



Vita

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Chefarzt Innere Medizin 2 / Kardiologie

Facharzt für Innere Medizin und Kardiologie
Notfallmedizin und Intensivmedizin
Interventionelle Kardiologie (DGK)
Kardiale Computertomographie (DGK)
Kardiovaskuläre Intensiv- und Notfallmedizin (DGK)
Master of Health Business Administration (MHBA)

Meilensteine Ausbildung Studium / Karriere

seit 2023

Chefarzt
Innere Medizin 2 / Kardiologie
Kreiskrankenhaus Bergstrasse, Heppenheim

2019 – 2023

Oberarzt
Medizinische Klinik
Universitätsklinikum Mannheim

Research Fellowship
Medical University of South Carolina, Charleston (USA)

2011 – 2019	Facharzt und Assistenzarzt I. Medizinische Klinik Universitätsklinikum Mannheim
2018 - 2020	Master of Health Business Administration Friedrich-Alexander-Universität Erlangen-Nürnberg
2004 - 2011	Studium der Humanmedizin Goethe-Universität, Frankfurt am Main Kapstadt (Südafrika) und Bern (Schweiz)

Qualifikationen (Facharzt- und Zusatzbezeichnungen)

Interventionelle Kardiologie (DGK)
Kardiale Computertomographie (DGK)
Facharzt für Kardiologie
Intensivmedizin
Facharzt für Innere Medizin
Notfallmedizin

Auszeichnungen und Ehrungen

Dietmar-Hopp-Stiftung gGmbH (Förderbetrag: 40.000 €)
Neue Gerinnungsmarker bei stabiler koronarer Herzkrankheit und akutem Herzinfarkt

Mitgliedschaften

American Heart Association

Deutsche Gesellschaft für Kardiologie (DGK)

- Arbeitsgruppe Interventionelle Kardiologie (AG 6)
- Arbeitsgruppe Cardio-CT (AG 24)
- Arbeitsgruppe Koronarer Fluss und myokardiale Perfusion (AG 27)
- German Chapter of Young Cardiologists (AG 38)
- Arbeitsgruppe Kardiopulmonale Reanimation (AG 42)

Deutsches Zentrum für Herz-Kreislauf-Forschung (DZHK)

European Society of Cardiology (ESC)

Radiological Society of North America (RSNA)

Veröffentlichungen und Publikationen

- Becker L, Alonso A, Kruska M, **Baumann S**, Grassl N, Lesch H, Eisele P, Sieburg T, Behnes M, Schupp T, Kaye H, Platten M, Duerschmied D, Szabo K, Akin I, Fastner C. Acute ischemic stroke and troponin elevation: update of the Mannheim clinical algorithm. Inn Med (Heidelb). 2024 Aug;65(8):830-839.
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- Rangus I, Pepic A, Vettorazzi E, Zeiher AM, Scheitz JF, Wegscheider K, Landmesser U, Endres M. Type 1 Myocardial Infarction in Patients With Acute Ischemic Stroke. *JAMA Neurol.* 2024 Jul 1;81(7):703-711
3. Sigl M, **Baumann S**, Könemann AS, Keese M, Schwenke K, Gerken ALH, Dürschmied D, Rosenkaimer S. Prognostic value of extended cardiac risk assessment before elective open abdominal aortic surgery. *Herz.* 2024 Jun;49(3):210-218
4. Weichsel L, Giesen A, André F, Renker M, **Baumann S**, Breitbart P, Beer M, Maurovitch-Horvat P, Szilveszter B, Vattay B, Buss SJ, Marwan M, Giannopoulos AA, Kelle S, Frey N, Korosoglou G. Comparison of Two Contemporary Quantitative Atherosclerotic Plaque Assessment Tools for Coronary Computed Tomography Angiography: Single-Center Analysis and Multi-Center Patient Cohort Validation. *Diagnostics (Basel).* 2024 Jan 9;14(2):154
5. Alonso A, Kraus J, Ebert A, Nikolayenko V, Kruska M, Sandikci V, Lesch H, Duerschmied D, Platten M, **Baumann S**, Szabo K, Akin I, Fastner C. Left atrial area index provides the best prediction of atrial fibrillation in ischemic stroke patients: results from the LAETITIA observational study. *Front Neurol.* 2023 Sep 27;14:1237550.
6. Ayx I, Froelich MF, **Baumann S**, Papavassiliu T, Schoenberg SO. Radiomics in Cardiac Computed Tomography. *Diagnostics (Basel).* 2023 Jan 13;13(2):307
7. Soschynski M, Hagen F, **Baumann S**, Hagar MT, Weiss J, Krauss T, Schlett CL, von Zur Mühlen C, Bamberg F, Nikolaou K, Greulich S, Froelich MF, Riffel P, Overhoff D, Papavassiliu T, Schoenberg SO, Faby S, Ulzheimer S, Ayx I, Krumm P. High Temporal Resolution Dual-Source Photon-Counting CT for Coronary Artery Disease: Initial Multicenter Clinical Experience. *J Clin Med.* 2022 Oct 11;11(20):6003
8. Tesche C, Bauer MJ, Straube F, Rogowski S, **Baumann S**, Renker M, Fink N, Schoepf UJ, Hoffmann E, Ebersberger U. Association of epicardial adipose tissue with coronary CT angiography plaque parameters on cardiovascular outcome in patients with and without diabetes mellitus. *Atherosclerosis.* 2022 Dec;363:78-85
9. Becher T, Schimanski R, Müller J, **Baumann S**, Klenantz S, Pötzsch B, Lossnitzer D. Plasma levels of thrombin and activated protein C in patients with acute myocardial infarction: An observational study. *Int J Cardiol Heart Vasc.* 2022 Jul 30;42:101097
10. Lesch H, Kruska M, Fastner C, **Baumann S**, Britsch S, Alonso A, Szabo K. From the brain to the heart and back again. *DGNeurologie* volume 5, pages 268–274 (2022)
11. **Baumann S**, Overhoff D, Tesche C, Korosoglou G, Kelle S, Nassar M, Buss SJ, Andre F, Renker M, Schoepf UJ, Akin I, Waldeck S, Schoenberg SO, Lossnitzer D. Morphologische und funktionelle Diagnostik der koronaren Herzkrankheit mittels Computertomographie. *Herz* 2022 Mar 4 (accepted)
12. Kruska M, Kolb A, Fastner C, Mildemberger I, Hetjens S, Kittel M, Bail K, Behnes M, Akin I, Borggrefe M, Szabo K, **Baumann S**. Coronary Artery Disease in Patients Presenting With Acute Ischemic Stroke or Transient Ischemic Attack and Elevated Troponin Levels. *Front Neurol.* 2022 Jan 13;12:781553.
13. Fastner C, Szabo K, Samartzi M, Kruska M, Akin I, Platten M, **Baumann S**, Alonso A. Treatment Standards for Direct Oral Anticoagulants in Patients with Acute Ischemic Stroke and Non-valvular Atrial Fibrillation: A Survey among German Stroke Units. *PLOS One* 2022 Feb 17 (accepted)
14. Overhoff D, Ansari U, Hohneck A, Tülümen E, Rudic B, Kuschyk J, Lossnitzer D, **Baumann S**, Froelich MF, Waldeck S, Akin I, Borggrefe M, Schoenberg SO, Papavassiliu T. Prediction of cardiac events with non-contrast

magnetic resonance feature tracking in patients with ischaemic cardiomyopathy. ESC Heart Fail. 2021 Nov 24 (accepted=

15. Ansari U, Janssen S, **Baumann S**, Borggrefe M, Waldeck S, Schönberg S, Papavassiliu T, Overhoff D. Sparse 3D contrast-enhanced whole-heart imaging for coronary artery evaluation. Herz. 2022 Jan 10 (accepted)

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27. **Baumann S**, Lossnitzer D, Akin I. Ischämietests: Violdiskutierte Technik. Dtsch Arztebl 2020; 117(9): A-456 / B-395 / C-379.
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33. **Baumann S**, Hirt M, Rott C, Özdemir GH, Tesche C, Becher T, Weiss C, Hetjens S, Akin I, Schoenberg SO, Borggreffe M, Janssen S, Overhoff D, Lossnitzer D. Comparison of Machine Learning Computed Tomography-Based Fractional Flow Reserve and Coronary CT Angiography-Derived Plaque Characteristics with Invasive Resting Full-Cycle Ratio. J Clin Med. 2020 Mar 6;9(3):714
34. Lossnitzer D, Chandra L, Rutsch M, Becher T, Overhoff D, Janssen S, Weiss C, Borggreffe M, Akin I, Pflieger S, **Baumann S**. Additional Value of Machine-Learning Computed Tomographic Angiography-Based Fractional Flow Reserve Compared to Standard Computed Tomographic Angiography. J Clin Med. 2020 Mar 3;9(3):676.
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36. **Baumann S**, Özdemir GH, Tesche C, Schoepf UJ, Golden JW, Becher T, Hirt M, Weiss C, Renker M, Akin I, Schoenberg SO, Borggreffe M, Haubenreisser H, Lossnitzer D, Overhoff D. Coronary CT angiography derived plaque markers correlated with invasive instantaneous flow reserve for detecting hemodynamically significant coronary stenosis. Eur J Radiol. 2020 Jan;122:108744.
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8 instantaneous wave free ratio to detect hemodynamically significant coronary stenosis. *Clin Res Cardiol.* 2020 Jun;109(6):735-745.

38. Huseynov A, Behnes M, Ansari U, **Baumann S**, Lossnitzer D, El-Battrawy I, Fastner C, Borggreffe M, Akin I. Optimal duration for dual antiplatelet therapy with COMBO dual therapy stent. *J Geriatr Cardiol.* 2019 Nov;16(11):840-843.

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41. Tesche C, Otani K, De Cecco CN, Coenen A, De Geer J, Kruk M, Kim YH, Albrecht M, **Baumann S**, Renker M, Bayer RR, Duguay T, Litwin S, Varga-Szemes A, Schienberg D, Yang DH, Kepka C, Persson, Nieman K, Schoepf UJ. Influence of Coronary Artery Calcium on the Diagnostic Performance of Machine Learning Coronary CT Angiography-Derived Fractional Flow Reserve - Results from the MACHINE Registry. *ACC Cardiovasc Imaging.* 2020 Mar;13(3):760-770.

42. Wichmann JL, Takx RAP, Nunez JH, Vliegenthart R, Otani K, Litwin SE, Morris PB, De Cecco CN, Rosenberg RD, Bayer RR 2nd, **Baumann S**, Renker M, Vogl TJ, Wenger NK, Schoepf UJ. Relationship Between Pregnancy Complications and Subsequent Coronary Artery Disease Assessed by Coronary Computed Tomographic Angiography in Black Women. *Circ Cardiovasc Imaging.* 2019 Jul;12(7):e008754.

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46. **Baumann S**, Chandra L, Skarga E, Renker M, Borggreffe M, Akin I, Lossnitzer D. Instantaneous wave-free ratio (iFR[®]) to determine hemodynamically significant coronary stenosis: A comprehensive review. *World J Cardiol.* 2018 Dec 26;10(12):267-277

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