

**Ausgewählte wissenschaftliche Publikationen Schwerpunkt Klinische Elektrophysiologie seit 2014**

- 1) **Vollmann D, Woronowicz S, Kmiec L, Jung K, Zenker D, Seegers J, Sossalla S, Dorenkamp M, Sohns C, Lüthje L, Hasenfuss G, Zabel M.** Passive-fixation lead failure rates and long-term patient mortality in subjects implanted with Sprint Fidelis electrodes. *Europace*. 2014; 16:258-64
- 2) Kuschyk J, Milasonovic G, Köhlkamp V, Roberts P, **Zabel M**, Molin F, Shorofsky S, Stromberg K, DeGroot P, Murgatroyd F. A multicenter study of shock pathways for subcutaneous implantable defibrillators. *J Cardiovasc Electrophysiol*. 2014; 25:29-35
- 3) Staab W, **Sohns C**, Zwaka PA, Sohns JM, Schwarz A, Schneider S, **Vollmann D, Zabel M**, Hasenfuss G, Lotz J. Split-bolus single-phase cardiac multidetector computed tomography for reliable detection of left atrial thrombus: comparison to transesophageal echocardiography. *Rofo*. 2014; 186:1009-15
- 4) **Sohns C, Bergau L, Lüthje L, Vollmann D, Zabel M.** Single-ring ablation compared with standard circumferential pulmonary vein isolation and using remote magnetic catheter navigation in patients with symptomatic atrial fibrillation. *J Interv Card Electrophysiol*. 2014; 41: 75-82
- 5) **Zabel M**, Müller-Riemenschneider F, Geller JC, Brachmann J, Köhlkamp V, Dissmann R, Reinhold T, Roll S, **Lüthje L**, Bode F, Eckardt L, Willich SN, for the MONITOR-ICD investigators. Rationale and design of the MONITOR-ICD study: a randomized comparison of economic and clinical effects of automatic remote MONITORing versus control in patients with Implantable Cardioverter Defibrillators. *Am Heart J*. 2014; 168:430-7
- 6) **Bergau L, Seegers J, Zabel M.** Sex differences in ICD benefit. *J Electrocardiol*. 2014; 47:869-73
- 7) **Lüthje L, Vollmann D, Seegers J, Sohns C, Hasenfuß G, Zabel M.** A randomized study of remote monitoring and fluid monitoring for the management of patients with implanted cardiac arrhythmia devices. *Europace*. 2015; 17:1276-81
- 8) Sassi R, Cerutti S, Lombardi F, Malik M, Huikuri HV, Peng CK, Schmidt G, Yamamoto Y, Gorenek B, Lip GH, Grassi G, Kudaiberdieva G, Fisher JP, **Zabel M**, Macfadyen R. Advance in heart rate variability signal analysis: joint position statement by the e-Cardiology ESC Working Group and the European Heart Rhythm Association co-endorsed by the Asia Pacific Heart Rhythm Society. *Europace*. 2015; 17:1341-53
- 9) **Seegers J, Munoz Exposito P, Lüthje L, Fischer TH, Lueken M, Wenk H, Sossalla ST, Hasenfuss G, Zabel M.** Longevity of implantable cardioverter-defibrillators in a single center population. *J Interv Card Electrophysiol*. 2015; 44: 179-86
- 10) Tomzik J, Koltermann KC, **Zabel M**, Willich SN, Reinhold T. Quality of life in patients with an implantable cardioverter defibrillator: a systematic review. *Front. Cardiovasc. Med*. 2015; 2:34.
- 11) **Fischer TH**, Herting J, Eiringhaus J, Pabel S, Hartmann NH, Ellenberger D, Friedrich M, Renner A, Gummert J, Maier LS, **Zabel M**, Hasenfuss G, Sossalla ST. Sex- dependent alterations in Ca<sup>2+</sup> cycling in human cardiac hypertrophy and heart failure. *Europace*. 2016; 18: 1440-8
- 12) **Seegers J, Conen D, Jung K, Bergau L, Dorenkamp M, Lüthje L, Sohns C, Sossalla ST, Fischer TH, Hasenfuss G, Friede T, Zabel M.** Sex difference in appropriate shocks but not mortality during long-term follow-up in patients with implantable cardioverter-defibrillators. *Europace*. 2016; 18: 1194-1202

- 13) **Seegers J, Bergau L, Munoz Exposito P**, Bauer A, **Fischer T, Lüthje L**, Hasenfuß G, Friede T, **Zabel M**. Prediction of appropriate shocks using 24-hour Holter variables and T-wave alternans following first implantable cardioverter-defibrillator implantation. *Am J Cardiol*. 2016; 118: 86-94
- 14) **Seegers J, Bergau L, Tichelbäcker T**, Malik M, **Zabel M**. ICD risk stratification studies – EU-CERT-ICD and the European perspective. *J Electrocardiol*. 2016; 49: 831-6
- 15) Conen D, Arendacka B, Röver C, **Bergau L, Munoz P**, Wijers S, Sticherling C, **Zabel M**, Friede T. Gender differences in appropriate shocks and mortality among patients with primary prophylactic implantable cardioverter-defibrillators: Systematic review and meta-analysis. *PLoS One*. 2016; 11: e0162756
- 16) **Seegers J**, Hnatkova K, Friede T, Malik M, **Zabel M**. T-wave loop area from a pre-implant 12-lead ECG is associated with appropriate ICD shocks. *PLoS One*. 2017; 12: e0173868
- 17) Sprenkeler D, Tuinenburg A, Ritsema van Eck HJ, **Zabel M**, Vos MA. Circadian pattern of short-term variability of the QT-interval in a primary prevention ICD-population: a methodological pilot study of EU-CERT-ICD. *PLoS One*. 2017; 12: e0183199
- 18) **Bergau L\*, Tichelbäcker T\***, Kessel B, **Lüthje L, Fischer TH**, Friede T, **Zabel M**. Predictors of mortality and ICD shock therapy in primary prophylactic ICD patients – A systematic review and meta-analysis. *PLoS One*. 2017; 12: e0186387
- 19) Huikuri HV, **Zabel M**, Lombardi F, Malik M, on behalf of the e-health Digital Rhythm Study Group of the European Heart Rhythm Association. Measurement of cardiovascular autonomic function: where to go from here? *Int J Cardiol*. 2017; 249:73-74
- 20) Calkins H, Willems S, Gerstenfeld EP, Verma A, Schilling R, Hohnloser SH, Okumura K, Serota H, Nordaby M, Guiver K, Biss B, Brouwer MA, Grimaldi M, for the RE-CIRCUIT investigators. Uninterrupted dabigatran versus warfarin for ablation in atrial fibrillation. *N Engl J Med*. 2017; online 19 Mar 2017; DOI:10.1056/NEJMoa1701005 (**Zabel-M** co-investigator)
- 21) Sticherling C, Arendacka B, Svendsen JH, Wijers S, Friede T, Stockinger J, Dommasch M, Merkely B, Willems R, Lubinski A, Scharfe M, Braunschweig F, Svetlosak M, Zürn CS, Huikuri H, Flevari P, Lund-Andersen C, Schaer BA, Tuinenburg AE, **Bergau L**, Schmidt G, Szeplaki G, Vandenberk B, Kowalczyk E, Eick C, Junttila J, Conen D, **Zabel M**, for the EU-CERT-ICD investigators. Sex differences in outcomes of primary prevention ICD therapy: combined registry data from eleven European countries. *Europace*. 2018; 20:963-70
- 22) Hnatkova K, **Seegers J**, Barthel P, Novotny T, Smetana P, **Zabel M**, Schmidt G, Malik M. Clinical value of different QRS-T angle expressions. *Europace*. 2018; 20:1352-61
- 23) Malik M, Buxton AE, Huikuri H, Lombardi F, Schmidt G, **Zabel M**, on behalf of e-rhythm Study Group of EHRA. Noninvasive electrophysiology in risk assessment and screening. *Heart Rhythm*. 2018; 15:803-804
- 24) Malik M, Camm AJ, Huikuri H, Lombardi F, Schmidt G, Schwartz PJ, **Zabel M**, on behalf of e-rhythm Study Group of EHRA. Electronic gadgets and their health-related claims. *Int J Cardiol*. 2018; 258: 163-164
- 25) Malik M, Huikuri H, Lombardi F, Schmidt G, **Zabel M**, on behalf of e-rhythm Study Group of EHRA. Conundrum of the Tpeak-Tend interval. *J Cardiovasc Electrophysiol*. 2018; 29:767-770
- 26) **Bergau L**, Willems R, Sprenkeler DJ, **Fischer TH**, Flevari P, Hasenfuß G, Katsaras D, Kirova A, Lehnart SE, **Lüthje L**, Röver C, **Seegers J**, **Sossalla S**, Dunnink A, **Sritharan R**, Tuinenburg AE, Vandenberk B, Vos MA, Wijers

- SC, Friede T, **Zabel M**. Differential multivariable risk prediction of appropriate shock versus competing mortality – a prospective cohort study to estimate benefits from ICD therapy. *Int J Cardiol*. 2018; S0167-5273 (18): 32262-9
- 27) **Tichelbäcker T, Bergau L**, Puls M, Mütze T, Friede T, Frey N, Hasenfuß G, **Zabel M**, Jacobshagen C, **Sossalla S**. Insights into permanent pacemaker implantation following TAVR in a real-world cohort. *PLOS ONE*. 2018; 13: e0204503
- 28) Kowallick JT, Staab W, Schuster A, Backhaus SJ, Weber-Krüger M, Bauer L, **Sohns C**, Lotz J, Hasenfuß G, **Lüthje L, Zabel M, Bergau L**. Reverse left ventricular structural remodeling following catheter ablation of atrial fibrillation in patients with preserved left ventricular function: Insights from CMR native T1 mapping. *Heart Rhythm*. 2018 Sep 21. doi: 10.1016/j.hrthm.2018.09.016 [Epub ahead of print]
- 29) Olgin JE, Pletcher MJ, Vittinghoff E, Wranicz J, Malik R, Morin DP, Zweibel S, Buxton AE, Elaxi CS, Chung EH, Rashba E, Borggrefe M, Hue TF, Maguire C, Lin F, Simon JA, Hulley S, Lee BK, for the VEST investigators. Wearable cardioverter-defibrillator after myocardial infarction. *N Engl J Med*. 2018; 379:1205-15 (**Zabel-M** co-investigator)
- 30) Malik M, Huikuri H, Lombardi F, Schmidt G, **Zabel M**, for the e-Rhythm Study Group of EHRA. Neural influence of cardiac electrophysiology. *J Cardiovasc Electrophysiol*. 2019; 30:116-7. doi: 10.1111/jce.13776.
- 31) Malik M, Huikuri HV, Lombardi F, Schmidt G, Verrier RL, **Zabel M**, for the e-Rhythm group of EHRA. Is the  $T_{peak-T_{end}}$  interval as a measure of repolarization heterogeneity dead or just seriously wounded? *Heart Rhythm*. 2019 Jan 17. pii: S1547-5271(19)30015-3. doi: 10.1016/j.hrthm.2019.01.015. [Epub ahead of print]
- 32) Malik M, Huikuri H, Lombardi F, Schmidt G, Verrier RL, **Zabel M**, for the e-Rhythm Study Group of EHRA. Our doubts about the usefulness of the  $T_{peak-T_{end}}$  interval. *Heart Rhythm*. 2019 Jan 22; pii: S1547-5271(19)30035-9. doi: 10.1016/j.hrthm.2019.01.022. [Epub ahead of print] (editorial) IF 4.866
- 33) Huikuri HV, Malik M, Schmidt G, Lombardi F, **Zabel M**, for the e-health study group. Value of measurement of QRS-T angle from a standard 12-lead electrocardiogram. *J Cardiovasc Electrophysiol*. 2019, 277:24-25; doi: 10.1016/j.ijcard.2018.10.032 (editorial) IF 2.873
- 34) **Zabel M**, Sticherling C, Willems R, Lubinski A, Bauer A, **Bergau L**, Braunschweig F, Brugada J, Brusich S, Conen D, Cygankiewicz I, Flevari P, Taborsky M, Hansen J, Hasenfuß G, Hatala R, Huikuri HV, Iovlev S, Kääb S, Kaliska G, Kasprzak JD, **Lüthje L**, Malik M, Novotny T, Pavlovic N, Schmidt G, Shalghanov T, Sritharan R, Schlögl S, Szavits-Nossan J, Traykov V, Tuinenburg A, Velchev V, Vos MA, Willich SN, Friede T, Svendsen JH, Merkely B, for the EU-CERT-ICD study investigators. Rationale, objectives and design of the EU-CERT-ICD (Comparative Effectiveness Research to Assess the Use of Primary Prophylactic Implantable Cardioverter Defibrillators in Europe) prospective study: Use of an observational controlled study design to assess the comparative effectiveness of primary prophylactic ICD implantation. *ESC Heart Failure*. 2019; 6:182-193. doi: 10.1002/ehf2.12367
- 35) Malik M, Hnatkova K, Huikuri HV, Lombardi F, Schmidt G, **Zabel M**. Cross talk proposal: heart rate variability is a valid measure of cardiac autonomic responsiveness. *J Physiol*. 2019; Apr 21 [Epub ahead of print], doi: 10.1113/JP277500

- 36) Eiringhaus J, **Herting J**, Schatter F, Nikolaev VO, Sprenger J, Wang Y, Köhn M, **Zabel M**, El-Armouche A, Hasenfuss G, **Sossalla S**, **Fischer TH**. Protein kinase / phosphatase balance mediates the effects of increased late sodium current on ventricular calcium cycling. *Basic Res Cardiol*. 2019; 114:13. doi:10.1007/s00395-019-0720-7
- 37) Packer DL, Mark DB, Robb RA, Monahan KH, Bahnson TD, Poole JE, Noseworthy PA, Rosenberg YD, Jeffries N, Mitchell LB, Flaker GC, Pokushalov E, Romanov A, Bunch TJ, Noelker G, Ardahsev A, Revishvili A, Wilber DJ, Cappato R, Kuck KH, Hindricks G, Davies DW, Lowey PR, Naccarelli GV, Reiffel JA, Piccini JP, Silverstein AP, Al-Khalidi HR, Lee KL, for the CABANA Investigators. Effect of catheter ablation vs antiarrhythmic drug therapy on mortality, stroke, bleeding, and cardiac arrest among patients with atrial fibrillation: The CABANA randomized clinical trial. *JAMA*. 2019; doi: 10.1001/jama.2019.0693, [Epub ahead of print] (**Zabel-M** co-investigator)
- 38) Mark DB, Anstrom KJ, Sheng S, Piccini JP, Baloch KN, Monahan KH, Daniels MR, Bahnson TD, Poole JE, Rosenberg YD, Lee KL, Packer DL, for the CABANA Investigators. Effect of catheter ablation vs medical therapy on quality of life among patients with atrial fibrillation: The CABANA randomized clinical trial. *JAMA*. 2019; doi: 10.1001/jama.2019.0692, [Epub ahead of print] (**Zabel-M** co-investigator)