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**Chefarzt Klinik für Medizinische Onkologie und Hämatologie, Kantonsspital  
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### **Homepage**

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### **Bereiche**

Medizinische Onkologie und Hämatologie

### **Position**

Chefarzt Klinik für Medizinische Onkologie und Hämatologie, Kantonsspital St.Gallen

Stellvertretender Leiter Comprehensive Cancer Center Kantonsspital St.Gallen

### **Frühere Positionen**

2011-2017: Kantonsspital St.Gallen, Klinik Onkologie/Hämatologie:  
Leitender Arzt Onkologie/Hämatologie

2009-2016: Aufbau und Leitung Clinical Trials Unit

2008-2010: Oberarzt mbF

Seit 2006: Leitung Experimentelle Onkologie

2006-2008: Leiter klinische Forschungsabteilung Onkologie/Hämatologie

2006–2008: Oberarzt

2006: Klinik für Onkologie/Hämatologie/Immunologie/ Rheumatologie, Universität Tübingen (D):  
Oberarzt Onkologie/Hämatologie

Ab 2000: Aufbau und Leitung Laborforschergruppe Antigenprozessierung und Proteasenbiologie  
1997–1998, 2000–2006: Assistenzarzt Onkologie/Hämatologie , Klinik für Rheumatologie und klinische Immunologie,

1996: Universitätsklinik Freiburg (D):  
Assistenzarzt Rheumatologie, klinische Immunologie

## **Forschungsgebiet**

Klinische Forschung: Multiples Myelom, Akute Leukämien, Non Hodgkin Lymphome  
Laborforschung: Proteasen-Biologie maligner Erkrankungen, Proteasom

## **Mitgliedschaften**

Deutsche Gesellschaft für Immunologie  
American Society for Hematology

## Publikationen (128)

Núñez N, Berner F, Friebel E, Unger S, Wyss N, Gomez J, Purde M, Niederer R, Porsch M, Lichtensteiger C, Kramer R, Erdmann M, Schmitt C, Heinzerling L, Abdou M, Karbach J, Schadendorf D, Zimmer L, Ugurel S, Klümper N, Hölzel M, Power L, Kreutmair S, Capone M, Madonna G, Cevhertas L, Heider A, Amaral T, Hasan Ali O, Bomze D, Dimitriou F, Diem S, Ascierto P, Dummer R, Jäger E, Driessen C, Levesque M, van de Veen W, Joerger M, Früh M, Becher B, Flatz L. Immune signatures predict development of autoimmune toxicity in patients with cancer treated with immune checkpoint inhibitors. *Med (N Y)* 2023

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Schwestermann J, Besse A, Driessen C, Besse L. Contribution of the Tumor Microenvironment to Metabolic Changes Triggering Resistance of Multiple Myeloma to Proteasome Inhibitors. *Front Oncol* 2022; 12:899272.

Lalive d'Epinau M, Güsewell S, Graf N, Mey U, Driessen C, Hitz F. Outcome of older myeloma patients in relationship to comorbidities and availability of second-generation novel agents in a real-life setting. *Hematol Oncol* 2022; 40:716-723.

Dimopoulos M, Richardson P, Bahlis N, Grosicki S, Cavo M, Beksac M, Legieć W, Liberati A, Goldschmidt H, Belch A, Magen H, Larocca A, Laubach J, Petrucci M, Reece D, White D, Mateos M, Špička I, Lazarou M, Berdeja J, Kaufman J, Jou Y, Ganetsky A, Popa McKiver M, Lonial S, Weisel K, Driessen C. Addition of elotuzumab to lenalidomide and dexamethasone for patients with newly diagnosed, transplantation ineligible multiple myeloma (ELOQUENT-1): an open-label, multicentre, randomised, phase 3 trial. *Lancet Haematol* 2022; 9:e403-e414.

Besse A, Kraus M, Mendez-Lopez M, Maurits E, Overkleeft H, Driessen C, Besse L. Immunoproteasome Activity in Chronic Lymphocytic Leukemia as a Target of the Immunoproteasome-Selective Inhibitors. *Cells* 2022; 11

Berner F, Niederer R, Luimstra J, Pop O, Jochum A, Purde M, Hasan Ali O, Bomze D, Bauer J, Freudenmann L, Marcu A, Wolfschmitt E, Haen S, Gross T, Dubbelaar M, Abdou M, Baumgaertner P, Appenzeller C, Cicin-Sain C, Lenz T, Speiser D, Ludewig B, Driessen C, Jörgen M, Früh M, Jochum W, Cozzio A, Rammensee H, Walz J, Neeffes J, Flatz L. Keratinocyte differentiation antigen-specific T cells in immune checkpoint inhibitor-treated NSCLC patients are associated with improved survival. *Oncoimmunology* 2021; 10:2006893.

Ludwig H, Weisel K, Jackson G, Garderet L, van de Donk N, Leleu X, Goldschmidt H, Beksac M, Nijhof I, Schreder M, Abildgaard N, Hájek R, Zojer N, Kastiris E, Broijl A, Schjesvold F, Boccadoro M, Caers J, Delforge M, Sonneveld P, Facon T, San-Miguel J, Avet-Loiseau H, Mohty M, Mateos M, Moreau P, Cavo M, Pawlyn C, Zweegman S, Engelhardt M, Driessen C, Cook G, Dimopoulos M, Gay F, Einsele H, Terpos E. COVID-19 vaccination in patients with multiple myeloma: a consensus of the European Myeloma Network. *Lancet Haematol* 2021; 8:e934-e946.

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Driessen C, Noppen C, Boonen G, Drewe J. Complete hematological and major molecular response through treatment with low-dose Interferon alpha 2a in high-risk polycythemia vera patient: a case report. *Clin Case Rep* 2021; 9:e04903.

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Schett A, Rothschild S, Curioni-Fontecedro A, Krähenbühl S, Früh M, Schmid S, Driessen C, Jörger M. Predictive impact of antibiotics in patients with advanced non small-cell lung cancer receiving immune checkpoint inhibitors : Antibiotics immune checkpoint inhibitors in advanced NSCLC. *Cancer Chemother Pharmacol* 2019; 85:121-131.

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Plummer C, Driessen C, Szabo Z, Mateos M. Management of cardiovascular risk in patients with multiple myeloma. *Blood Cancer J* 2019; 9:26.

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Xin B, Groll M, van der Marel G, Driessen C, Florea B, Kisselev A, Weyburne E, Janssens M, Du Y, Espinal C, Maurits E, Heinemeyer W, de Bruin G, Huber E, Overkleeft H. Structure-Based Design of Inhibitors Selective for Human Proteasome  $\beta$ 2c or  $\beta$ 2i Subunits. *J Med Chem* 2019; 62:1626-1642.

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Hasan Ali O, Lenz T, Driessen C, Früh M, Jörgen M, Cozzio A, Diem S, Fässler M, Bomze D, Berner F, Flatz L. Human leukocyte antigen variation is associated with adverse events of checkpoint inhibitors. *Eur J Cancer* 2018; 107:8-14.

Besse A, Overkleeft H, Maurits E, de Bruin G, Xin B, Bader J, Mendez-Lopez M, Kraus M, Besse L, Driessen C. Proteasome Inhibition in Multiple Myeloma: Head-to-Head Comparison of Currently Available Proteasome Inhibitors. *Cell Chem Biol* 2018

Downey-Kopyscinski S, Overkleeft H, Driessen C, Richardson P, Mitsiades C, Florea B, Bhatt A, Gautier M, Daily E, Kisselev A. An inhibitor of proteasome  $\beta$ 2 sites sensitizes myeloma cells to immunoproteasome inhibitors. *Blood Adv* 2018; 2:2443-2451.

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## Projekte (23)

**A Study to Evaluate Imetelstat (GRN163L) in Transfusion-Dependent Subjects with IPSS Low or Intermediate-1 Risk Myelodysplastic Syndrome (MDS) that is Relapsed/Refractory to Erythropoiesis-Stimulating Agent (ESA) Treatment**

*Klinische Forschung - 15.03.2021 - 07.04.2030*

*Geplant*

**A Phase 1b/2 Multicenter, Open-label, Expansion Study to Assess the Safety and Efficacy of AMG 420 as Monotherapy in Subjects With Relapsed and/or Refractory Multiple Myeloma**

*Klinische Forschung - 05.12.2019 - 23.12.2020*

*Automatisch geschlossen*

**Klinische Phase-I-Studie zur Beurteilung der Sicherheit, der pharmakokinetischen Profile sowie der Wirksamkeit von EDO-S101, einem First-in-Class alkylierenden HDA-Ci-Fusionsmolekül, bei rezidivierenden/refraktären hämatologischen Malignitäten**

*Klinische Forschung - 04.05.2016 - 01.01.2018*

*Automatisch geschlossen*

**Combination of ibrutinib and bortezomib followed by ibrutinib maintenance to treat patients with relapsed and refractory mantle cell lymphoma; a multicenter Phase I/II trial**

*Klinische Forschung - 09.09.2015 - 31.03.2021*

*Automatisch geschlossen*

**Improving the activity of proteasome inhibitors for potential treatment of**

*Grundlagenforschung - 31.03.2015 - 07.12.2018*

*Automatisch geschlossen*

**HOVON 103 / SAKK 30/10 protocol Tosedostat**

*Klinische Forschung - 19.03.2015 - 19.03.2015*

*Automatisch geschlossen*

**Etablierung eines humanisierten Maus-Myelom-Modells**

*Grundlagenforschung - 01.05.2014 - 31.12.2015*

*Automatisch geschlossen*

**In vitro proteotoxic synergism of nelfinavir and carfilzomib in solid cancer cell lines**

*Grundlagenforschung - 01.03.2013 - 31.12.2014*

*Automatisch geschlossen*

**Development and preclinical characterization of third-generation proteasome inhibitors**

*Klinische Forschung - 01.01.2013 - 31.12.2015*

*Automatisch geschlossen*

**In vitro proteotoxic synergism of nelfinavir and carfilzomib in solid cancer cell lines**

*Grundlagenforschung - 01.01.2013 - 31.12.2014*

*Automatisch geschlossen*

**Praeklinische Charakterisierung neuer Einsatzmöglichkeiten von Proteasominhibitoren zur Vorbereitung innovativer klinischer Investigator-initiiertes Studien in der Onkologie**

*Grundlagenforschung - 01.07.2012 - 30.06.2013*

*Automatisch geschlossen*

**SAKK 39/10**

*Klinische Forschung - 11.04.2012 - 11.06.2014*

*Automatisch geschlossen*

**An open, multicentric phase II trial to evaluate the efficacy and safety of Bendamustine, Lenalidomide (Revlimid®) and Dexamethasone (BRd) as 2nd-line therapy for patients with relapsed or refractory multiple myeloma**

*Klinische Forschung - 17.02.2012 - 17.07.2014*

*Automatisch geschlossen*

**Master Protokoll: A Program of randomized phase II multicenter studies to assess the tolerability and efficacy of the addition of new drugs to standard induction chemotherapy in AML and RAEB ≥ 66 years and very poor risk AML ≥ years**

*Klinische Forschung - 09.02.2012 - 09.02.2016*

*Automatisch geschlossen*

**Development of third-generation proteasome inhibitors for clinical applications**

*Klinische Forschung - 01.01.2012 - 31.12.2012*

*Automatisch geschlossen*

**Randomized study with a run-in feasibility phase to assess the added value of Clofarabine in combination with standard remission-induction chemotherapy in patients aged 18-65 years with previously untreated acute myeloid leukemia (AML) or myelodysplasia (MDS) RAEB with IPSS (größer gleich 1.5) A multicenter phase III trial**

*Klinische Forschung - 22.10.2010 - 31.12.2013*

*Automatisch geschlossen*

**Phase I trial of nelfinavir and bortezomib in advanced hematologic malignancies**

*Klinische Forschung - 15.06.2010 - 30.09.2011*

*Automatisch geschlossen*

**Phase III trial of combined immunochemotherapy with Fludarabine, Cyclophosphamide and Rituximab (FCR) versus Bendamustine and Rituximab (BR) in patients with previously untreated chronic lymphocytic leukaemia**

*Klinische Forschung - 31.05.2010 - 31.01.2015*

*Automatisch geschlossen*

**Rituximab, bendamustine and lenalidomide in patients with relapsed or refractory aggressive B-cell lymphoma not eligible for high dose chemotherapy. A phase I/II trial**

*Klinische Forschung - 02.12.2009 - 30.04.2012*

*Automatisch geschlossen*

**An open-label, multi-centre, dose escalating, phase I/II study to investigate the safety and tolerability of RO5072759 given as monotherapy in patients with CD 20+ malignant disease**

*Klinische Forschung - 16.07.2009 - 16.07.2013*

*Automatisch geschlossen*

**In vitro Untersuchung der Proteasen-Aktivität und der Wirkung von Proteasen-Inhibitoren bei hämatologischen Neoplasien**

*Klinische Forschung - 18.05.2009 - 18.05.2020*

*Automatisch geschlossen*

**Prospective evaluation of the predictive value of PET in patients with diffuse large B-cell-lymphoma under R-CHOP-14. A multicenter study**

*Klinische Forschung - 28.01.2008 - 28.09.2011*

*Automatisch geschlossen*

**Protocole multicentrique de traitement**

*Klinische Forschung - 01.11.2007 - 01.11.2015*

*Automatisch geschlossen*