This year, the third edition of ‘Transfusion Therapy: Clinical Principles and Practice’ has been released, again edited by Paul M. Mintz. Its 31 chapters contain the contributions of 49 distinguished authors. The declared primary aim of this text is to assist clinicians to make informed clinical decisions on transfusion therapy and to manage transfusion-associated side effects. In fact, the topic selection is comprehensive, with all major aspects of transfusion medicine being addressed. Multiple recent advances of the past 6 years have necessitated this new edition that provides up-to-date information in part available only weeks before release of this book.

The first section encompassing almost 400 pages is dedicated to the use of blood components in clinical practice, covering a multitude of clinical scenarios demanding transfusion therapy. First, pros and cons regarding the prophylactic use of platelets and plasma before invasive procedures are extensively discussed, and principal recommendations are given. After a chapter on the pathophysiology of anemia, the transfusion strategies for autoimmune, drug-induced and congenital hemolytic anemias are outlined. Here, the wealth of information extends from specific immunohematologic features of autoantibodies to the rationale of extended red cell phenotype matching for patients with sickle cell anemia. Further topics are acquired disorders of hemostasis, congenital coagulopathies as well as guidelines for intrauterine, neonatal and pediatric transfusion therapy. In additional chapters, transfusion therapy with special attention to surgery, massive transfusion/trauma, critical care and solid organ transplantation is considered. Finally, also a brief but informative overview on therapeutic apheresis is given. The second section titled ‘blood components and derivatives’ details specifications and therapy with platelets, granulocytes, immune globulins, Rh immune globulin and fibrin sealant. Further chapters expand on transfusion therapy in hematopoietic progenitor transplantation, lymphocyte immunotherapy and the use of hematopoietic growth factors. One of the new chapters of this edition is on alloimmunization to red cell antigens and the management of sensitized patients. Antigen- and patient-related factors contributing to red cell antibody formation are highlighted and discussed in the context of particular risk groups of alloimmunization. For optimum topical fit, this useful chapter would have better been included into the following, third, section. Here, the prevention and management of adverse events to transfusion are presented: graft-versus-host disease, leukodepletion and associated effects, alternatives to allogeneic transfusion, modern pathogen reduction techniques and management of transfusion reactions. Each entity of the wide spectrum of transfusion reactions has a concise description clearly organized into diagnosis, treatment and prevention. The fourth section is devoted to the safety aspects of the transfusion process, hemovigilance, quality assessment and US-specific legal issues. The final section is designed to be a summary assessing the benefits and risks of transfusion. Risk estimates of transfusion-associated side effects including infections and the controversy regarding transfusion thresholds are put into perspective. This part represents a particularly valuable overview for quick reference on current trends and figures.

In conclusion, the authors provide sufficient pathophysiologic and technical details as to enable fundamental understanding, but succeed in maintaining their focus on practical transfusion medicine. Despite the enormously condensed contents and so many individual contributors, the chapters of this text book are generally well structured and of outstanding educational value. Moreover, numerous tables and illustrations enhance the efficacy of information transfer. These facts qualify the book as reliable reference for experts, trainees and international readers alike.

Günter F. Körmöczi
Department of Blood Group Serology and Transfusion Medicine, Medical University of Vienna, Vienna, Austria
E-mail: guenther.kormoecci@meduniwien.ac.at