



Dr. med. Sven Borchmann

Name Borchmann, Sven Dr. med.

Address Department I for Internal Medicine
University Hospital Cologne
Weyertal 115c, Building 74 (FLEX-1)
50931 Cologne, Germany

Academic education

2006-2011 Economics (B.A.), University of St. Gallen, Switzerland and University of Western Australia, Australia

2009-2015 Medicine, University of Cologne, Germany

Scientific degrees

2016 MD (Dr. med.), Supervisor: Prof. Dr. Elke Pogge von Strandmann, University of Cologne, Germany

2023 (expected) PhD (Dr. nat. med.), Supervisor: Prof. Dr. Dr. Roland Ullrich, University of Cologne, Germany

Scientific career

Since 2020 Department I for Internal Medicine, University of Cologne, Independent research group leader

Since 2018 German Hodgkin Study Group, University of Cologne, Head of Laboratory and Biobanking

Since 2015 Residency in Hematology and Medical Oncology (currently interrupted to focus on my academic research and spinoff company), Department I for Internal Medicine, University of Cologne (Director: Prof. Dr. Michael Hallek)

2017-2020 Postdoctoral Scientist / Fellow with Prof. Dr. Dr. Roland Ullrich, Department I for Internal medicine, University of Cologne

2017 Visiting Investigator with the Lymphoma Service (Chief: Prof. Anas Younes, MD), Memorial Sloan Kettering Cancer Center, New York

Since 2015 Trial Physician with the German Hodgkin Study Group, University of Cologne

Honors/ Awards/ Memberships

2020 Publication prize of the Else-Kröner-Fresenius Stiftung

2018 - 2020 Fellowship "Else Kröner Fresenius Forschungskolleg Clonal Evolution"

2017 Abstract achievement award 59th American Society of Hematology Meeting

2016 Abstract achievement award 58th American Society of Hematology Meeting

2016 Travel grant 21st Congress of the European Hematology Association

2009 Full stipend and membership "Studienstiftung des deutschen Volkes"

Most relevant publications

1. **Borchmann S**, Selenz C, Lohmann M, Ludwig H, Gassa A, Brägelmann J, Lohneis P, Meder L, Breid S, Nill M, Fassunke J, Gathof B, Alakus H, Kirsch D, Hokmat K, Büttner R, Reinhardt C, Hallek M, Ullrich R. Universally applicable tripartite antigenagnostic combination immunotherapy cures established poorly immunogenic tumors. **Journal of Immunotherapy of Cancer**. 2022; 10:e004781. *First description of a combination immunotherapy that is highly effective in the KP autochthonous lung cancer model.*
2. Sobesky S, Mammadova L, Cirillo M, Drees E, Mattlener J, Dörr H, Altmüller J, Shi Zhiyuan, Bröckelmann PJ, Weiss J, Kreissl S, Sasse S, Ullrich RT, Reinke S, Klapper W, Gerhard-Hartmann E, Rosenwald A, Roemer MGM, Nürnberg P, Hagenbeek A, Zijlstra JM, Pegtel DM, Engert A, Borchmann P, von Tresckow B, **Borchmann S**. Exhaustive circulating tumor DNA sequencing reveals the genomic landscape of Hodgkin lymphoma and facilitates ultrasensitive detection of minimal residual disease. **Med** 2021; 2(10): 1171-1193: e11. *Largest genomic landscape of Hodgkin lymphoma to date and development of assay to track*

somatic mutations in circulating tumor DNA for highly sensitive assessment of minimal residual disease.

3. Reinke S, Broeckelmann PJ, Iaccarino I, Garcia-Marquez M, **Borchmann S**, Jochims F, Kotrova M, Pal K, Brüggemann M, Hartmann E, Sasse S, Kobe C, Mathas S, Soekler M, Keller U, Bormann M, Zimmermann A, Richter J, Fuchs M, von Tresckow B, Borchmann P, Schlößer H, von Bergwelt-Baildon M, Rosenwald A, Engert A, Klapper W. Tumor and microenvironment response but no cytotoxic T-cell activation in classic Hodgkin lymphoma treated with anti-PD1. **Blood**. 2020; 136 (25): 2851–2863. *Development of novel model for mechanism of action of immune checkpoint inhibition in Hodgkin lymphoma based on re-biopsy program in clinical trial.*
4. **Borchmann S**. An atlas of the tissue and blood metagenome in cancer reveals novel links between bacteria, viruses and cancer. **Microbiome**. 2021; 9 (1), 1-22. *Large scale analysis of over 3000 whole genome sequencing datasets in which multiple associations between bacteria, viruses and cancer are described for the first time.*
5. **Borchmann S**, Cirillo M, Görden H, Sasse S, Kreissl S, Bröckelmann P, von Tresckow B, Fuchs M, Ullrich RT, Engert A. Pre-treatment Vitamin D deficiency impairs progression-free and overall survival in Hodgkin Lymphoma. **Journal of Clinical Oncology**. 2019;37(36):3528-3537. *Study showing for the first time that Vitamin D deficiency in Hodgkin lymphoma at diagnosis is associated with a survival disadvantage.*
6. **Borchmann S**, Joffe E, Moskowitz CH, Zelenetz AD, Noy A, Portlock CS, Gerecitano JF, Batlevi C, Caron P, Drullinsky P, Hamilton A, Hamlin Jr. PA, Horwitz SM, Kumar A, Matasar MJ, Moskowitz AJ, Owens CN, Palomba L, Younes A, Straus DJ. Active Surveillance for Newly Diagnosed Nodular Lymphocyte-Predominant Hodgkin Lymphoma. **Blood**. 2019;133(20): 2121-2129. *Highlighted as plenary paper with accompanying editorial by J.M. Connors. Introducing the idea of active surveillance into the care for nodular lymphocyte predominant Hodgkin lymphoma patients.*
7. **Borchmann S**, Müller H, Haverkamp H, Baues C, Marková J, Hüttmann A, Glunz A, Fuchs M, Engert A. Osteonecrosis as a treatment complication in Hodgkin Lymphoma patients: An analysis of the German Hodgkin Study Group (GHSG). **Leukemia**. 2019;3: 439-446. *First systematic analysis of osteonecrosis as a treatment complication in HL.*
8. **Borchmann S**, Hude I, Müller H, Haverkamp H, Bürkle C, Fuchs M, Borchmann P, Engert A. Thrombosis as a treatment complication in Hodgkin lymphoma patients: a comprehensive analysis of three prospective randomized German Hodgkin Study Group (GHSG) trials. **Annals of Oncology**. 2019;30(8): 1329-1334. *First systematic analysis of thrombosis as a treatment complication in HL.*
9. Hude I, Sasse S, von Tresckow B, Bröckelmann P, Engert A, **Borchmann S**. Leukocyte and eosinophil counts predict response to PD1 inhibition in relapsed or refractory classical Hodgkin Lymphoma patients. **British Journal of Haematology**. 2018;181(6): 837-840. *Development of a novel model to predict response to immune checkpoint inhibition in Hodgkin lymphoma based on clinical parameters.*
10. **Borchmann S**, Müller H, Engert A. Hodgkin Lymphoma has a seasonal pattern of incidence and mortality that depends on latitude. **Scientific Reports**. 2017:14805. *Investigation into seasonality effect in Hodgkin lymphoma across latitudes.*