

CURRICULUM VITAE – DR. MED. MOHAMED AYOUB

PERSONAL



Address Dr. Neuhäuser-Straße 15
32545 Bad Oeynhausen, Germany

Date of Birth 02 January 1986

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Mail ayoub@hotmail.de

Citizenship German

CURRENT POSITION

**Director CTO and High-Risk Angioplasty,
interventional cardiology (>350 CTO PCI per year)**
University Heart Center NRW – Bad Oeynhausen, Germany

EDUCATION 2005 – 2011

Ludwig-Maximilians-University, Munich
Study of Medicine

- 11/2011: 2. section of the medical exam
- 08/2010 – 07/2011: practical year
- 09/2007: 1. section of the medical exam

QUALIFICATIONS

- Interventional Cardiology license
- German and Swiss professional work license obtained in 04/2012 and 09/2015
- Qualified as specialist for internal medicine and general cardiology (03/2019)
- Rotablation Atherectomy Certificate

- Rotational Atherectomy Certificate
- Stingray Certificate
- Transcatheter Aorticvalve Replacement (TAVR)
- Emergency Medicine license
- ACLA (Advanced Cardiovascular Life Support)
- PALS (Pediatric Advanced Life Support)

CLINICAL EXPERIENCE

University Heart Center Bad Krozingen, Germany

02/2018 – 09/2021

- Interventional Cardiology Unit, CTO and High Risk Angioplasty Division (> 1200 CTO PCI and > 2500 PCI performed)
- Echocardiography
- General Cardiology Unit
- Cardiac Intensive Care Unit
- Emergency Medical Service

08/2018 – 12/2018

10/2016 – 02/2017

04/2015 – 09/2016

01/2015 – 12/2018

04/2014 – 03/2015

University Spital Basel

- Internal Medicine and Emergency Medicine
Resident

01/2013 – 03/2014

University Heart Center Bad Krozingen

Resident

04/2012 – 12/2012

Ultrasound, Prof. Dr. med. Wolfram Knapp, Munich

Resident

05/2011 – 04/2012

Hernia Center, Dr. Muschaweck, Munich

Resident

SCIENTIFIC ACTIVITY

PUBLICATIONS (Clinical research in interventional cardiology with the focus on PCI for complex coronary artery disease (CAD) and chronic total coronary occlusion (CTO) since 07/2013)

- **Mohamed Ayoub, MD**, Péter Tajti, MD, Ibrahim Akin, MD, Michael Behnes, MD, Tobias Schupp, MD, Jan Forner, MD, Hazem Omran, MD, Dirk Westermann, MD, Volker Rudolph, MD, and Kambis Mashayekhi, MD, Safety and

Long-Term Outcomes of Rotablation in Patients with Reduced (<50%) Left Ventricular Ejection Fraction (rEF) (The Rota-REF Study). *Clin Med.* 2023 Aug 30;12(17):5640. doi: 10.3390/jcm12175640.

- **Mohamed Ayoub, MD**, Selina Lutsch, Michael Behnes, MD, Muharrem Akin, MD, Tobias Schupp, MD, Ibrahim Akin, MD, Volker Rudolph, MD, Dirk Westermann MD, and Kambis Mashayekhi, MD, Sex-Based Differences in Rotational Atherectomy and Long-Term Clinical Outcomes. *J Clin Med.* 2023 Jul 31;12(15):5044. doi: 10.3390/jcm12155044.
- **Mohamed Ayoub MD**; Noé Corpataux MD; Michael Behnes MD; Tobias Schupp MD; Jan Forner MS; Ibrahim Akin MD; Franz-Josef Neumann MD; Dirk Westermann, MD and Volker Rudolph MD; Kambis Mashayekh MD. Safety and efficiency of rotational atherectomy in chronic total coronary occlusion - 1-year clinical outcomes of an observational registry. *J Clin Med.* 2023 May 17;12(10):3510. doi: 10.3390/jcm12103510.
- **Mohamed Ayoub MD**; Kambis Mashayekh MD; Michael Behnes MD; Tobias Schupp MD; Jan Forner MS; Ibrahim Akin MD; Franz-Josef Neumann MD; Dirk Westermann MD; Volker Rudolph MD; Aurel Toma MD. Prognostic value of different levels of uric acid in patients with coronary chronic total occlusion undergoing percutaneous coronary intervention.
- Jonas Rusnak, Tobias Schupp, Kathrin Weidner, Marinela Ruka, Sascha Egner-Walter, Jan Forner, Thomas Bertsch, Maximilian Kittel, Kambis Mashayekhi, Péter Tajti, **Mohamed Ayoub**, Michael Behnes, Ibrahim Akin. Impact of Lactate on 30-Day All-Cause Mortality in Patients with and without Out-of-Hospital Cardiac Arrest Due to Cardiogenic Shock. *J Clin Med.* 2022 Dec; 11(24): 7295. Published online 2022 Dec 8. doi: 10.3390/jcm11247295
- **Mohamed Ayoub, MD**, Peter Tajti, MD, Miroslaw Ferenc, MD, Ibrahim Akin, MD, Michael Behnes, MD, Franz-Josef Neumann, MD, Kambis Mashayekhi, MD. Feasibility and Outcome of the ROTAPRO System in Treating Severely Calcified Coronary Lesions: The ROTAPRO Study. Accepted for publishing in *Cardiology Journal*.
- Tobias Rheude, Himanshu Rai, Gert Richardt, Abdelhakim Allali, Mohamed Abdel-Wahab, Dmitriy S Sulimov, Kambis Mashayekhi, **Mohamed Ayoub**, Florim Cuculi, Matthias

Bossard, Sebastian Kufner, Erion Xhepa, Adnan Kastrati, Massimiliano Fusaro, Michael Joner, Robert A Byrne, Salvatore Cassese. Super high-pressure balloon versus scoring balloon to prepare severely calcified coronary lesions: the ISAR-CALC randomised trial. *EuroIntervention*. 2021 Aug 27;17(6):481-488. doi: 10.4244/EIJ-D-20-01000.

- Gutiérrez-Chico JL, Cortés C, **Ayoub M**, Lauer B, Otto S, Reisbeck B, Reisbeck M, Schulze C, Mashayekhi K. Subintimal shift as mechanism for side-branch occlusion in percutaneous treatment of chronic total occlusions with bifurcation lesions. *Cardiol J*. 2021 Aug 12. doi: 10.5603/CJ. a2021.0079. Online ahead of print.
- Peter Tajti, **Mohamed Ayoub**, Thomas Nuehrenberg, Mirosław Ferenc, Michael Behnes, Heinz Joachim Buettner, Franz-Josef Neumann, Kambis Mashayekhi. Association of Prolonged Fluoroscopy Time with Procedural Success of Percutaneous Coronary Intervention for Stable Coronary Artery Disease with and without Chronic Total Occlusion. *J Clin Med*. 2021 Apr 3;10(7):1486. doi: 10.3390/jcm10071486.
- Peter Tajti, **Mohamed Ayoub**, Thomas Nuehrenberg, Kambis Mashayekhi. Coronary physiology and percutaneous intervention managed with gadolinium road mapping and intravascular ultrasound in hyperthyroidism. *Cardiol J*. 2021;28(4):642-645. doi: 10.5603/CJ.a2021.0027. Epub 2021 Mar 1.
- Christian Roth, Georg Goliash, Stefan Aschauer, Clemens Gangl, **Mohamed Ayoub**, Klaus Distelmaier, Bernhard Frey, Irene M Lang, Rudolf Berger, Kambis Mashayekhi, Mirosław Ferenc, Christian Hengstenberg, Aurel Toma. Impact of treatment strategies on long-term outcome of CTO patients. *Eur J Intern Med*. 2020 Jul;77:97-104. doi: 10.1016/j.ejim.2020.03.008. Epub 2020 Mar 14.
- Winter MP, Goliash G, Bartko P, Siller-Matula J, **Ayoub M**, Aschauer S, Distelmaier K, Gebhard C, Mashayekhi K, Ferenc M, Hengstenberg C, Toma A. Left Main Coronary Artery Disease and Outcomes after Percutaneous Coronary Intervention for Chronic Total Occlusions. *J Clin Med*. 2020 Mar 30;9(4):938. doi: 10.3390/jcm9040938. PMID: 32235416; PMCID: PMC7231249
- Peter Tajti, **Mohamed Ayoub**, Nicolaus Loffelhardt, Kambis Mashayekhi. Management of Microcatheter Fracture in Complex Percutaneous Coronary Intervention with Laser Atherectomy. *diovasc Revasc Med*. 2021

Jul;28S:208-211. doi: 10.1016/j.carrev.2020.12.017. Epub 2020 Dec 16.

- Enrico Poletti, Lorenzo Azzalini, **Mohamed Ayoub**, Soledad Ojeda, Carlo Zivelonghi, Alessio La Manna, Barbara Bellini, Adrián Lostalo, Aurora Luque, Giuseppe Venuti, Matteo Montorfano, Pierfrancesco Agostoni, Manuel Pan, Mauro Carlino, Kambis Mashayekhi. Conventional vascular access site approach versus fully trans-wrist approach for chronic total occlusion percutaneous coronary intervention: a multicenter registry. *Catheter Cardiovasc Interv.* 2020 Jul;96(1):E45-E52. doi: 10.1002/ccd.28513. Epub 2019 Oct 9.
- Lorenzo Azzalini, MD, PhD, MSc; Enrico Poletti, MD; **Mohamed Ayoub, MD**; Soledad Ojeda, MD, PhD; Carlo Zivelonghi, MD; Alessio La Manna, MD; Barbara Bellini, MD; Adrián Lostalo, MD; Aurora Luque, MD; Giuseppe Venuti, MD; Matteo Montorfano, MD; Pierfrancesco Agostoni, MD, PhD; Manuel Pan, MD, PhD; Mauro Carlino, MD; Kambis Mashayekhi, MD. Coronary artery perforation during chronic total occlusion percutaneous coronary intervention: epidemiology, mechanisms, management, and outcomes. *EuroIntervention* 2019;15:e804-e811. DOI: 10.4244/EIJ-D-19-00282
- Georg Goliash, Max-Paul Winter, **Mohamed Ayoub**, Philipp E Bartko, Catherine Gebhard, Kambis Mashayekhi, Miroslaw Ferenc, Heinz Joachim Buettner, Christian Hengstenberg, Franz-Josef Neumann, Aurel Toma. A Contemporary Definition of Periprocedural Myocardial Injury After Percutaneous Coronary Intervention of Chronic Total Occlusions. *JACC Cardiovasc Interv.* 2019 Oct 14;12(19):1915-1923. doi: 10.1016/j.jcin.2019.06.053.
- Mashayekhi K, Nührenberg T, Toma A, Gick M, Ferenc M, Hochholzer W, Comberg T, Rothe J, Valina C, Löffelhardt N, **Ayoub M**, Zhao M, Bremicker J, Jander N, Minners J, Ruile P, Behnes M, Akin I, Schäufele T, Neumann F-J, Büttner H. A Randomized Trial to Assess Regional Left Ventricular Function After Stent Implantation in Chronic Total Occlusion. *J Am Coll Cardiol Intv.* 2018 Oct, 11 (19) 1982-1991.
- Miroslaw Ferenc, **Mohamed Ayoub**, Hans-Joachim Büttner, Michael Gick, Thomas Comberg, Jürgen Rothe, Christian M Valina, Willibald Hochholzer, Franz-Josef Neumann. Long-term outcomes of routine versus provisional T-stenting for de novo coronary bifurcation lesions: five-year results of the Bifurcations Bad Krozingen

I study. EuroIntervention. 2015 Dec;11(8):856-9. doi: 10.4244/EIJV11I8A175.

PHD

- 02/2009 – 02/2010: German Heart Center Technical University Munich
- ISAR REACT 3A Study: “Reduction of the peri-interventional heparin dose in elective coronary patients”. Published by the library of the TU Munich: <http://nbn-resolving.de/urn/resolver.pl?urn:nbn:de:bvb:91-diss-20120712-1094678-1-3>
- Quantitative evaluation of coronary findings in the QCA core laboratory of the clinical research center (ISAR group), German Heart Center Munich

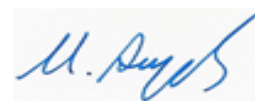
Academic degree in medicine (Dr. med.)

- 08/2012

LIVE CASE OPERATOR EXPERIENCE

- CHIP Austria Summit 2019, Vienna
- 5th Amsterdam Symposium CTO
- CTO Graz 2020
- CTO LIVE AID 2020
- Turin CTO Summit 2020
- CTO LIVE AID 2021
- EUROPCR 2021
- Swiss CTO Summit 2021
- TCT 2021
- AGIK Web PCI 2021
- ML CTO 2022 and
- Swiss CTO Connect 2023
- Turin CTO Summit 2023
- Istanbul CTO 2023
- ML CTO 2023
- Euro CTO 2023
- Swiss CTO 2023

Dr. med. Mohamed Ayoub



Bad Oeynhausen, 21 January 2024