

Ausgewählte wissenschaftliche Publikationen Schwerpunkt Klinische Elektrophysiologie seit 2015

- 1) **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
- 2) 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
- 3) **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
- 4) 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
- 5) **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 Ca²⁺ cycling in human cardiac hypertrophy and heart failure. *Europace*. 2016; 18: 1440-8
- 6) **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
- 7) **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
- 8) **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
- 9) 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
- 10) **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
- 11) 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
- 12) **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
- 13) 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

14) 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: 767-70

15) 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, Meyer-Zürn CS, Huikuri H, Flevari P, Lund-Andersen C, Schaer B, Tuinenburg AE, **Bergau L**, Schmidt G, Szeplaki G, Vandenberk B, Kowalczyk E, Eick C, Juntila 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: 963-970

16) 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

17) 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: 163-64

18) **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

19) 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: 1352-1360

20) **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; 272: 102-107

21) 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

22) 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; 597:2595-2598

23) Malik M, Hnatkova K, Huikuri HV, Lombardi F, Schmidt G, **Zabel M**. Cross talk rebuttal. *J Physiol.* 2019; 597:2603-2604

24) **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, Shalганov 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

25) 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

26) 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
- 27) 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; 16: 952-953
- 28) Huikuri H, Verrier RL, Malik M, 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; 16:e49
- 29) 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 after catheter ablation of atrial fibrillation in patients with preserved left ventricular function: Insights from CMR native T1 mapping. *Heart Rhythm*. 2019; 16:424-432
- 30) Bauer A, Klemm M, Rizas KD, Hamm W, v Stülpnagel L, Lubinski A, Flevari P, Harden M, Friede T, Kääb S, Merkely B, Sticherling C, Willems R, Huikuri H, Malik M, Schmidt G*, **Zabel M***, and the EU-CERT-ICD investigators. Periodic repolarization dynamics predicts the mortality benefit in patients undergoing prophylactic implantation of a defibrillator (EU-CERT-ICD): a prospective controlled multicentre observational study. *Lancet*. 2019; 394: 1344-1351
- 31) **Zabel M, Schlögl S**, Lubinski A, Hastrup Svendsen J, Bauer A, Arbelo A, Brusich S, Conen D, Cygankiewicz I, Dommasch M, Flevari P, Galuszka J, Katsimardos A, Hansen J, Hasenfuß G, Hatala R, Huikuri HV, Kenttä T, Kucejko T, **Haarmann H**, Harden M, Iovlev S, Kääb S, Kaliska G, Katsimardos A, Kasprzak JD, Qavoq D, **Lüthje L**, Malik M, Novotny T, Pavlovic N, Perge P, Röver C, Schmidt G, Shalghanov T, **Sritharan R**, Svetlosak M, Sallo Z, Szavits-Nossan J, Traykov V, Vandenberg B, Velchev V, Vos MA, Willich SN, Friede T, Willems R, Merkely B, Sticherling C, and the EU-CERT-ICD investigators. Present criteria for prophylactic ICD implantation: Insights from the EU-CERT-ICD (Comparative Effectiveness Research to Assess the Use of Primary Prophylactic Implantable Cardioverter Defibrillators in Europe) project. *J Electrocardiol*. 2019; 57S: S34-S39
- 32) 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; 321:1261-74 (**Zabel-M** co-investigator)
- 33) 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; 321: 1275-85 (**Zabel-M** co-investigator)
- 34) Junttila MJ, Pelli A, Kenttä TV, Friede T, Willems R, **Bergau L**, Malik M, Vandenberg B, Vos MA, Schmidt G, Merkely B, Lubinski A, Svetlosak M, Braunschweig F, Harden M, **Zabel M**, Huikuri HV, Sticherling C, for the EU-CERT-ICD Investigators. Appropriate shocks and mortality in patients with versus without diabetes with prophylactic implantable cardioverter-defibrillators. *Diabetes Care*. 2020; 43:196-200

- 35) **Zabel M**, Willems R, Lubinski A, Bauer A, Brugada J, Conen D, Flevari P, Hasenfuss G, Hatala R, Huikuri HV, Malik M, Pavlovic N, Schmidt G, **Sritharan R**, **Schlögl S**, Szavits-Nossan J, Traykov V, Tuinenburg AE, Willich SN, Harden M, Friede T, Hastrup Svendsen J, Sticherling C*, Merkely B*, and the EU-CERT-ICD Study Investigators. Clinical effectiveness of primary prevention implantable cardioverter-defibrillators: results of the EU-CERT-ICD controlled multicentre cohort study. *Eur Heart J*. 2020; 41: 3437-3447
- 36) **Zabel M**, Friede T, Huikuri HV, Malik M, Willems R, the EU-CERT-ICD consortium. Role of the proportion of sudden cardiac death to mortality for clinical effectiveness of primary prevention ICDs. *Eur Heart J*. 2020; 41:4527-4528
- 37) Vandenberk B, Floré V, Röver C, Vos MA, Dunnink A, Leftheriotis D, Friede T, Flevari P, **Zabel M**, Willems R. Repeating noninvasive risk stratification improves prediction of outcome in ICD patients. *Ann Noninvasive Electrocardiol*. 2020; 25:e12794
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- 39) Reichlin T, Asatryan B, Vos MA, Willems R, Huikuri HV, Junttila MJ, **Schlögl SC**, Hnatkova K, Schaer BA, Malik M, **Zabel M**, Sticherling C, EU-CERT-ICD investigators. Automated electrocardiographic quantification of myocardial scar in patients undergoing primary prevention implantable cardioverter-defibrillator implantation: association with mortality and subsequent appropriate and inappropriate therapies. *Heart Rhythm*. 2020; 17: 1664-1671
- 40) **Bengel P**, **Herting J**, **Zabel M**, **Lüthje L**. Pulmonary vein ablation in a patient with a large left common pulmonary vein joining a large right common trunk. *Eur Heart J – Case Reports*. 2020; 4:1-2
- 41) **Zabel M**. ICD registries and sex-specific metaanalyses. In: *Sex and Cardiac Electrophysiology*. 1st edition (2020 Jan 1). Ch. 78, pp. 855-866. Editor: Malik M. Publisher: Academic Press.
- 42) Dommasch M*, Steger A*, Barthel P, Huster KM, Müller A, Sinnecker D, Laugwitz KL, Penzel T, Lubinski A, Flevari P, Harden M, Friede T, Kääb S, Merkely B, Sticherling C, Willems R, Huikuri HV, Bauer A, Malik M*, **Zabel M***, Schmidt G*; and the EU-CERT-ICD investigators. Nocturnal respiratory rate predicts ICD benefit: a prospective, controlled, multicentre cohort study. *E Clinical Medicine*. 2021; 31:100695
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