Preface

At the 63rd Annual Meeting of the Japanese Society for Dialysis Therapy (JSDT) held from June 29 to July 1, 2018 in Kobe, Japan, 19,000 participants working across a broad range of fields including nephrology, urology, pharmacy, clinical engineering, nursing, nutrition, and rehabilitation medicine gathered to discuss the current situation in dialysis therapy under the theme “Resurrection of the kidney through the utmost efforts of JSDT. The aim was to bolster the participants’ knowledge for improving blood purification and reviving the vitality of patients, as we have recently faced a number of difficult issues: the increasing number of elderly patients in need of nursing care, the bridge to end-of-life care that is under debate, and the balance between medical costs and budget.

From among the 3,200 excellent presentations given at the event and some invited papers from JSDT members, we present here 15 articles that offer an up-to-date, multifaceted discussion of various challenges that we currently face in treating patients with ESKD. These articles include diverse aspects of dialysis therapy involving several kinds of modalities and complications, from neonates to the elderly, and we believe that there is a need to create awareness about these aspects among ESKD professionals.

This supplement issue of *Blood Purification* addresses wide-reaching, topical issues in dialysis therapy.

Some important questions are posed and answered in relation to specific therapies. For example, in regard to incident hemodialysis, does the response to erythropoiesis-stimulating agent have a predictive value for prognosis? In peritoneal dialysis, what is the relationship between aortic arch calcification, a fatal complication in dialysis, and bone-associated molecules such as fibroblast growth factor-23 and osteoprotegerin? And in regard to maintenance dialysis (MHD), do MHD treatments per se affect the nutritional or inflammatory condition and lead to premature death, or do they present a high risk for adverse events? Are serum magnesium levels correlated with aortic arch calcification and mortality in MHD patients? Does predilution online hemodiafiltration improve albumin redox in MHD patients?

We also look at whether the inhibition of mammalian target of rapamycin in transplant recipients augments an increase in soluble Klotho levels, which can prevent vascular calcification. In addition, what is the significance of the content of reticulocyte hemoglobin in the management of renal anemia? Which complications commonly need to be managed during continuous renal replacement therapy in critically ill neonates? Should focus be placed on survival benefits or alternative goals in the management of the super-aged dialysis population?

The success of the JSDT meeting and the published proceedings depends on the efforts of all the members attending the meeting. We are also honored that all the members could celebrate the half-century history of JSDT in 2018. We hope that this collection of articles will be useful to those readers who were not able to take

part in the discussions at the Annual Meeting and that it will stimulate further research and clinical investigations into safe management of all populations with ESKD.

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