent cellular cytotoxicity by excess immunoglobulin G
Preithner, S et al. *Mol Immunol* 43: 1183-1193 (2006)
- Cellular and complement-dependent cytotoxicity of monoclonal antibody MT201 against human breast cancer cell lines
Prang, N et al. *Brit. J Cancer* 92: 342-349 (2005)
- Cytotoxic activity of novel monoclonal antibody MT201 against primary ovarian tumor cells
Xiang, W et al. *J Canc Res Clin Oncol* 129: 341-348 (2003)
- In-vitro and in-vivo activity of MT201, a fully human monoclonal antibody for pancarcinoma treatment
Naundorf, S et al. *Int J Cancer* 100: 101-110 (2002)

EpCAM Target

- EpCAM as target in cancer therapy
Gires, O, Baeuerle PA. *J Clin Oncol* (Commentary) in press (2010)
- The emerging role of EpCAM in cancer and stem cell signalling
Munz, M et al. *Canc Res*, 69: 5627-5629 (2009)
- EpCAM's renaissance
Baeuerle, PA, Ruettinger D. *Drug Discovery and Development* www.dddmag.com (2009)
- Nuclear signaling by tumour-associated antigen EpCAM
Maetzel, D et al. *Nat Cell Biol* 11: 162-171 (2009)
- On the abundance of EpCAM on cancer stem cells
Gires, O et al. *Nat Rev Cancer* 9:143 (2009)
- Rationale for treatment of colorectal cancer with EpCAM targeting therapeutics
Baeuerle, PA, Riethmuller, G in: *Tumor-associated antigens: identification, characterization, and clinical applications* (Gires O, Seliger B, eds.) Wiley-VCH, Weinheim, pp. 179-200 (2009)
- EpCAM (CD326) – finding its role in cancer (meeting review)
Baeuerle, PA, Gires, O *Brit J Cancer* 96: 417-423 (2007)

- Frequent high-level expression of immunotherapeutic target Ep-CAM in colon, stomach, prostate and lung carcinomas
Went, P et al. *Brit J Cancer* **94**:128-35 (2006)
- Overexpression of epithelial cell adhesion molecule (Ep-CAM) is an independent prognostic marker for reduced survival of patients with epithelial ovarian cancer
Spizzo, G et al. *Gynecol Oncol* **103**: 483-488 (2006)
- Expression of epithelial cellular adhesion molecule (Ep-CAM) in chronic (necro-) inflammatory liver diseases and hepatocellular carcinoma
Breuhahn, K et al. *Hepatol Res* **34**: 50-56 (2006)

MT203 and MT204

- Combined blockade of GM-CSF and IL-17 pathways potently suppresses chronic destructive arthritis in a TNF-alpha independent mouse model
Plater-Zyberk C et al. *Ann Rheum Dis* **68**: 721-728 (2009)
- LPS-induced lung inflammation is inhibited by neutralization of GM-CSF
Puljic, R et al. *Eur J Pharmacol* **557**: 230-235 (2007)
- GM-CSF neutralization suppresses inflammation and protects cartilage in acute streptococcal cell wall arthritis of mice
Plater-Zyberk, C et al. *Ann Rheum Dis* **66**: 452-457 (2007)
- A humanized monoclonal antibody against interleukin-2 that can inactivate the cytokine/receptor complex
Volkland, J et al. *Mol Immunol* **44**: 1754-1764 (2007)
- A human monoclonal IgG1 potently neutralizing the pro-inflammatory cytokine GM-CSF
Krinner, EM et al. *Mol Immunol* **44**: 916-925 (2007)
- A highly stable polyethylene glycol-conjugated human single-chain antibody neutralizing granulocyte/macrophage colony stimulating factor at low nanomolar concentration
Krinner, EM et al. *Protein Engineering, Design and Selection* **19**: 461-470 (2006)

D93

- Targeting of humanized antibody 93 to sites of angiogenesis and tumor growth by binding to multiple epitopes on denatured collagen
Freimark, B et al. *Mol Immunol* **44**: 3741-3750 (2007)
- Novel humanized antibody D93 inhibits angiogenesis and tumor growth by binding to cryptic sites in collagen: an extracellular matrix based approach
Pernasetti, F et al. *Intl J Oncol* **29**: 1371-1379 (2006)

New Antibody Constructs and Target Discovery

- Human IgG1 antibodies antagonizing activating NKG2D receptor on natural killer cells
Steigerwald, J et al. *mAbs* 1: 115-127 (2009)
- Myocardial gene expression of matched hibernating and control tissue from patients with ischemic left ventricular dysfunction
Zohlhnoefer, D et al. *Heart Vessel* 23: 230-242 (2008)
- A human cytokine/single-chain antibody fusion protein for simultaneous delivery of GM-CSF and IL-2 to Ep-CAM overexpressing tumor cells
Schanzer, J et al. *Cancer Immunity* 6: 4 (2006)
- Anti-tumor activity of a dual cytokine/single-chain antibody fusion protein for simultaneous delivery of GM-CSF and IL-2 to Ep-CAM expressing tumor cells
Schanzer, J et al., *J Immunother* 29: 477-488 (2006)
- Epithelial tight junction proteins as potential antibody targets for pan-carcinoma therapy
Offner, S et al. *Cancer Immunol Immunother* 54: 431-445 (2005)
- Rapamycin attenuates vascular wall inflammation and progenitor cell promoters after angioplasty
Nuehrenberg, TG et al. *FASEB J* 19: 246-248 (2005)
- Highly efficient antigen targeting to M-DC8⁺ dendritic cells via Fc γ RIII/CD16-specific antibody conjugates
Mende, I et al. *Int Immunol* 15: 539-547 (2005)
- Rapamycin effects transcriptional programs in smooth muscle cells controlling proliferative and inflammatory properties
Zohlhnoefer, D et al. *Mol Pharmacol* 65: 880-889 (2004)
- A bispecific single-chain antibody fusion protein for the targeted depletion of autoreactive B cells via unstimulated human T lymphocytes
Zocher, M et al. *Mol Immunol* 41: 511-518 (2004)
- A subset of human dendritic cells in the T cell area of mucosa-associated lymphoid tissue with high potential to produce TNF- α
De Baey, A et al. *J Immunol* 170: 5089-5094 (2003)
- Specific depletion in vitro and in vivo of autoreactive B lymphocytes by a recombinant fusion protein
Zocher, M et al. *Int Immunol* 15: 789-796 (2003)
- Combined transcriptome and genome analysis of single micrometastatic cells
Klein, CA et al. *Nature Biotech* 20: 387-392 (2002)
- Transcriptome analysis reveals a role of interferon- γ in human neointima formation
Zohlhnoefer, D et al. *Mol Cell* 7: 1059-1069 (2001)

- Phenotype and function of human dendritic cells derived from M-DC8⁺ monocytes
De Baey, A et al. *Eur J Immunol* 31: 1646-1655 (2001)
- Gene expression profiling of human stent-induced neointima by cDNA array analysis of microscopic specimens retrieved by helix cutter atherectomy
Zohlnhoefer, D et al. *Circulation* 103: 1396-1402 (2001)