

PD DR. MED. AMIN POLZIN, FESC

PERSONAL INFORMATION

Name: Amin Polzin
Born: 1983/06/06, Mönchengladbach
Citizenship: German
Homepage: <https://www.uniklinik-duesseldorf.de/patienten-besucher/klinikeninstitutezentren/klinik-fuer-kardiologie-pneumologie-und-angiologie/science/basic-science/cvrl-cardiovascular-research-laboratory/research-group-polzin>



Researcher
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Address: Division of Cardiology, Pulmonology and Vascular Medicine
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Germany

KEY FACTS

Peer-reviewed journal publications: 121 (as first author or last > 60)
Total citations: >710; h-index: 16
<https://www.ncbi.nlm.nih.gov/myncbi/amin.polzin.1/bibliography/public/>

EDUCATION

Medical Specialist for ...

2022 **Cardiovascular Sleep Medicine**
2022 **Vascular Medicine**
2022 **Cardiovascular Intensive Care and Emergency Medicine**
2021 **Specialized Cardiology for Adults with Congenital Heart Defects**
2019 **Heart Failure**
2018 **Interventional Cardiology**
2018 **Internal Intensive Care Medicine**
2016 **Cardiology, Internal Medicine, and Emergency Medicine** - Board certification

2010-2016 **Residency**
Department of Cardiology, Pulmonology, and Vascular Medicine, University Hospital Heinrich-Heine University Düsseldorf, Germany
2011 **Medical Doctorate** (Dr. med.), Institute of Pharmacology and Clinical Pharmacology, Heinrich-Heine University Düsseldorf, Germany - Thesis: "Release of sphingosine-1-phosphate from platelets in acute coronary syndrome"
2003-2009 **Medical School**
Heinrich-Heine University Düsseldorf, Germany

CURRENT POSITION

Since 2023 **Leading Physician** of the **Division for Heart Failure, Emergency and Rescue Medicine**
Since 2020 **Leading Physician** of the **Outpatient Cardiological Day Clinic**
Since 2020 **Medical Head** of the **Cardiological Patient Management**

Since 2018 **Medical Head of the Cardiovascular Laboratory Düsseldorf**
 Since 2017 **Leading Physician of the PFO-/LAA-/TASH Program**
 Since 2019 **Advanced Clinician Scientist** research program at the Cardiovascular Research Laboratory, Department of Cardiology, Pulmonology, and Vascular Medicine, University Hospital Heinrich-Heine University Düsseldorf
 Since 2017 **Senior Physician** of the Department of Cardiology, Pulmonology, and Vascular Medicine, University Hospital Heinrich-Heine University Düsseldorf, Germany
 Since 2016 **Associate Professor, *Facultas docendi* and *Venia legendi*** Internal Medicine, Heinrich-Heine University Düsseldorf, Germany

PREVIOUS POSITIONS

2021-2023 **Deputy Leading Physician of the Division for Structural Heart Disease**
 2020/2021 **Clinical Senior Lecturer, Imperial College London, National Heart and Lung Institute, London, UK** (Mentor: Prof. Dr. Jane Mitchell)
 2010-2016 **Resident Physician**
 Department of Cardiology, Pulmonology, and Vascular Medicine, University Hospital Heinrich-Heine University Düsseldorf, Germany
 2015-2017 **Thrombosis Expert Academy**
 2015 **Senior Clinician Scientist** - Forschungskommission grant of the Heinrich-Heine University Düsseldorf
 2015 **Postdoctoral Research Fellowship**
 Institute for Pathophysiology, University of Duisburg-Essen, West German Heart Center, Essen, Germany
 Mentor: Univ.-Prof. Dr. med. B. Levkau
 2010 **Research Fellowship**
 Institute of Pharmacology and Clinical Pharmacology
 Heinrich-Heine University Düsseldorf, Germany
 Mentors: Univ.-Prof. Dr. med. B. Rauch and Univ.-Prof. Dr. med. K. Schrör

PEER-REVIEWED JOURNAL PUBLICATIONS

Top 10 publications. *Indicates shared first or last authorship:

1. **Polzin A**, Zeus T, Schror K, Kelm M, Hohlfeld T. Dipyron (metamizole) can nullify the antiplatelet effect of aspirin in patients with coronary artery disease. *Journal of the American College of Cardiology* 2013;62:1725-1726.
2. **Polzin A**, Rassaf T, Bohm A, Luth A, Kleuser B, Zeus T, Kelm M, Kroemer HK, Schror K, Rauch BH. Aspirin inhibits release of platelet-derived sphingosine-1-phosphate in acute myocardial infarction. *International Journal of Cardiology* 2013;170:e23-4.
3. **Polzin A**, Piayda K, Keul P, Dannenberg L, Mohring A, Graler M, Zeus T, Kelm M, Levkau B. Plasma sphingosine-1-phosphate concentrations are associated with systolic heart failure in patients with ischemic heart disease. *Journal of Molecular and Cellular Cardiology* 2017;110:35-37.
4. Achilles A, Mohring A, Dannenberg L, Grandoch M, Hohlfeld T, Fischer JW, Levkau B, Kelm M, Zeus T, **Polzin A**. Dabigatran enhances platelet reactivity and platelet thrombin receptor expression in patients with atrial fibrillation. *Journal of Thrombosis and Haemostasis* 2017;15:473-476.
5. Piayda K, Mohring A, Dannenberg L, Gafoor S, Sievert H, Kelm M, Zeus T, **Polzin A**. Aspirin Versus Aspirin Plus Clopidogrel as Antithrombotic Treatment Following Transcatheter Aortic Valve Replacement With a Balloon-Expandable Valve. *JACC Cardiovascular Interventions* 2018; 10(15):1598-1599.

6. Piayda K, Zeus T, Sievert H, Kelm M, **Polzin A**. Subclinical leaflet thrombosis. *Lancet*. 2018;391(10124):937-938.
7. Keul P, **Polzin A**, Kaiser K, Gräler M, Dannenberg L, Daum G, Heusch G, Levkau B. Potent anti-inflammatory properties of HDL in vascular smooth muscle cells mediated by HDL-S1P and their impairment in coronary artery disease due to lower HDL-S1P: a new aspect of HDL dysfunction and its therapy. *FASEB J*. 2018 Aug 21:fj201801245R.
8. **Polzin A**, Dannenberg L, Wolff G, Helten C, Achilles A, Hohlfeld T, Zeus T, Kelm M, Massberg S, Petzold T. Non-vitamin K oral anticoagulants (NOAC) and the risk of myocardial infarction: Differences between factor IIa and factor Xa inhibition? *Pharmacol Ther*. 2018 Oct 12.
9. Petzold T, Thienel M, Dannenberg L, Mourikis P, Helten C, Ayhan A, M'Pembele R, Achilles A, Trojovský K, Konsek D, Zhang Z, Regenauer R, Pircher J, Ehrlich A, Lüsebrink E, Nicolai L, Stocker T, Brandl R, Rösenthaler F, Spannagl M, Mayr C, Schiller H, Hoffmann T, Levkau B, Hohlfeld T, Zeus T, Schulz C, Kelm M, Massberg S, **Polzin A**. Rivaroxaban reduces platelet activation and arterial thrombosis through a direct antiplatelet mechanism. *Circ Res*. 2020 Feb 14;126(4):486-500.
10. **Polzin A***, Dannenberg L*, Benkhoff M*, Barcik M, Helten C, Mourikis P, Ahlbrecht S, Wildeis L, Ziese J, Zikeli D, Metzen D, Hu H, Baensch L, Schröder NH, Keul P, Weske S, Wollnitzke P, Duse D, Saffak S, Cramer M, Bönner F, Müller T, Gräler MH, Zeus T, Kelm M, Levkau B. Revealing concealed cardioprotection by platelet Mfsd2b-released S1P in human and murine myocardial infarction. *Nat Commun*. 2023 Apr 26;14(1):2404.

AWARDS AND FUNDING

Awards:

2021	Best Abstract Prize for Clinical Lipid Research of the German Cardiac Society (Deutsche Gesellschaft für Kardiologie)
2020	Edens Prize for outstanding scientific research, Heinrich-Heine University Düsseldorf
2019	Hans-und-Gertie-Fischer Award for the best original work from a German-speaking country
2017	Best Poster Prize of the European Society of Cardiology
2015	August-Wilhelm-und-Lieselotte-Becht Award of the Deutsche Herzstiftung
2013	Hans-und-Gertie-Fischer Award for the best original work from a German-speaking country

Funding:

2021	Deutsche Forschungsgemeinschaft (DFG) / German Research Foundation research grant
2021	Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Junior Clinician Scientist – research fellow Dr. med. Philipp Mourikis)
2020	Deutsches Zentrum für Herzkreislauf-Forschung (DZHK) / German Center for Cardiovascular Research associate fellowship program
2020	Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Junior Clinician Scientist – research fellow Dr. med. Carolin Helten)
2019	Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Senior Clinician Scientist – research fellow Dr. med. Lisa Dannenberg)
2019	Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Advanced Clinician Scientist – PD Dr. med. Amin Polzin)
2019	Deutscher Akademischer Austauschdienst (DAAD) / German Academic Exchange Service research support
2018	Sonderforschungsbereich (SFB) / Collaborative Research Center (CRC) principal investigator grant

- 2018 Deutsche Forschungsgemeinschaft (DFG) / German Research Foundation research grant
- 2016 Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Junior Clinician Scientist – research fellow Dr. med. Lisa Dannenberg)
- 2015 Forschungskommission grant of the Heinrich-Heine University Düsseldorf (Senior Clinician Scientist – Dr. med. Amin Polzin)

Memberships:

Fellow of the European Society of Cardiology (FESC)

Deutsche Gesellschaft für Kardiologie (German Cardiac Society)

Deutsche Gesellschaft für Pharmakologie (German Society of Pharmacology)