



## CV Christian Schwöppe

### 1 - Personal Details

---

<b>Family name, first name</b>	Schwöppe, Christian
<b>Title</b>	Dr. rer. nat.
<b>Date of Birth</b>	18.08.1971 in Georgsmarienhütte
<b>Nationality</b>	German
<b>Institute / Clinic</b>	University Hospital Muenster, Department of Medicine A
<b>Address</b>	Albert-Schweitzer-Campus 1, D-48149 Münster, Germany
<b>Phone / E-Mail</b>	+49 251 83 56225 / christian.schwoeppe@uni-muenster.de
<b>Current Position</b>	Senior scientist, Research Group Leader, CSO at Anturec Pharmaceuticals GmbH

### 2 - Education and Academic Degrees

---

10/2002	Promotion (Biology), Dr. rer. nat. (Supervisor: Prof. Dr. rer. nat. Ekkehard Neuhaus)
2000 – 2002	PhD studies at the Dept. of Plant Physiology at the University of Kaiserslautern
1998 – 2000	PhD studies at the Dept. of Plant Physiology at the University of Osnabrück
02/1998	Diploma (Biology), Dipl. Biol. (Supervisor: Prof. Dr. rer. nat. Ekkehard Neuhaus)
02 – 07/1994	Studies abroad, University of Salzburg, Austria
1991 – 1998	Studies of biology, University of Osnabrück

### 3 – Employment History

---

- Since 10/2004 Scientific assistant at the Department of Medicine A at the University Hospital Münster (UKM)
- 01/2003 – 08/2004 Scientific assistant at the Dept. of Molecular Physiology of Plants at the University of Münster (WWU)
- 10/2002 – 12/2002 Scientific assistant at the Dept. of Plant Physiology at the University of Kaiserslautern

### 4 – Additional Information/Positions Memberships Honours

---

- Since 04/2018 Qualified person, deputy head of production and information officer in accordance with the German Arzneimittelgesetz (AMG) and Arzneimittel- und Wirkstoffherstellungsverordnung (AMWHV) within the GMP production project of the Department of Medicine A of the University Hospital Münster
- 03/2016 - 03/2018 Head of Production and Deputy Qualified Person of the GMP-production unit of the Department of Medicine A
- Since 12/2006 Responsible S1-project manager according to §15 GenTSV of the S1-genetic engineering facilities within the Department of Medicine A
- Since 2005 Project leader for animal experiments according to the German Tierschutzgesetz
- Since 2017 Member of the European- and German Qualified Person Association (EQPA, GQPA)

### 5 – Publications (selected original articles, 2009ff; for additional articles, see PubMed)

---

Berdel WE, Harrach S, Brand C, Brömmel K, Berdel AF, Hintelmann H, Schliemann C, **Schwöppe C**. Animal safety, toxicology, and pharmacokinetic studies according to the ICH S9 guideline for a novel fusion protein tTF-NGR targeting procoagulatory activity into tumor vasculature: are results predictive for humans? *Cancers*. 12: 3536. doi: 10.3390/cancers12123536, 2020

Schliemann C, Gerwing M, Heinzow H, Harrach S, **Schwöppe C**, Wildgruber M, Hansmeier AA, Angenendt L, Berdel AF, Stalman U, Berning B, Kratz-Albers K, Middelberg-Bisping K, Wiebe S, Albring J, Wilms C, Hartmann W, Wardelmann E, Krähling T, Heindel W, Gerss J, Bormann E, Schmidt H, Lenz G, Kessler T, Mesters RM, Berdel WE. First-in-class CD13-targeted tissue factor tTF-NGR in patients with recurrent or refractory malignant tumors: results of a phase I dose-escalation study. *Cancers*. 12: 1488. doi: 10.3390/cancers12061488, 2020

Brand C, Greve B, Bölling T, Eich HT, Willich N, Harrach S, Hintelmann H, Lenz G, Mesters RM, Kessler T, Schliemann C, Berdel WE\*, **Schwöppe C**\*. Radiation synergizes with antitumor activity of CD13-targeted tissue factor in a HT1080 xenograft model of human soft tissue sarcoma. *PLoS ONE*. 15: e0229271. doi: 10.1371/journal.pone.0229271, 2020 (\*, contributed equally and share senior authorship, respectively)

Höink A, Persigehl T, Kwiecien R, Balthasar M, Mesters RM, Berdel WE, Heindel W, Bremer C, **Schwöppe C**. Gadofosveset-enhanced MRI as simple surrogate parameter for real-time evaluation of the initial tumour vessel infarction by retargeted tissue factor tTF-NGR. *Oncol Lett*. 17: 270–280. doi: 10.3892/ol.2018.9638, 2019

Kessler, T, Baumeier A, Brand C, Grau M, Angenendt L, Harrach S, Stalman U, Schmidt LH, Gosheger G, Hades H, Andreou D, Dreischalück J, Lenz G, Wardelmann E, Mesters RM, **Schwöppe C**, Berdel WE, Hartmann W, and Schliemann C. Aminopeptidase N (CD13): Expression, prognostic impact, and use as therapeutic target for tissue factor induced tumor vascular infarction in soft tissue sarcoma. Transl Oncol. 11: 1271–1282. doi: 10.1016/j.tranon.2018.08.004, 2018

Sampedro A, Ramos-Torres A, **Schwöppe C**, Mück-Lichtenfeld C, Helmers I, Bort A, Diaz-Laviada Marturet I, Fernandez G. Hierarchical self-assembly of BODIPY dyes as a tool to improve the antitumor activity of capsaicin in prostate cancer. Angew Chem Int Ed Engl. Oct 16. doi: 10.1002/anie.201804783, 2018

Angenendt L, Reuter S, Kentrup D, Benk AS, Neumann F, Hüve J, Martens AC, **Schwöppe C**, Kessler T, Schmidt LH, Sauer T, Brand C, Mikesch J-H, Lenz G, Mesters RM, Müller-Tidow C, Hartmann W, Wardelmann E, Neri D, Berdel WE, Roesli C, Schliemann C. An atlas of bloodstream-accessible bone marrow proteins for site-directed therapy of acute myeloid leukemia. Leukemia 32(2): 510–519. doi: 10.1038/leu.2017.208, 2018

Schmidt LH, Brand C, Stucke-Ring J, Schliemann C, Kessler T, Harrach S, Mohr M, Görlich D, Marra A, Hillejan L, Müller-Tidow C, Lenz G, Wardelmann E, Wiewrodt R, Berdel WE\*, **Schwöppe C\***, Hartmann W\*. Potential therapeutic impact of CD13 expression in non-small cell lung cancer. PLOS ONE June 12: <https://doi.org/10.1371/journal.pone.0177146>2017, 2017 (\*, contributed equally and share senior authorship, respectively)

Schmidt LH, Stucke-Ring J, Brand C, Schliemann C, Harrach S, Muley T, Herpel E, Kessler T, Mohr M, Görlich D, Kreuter M, Lenz G, Wardelmann E, Thomas M, Berdel WE\*, **Schwöppe C\***, Hartmann W\*. CD13 as target for tissue factor induced tumor vascular infarction in small cell lung cancer. Lung Cancer 113: 121–127, 2017 (\*, contributed equally and share senior authorship, respectively)

Stucke-Ring J\*, Ronnacker J\*, Brand C, Hölzke C, Schliemann C, Kessler T, Schmidt LH, Harrach S, Mantke V, Hintelmann H, Hartmann W, Wardelmann E, Lenz G, Wunsch B, Müller-Tidow C, Mesters RM, **Schwöppe C\***, Berdel WE\*. Combinatorial effects of doxorubicin and retargeted tissue factor tTF-NGR by intratumoral entrapment of doxorubicin and proapoptotic increase of tumor vascular infarction. Oncotarget 7(50): 82458-82472, 2016 (\*, contributed equally and share senior authorship, respectively)

Brand C, Schliemann C, Ring J, Kessler T, Bäumer S, Angenendt L, Mantke V, Ross R, Hintelmann H, Spieker T, Wardelmann E, Mesters RM, Berdel WE\*, **Schwöppe C\***. NG2 proteoglycan as a pericyte target for anticancer therapy by tumor vessel infarction with retargeted tissue factor. Oncotarget 7(6): 6774-6789, 2016 (\*, contributed equally and share senior authorship)

Brand C, Fröhlich M, Ring J, Schliemann C, Kessler T, Mantke V, König S, Lücke M, Mesters RM, Berdel WE\*, **Schwöppe C\***. Tumor growth inhibition via occlusion of tumor vasculature induced by N-terminally PEGylated retargeted tissue factor tTF-NGR. Mol. Pharm 12: 3749-3758, 2015 (\*, contributed equally and share senior authorship)

Persigehl T, Ring J, Bremer C, Heindel W, Holtmeier R, Stypmann J, Claesener M, Hermann S, Schäfers M, Zerbst C, Schliemann C, Mesters RM, Berdel WE, **Schwöppe C**. Non-invasive monitoring of tumor-vessel infarction by retargeted truncated tissue factor tTF-NGR using multi-modal imaging. Angiogenesis 17(1): 235-46, 2014

**Schwöppe C**, Zerbst C, Fröhlich M, Schliemann C, Kessler T, Liersch R, Overkamp L, Holtmeier R, Stypmann J, Dreiling A, König S, Hölzke C, Lücke M, Müller-Tidow C, Mesters RM, Berdel WE. Anticancer therapy by tumor vessel infarction with polyethylene glycol (PEG) conjugated retargeted tissue factor. J. Med. Chem. 56(6): 2337-47, 2013

von Maltzahn G, Park JH, Lin KY, Singh N, **Schwöppe C**, Mesters R, Berdel WE, Ruoslahti E, Sailor MJ, Bhatia SN. Nanoparticles that communicate in vivo to amplify tumour targeting. Nature Materials 10(7): 545-52, 2011

**Schwöppe C**, Kessler T, Persigehl T, Liersch R, Hintelmann H, Dreischalück J, Ring J, Bremer C, Heindel W, Mesters RM, Berdel WE. Tissue-factor fusion proteins induce occlusion of tumor vessels. Thromb Res. 125: S143–S150. doi: 10.1016/S0049-3848(10)70033-5, 2010

Dreischalück J, **Schwöppe C**, Spieker T, Kessler T, Tiemann K, Liersch R, Schliemann C, Kreuter M, Kolkmeier A, Hintelmann H, Mesters RM, Berdel WE. Vascular infarction by subcutaneous application of tissue factor targeted to tumor vessels with NGR-peptides: activity and toxicity profile. Int J Oncol. 37: 1389–1397. doi: 10.3892/ijo\_00000790, 2010

Bieker R, Kessler T, **Schwöppe C**, Padró T, Persigehl T, Bremer C, Heindel W, Mesters RM, Berdel WE. Infarction of tumor vessels by NGR-peptide directed targeting of tissue factor. Experimental results and first-in-man experience. Blood 113(20): 5019-5027, 2009