Letter from the Editor-in-Chief

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As fall approaches, we present our third issue of the year, packed with excellent and inspiring articles. We are extremely happy with the enthusiasm surrounding the journal, which is reflected in the growing number of submissions. Thanks to this we could already submit a request for registration in PubMedCentral. We will update you as soon as we have received the outcome. We are also pleased with the growing number of discussions (letters, editorials, views). To become the platform for Digital Health-related discussions is one of our primary goals.

We are well on our way and are continuing to develop the journal further. One of those developments is the addition of a new format called 'Cardiopulse Digital'. Regular readers of our mother journal, The European Heart Journal (EHJ), are certainly familiar with this format. For those of you who are not, it tells the stories behind science in a light, diverse and informative style. We are big fans of CardioPulse and are excited to introduce it in Digital Health. The first contribution is a conversation with one of the Digital Health Key Opinion Leaders (KOL), Prof. Dr Martin Cowie, the Chair of the Digital Health Committee (DHC) of the European Society of Cardiology (ESC). He talks about his interest with Digital Health and the activities of the DHC.

We again have many articles with developments in which artificial intelligence (AI) is applied. A noteworthy observation we have made over the past year is that electrocardiograms (EKGs) often play a key role. Prof. Dr Peter de Jaegere, deputy editor, elaborates on this observation and the use of AI in an editorial. In addition, we have another two AI-related review articles, five original submissions with AI developments and a point of view for you. All of them are excellent articles, but because of limited space I have here, I would like to point out two of them: (i) the article by Prof. Dr Francisco Lopez-Jiminez which has a short, powerful, and self-explanatory title: 'The 12-Lead EKG as a Biomarker of Psychological Age', and draws a lot of attention; (ii) 'Uncertainty estimation for deep learning-based automated analysis of 12-lead electrocardiograms', by Dr Rutger van der Leur et al. This study explores the accuracy (uncertainty estimation) of deep neural networks, a topic that needs to be addressed before advancing towards clinical implementation.

Social Media (SoMe) is progressively being used to distribute scientific news. As a journal, we too use SoMe channels. We are evaluating our scientific contributions by taking the journal's impact factors into account and by measuring our H-factors. They are still important benchmarks for co-determining your scientific career. But should not we perhaps reconsider this in an era where SoMe is becoming increasingly important? Dr Karla Ankur et al. further fuels this debate with a short report entitled: 'Mapping and Quantification of the Twitter Footprint of Cardiologists'.

Implementing new technology in medicine is often a challenge. Teaching and training are crucial. It is logical that we usually pay a lot of attention to the early presentations of innovations. However, there is also a demand for educational articles when it is time to implement the innovations in clinical practice. We want to create room for that in Digital Health. The article entitled 'The photoplethysmography dictionary: Practical guidance in TeleCheck-AF signal interpretation and clinical scenarios', by Dr Dominik Linz, is a superb example. The term photoplethysmography is probably unknown to many. However, if you tell them, they may already use this technology themselves, as it's available in many consumer devices, such as the Apple Watch to measure your heart rate, it comes to life. This guide describing how to use photoplethysmography in a large multicentre, cross-border collaborative project to combat COVID-19 restrictions is an outstanding example, and I certainly hope to receive many more such educational submissions. Prof. Dr Gregory Lip further discusses this article in an accompanying editorial as well.

COVID-19 has led to a myriad of problems, including health care avoidance. Remote monitoring could be a means to sustain care at a distance. Dr Sylvain Ploux et al., explored this in a heart failure patient group. The health condition of these patients before and during the pandemic were compared, and they found no detrimental effects induced by remote monitoring. There are many ongoing advancements in this field, such as more advanced wearable devices and sensors. Prof. Dr Lukasz Koltowski et al., compared two more recent introduced devices, e.g. Kardia Mobile and ISTEL HR and matched that to the golden standard, the 12-lead EKG.

The final article I want to talk about is part of our teaching series entitled 'Artificial Intelligence to Generate Medical Images: Augmenting the Cardiologist's Visual Clinical Workflow', by Dr Max Olender et al. This is a remarkably interesting concept for generating synthesized intracoronary optical coherence tomography intracoronary images. This would allow to build a database of images of various

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pathologies for training without having to collect them *in vivo* first, a time-consuming and demanding task.

We hope you enjoy reading this latest issue! And keep on submitting your work! Also check out the upcoming Digital Health Summit being held from 22 to 24 October: https://digital-congress.escardio.org/ESC-Digital-Summit.

Conflict of interest: none declared.