
Preface

The goal of *Therapeutic Apheresis: A Handbook* has always been to create a concise and practical guide for all members of the health-care team who support apheresis medicine. This includes those who desire to learn more about the specialized treatment available from therapeutic apheresis, including clinicians who may refer patients for treatment. Although many of the guidelines refer to practice in North America, the principles and procedures described are universal in application.

Since conception, this book has represented a joint effort between the AABB and the American Society for Apheresis (ASFA). This edition incorporates the latest contents of the *Journal of Clinical Apheresis* “Special Issue”—“Guidelines on the Use of Therapeutic Apheresis in Clinical Practice—Evidence-Based Approach from the Writing Committee of the American Society for Apheresis.”

In conjunction with the 8th “Special Issue,” this handbook represents an indispensable resource for every apheresis physician, nurse, and related support personnel. This handbook covers only therapeutic apheresis procedures. As such, and different from previous editions, cell collections are not included (those will be included in the 2nd edition of *Cellular Therapy: A Handbook*).

Chapter 1 reviews fundamental concepts of therapeutic apheresis, including the basics of the extracorporeal circuit, the physiology of apheresis, blood separation, vascular access, anticoagulation, clinical decision-making, the ASFA Choosing Wisely Campaign, and the complications associated with therapeutic apheresis procedures.

Chapter 2 describes the clinical application of principles described in the “Special Issue.”

Chapter 3 discusses therapeutic cytappheresis procedures, including thrombocytapheresis and leukocytapheresis.

Chapter 4 address all aspects and indications for extracorporeal photopheresis (also known as ECP).

Chapter 5 focuses on therapeutic plasma exchange; it is the longest chapter in the handbook because of the number of diverse diseases treated with this therapeutic modality.

Chapter 6 discusses all aspects of red cell exchange.

Chapter 7 focuses on the unique issues and concerns associated with the application of apheresis treatments to pediatric patients, including issues with hypovolemia and how the red cell intravascular deficit relates to the extracorporeal circuit and vascular access.

Chapter 8 addresses lipoprotein apheresis as an example for the selective removal of blood components using special devices, such as the removal of LDL cholesterol in patients with familial hypercholesterolemia.

Chapter 9 describes the therapeutic apheresis physician's medical, operational, and financial responsibilities, including the operational and accreditation considerations for a therapeutic apheresis treatment program.

The Appendix contains a numbered list that concisely summarizes the most recent treatment recommendations for the diseases discussed in this handbook and the eighth edition of the "Special Issue." Familiarization with this list will help all members of the treatment team to determine the most appropriate treatment for their patients.

Many thanks to Jeffrey L. Winters, MD, and Kendall P. Crookston, MD, PhD, for the excellent foundation they laid as editors of previous editions of this handbook. Also, thanks for the authors of the chapters who took the time to provide the timely updates as well as to their respective institutions for supporting these valuable scholarly activities. Additional thanks go to AABB and ASFA for their support of this work. We also thank the AABB Publications staff; without their assistance, this edition would not have been possible.

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Reference

Padmanabhan A, Aqui N, et al. Guidelines on the use of therapeutic apheresis in clinical practice—evidence-based approach from the Writing Committee of the American Society for Apheresis: The Seventh Special Issue. *J Clin Apher* 2019;34:171-354.

