



PD Dr. Maximilian Bösch

Pneumologie und Schlafmedizin, Medizinische Onkologie und Hämatologie ·
Dept. I

Kontakt

PD Dr. Maximilian Bösch
Rorschacherstrasse 95
9007 St. Gallen
Switzerland

T +41 71 494 7143
Maximilian.Boesch@kssg.ch

Homepage

www.h-och.ch/onkologie
www.kssg.ch/lungenzentrum

Orcid

0000-0002-0994-9883

Weitere Informationen

Doctor of Molecular Oncology
Venia Docendi for Experimental Internal Medicine and Hematology and Oncology
CAS ETH in Digital Health
CAS HSG in KMU Management

Bereiche

Pneumologie und Schlafmedizin, Medizinische Onkologie und Hämatologie

Forschungsgebiet

Immune-Oncology | Precision Medicine | Digital Health | Jazz Guitar

Mitgliedschaften

Lung Center, HOCH Health Ostschweiz
Medical Oncology and Hematology, HOCH Health Ostschweiz

Patente

Vav3 as a marker for cancer (WO2016066604A1)

Publikationen (39)

Baty F, Cvetković D, Bösch M, Bauer F, Martins N, Rossi R, Schoch O, Annaheim S, Brutsche M. Validation of a Textile-Based Wearable Measuring Electrocardiogram and Breathing Frequency for Sleep Apnea Monitoring. *Sensors (Basel)* 2024; 24

Bösch M, Baty F, Bilz S, Brutsche M, Rassouli F. Tracking Real-World Physical Activity in Chronic Obstructive Pulmonary Disease Over One Year: Results from a Monocentric, Prospective, Observational Cohort Study. *Int J Chron Obstruct Pulmon Dis* 2024; 19:1921-1929.

Bösch M, Baty F, Rassouli F, Brutsche M. What is disease modification and is this concept even helpful?. *Eur J Intern Med* 2024; 124:1-4.

Bösch M, Baty F, Rassouli F, Kowatsch T, Jörgen M, Früh M, Brutsche M. Non-pharmaceutical interventions to optimize cancer immunotherapy. *Oncoimmunology* 2023; 12:2255459.

Bösch M, Rassouli F, Baty F, Schwärzler A, Widmer S, Tinschert P, Shih I, Cleres D, Barata F, Fleisch E, Brutsche M. Smartphone-based cough monitoring as a near real-time digital pneumonia biomarker. *ERJ Open Res* 2023; 9

Barata F, Cleres D, Tinschert P, Shih I, Rassouli F, Bösch M, Brutsche M, Fleisch E. Nighttime continuous contactless smartphone-based cough monitoring for the ward: A validation study. *JMIR Form Res* 2023

Bösch M, Horvath L, Baty F, Pircher A, Wolf D, Spahn S, Straussman R, Tilg H, Brutsche M. Compartmentalization of the host microbiome: how tumor microbiota shapes checkpoint immunotherapy outcome and offers therapeutic prospects. *J Immunother Cancer* 2022; 10

Bösch M, Baty F, Albrich W, Flatz L, Rodriguez R, Rothschild S, Jörgen M, Früh M, Brutsche M. Local tumor microbial signatures and response to checkpoint blockade in non-small cell lung cancer. *Oncoimmunology* 2021; 10:1988403.

Braun F, Ferrario D, Brutsche M, Annaheim S, Bösch M, Baty F, Proust Y, Proenca M, Theurillat P, Bonnier G, Lemay M. Influence of Measurement Location on Reflectance Pulse Oximetry in Sleep Apnea Patients: Wrist vs. Upper Arm. *Annu Int Conf IEEE Eng Med Biol Soc* 2021; 2021:1297-1300.

Scheibelhofer S, Drothler S, Braun W, Braun R, Bösch M, Weiss R. Laser facilitated epicutaneous peptide immunization using dry patch technology. *Vaccine* 2021; 39:5259-5264.

Bauer M, Brunner P, Bösch M, Braun R, Braun W, Böhler C, Ling V, Pajenda S, Al Jalali V, Matzneller P, Lackner E, Zeitlinger M. Phase I Study to Assess Safety of Laser-Assisted Topical Administration of an Anti-TNF Biologic in Patients With Chronic Plaque-Type Psoriasis. *Front Med (Lausanne)* 2021; 8:712511.

Bösch M, Sykora M, Gasteiger S, Baty F, Brutsche M, Sopper S. OMIP 077: Definition of all principal human leukocyte populations using a broadly applicable 14-color panel. *Cytometry A* 2021

Scheibelhofer S, Drothler S, Braun W, Braun R, Bösch M, Weiss R. Laser-facilitated epicutaneous immunization of mice with SARS-CoV-2 spike protein induces antibodies inhibiting spike/ACE2 binding. *Vaccine* 2021; 39:4399-4403.

Bösch M, Baty F, Rothschild S, Tamm M, Jörgen M, Früh M, Brutsche M. Tumour neoantigen mimicry by microbial species in cancer immunotherapy. *Br J Cancer* 2021; 125:313-323.

Bösch M, Khan P, Geiser T, Gazdhar A, Knudsen L, Roux J, Tamm M, Brutsche M, Baty F, Hostettler K. Transcriptomic profiling reveals disease-specific characteristics of epithelial cells in idiopathic pulmonary fibrosis. *Respir Res* 2020; 21:165.

Baty F, Bösch M, Widmer S, Annaheim S, Fontana P, Camenzind M, Rossi R, Schoch O, Brutsche M. Classification of Sleep Apnea Severity by Electrocardiogram Monitoring Using a Novel Wearable Device. *Sensors (Basel)* 2020; 20

Wolf D, Reimer D, Hartmann G, Sopper S, Sprung S, Marth C, Wieser V, Zeimet A, Fiegl H, Bösch M. High RIG-I expression in ovarian cancer associates with an immune-escape signature and poor clinical outcome. *Int J Cancer* 2019

Fontana P, Martins N, Camenzind M, Bösch M, Baty F, Schoch O, Brutsche M, Rossi R, Annaheim S. Applicability of a Textile ECG-Belt for Unattended Sleep Apnoea Monitoring in a Home Setting. *Sensors (Basel)* 2019; 19

Schoch O, Baty F, Bösch M, Benz G, Niedermann J, Brutsche M. Telemedicine for Continuous Positive Airway Pressure in Sleep Apnea: A Randomized, Controlled Study. *Ann Am Thorac Soc* 2019

Bösch M, Baty F, Rumpold H, Sopper S, Wolf D, Brutsche M. Fibroblasts in cancer: Defining target structures for therapeutic intervention. *Biochim Biophys Acta Rev Cancer* 2019; 1872:111-121.

Fontana P, Martins N, Camenzind M, Rossi R, Baty F, Bösch M, Schoch O, Brutsche M, Annaheim S. Clinical Applicability of a Textile 1-Lead ECG Device for Overnight Monitoring. *Sensors (Basel)* 2019; 19

Hatina J, Bösch M, Sopper S, Kripnerova M, Wolf D, Reimer D, Marth C, Zeimet A. Ovarian Cancer Stem Cell Heterogeneity. *Adv Exp Med Biol* 2019; 1139:201-221.

Bösch M, Reimer D, Wolf D, Hatina J, Rössler J, Wiedemair A, Fiegl H, Marth C, Sopper S, Zeimet A. Evaluation of Vav3.1 as prognostic marker in endometrial cancer. *J Cancer Res Clin Oncol* 2018; 144:2067-2076.

Bösch M, Reimer D, Sopper S, Wolf D, Zeimet A. (Iso-)form Matters: Differential Implication of Vav3 Variants in Ovarian Cancer. *Oncologist* 2018; 23:757-759.

Bösch M, Spizzo G, Seeber A. Concise Review: Aggressive Colorectal Cancer: Role of Epithelial Cell Adhesion Molecule in Cancer Stem Cells and Epithelial-to-Mesenchymal Transition. *Stem Cells Transl Med* 2018; 7:495-501.

Cheng H, Brutsche M, Jochum W, Schneider T, Rodriguez R, Tarantino I, Pikor N, Novkovic M, Bösch M, Cupovic J, Onder L, Ludewig B. CCL19-producing fibroblastic stromal cells restrain lung carcinoma growth by promoting local antitumor T-cell responses. *J Allergy Clin Immunol* 2018

Bösch M, Knauer M, Ruhstaller T, Jochum W, Gastl G, Sopper S, Mörbe U, Novkovic M, Cheng H, Onder L, Ludewig B. Interleukin 7-expressing fibroblasts promote breast cancer growth through sustenance of tumor cell stemness. *Oncoimmunology* 2018; 7:e1414129.

Bösch M, Cosma A, Sopper S. Flow Cytometry: To Dump or Not To Dump. *J Immunol* 2018; 201:1813-1815.

Reimer D, Hackl H, Parson W, Altevogt P, Hatina J, Sopper S, Marth C, Wolf D, Bösch M, Zeimet A. Truncated isoform Vav3.1 is highly expressed in ovarian cancer stem cells and clinically relevant in predicting prognosis and platinum-response. *Int J Cancer* 2017; 142:1640-1651.

Bösch M, Hoflehner E, Wolf D, Gastl G, Sopper S. Harnessing the DNA Dye-triggered Side Population Phenotype to Detect and Purify Cancer Stem Cells from Biological Samples. *J Vis Exp* 2017

Bösch M, Sopper S, Zeimet A, Reimer D, Gastl G, Ludewig B, Wolf D. Heterogeneity of Cancer Stem Cells: Rationale for Targeting the Stem Cell Niche. *Biochim Biophys Acta* 2016; 1866:276–289.

Bösch M, Sopper S, Wolf D. Ionophore Antibiotics as Cancer Stem Cell-Selective Drugs: Open Questions. *Oncologist* 2016; 21:1291–1293.

Bösch M, Zeimet A, Fiegl H, Wolf B, Huber J, Klocker H, Gastl G, Sopper S, Wolf D. High prevalence of side population in human cancer cell lines. *Oncoscience* 2016; 3:85–87.

Bösch M, Wolf D, Sopper S. Optimized Stem Cell Detection Using the DyeCycle-Triggered Side Population Phenotype. *Stem Cells Int* 2015; 2016:1652389.

Bösch M, Zeimet A, Rumpold H, Gastl G, Sopper S, Wolf D. Drug Transporter-Mediated Protection of Cancer Stem Cells From Ionophore Antibiotics. *Stem Cells Transl Med* 2015; 4:1028–32.

Bösch M, Wolf D, Hatina J, Spoeck F, Parson W, Gastl G, Schmidt S, Reimer D, Zeimet A, Sopper S. The side population of ovarian cancer cells defines a heterogeneous compartment exhibiting stem cell characteristics. *Oncotarget* 2014; 5:7027–39.

Chiocchetti A, Klauck S, Lottspeich F, Kellermann J, Breitenbach M, Hintner H, Bauer J, Scheibe B, Poustka F, Freitag C, Wiemann S, Karl T, Bösch M, Haslinger D, Breitenbach-Koller L. Protein signatures of oxidative stress response in a patient specific cell line model for autism. *Mol Autism* 2014; 5:10.

Bösch M, Reimer D, Rumpold H, Zeimet A, Sopper S, Wolf D. DyeCycle Violet used for side population detection is a substrate of P-glycoprotein. *Cytometry A* 2012; 81:517–22.

Zeimet A, Pesta M, Wolf D, Marth C, Fiegl H, Müller-Holzner E, Hofstetter G, Concin N, Untergasser G, Rumpold H, Wiedemair A, Roessler J, Martowicz A, Bösch M, Sopper S, Reimer D, Hatina J. Ovarian cancer stem cells. *Neoplasma* 2012; 59:747–55.

Projekte (7)

Profiling of quitting trajectories during smoking cessation attempt (SMOKEPROFILE-Study)

Grundlagenforschung - 01.05.2021 - 30.12.2023

Automatisch geschlossen

Comparison of the effect of outdoor eccentric versus indoor concentric exercise training on physical capacity and quality of life in patients with advanced COPD (DOWNHILL-study)

Grundlagenforschung - 01.05.2021 - 30.04.2025

Laufend

Smartphone-Enabled Detection of Cough in COVID-19 (COCO): An Exploratory, Single-Center, Observational Cohort Study

Klinische Forschung - 03.12.2020 - 03.12.2020

Automatisch geschlossen

Predictive markers for checkpoint-based immunotherapy in advanced non-small cell lung cancer

Grundlagenforschung - 01.01.2020 - 31.12.2021

Abgeschlossen

The role of physical activity, malnutrition and sarcopenia for the prediction of acute exacerbations and the evolution of COPD assessment test (CAT) in patients with COPD

Klinische Forschung - 29.11.2018 - 30.06.2021

Abgeschlossen

Targeting breast cancer through manipulation of IL-7 producing tumor fibroblasts

Grundlagenforschung - 01.01.2016 - 31.12.2017

Automatisch geschlossen

Selection and education of heart-specific Th cells by thymic and lymph node stromal cells

Grundlagenforschung - 01.04.2013 - 31.03.2016

Abgeschlossen