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## FOREWORD

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### Special Section on Healthcare, Medical Information and Communication Technology for Safe and Secure Society

In some medical application of ICT, wireless transmission of biosignals may be mission critical, e.g. in intensive care units, in emergency rooms, or in surgical operation rooms. The most reliable ICT is needed if lives of patients are dependent on the real-time information sent by medical ICT systems. Even in healthcare or in usual management of chronic diseases such as hypertension or diabetes, safe and secure ICT is necessary as all patient data are regarded as private personal data. Therefore, safety and security is a prerequisite for healthcare and medical ICT (MICT), and through the use of MICT we can live a safe and secure life with appropriate healthcare and medical management.

ICT should play various roles to improve the efficiency and quality of healthcare and medicine so that healthcare and medicine should be dependable and cost-effective services. Even though safe and secure MICT is necessary, ICT should not increase the cost of medical devices, or should not hinder the approval process of medical devices.

In this Special Section, we invited submissions of original articles related to MICT and its role for safe and secure society. We had a total of 12 submissions for full papers (1 from abroad). Based on the constructive comments and the careful judgements by Reviewers (including those from abroad), the Guest Editors recommended the acceptance of 6 full papers (1 from abroad). The Special Section Editorial Committee finally approved this. This figure includes 1 invited paper. The invited paper also went through the full review process.

We hope this Special Section would help readers discuss necessary ICT for healthcare and medicine.

#### Special Section Editorial Committee Members

Guest Editor-in-Chief: Masaru Sugimachi (National Cerebral and Cardiovascular Center)

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Masaru Sugimachi, Guest Editor-in-Chief

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**Masaru Sugimachi** (*Member*) received his M.D. and Ph.D. (biomedical engineering) from Kyushu University in 1984, 1992, respectively. From 1992, he moved to the Department of Cardiovascular Dynamics, National Cardiovascular Center, Osaka. Since 2004, he has chaired the Department. He has been Vice Chairperson (2010–2011, 2014–2015), and Chairperson (2016–2017) of IEICE Technical Group on Medical ICT.

