

Join a diverse community of health care professionals working to make transfusion medicine and biotherapies safe, available and effective worldwide. No matter your role, AABB has the education, resources, connections and opportunities to help you succeed.

#### JOIN AABB NOW AND YOU'LL START RECEIVING:

- Transfusion, AABB's peerreviewed journal, comprising the latest research in the field
- AABB News, AABB's monthly magazine filled with news, interviews and feature articles on the field's most important issues

AABB Weekly Report, newsletter with need-to-know information Access to the AABB Community, the Association's members-only online forum

Opportunities to volunteer and connect with other members

- Exclusive content, educational tools and critical resources
- Discounts on publications, online learning and AABB Annual Meeting registration
- · And much more

JOIN TODAY! aabb.org/join

## Welcome!

ig things may come in small packages, but they may also come in larger packages. This year's catalog readers will want to check out the expanded offerings in biotherapy resources. Supplementing the items on pages 7-9, the newly updated biotherapy landing page at aabb.org/biotherapies has additional (and complimentary!) tools for progress. We are so pleased to share all of this content with you.

The "small packages" this year are numerous in quantity and diverse in topic—hemoglobin determination, informed consent, coagulation, global education, multiple *Standards* editions, therapeutic apheresis, and more. You might say these offerings are reflective of the AABB membership and its wider community.

As demonstrated by the list below of titles released since the last catalog, significant new resources have been created by AABB members—both individuals and members of AABB committees and other working groups. From concise guides to major textbooks, the results of engaged and collaborative members have produced a robust library to enrich the entire profession.

Savvy AABB colleagues know that the release of relevant new content is a continuous process. All are encouraged to check the website regularly for announcements of new resources. Not as widely known is that many of the publications AABB offers are the result of members contacting us with ideas for resources they would like to have. So, please, do let us know what you'd like to see in the future.

Laurie Munk Senior Director, AABB Publications

Publications by Topic
AABB Standards 3
Quality 6
Biotherapies 7
Patient Blood Management
Transfusion Practices
General
Components
Immunohematology/Serology 17
Complications 20
Special Patients/Situations
Donors
Management
Index by Title
Index by Author/Editor30
Publications Order Form
Ordering Information 32

#### *■What's New?* **=**

Be sure to check out the newest AABB resources, highlighted throughout these pages.

AABB Guide to Donor Hemoglobin Determination	. 24
AABB Guide to Informed Consent in Transfusion Medicine	
AABB-ISCT Good Tissue Practice Interpretive Tool	
· · · · · · · · · · · · · · · · · · ·	
• Auditing for Success in Blood Centers, Transfusion Services, and Cellular Therapy Laboratories	
CABP Sample Exam Questions	8
• Circular of Information for the Use of Cellular Therapy Products, 2024	9
• Circular of Information for the Use of Human Blood and Blood Components, 2024	16
Coagulation: A Handbook	22
Getting Started in Processing for Biotherapies	7
Global Education, Training, and Staffing in Transfusion Medicine	27
Regulatory Toolkit: Donor Blood Pressure and Pulse	25
Regulatory Toolkit: Licensed COVID-19 Convalescent Plasma	
Standards for Blood Banks and Transfusion Services, 34th edition	3
Standards for Immunohematology Reference Laboratories, 13th edition	5
Standards for Relationship Testing Laboratories, 16th edition	3
Therapeutic Apheresis: A Handbook, 7th edition	
• The Transfusion Committee: Putting Patient Safety First, 3rd edition	
· · · · · · · · · · · · · · · · · · ·	

odb. s och

**STANDARDS** 

**Blood Banks** and Transfusion **Services** 

34<sup>TH</sup> EDITION

AABB Standards Portal

**Access AABB Standards** through the online Standards Portal for an enhanced, easy-to-use experience.

Free Two-Week Trial Available aabb.org/ portaltrial

- View, search, and print full editions of any set of Standards from any device.
- Customize your view and filter each set of Standards based on the activities your facility performs.
- Access the most up-to-date Guidance with each set of Standards by clicking on the "Guidance button" next to each standard. The Guidance offers more information and rationales for new or revised standards, granted variances and more.
- Link to, and read the content of, cross-referenced standards and relevant sections of the US Code of Federal Regulations, FDA Guidance, AABB Association Bulletins, peer-reviewed articles, and more.
- When interim or emergent standards or new guidances are issued, the Portal will be updated in real time.

aabb.org/portal

## Standards

#### **Standards for Blood Banks and Transfusion** Services, 34th edition (effective April 1, 2024)

The 34th edition of Standards for Blood Banks and Transfusion Services details the latest standards of practice in blood banking and transfusion medicine. As in the past, each chapter heading represents one of the Quality System Essentials and the quality standards are supplemented by technical requirements. Significant changes include:

- The updated Quality Systems Essentials template has been incorporated, including updated language and new sections on key concepts, key terms, and examples of objective evidence.
- New Standard 5.1.2.4 requires that laboratories evaluate comparability of tests results using different methods.
- New Standards 5.1.10.1 5.1.10.3 address proficiency testing referrals, associated communications, and notifications to CMS.
- Standards have been added to cover the use and storage of coldstored platelets in line with recently released FDA Guidance.
- New Standard 5.10.1 has been added to ensure that the Circular of Information for the Use of Human Blood and Blood Components would be available to the receiving facility or transfusionist with all shipped products.

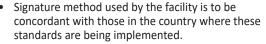
STANDARDS PORTAL: AABB, 2024, digital edition

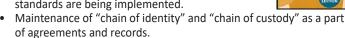
Product Code: 243120SP | Member Price: \$207 | Nonmember Price: \$302 PRINT EDITION: AABB, 2024, 187 pages, ISBN 978-1-56395-487-0 Product Code: 243120 | Member Price: \$207 | Nonmember Price: \$302 PRINT AND PORTAL BUNDLE: Product Code: 243830 | Member Price: \$330 | Nonmember Price: \$483

PRINT AND GUIDANCE BUNDLE: Product Code: 244020 | Member Price: \$330 | Nonmember Price: \$483

#### Standards for Cellular Therapy Services, 11th edition (effective July 1, 2023)

The 11th edition of Standards for Cellular Therapy Services details the latest standards of practice for accredited cellular therapy facilities and includes overarching quality standards as well as specific technical standards. Significant changes include:





- Suppliers to be qualified when cellular therapy services involve more than one facility.
- Having a qualified interpreter involved in the donor informed consent process where appropriate.
- Facility-defined interval for collection of outcome data.
- Products from donors who are CMV positive are identified as such and the product labeled accordingly.
- Look-back procedures in the case of an identified nonconformance.

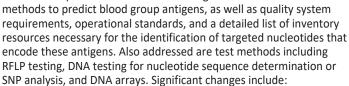
STANDARDS PORTAL: AABB, 2023, digital edition

Product Code: 233110SP | Member Price: \$197 | Nonmember Price: \$287 PRINT EDITION: AABB, 2023, 187 pages, ISBN 978-1-56395-466-5 Product Code: 233110 | Member Price: \$197 | Nonmember Price: \$287 PRINT AND PORTAL BUNDLE: Product Code: 233223 | Member Price: \$315 | Nonmember Price: \$459

PRINT AND GUIDANCE BUNDLE: Product Code: 233099 | Member Price: \$315 | Nonmember Price: \$459

#### **Standards for Molecular Testing** for Red Cell, Platelet, and Neutrophil Antigens, 6th edition (effective January 1, 2023)

The 6th edition of Standards for Molecular Testing for Red Cell, Platelet, and Neutrophil Antigens contains minimum requirements for facilities using molecular



- Processes to be in place to perform risk assessments for all critical activities in the facility at defined intervals.
- Expanded reference standard tables that focus on "Chromosome Position," which relates to the chromosome position for the current human reference genome assembly.
- Processes to be in place to minimize the risk and impact of internal and external data breach.
- Proficiency testing options outside the United States.

STANDARDS PORTAL: AABB, 2022, digital edition

Product Code: 223115SP | Member Price: \$139 | Nonmember Price: \$159 PRINT EDITION: AABB, 2022, 59 pages, ISBN 978-1-56395-458-0 Product Code: 223115 | Member Price: \$139 | Nonmember Price: \$159

PRINT AND PORTAL BUNDLE: Product Code: 223295 | Member Price: \$222 | Nonmember Price: \$254

PRINT AND GUIDANCE BUNDLE: Product Code: 224205 | Member Price: \$222 |

Nonmember Price: \$254

#### Standards for Relationship Testing ..... Laboratories, 16th edition (effective January 1, 2024)

The 16th edition of Standards for Relationship Testing Laboratories features new and revised requirements in areas such as employee qualification, facility monitoring of potentially fabricated documents, and the identifica-

tion of non-chain-of-custody cases. Significant changes include:

- The updated Quality Systems Essentials template has been incorporated, including updated language and new sections on key concepts, key terms, and examples of objective evidence.
- The 16th edition has been expanded to allow for forensic genetic genealogy testing activities throughout the edition.
- New standards have been created to allow individuals wishing to serve as a laboratory director or technical leader whose experience was not accrued in an AABB-accredited laboratory to petition AABB to determine if their experience would be equivalent.

RT Standards has been updated to include requirements specifically for traditional relationship testing statistics and non-traditional relationship testing statistics, better reflecting the current landscape of the field.

STANDARDS PORTAL: AABB, 2024, digital edition

Product Code: 233293SP | Member Price: \$151 | Nonmember Price: \$208 PRINT EDITION: AABB, 2024, 118 pages, ISBN 978-1-56395-481-8 Product Code: 233293 | Member Price: \$151 | Nonmember Price: \$208 PRINT AND PORTAL BUNDLE: Product Code: 233982 | Member Price: \$262 |

Nonmember Price: \$325

PRINT AND GUIDANCE BUNDLE: Product Code: 234093 | Member Price: \$262 | Nonmember Price: \$325



**NEW!** 

## Standards

#### **Fundamental Standards for Blood Collection and Transfusion**

The Fundamental Standards for Blood Collection and Transfusion is a resource on and introduction to AABB standard-setting as a process. It can also be a tool to assist facilities and personnel taking the first step in incorporating quality concepts into blood banking. Notably, there is no accreditation program associated with these Fundamental Standards—they are for educational purposes only. They are based on input from internationally recognized experts, public comment, and the scientific literature on techniques and applications with an emphasis on regions with limited resources.

DIGITAL EDITION: AABB, 2018, 79 pages, PDF file

Product Code: 182237SP | Member Price: FREE | Nonmember Price: FREE

#### Estándares Fundamentales para Recolección y Transfusión de Sangre

Los Estándares Fundamentales para Recolección y Transfusión de Sangre son un recurso y una introducción al establecimiento de las normas de la AABB como un proceso. También puede ser una herramienta para ayudar a las instituciones y al personal a dar el primer paso para incorporar conceptos de calidad en el banco de sangre. Notablemente, no hay un programa de acreditación asociado con estos Estándares Fundamentales—son solo para fines educativos. Se basan en aportes de expertos reconocidos internacionalmente, comentarios públicos y la literatura científica sobre técnicas y aplicaciones con énfasis en regiones con recursos limitados.

EDICIÓN DIGITAL: AABB, 2020, 78 páginas, archivo PDF

Código de producto: 202239SP | Precio para miembros: GRATIS | Precio para no miembros: GRATIS



Standards

Collection

#### AABB Quality Certificate Program/El Programa de Certificado de Calidad de la AABB

The AABB Quality Certificate Program is based on the implementation of AABB's Fundamental Standards for Blood Collection and Transfusion. The Certificate signifies that facilities in limited-resource settings have initiated their quality journey by adhering to AABB fundamental standards. Facilities that obtain the Quality Certificate will gain international recognition for their efforts with a 2-year certificate issued by AABB.

El Programa de Certificado de Calidad de la AABB se basa en la implementación de las Estándares Fundamentales para la Recolección y Transfusión de Sangre de la AABB. El Certificado significa que las instalaciones en entornos de recursos limitados han iniciado su camino hacia la calidad al adherirse a los estándares fundamentales de la AABB. Las instalaciones que obtengan el Certificado de Calidad obtendrán reconocimiento internacional por sus esfuerzos con un certificado de dos años emitido por la AABB.

#### Standards for a Patient Blood Management Program, 4th edition (effective June 1, 2023)

The Standards for a Patient Blood Management Program can help facilities that are implementing or enhancing PBM efforts to have a solid foundation for maintaining and optimizing the care of patients who may or may not need transfusion. Like other AABB Standards, this edition includes overarching quality standards as well as specific technical standards.



Significant changes to the 4th edition:

- Care required for patients undergoing cardiac surgery or structural heart procedures in activity level 1.
- An operational continuity plan to be in place to address potential and actual inventory shortages.
- Corrective action to be taken when employee competence has not been demonstrated.
- Individuals with heavy bleeding potential are to be evaluated and managed appropriately.

STANDARDS PORTAL: AABB, 2022, digital edition

Product Code: 223186SP | Member Price: \$105 | Nonmember Price: \$120 PRINT EDITION: AABB, 2022, 47 pages, ISBN 978-1-56395-461-0 Product Code: 223186 | Member Price: \$105 | Nonmember Price: \$120 PRINT AND PORTAL BUNDLE: Product Code: 223882 | Member Price: \$168 | Nonmember Price: \$192

PRINT AND GUIDANCE BUNDLE: Product Code: 224086 | Member Price: \$168 |

Nonmember Price: \$192

STANDARDS PORTAL: AABB, 2022, digital edition

Product Code: 223100SP | Member Price: \$152 | Nonmember Price: \$188 PRINT EDITION: AABB, 2022, 67 pages, ISBN 978-1-56395-455-9 Product Code: 223100 | Member Price: \$152 | Nonmember Price: \$188 PRINT AND PORTAL BUNDLE: Product Code: 223968 | Member Price: \$243 |

Nonmember Price: \$300

PRINT AND GUIDANCE BUNDLE: Product Code: 224095 | Member Price: \$243 | Nonmember Price: \$300

#### Standards for Perioperative Autologous Blood Collection and Administration, 10th edition (effective January 1, 2023)

The 10th edition of Standards for Perioperative Autologous Blood Collection and Administration contains requirements intended to maintain and enhance the quality and safety of perioperative autologous blood. It reflects the concerns and priorities of several different aspects of the discipline, including the input of recognized experts in the field and the best interests of their patients. It was developed in the context of the global drive for quality in health care and internationally



the 10th edition: Processes to be in place to perform risk assessments for all critical

recognized principles of quality management. Significant changes to

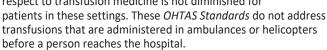
- activities in the facility at defined intervals.
- Processes to be in place to minimize the risk and impact of internal and external data breach.
- Medical director designees may develop policies, processes, and procedures for collection and administration of components.

aabb.org/store

## Standards

#### Standards for Out-of-Hospital Transfusion Administration Services, 1st edition (effective July 1, 2018)

Standards for Out-of-Hospital Transfusion
Administration Service details the latest standards for facilities other than the hospital that administer blood transfusion. As medical care advances and the population ages, the number and diversity of settings for blood transfusion are increasing. Long-term care facilities, infusion centers, hospices, and home-care agencies need to ensure that the quality of care with respect to transfusion medicine is not diminished for



The Quality System Essentials form the framework for the *OHTAS Standards*. The requirements in this document were developed to be consistent with those in the *Standards for Blood Banks and Transfusion Services*. In fact, users of both sets of *Standards* will notice some overlap in both the quality and the technical requirements of the two sets. This is intentional and reflects current practice.

STANDARDS PORTAL: AABB, 2018, digital edition

Product Code: 183142SP | Member Price: \$65 | Nonmember Price: \$79 **PRINT EDITION:** AABB, 2018, 44 pages, ISBN 978-1-56395-987-5 Product Code: 183142 | Member Price: \$65 | Nonmember Price: \$79

PRINT AND PORTAL BUNDLE: Product Code: 183145 | Member Price: \$120 |

Nonmember Price: \$140

Standards for Immunohematology Reference Laboratories, 13th edition (effective April 1, 2024)

The 13th edition of Standards for Immunohematology Reference Laboratories relies on a matrix of quality management system and detailed operational requirements, such as those defining minimum antisera resources. Significant changes include:

- The updated Quality Systems Essentials template has been incorporated, including updated language and new sections on key concepts, key terms, and examples of objective evidence.
- Standard 5.1.1.1 has been updated to focus specifically on testing processes and not testing procedures.
- New Standards 5.1.10.1.1 5.1.10.1.3 address proficiency testing referrals, associated communications, and notifications to CMS.
- New subnumber 3 has been added to Standard 5.2 creating a new path for conformance with American Rare Donor Program participation by screening at least 1000 donors for IgA deficiency.

STANDARDS PORTAL: AABB, 2024, digital edition

Product Code: 243125SP | Member Price: \$144 | Nonmember Price: \$208

PRINT EDITION: AABB, 2024, 100 pages, ISBN 978-1-56395-484-9

Product Code: 243125 | Member Price: \$144 | Nonmember Price: \$208

PRINT AND PORTAL BUNDLE: Product Code: 243499 | Member Price: \$231 |

Nonmember Price: \$336

PRINT AND GUIDANCE BUNDLE: Product Code: 244025 | Member Price: \$231 |

Nonmember Price: \$336

#### It's Your Choice

Standards for Out-of-Hospital Transfusion

Administration

Services

#### **User Benefits**

The Standards Portal allows users to customize their profile based on the activities for which they are accredited and can be rearranged at any time. Standards that do not apply to a user's profile will appear grayed out to ensure that purchasers are aware of the standards that apply to their facility and those that do not.

The Standards Portal is also fully searchable by key word, chapter, or standard number, allowing users to navigate quickly to the most relevant standards to them at that time. Guidance is provided on how to implement a standard, why it was created, or why a change was made from this edition to the last. Any relevant documentation that would assist users in implementing the standard in question is provided. Any interim or emergent standards will appear seamlessly in the portal once effective and highlighted.

All links to outside websites and cross references to other standards in the portal are live and appear in pop-up windows, allowing users to see both the standard in question and the linked post. The full edition of the Standards (not including any guidance) is printable at any time to ensure that users can take the Standards on the go.

#### **User Responsibilities**

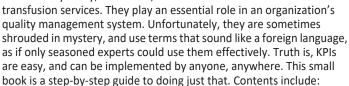
By purchasing the Standards through the AABB Standards Portal, users acknowledge and agree that they will access the Standards solely for their own personal and/or professional use and not distribute, copy, or provide access to the Standards for use by any third parties. Furthermore, users will securely maintain their login and password for the Portal. In the event that AABB or its authorized agents discover that users have not complied with these Terms and Conditions of Use, users understand that they will lose all rights to access the Standards and will not be entitled to any refund.

# Quality

#### Blood Bank KPIs: How to Select, Develop, and Analyze Them

By Faisal Saud Alsagri, MSc, BCLS, CLSSBB

Key performance indicators (KPIs) are a time-tested method for gathering the data (measurements) necessary to make operational improvements. KPIs are in use by many, but not all, blood banks and



- Fundamental concepts.
- Five steps in making effective KPIs.
- KPI template with explanations of each element.
- 30 examples of common KPIs.

The examples provided are all directly related to quality management, blood donation, component processing, and transfusion activities. Users can get started by studying the examples provided and then create their own KPIs later on.

PRINT EDITION: AABB Press, 2020, 47 pages, ISBN 978-1-56395-371-2 Product Code: 202026 | Member Price: \$50 | Nonmember Price: \$85

**DIGITAL EDITION: AABB Press, 2020** 

Product Code: 202026DB | Member Price: \$50 | Nonmember Price: \$85

#### **Error Management: Turning a** Negative Situation into a **Positive One**

By Faisal Saud Alsaqri, MSc, BCLS, CLSSBB, and Anne Chenoweth, MBA, MT(ASCP)SBB<sup>CM</sup>, CQA(ASQ)



Errors are going to occur, like it or not. The more we admit to errors, the greater the chances of success in eliminating them and preventing others in the future. Error or "occurrence" management in the laboratory is the core of continual process improvement. It requires a very well-designed process by which errors can be identified without blame and handled effectively. That process can have many variations, yet the consistent elements typically include the following: detection, reporting, initial evaluation, any action urgently needed, an in-depth analysis of the root cause(s), notifications as required, corrective actions, preventive actions, and, finally, evaluation of the success of those actions taken. This text provides tools and step-by-step instructions for managing errors and making the right decisions for correction and prevention. Topics covered:

- Process improvement.
- Error management essentials.
- Best practices in error management.
- Self-assessment.
- Management approaches and strategies.

**PRINT EDITION:** AABB Press, 2022, 98 pages, ISBN 978-1-56395-438-2 Product Code: 222006 | Member Price: \$60 | Nonmember Price: \$90

**DIGITAL EDITION: AABB Press, 2022** 

Product Code: 222006DB | Member Price: \$60 | Nonmember Price: \$90

#### **Auditing for Success in Blood** Centers, Transfusion Services, and Cellular Therapy Laboratories

By Faisal Saud Alsagri, MSc, BCLS, CLSSBB; Anne Chenoweth, MBA, MT(ASCP)SBB<sup>CM</sup>, CQA(ASQ); and Yvette C. Tanhehco, MD, PhD, MS, CABP

Auditing principles, processes, and quality control measures share many common attributes, even though the facilities being assessed may be unique. This text establishes a foundation in auditing concepts that can lead to success for the professional conducting the audit, the particular facility and its staff, and any third party involved (regulatory agency, study sponsor, accreditation organization). Chapters cover:

**Auditing for Success** 

- Auditing fundamentals (eg, risk assessment, internal controls).
- Auditor selection and training.
- Planning and preparation.
- Performing audits.
- Documenting, analyzing, and reporting results. And more!

Included in the book are practical examples in different settings, discussion of lessons to be learned, and helpful templates.

**PRINT EDITION:** AABB Press, 2024, 76 pages, ISBN 978-1-56395-506-8 Product Code: 242015 | Member Price: \$65 | Nonmember Price: \$95

**DIGITAL EDITION:** AABB Press, 2024

Product Code: 242015DB | Member Price: \$65 | Nonmember Price: \$95

#### AABB Guide to the Quality **Assessment of Transfusion**

By Tracie Nichols, MS, MLS(ASCP)SBB; Tina Chanez, MBA, MT(ASCP), CQA(ASQ); Mary E. Harach, CQA(ASQ), MT(ASCP); Kristy Jones, CMQ/OE, CQA(ASQ), MT(ASCP)SBB; Vaanush Nazaryan, MBA, SBB(ASCP), CPHQ; Patrick Ooley, MS, MT(ASCP),

CQA(ASQ)CMQ/OE; and Ljiljana Vladimira Vasovic, MD, for the Transfusion Medicine Section Coordinating Committee

Quality assessment can help to prevent mistransfusions and several other noninfectious serious hazards of transfusion. Diligent monitoring, identification, reporting, and rebuilding of problematic systems that put patients at risk can help to achieve this goal. This AABB Guide provides an overview of key aspects of a quality assessment program for the transfusion service. Beginning with the quality plan, a complete analysis of the transfusion process or "system" includes a step-by-step approach to reviewing the following:

- Procedures (eg, blood bank, nursing, operating room).
- Staff education and training.
- Blood component ordering.
- Patient consent.
- Sample collection and compatibility testing.
- Blood administration and transfusion documentation.
- Adverse events and transfusion reactions.
- Blood utilization.
- Incident and deviation management.

PRINT EDITION: AABB, 2021, 31 pages, ISBN 978-1-56395-423-8 Product Code: 213060 | Member Price: \$35 | Nonmember Price: \$50

**DIGITAL EDITION: AABB, 2021** 

Product Code: 213060DB | Member Price: \$35 | Nonmember Price: \$50



# Biotherapies

NEW!

#### **AABB-ISCT Good Tissue Practice Interpretive Tool**

Human cellular and tissue-based products (HCT/Ps) Tool classified as "361 products" must be processed according to Good Tissue Practice (GTP) requirements in facilities subject to regulatory oversight. HCT/Ps that do not meet requirements as "361" products, are considered "351" products and must comply with current Good Manufacturing Practice (GMP) regulations, rather than GTP regulations.

To assist professionals in understanding more about GTP regulations, a team of industry experts in HCT/P product development and manufacturing created an interpretive tool that associates the GTP regulations with guidance references, considerations, and additional resources. The formation of the team is the result of a collaboration between the Association for the Advancement of Blood & Biotherapies (AABB) and the International Society for Cell & Gene Therapy (ISCT).

Links in the tool are provided without interpretation and are not intended as a substitute for information on the terms and procedures directly associated with regulatory requirements governing 361-based products. Links and references in the tool will be reviewed periodically and updated accordingly.

**DIGITAL EDITION:** Free PDF can be downloaded from aabb.org/news-resources/ resources/cellular-therapies/aabb-isct-gtp-interpretative-tool

#### Cellular Therapy: A Handbook, 2nd edition

Edited by Jose A. Cancelas, MD, PhD, and Nicholas Bandarenko, MD

Newcomers and seasoned professionals alike will appreciate this updated handbook. The first edition was very popular—for a full 10 years after its release.

This edition has been completely re-created by international experts to bring you the most recent developments in the field. The material on cutting-edge advances is accompanied by the kind of solid information you'll want at your fingertips working in a cellular therapy laboratory. As with other handbooks in the series, this is your go-to, first reference with concise explanations and illustrations; the chapter reference lists provide ample resources for further study, if desired.

#### Topics covered:

- Biology of hematopoietic transplantation.
- HPC sources.
- Processing and storage of cryopreserved products.
- Processing and storage of noncryopreserved products.
- HLA typing and matching in HSCT.
- Clinical aspects of HSCT.
- Complications and their management.
- Hematopoietic gene repair and therapy.
- Adoptive immunotherapy.

PRINT EDITION: AABB, 2023, 291 pages, ISBN 978-1-56395-364-4 Product Code: 233050 | Member Price: \$70 | Nonmember Price: \$95



#### **Getting Started in Processing** for Biotherapies

By Joseph (Yossi) Schwartz, MD, MPH; Garrett Booth, MD, MS; Laura Connelly-Smith, BPharm, MBBCh, DM; Jeremy W. Jacobs, MD, MHS; Ashley Krull, PhD; Salyka Sengsayadeth, MD; and Ronit Reich-Slotky, PhD, MSc, CABP

Forward-thinking blood centers and hospitals are starting to collect cellular starting material for biotherapy research and eventual commercialization into therapeutic products. Staff well-versed in blood banking and transfusion medicine have an opportunity to transition to work in the newly expanding field. Success in developing this mission-critical revenue stream depends on a full understanding of the requirements for working under contract with research sponsors. This book provides insight into the critical planning stages that must precede a program launch. Written by experienced professionals, the content includes helpful tips, tools, and templates that can help clarify the benefits and challenges of the endeavor.

#### Topics include:

- Rationale for, and basics of, biotherapies
- Stakeholders
- Business plan
- **Budget considerations**
- Quality management
- Regulatory oversight
- Personnel (including contracting services)
- Processing (including cryopreservation, thawing, red cell/plasma
- Space and equipment considerations
- Storage and transportation

**PRINT EDITION:** AABB Press, 2024, 81 pages, ISBN 978-1-56395-479-9 Product Code: 242025 | Member Price: \$55 | Nonmember Price: \$85 **DIGITAL EDITION: AABB Press, 2024** 

Product Code: 242025DB | Member Price: \$55 | Nonmember Price: \$85

## ====Stay Tuned!=

AABB publishes new releases throughout the year—not just when a new catalog is prepared. That means new content may be available at any time. If you want to stay up to date, you can develop the habit of checking the AABB website (aabb.org/store) frequently for updates about new content. And if you purchase a publication on back-order, your copy will be one of the first to be shipped once the item is in stock.

# **Biotherapies**



### The First and Only Certification for Biotherapies Professionals

AABB offers the field's first and only certification for biotherapies professionals: The AABB Certified Advanced Biotherapies Professional (CABP) credentialing program.

Becoming a CABP is a mark of distinction, establishing that qualified professionals have demonstrated—through a certification exam—that they have the necessary knowledge to credibly practice in the field of biotherapies.

Certifying as a CABP provides an opportunity for highperforming biotherapies professionals to demonstrate their commitment and competence, distinguish themselves from their peers, and position themselves for career advancement. Candidates must meet prerequisites, obtain a passing grade on the exam, and agree to the CABP Code of Conduct to earn the certification for a 3-year cycle.

The CABP exam is comprehensive and is designed to cover the full breadth of topics within the field of biotherapies.

The exam covers seven domains in the field:

- Biotherapies in the patient care ecosystem.
- Biotherapies science and ethics.
- Operations and equipment.
- Biotherapies development lifecycle.
- · Manufacturing.
- Quality systems.
- The regulatory environment.

The CABP examination is open to all biotherapies professionals, including those working as physicians, quality and regulatory specialists, laboratorians, researchers, nurses and pharmacists. More information on AABB's new CABP program—including a link to apply—is available on the AABB website at aabb.org/CABP.

#### **CABP Sample Exam Questions**

Prepare for AABB's Certified Advanced Biotherapies
Professional (CABP) exam with these two sets of 100
sample questions. Covering content across all
seven of the exam's domains, these digital study
resources were specifically developed by subject
matter experts to help CABP candidates prepare
for the online, proctored exam. Downloadable and
printable from the AABB Education platform, each
set includes:

100 sample exam questions, covering the exam's seven key domains. (These specific questions will not appear on the CABP exam but are designed to cover learning objectives as outlined in the CABP exam syllabus.)

Answers and detailed rationales for each sample question are provided.

**SET 1:** AABB, 2024, 40 pages

Product Code: CABPPREP-SE-SET01 | Member Price: \$49 | Nonmember Price: \$59 **SET 2**: AABB, 2024, 41 pages

Product Code: CABPPREP-SE-SET02 | Member Price: \$49 | Nonmember Price: \$59 **BOTH SETS:** AABB, 2024

Product Code: CABPPREP-SE-BUN01 | Member Price: \$75 | Nonmember Price: \$99

# Stem Cell Collection, Infusion, and Transfusion Support: A Primer

By Laura Cooling, MD, MS

Are all the cell therapy resources you've checked so far a bit overwhelming in depth and scope? Then this primer is for you. Intended for trainees, this volume is packed with highlighted key concepts, concise tables, and other "nuggets" that you'll find useful. Also helpful is the robust list of references that will assist you not only now, but later, as your knowledge base grows. An added benefit is a handy appendix of abbreviations used in the text.

#### Contents cover:

- Clinical HSCT types.
- Donor evaluation.
- Stem cell collection [HPC(A), HPC(M), HPC(CB)].
- Processing and infusion.
- Transfusion support.
- Engraftment.
- Posttransplant complications.

PRINT EDITION: AABB Press, 2023, 98 pages, ISBN 978-1-56395-479-5 Product Code: 232230 | Member Price: \$55 | Nonmember Price: \$85

**DIGITAL EDITION: AABB Press, 2023** 

Product Code: 232230DB | Member Price: \$55 | Nonmember Price: \$85

# **Biotherapies**

## Circular of Information for the Use of Cellular Therapy Products, 2024

The Circular of Information for the Use of Cellular Therapy Products is intended to be an extension of the cellular therapy product label. It describes available products, modifications, indications, contraindications, dosage and administration, side effects, and hazards of cellular therapy products. It has been prepared by the AABB Circular of Information for Cellular Therapy Products

Task Force, which includes a collaborative group of multiple nongovernmental organizations that represent the cellular therapy field. The US Food and Drug Administration and the Health Resources and Service Administration also participated in the development and review process.

**DIGITAL EDITION:** Free PDF can be downloaded from www.aabb.org/CTCircular.

#### Cellular Product Toolkit: Guidance and Templates for Evaluating Requests, Fulfilling Requirements, and Delivering Compliant Products



INCTION MORE OF IMMEDI

Edited by Christina M. Celluzzi, PhD, MS; Marcie Finney, MS, MBA; and Kathy Loper, MHS, MT(ASCP)

When cell collection and manufacturing facilities receive product requests, there are vital questions to ask, issues to consider, and documentation to fulfill to ensure a quality product. The tools in this kit not only guide the navigation of these issues but also provide some practical head starts at various points along the full process chain from request to delivery. Essential information is easily accessible via slides, templates, and other helpful tips and resources on:

- Intended use (research, commercial, or nonclinical).
- · Donor safety and consent.
- Manufacturing issues.
- · Business agreements.
- Transportation and storage.

DIGITAL EDITION: AABB, 2020, 212 pages

Product Code: 203183DB | Member Price: FREE | Nonmember Price: \$99

We are using this as a training resource and as a reference for best practices. It has just the right level of detail for an overview of the cell therapy landscape from a practical, applied perspective.

—R. Brent Dixon, PhD, HCLD(ABB), RAC

#### Practical Handbook of Cellular Therapy Cryopreservation

Edited by Michael H. Creer, MD; Aby J. Mathew, PhD; and M. Victor Lemas, PhD

The cryopreservation process has an impact on cell yield, viability, and function. This *Practical Handbook of Cellular Cryopreservation* explains the "nuts and

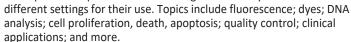
bolts" of the cryopreservation process from beginning to end: which freezers are used for which products, the fundamentals of freezing cells without damage, how to read freezing curves, how to handle products after an abnormality occurs, when to validate/verify/qualify, and so much more. This volume is packed with color illustrations that bring additional clarity to these detailed discussions.

PRINT EDITION: AABB Press, 2015, 157 pages, ISBN 978-1-56395-869-4 Product Code: 152492 | Member Price: \$50 | Nonmember Price: \$70

## Basic Principles in Flow Cytometry

By Vasiliki E. Kalodimou, MSc, PhD

This book provides a fundamental understanding of cell enumeration and discusses the principles of flow cytometer operation. Unlike other laboratory devices, flow cytometers present the technologist with many



PRINT EDITION: AABB Press, 2013, 91 pages, ISBN 978-1-56395-861-8 Product Code: 132087 | Member Price: \$38 | Nonmember Price: \$46



Buy a bundle and save:

Basic Principles in Flow Cytometry & Practical Handbook of Cellular Therapy Cryopreservation

BOTH BOOKS: Product Code: 152916 | Member Price: \$77 | Nonmember Price: \$88



Practical Handbook of Cellular Therapy

Cryopreservation

# Patient Blood Management

**Case Studies in** 

**Patient Blood** 

Management

#### Case Studies in Patient Blood Management

Edited by Irwin Gross, MD, and Mary A. Lieb, MT(ASCP)SBB, CQA(ASQ)

Jointly developed by a team of experts from AABB and the Society for the Advancement of Blood Management (SABM), this collection of clinical scenarios is a resource for anyone interested in patient-centered care—including clinicians, nurses, technologists, pharmacists, ethicists, and risk managers. Each scenario features learning objectives, a clinical situation, discussion of PBM options, key points, and references.

#### Scenarios include:

- Anemic patients.
- · OB/GYN patients.
- Orthopedic surgery.
- · Cardiovascular surgery.
- · Patients who refuse consent.
- · Patients who are bleeding significantly.
- Hematology/Oncology patients.

PRINT EDITION: AABB/SABM, 2015, 32 pages, ISBN 978-1-56395-920-2 Product Code: 156897 | AABB and SABM\* Member Price: \$110 |

Nonmember Price: \$145

**DIGITAL EDITION: AABB/SABM, 2015** 

Product Code: 156897DB | AABB and SABM\* Member Price: \$110 |

Nonmember Price: \$145

PRINT AND DIGITAL BUNDLE: Product Code: 156800 | AABB and SABM\*

Member Price: \$182 | Nonmember Price: \$232

\*Please call +1.866.222.2498 to receive your discount.

#### See Also

Standards for a Patient Blood Management Program (4th edition) and Standards for Perioperative Autologous Blood Collection and Administration (10th edition) and the accompanying Guidance are listed on page 4.

#### Preoperative Anemia Management

By Kathrine Frey, MD; Kelly McCoy, RN; Shylah Quast, BSN, RN; Rita Schwab, CPMSM; and Deborah Tolich, DNP, MSN, RN

This step-by-step guide to launching a preoperative anemia management program takes you through the process, from building a smart business model and gaining buy-in and approval, to implementation, measuring results, and demonstrating value. This is your essential primer on:

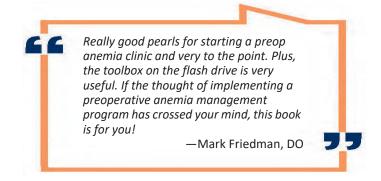
- · Feasibility studies and business proposals.
- Engagement of leaders and stakeholders.
- · Guidelines, algorithms, and workflows.
- Implementation and evaluation.
- Samples, templates, and slides in editable, digital format.

Get a head start toward success with USB card loaded with readymade templates, such as a business plan, an implementation plan, a project management tool, workflows, correspondence, and more!

PRINT EDITION: AABB Press, 2019, 73 pages, ISBN 978-1-56395-970-7 Product Code: 192991 | Member Price: \$84 | Nonmember Price: \$122

**DIGITAL EDITION: AABB Press, 2019** 

Product Code: 192991DB | Member Price: \$84 | Nonmember Price: \$122



#### Getting Started in Patient Blood Management

By James P. AuBuchon, MD, FCAP, FRCP(Edin); Kathleen E. Puca, MD, MT(ASCP)SBB, FCAP; Sunita Saxena, MD, MHA; Ira A. Shulman, MD, FCAP; and Jonathan H. Waters, MD



**PREOPERATIVE** 

**ANEMIA** 

**MANAGEMENT** 

After reviewing the rationale for limiting transfusion, this primer thoroughly discusses the five major concepts in patient blood management: 1) limiting blood loss through phlebotomy for testing, 2) optimizing patient hemoglobin levels, 3) using autologous donation and intraoperative blood recovery techniques, 4) minimizing perioperative blood loss, and 5) making evidence-based hemotherapy decisions. Also included are practical suggestions for taking initial positive steps toward program implementation; sample forms and reports; and helpful print and online resources.

**DIGITAL EDITION:** AABB, 2011, 34 pages, ISBN 978-1-56395-828-1 Product Code: 112024DB | Member Price: FREE | Nonmember Price: \$40

# Patient Blood Management

#### Citations in Patient Blood Management, 3rd edition

Compiled by Richard R. Gammon, MD; Christopher Bocquet; Mark T. Friedman, DO; Tina S. Ipe, MD, MPH; Sadhana Mangwana, MD, MBA; Aikaj Jindal, MD; Linda Rockwood, MS(CLM), MLS(ASCP)<sup>CM</sup>, CQA(ASQ), RABT; and Laura Stephens, MD, FCAP, QIA for the Transfusion Medicine Section Coordinating Committee

The resources in the literature on patient blood management are arranged by topic and subtopic in this updated compilation to form a convenient, useful reference tool. Compiled by subject matter experts, this publication serves as a comprehensive resource that will benefit anyone seeking to start or enhance their PBM program. Topics include assessment and treatment of anemia, transfusion indications, pharmacologic interventions, applications in point-of-care testing, PBM program development and certification, investigational agents, and more.

**DIGITAL EDITION:** AABB, 2021, 60 pages, ISBN 978-1-56395-434-4 Product Code: 214064DB | Member Price: FREE | Nonmember Price: FREE

# The Transfusion Committee: Putting Patient Safety First, 3rd edition

Edited by Amy E. Schmidt, MD, PhD

Is your facility struggling to review blood usage without a transfusion committee, blood utilization review committee, or similar group? This book will

help you recognize the importance of a transfusion review committee in the evolution toward a patient blood management environment. Building on the solid foundation of the popular previous editions, this revision adds new material throughout, as well as several new chapters. Designed to help community-based hospitals start and/or improve their transfusion committee and patient blood management programs, this book also includes useful templates and forms.

#### Topics include:

- Committee justification, organization, and function.
- Clinical practice guidelines.
- Regulatory agencies and accrediting organizations.
- Multidisciplinary and blood center participation.
- Quality tools for the committee.
- Patient blood management.
- Blood utilization review.
- Transfusion reaction oversight.
- Use of allogeneic blood products and blood conservation measures to minimize blood loss (new).
- Bloodless medicine (new).
- Implementation, management, and administrative aspects (new).
- · Committee functions and role in other countries (new).
- Pediatrics (new).

PRINT EDITION: AABB Press, 2024, ISBN 978-1-56395-509-9

Product Code: 242075 | Member Price: \$115 | Nonmember Price: \$145

**DIGITAL EDITION: AABB Press, 2024** 

Product Code: 242075DB | Member Price: \$115 | Nonmember Price: \$145

#### Perioperative Blood Management: A Physician's Handbook, 3rd edition

Edited by Jonathan H. Waters, MD; Aryeh Shander, MD; and Karen E. King, MD

questions that arise in daily practice.

Published jointly by AABB and SABM, this Handbook contains essential information for those who recognize the duty to consider all alternatives in care, both to select transfusion and to avoid transfusion. It is small enough to fit in a lab coat pocket, yet comprehensive enough to answer many of the

PRINT EDITION: AABB/SABM, 2013, 350 pages, ISBN 978-1-56395-842-7
Product Code: 133022 | AABB and SABM\* Member Price: \$50 | Nonmember

\*Please call +1.866.222.2498 to receive your discount.

#### **PBM Metrics**

By Nanci Fredrich, RN, BSN, MM; Richard R. Gammon, MD; Cheryl A. Richards, MT(ASCP)SBB; and Robin Tauer, RN, MHA

PBM Metrics brings you front-line expertise in collecting, analyzing, and reporting data on transfusion safety and patient blood management activities.

Written by experts, the 23 chapters cover the vexing questions people raise about metrics. What metrics are most useful? How much data is too much data? How do you integrate what you are doing with the facility's IT system? What data are critical to track? How do you spot trends and determine their meaning? What's the most effective way to show the results? This information-packed volume will help you cross off many items on your metrics checklist.

#### Topics include:

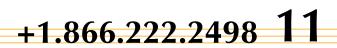
- The big picture (role of metrics in PBM, different types of metrics).
- Data collection (best practices, provider-specific metrics, dashboards).
- What to measure (thresholds, single-unit transfusions, nursing notes, reactions).
- Usage trends (percent/number wasted, surveys, data comparisons).
- Sharing what you find out (graphics, level of detail, anonymous or not?)

PRINT EDITION: AABB Press, 2019, 117 pages, ISBN 978-1-56395-972-1 Product Code: 192896 | Member Price: \$84 | Nonmember Price: \$122

**DIGITAL EDITION: AABB Press, 2019** 

Product Code: 192896DB | Member Price: \$84 | Nonmember Price: \$122





# Patient Blood Management

#### Hospital Certification in PBM

AABB and The Joint Commission have teamed up to offer Patient Blood Management (PBM) Certification to hospitals accredited by The Joint Commission. Based on the AABB Standards for a Patient Blood Management Program (PBM Standards), the certification can help organizations reap the maximum benefits of their PBM program. Reducing blood waste, improving patient outcomes, and reducing transfusion-related risks and costs make the collaboration between AABB and The Joint Commission essential to a facility with a PBM program.

How to get started? It's a stepwise process.

- Use the free trial of the PBM Standards in AABB's Standards Portal to help determine your facility's readiness to be evaluated.
- Study the PBM Certification Review Process Guide to help prepare for the on-site evaluation team visit.
- Review the white paper from an organization that has made the successful journey to certification and how it continues to benefit from the process.
- Submit your application 4 to 6 months before you would like to host the evaluation team visit.

For a free trial of the AABB *Standards*, visit https://aabb.org/portaltrial. For the review process guide, the white paper, the application form, and answers to any questions, contact www.jointcommission.org/patientbloodmanagement.

## AABB Guide to Blood Recovery and Reinfusion in Surgery and Trauma

By Richard R. Gammon, MD; Emily Coberly, MD; Alesia Kaplan, MD; and Janine Shepherd, MLS<sup>CM</sup>(ASCP)SBB, for the Transfusion Medicine Section Coordinating Committee

Patient blood management (PBM) programs have matured and grown in scope and sophistication. Increasingly, blood use in the surgical setting has become the centerpiece of those programs—likely because victims of trauma may suffer large-scale blood loss. The AABB Guide to Blood Recovery and Reinfusion in Surgery and Trauma focuses on the perioperative collection and reinfusion of blood that is shed during surgery, as well as prevention of the need for allogeneic transfusion in the postoperative period.



#### Topics addressed include:

- Maximizing the effectiveness of blood recovery and reinfusion.
- Details on sponges, suction, partially filled bowls, washing.
- Indications and contraindications for use of the techniques.
- Potential complications that may result.
- · Storage of recovered blood.
- Administrative aspects of program operations.
- · Regulatory and accreditation requirements.

Also included are helpful appendices on indications and contraindications for perioperative blood recovery in different patient populations.

PRINT EDITION: AABB, 2020, 36 pages, ISBN 978-1-56395-412-2 Product Code: 203002 | Member Price: \$40 | Nonmember Price: \$55 DIGITAL EDITION: AABB, 2020

Product Code: 203002DB | Member Price: \$40 | Nonmember Price: \$55

#### Patient Blood Management: Multidisciplinary Approaches to Optimizing Care

Edited by Jonathan H. Waters, MD, and Steven M. Frank, MD

This text explains the importance of combining strategies from multiple disciplines and offers practical advice on patient blood management (PBM) approaches. All 22 chapter experts use PBM concepts on a daily basis. Surgeons, anesthesiologists, nurses, perfusionists, pharmacists—all will find valuable content:

- · Rationale and economics of PBM.
- Developing a PBM program.
- Preoperative patient evaluation.
- Perioperative blood recovery.
- Topical hemostatics.
- · Point-of-care testing.
- Perioperative management in selected specialties: liver surgery, obstetrics, orthopedics, pediatrics, and cardiac surgery.

PRINT EDITION: AABB Press, 2016, 403 pages, ISBN 978-1-56395-932-5 Product Code: 162185 | Member Price: \$130 | Nonmember Price: \$150

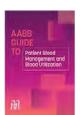
**DIGITAL EDITION:** AABB Press, 2016

Product Code: 162185DB | Member Price: \$130 | Nonmember Price: \$150

## AABB Guide to Patient Blood Management and Blood Utilization

By Richard R. Gammon, MD; Sara Bakhtary, MD; Nanci Fredrich, RN, BSN, MM; Sherry Hogan, RN, CCRN; and Barbara Tubby, MT(ASCP)SBB, MSEd, for the Transfusion Medicine Section Coordinating Committee

Patient blood management (PBM), although practiced for many years, has come of age as a mainstream practice within the past decade. The goal of the AABB Guide to Patient Blood Management and Blood Utilization is to serve as a concise yet comprehensive resource by first explaining the various aspects of PBM. Then the content dives into the review, audit, and measurement of program efforts. The metrics of blood utilization have been spurred by development of



sophisticated information technology systems and widespread use of electronic health records. Both new and long-standing PBM programs can benefit from this *Guide*, as its goal is to promote the journey from being a good PBM program to becoming a great one.

#### Topics covered:

- Avoidance of allogeneic transfusion.
- Options available pre-, intra-, and postoperatively.
- Guidance for blood utilization.
- · Methods for reviewing transfusion practices.
- How to audit transfusion decisions.
- Use of audit results to improve patient care.

**PRINT EDITION:** AABB, 2020, 60 pages, ISBN 978-1-56395-411-5 Product Code: 203412 | Member Price: \$50 | Nonmember Price: \$70

**DIGITAL EDITION:** AABB, 2020

Product Code: 203412DB | Member Price: \$50 | Nonmember Price: \$70

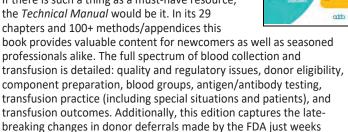
12 aabb.org/store

#### General

#### Technical Manual, 21st edition

Edited by Claudia S. Cohn, MD, PhD; Meghan Delaney, DO, MPH; Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>; Louis M. Katz, MD; and Joseph Schwartz, MD, MPH

If there is such a thing as a must-have resource, the Technical Manual would be it. In its 29 chapters and 100+ methods/appendices this



Other notable updates:

- Apheresis content updated to 2023 ASFA indications.
- Influence of COVID-19 included in discussions of disaster preparedness, blood shortages, convalescent plasma.
- Expanded cell therapy content.

before the new edition was released.

- Changes in neonatal and pediatric transfusion practice.
- Updates in molecular testing.

The methods and appendices are once again posted online at no extra cost. Purchasers of the print edition will find an access code to the online content in the book itself, and the digital edition includes methods/appendices as ancillary files to the chapters. Because the Technical Manual is such a good text for those just about to begin their careers, the AABB is happy to offer student pricing.

**PRINT EDITION:** AABB, 2023, hard cover, 899 pages, ISBN 978-1-56395-464-1 Product Code: 233013 | Member Price: \$188 | Nonmember Price: \$291 | Student Price: \$165

**DIGITAL EDITION: AABB, 2023** 

Product Code: 233013DB | Member Price: \$188 | Nonmember Price: \$291 |

Student Price: \$165

PRINT AND DIGITAL BUNDLE: Product Code: 233690 | Member Price: \$311 |

Nonmember Price: \$466



For over 30 years, I have used the AABB Technical Manual as a trusted resource in my practice and teaching roles. My first Technical Manual was the fabulous "green book" (10th edition), but every new version remains my "gold standard" for understanding Transfusion Medicine! I recommend this incredible publication without hesitation to learners everywhere.

—Joe Chaffin, MD

#### How Do I Do It? Volume 2

Compiled by Beth H. Shaz, MD

Readers of TRANSFUSION report that aside from the research content, their favorite feature is the practical advice articles begun in 2006 as the "How Do I . . ?" series. Renamed "How Do I Do It?" in 2022, this new compilation brings together the articles published

since the first compilation. In this volume, experienced colleagues describe how they manage more than 60 situations from the laboratory, surgical suite, collection facility, and clinical care areas.

**PRINT EDITION:** AABB, 2023, 540 pages, ISBN 978-1-56395-473-3 Product Code: 233927 | Member Price: \$125 | Nonmember Price: \$165

**DIGITAL EDITION: AABB, 2023** 

Product Code: 233927DB / Member Price: \$125 | Nonmember Price: \$165

#### How Do I? Volume 1

Compiled by Beth H. Shaz, MD

Did you miss it? We have a limited supply of the first collection available. It is a handy resource covering 10 years of practical advice from your peers.

PRINT EDITION: AABB, 2015, 436 pages, ISBN 978-1-56395-

Product Code: 153927 | Member Price: \$110 | Nonmember Price: \$130

## Together!

How Do I? Volume 1, and How Do I Do It? Volume 2

BOTH BOOKS: Product Code: 233930 | Member Price: \$188 | Nonmember Price: \$236



#### **Key Concepts in Transfusion Medicine**

Edited by Joseph Schwartz, MD, MPH, and Huy P. Pham, MD, MPH

Key Concepts in Transfusion Medicine reviews and reenforces the key concepts involved in the clinical aspects of blood transfusion (including apheresis and cellular therapy). For the clinicians who order blood components and the nurses who administer them, for physicians and technologists in training to become

blood bankers, and for seasoned professionals who are mentoring newcomers in the field—this book is ideal.

Key Concepts distills the current body of transfusion knowledge, presenting the material in a conversational style. It highlights key ideas, facts, conclusions, and suggested readings, to provide a solid basis on which to make intelligent transfusion decisions as well a good foundation for further reading. Its marginal notes re-emphasize the most important points.

**PRINT EDITION:** AABB Press, 2022, 557 pages, ISBN 978-1-56395-962-2 Product Code: 222023 | Member Price: \$95 | Nonmember Price: \$130

**DIGITAL EDITION: AABB Press, 2022** 

Product Code: 222023DB | Member Price: \$95 | Nonmember Price: \$130

## Global Perspectives and Practices in Transfusion Medicine

Edited by Quentin G. Eichbaum, MD, PhD, MPH, MFA, MMHC, MA, MSc, MMEd; Soraya Amar El-Dusouqui, MD, MBO; Linda S. Barnes, DrPH, MHA; Evan M. Bloch, MBChB, MS; Meghan Delaney, DO, MPH; Tina S. Ipe, MD, MPH; and Cees Th. Smit Sibinga, MD, PhD, FRCP Edin, FRCPath



This collaborative project of the AABB Global Transfusion Forum uses the concepts of contextual impact, interdependence, and transformative learning as foundations for bidirectional benefit. Authors representing more than 25 countries, with more than 75% living and working in low- and middle-income countries (LMICs), offer authentic perspectives on current local practices from those with contextual expertise, who are often underrepresented in the literature.

A consistent chapter structure includes learning objectives, global comparisons, and considerations for practice on each chapter topic. A broad range of topics from 22 chapters is divided into five sections:

- History, resolutions and frameworks.
- Developing blood systems.
- Transfusion practices.
- Transfusion education.
- · Research, ethics and health policy.

**PRINT EDITION:** AABB, 2023, 656 pages, ISBN 978-1-56395-451-1 Product Code: 233000 | Member Price: \$58 | Nonmember Price: \$75

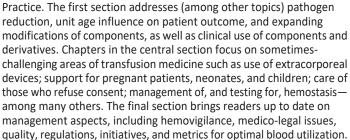
**DIGITAL EDITION: AABB, 2023** 

Product Code: 233000DB | Member Price: \$58 | Nonmember Price: \$75

## Transfusion Therapy: Clinical Principles and Practice, 4th edition

Edited by Marisa B. Marques, MD; Joseph Schwartz, MD, MPH; and Yan Yun Wu, MD, PhD

The 22 chapters are grouped in three sections: Blood Products and Derivatives, Transfusion Medicine Practice, and Management Aspects of Transfusion



PRINT EDITION: AABB Press, 2019, hard cover, 598 pages, ISBN 978-1-56395-996-7 Product Code: 192005 | Member Price: \$180 | Nonmember Price: \$260

**DIGITAL EDITION: AABB Press, 2019** 

Product Code: 192005DB | Member Price: \$180 | Nonmember Price: \$260

#### On-Call Manual: A Systematic Approach to Solving Common Issues in Transfusion Medicine

Edited by Philip Howard, MD; Alexis Peedin, MD; and Melissa George, DO

When they are calling you, who are you going to call? This handy resource is intended to assist residents,

fellows, and attending pathologists who are on call, are covering the transfusion service, and do not yet have the experience of a seasoned expert. More than 20 realistic cases are presented, involving the types of situations that can happen at any time, involving patients experiencing transfusion reactions; clinicians requesting red cell, platelet, and plasma/cryoprecipitate transfusion; possible use of apheresis; and situations involving obstetric/perinatal/pediatric patients.

Each case spans the initial questions to be asked, differential diagnosis, consultation with others, evaluation of test results, what portends for the patient's future transfusion management, and handing off to the next shift's personnel with a complete report.

The editors crowd-sourced the topics from among their colleagues and applied a structured, systematic approach that can be used anywhere, even in situations not described in the book. References and suggested readings are also included.

PRINT EDITION: AABB Press, 2023, 105 pages, ISBN 978-1-56395-471-9 Product Code: 232006 | Member Price: \$48 | Nonmember Price: \$62

**DIGITAL EDITION: AABB Press, 2023** 

Product Code: 232006DB | Member Price: \$48 | Nonmember Price: \$62

## Together!

See aabb.org/store for full descriptions!

On-Call Manual:

A Systematic Approach to Solving Common Issues in Transfusion Medicine and one copy each of AABB's five laminated data cards

#### BOOK AND CARDS:

Product Code: 232920 | Member Price: \$48 | Nonmember Price: \$62



#### **Components**

## Blood Transfusion Therapy: A Handbook, 14th edition

Edited by Melissa Cushing, MD; Jessica Poisson, MD; and Nicholas Bandarenko, MD

Hard to believe that things can change so much in 3 years. So although much of the "tried and true" content that was covered in the previous edition is still

included, this updated edition has been thoroughly reviewed and augmented to capture the most recent trends in transfusion medicine practice. Concise discussions address blood components and derivatives, hemostatic disorders, transfusion complications, massive transfusion, patient blood management, and therapeutic apheresis.

#### New content on:

- Liquid plasma, pathogen-inactivated plasma, factor concentrates.
- · RhIG dosing.
- Pre-hospital transfusion.
- Hyperhemolysis syndrome.
- · Massive hemorrhage, including use of whole blood.
- See online description for more!

PRINT EDITION: AABB, 2023, 331 pages, ISBN 978-1-56395-475-7 Product Code: 233016 | Member Price: \$60 | Nonmember Price: \$90

#### Blood Transfusion Therapy Data Card (Set of 10)

Developed by contributors to the *Blood Transfusion Therapy Handbook* 

The Blood Transfusion Therapy Data Card is a handy reference that can be carried easily in a lab coat pocket. Laminated for durability, the Data Card features:



- An updated list of available components with their composition and indications for use (includes pathogen-inactivated and liquid plasma).
- An outline of treatment for acute transfusion reactions.
- Information on prothrombin complex concentrates, fibrinogen concentrate, Factor XIII concentrate, protein C concentrate, and activated prothrombin complex concentrates.

PRINT EDITION: AABB, 2023, laminated cards, ISBN 978-1-56395-476-4 Product Code: 233103 | Member Price: \$45 (set) | Nonmember Price: \$60 (set)

#### Blood Transfusion Therapy: A Guide to Blood Component Administration, 5th edition

Blood Transfusion Therapy:
A Guide to Blood Component Administration

By the contributing editors of *Blood Transfusion Therapy: A Physician's Handbook*, 13th edition

This popular  $8.5^{\circ}$  x  $11^{\circ}$  flip chart on safe blood administration has been thoroughly updated to reflect recent changes. Administration of red cells, platelets, plasma, plasma derivatives, granulocytes, and cryoprecipitate is augmented by reminders on providing safe transfusions and managing transfusion reactions when they do occur. Multiple tabs, colorful graphics, and key points provide quick information on:

- Filters.
- · Blood warming.
- Pumps.
- Compatible fluids.
- Infusion times.
- Temperature limits.
- · Compatibility.
- And more!

**PRINT EDITION:** AABB, 2020, spiral-bound flip chart, ISBN 978-1-56395-409-2 Product Code: 203109 | Member Price: \$45 | Nonmember Price: \$55

## The AABB Handbook Series

For close to 40 years, the books in the AABB Handbook Series have been handy, reliable, and valued resources for thousands of practitioners in the transfusion medicine field. Not only physicians, but also nurses, technologists, and other specialists have depended on one or more books in the series as their "go-to" or first reference. The solid content is informative and the references put readers on the right track to further research. The series currently includes:

- Blood Transfusion Therapy: A Handbook, 14th edition (this page).
- Cellular Therapy: A Handbook, 2nd edition (see page 7)
- Coagulation: A Handbook, 1st edition (see page 22).
- Pediatric Transfusion: A Handbook, 5th edition (see page 21).
- Perioperative Blood Management: A Physician's Handbook, 3rd edition (see page 11).
- Therapeutic Apheresis: A Handbook, 7th edition (see page 23).

#### Circular of Information for the Use of Human Blood and Blood Components, 2024 (Set of 50)

Prepared by AABB, American Red Cross, America's Blood Centers, and the Armed Services Blood Program, this *Circular* is an extension of the container label and recognized as acceptable by the FDA. The FDA has detailed how the *Circular* in brochure format is to be used as well as the conditions under which the *Circular* on USB drive can be used. This important information is located on the Circular page of the AABB website.

#### New in this version:

- · FDA-licensed test for malaria.
- Signs and symptoms of TACO.
- Collection and processing of Leukocyte Reduced Red Blood Cells in an oxygen/carbon dioxide-reduced environment.
- Donor ingestion of drugs and preservation of platelet function in Whole Blood for transfusion.
- Proteins (albumin, ADAMTS13, and Factors II, V, VII, X and XI) in Plasma Cryoprecipitate Reduced remain at levels similar to the plasma product used to prepare the cryoprecipitate.

The bundle of 3 sets and a USB includes FDA-approved guidance on when the digital version may be used.

PRINT EDITION: AABB, 2024, 49 pages, ISBN 978-1-56395-501-3
Product Code: 243011 | Member Price: \$75 (set) | Nonmember Price: \$95 (set)
PRINT AND USB BUNDLE (USB and 3 sets printed): Product Code: 243018 |
Member Price: \$235 | Nonmember Price: \$290

#### RBC Transfusion Data Card (Set of 10)

This *Data Card* is distilled from the AABB clinical practice guidelines published in late 2016. Laminated for durability, the card concisely summarizes evidence-based restrictive strategies for Red Blood Cell (RBC) transfusion in both adult and pediatric patients. Included are indications, contraindications, and key points on administration, as well as references. Also included is a guide to the evaluation of the evidence used to develop the recommended strategies.



PRINT EDITION: AABB, 2017, laminated cards, ISBN 978-1-56395-942-4 Product Code: 173201 | Member Price: \$25 (set) | Nonmember Price: \$35 (set)

## Prophylactic Platelet Transfusion Data Card (Set of 10)

This Data Card (in sets of 10) is a convenient resource that folds to fit conveniently into a lab coat pocket for quick reference. Laminated for durability, the card concisely summarizes evidence-based clinical practice guidelines for the administration of platelets in a variety of adult patient populations. Included on the card is a guide to the evaluation of the evidence leading to the recommended guidelines. Also on the card are storage, transport, and expiration criteria for some of the most frequently transfused platelet products.

**PRINT EDITION:** AABB, 2015, laminated cards, ISBN 978-1-56395-918-9 Product Code: 156840 | Member Price: \$28 (set) | Nonmember Price: \$38 (set)

#### Eleadership Certificate in Blood Banking and Transfusion Medicine

Invest in yourself today! This self-paced program is expertly designed for emerging laboratory leaders, offering specialized leadership training to elevate your career to new heights. This interactive elearning experience covers a wide range of essential topics, including:

- Blood Banking and Transfusion Medicine Fundamentals
- Quality
- Regulatory Compliance
- Operations Management
- Administration
- Information Technology (IT) Systems
- · Personnel Leadership and Management

Job aids, glossaries, a learning journal, and other resources are provided to enhance your learning. This program is eligible for 30 continuing education credits/contact hours for California Nurses, California Lab Personnel, Florida Lab Personnel, and General Participation credit, which can be used for ASCP maintenance of certification. For more information on each credit type, please visit aabb.org/education/ce-cme-information.

Registration is easy via aabb.org/store. Upon purchase, immediate access is granted via the AABB Education Platform. To receive the certificate, participants must complete the domain modules, assessments, and a program evaluation within 12 months to receive the Certificate of Completion.

Individual Member Price: \$879 / Individual Nonmember Price: \$1,159 / Institutional discounts for 4 or more participants enrolling at the same time are available.

AABB wishes to thank Quidel/Ortho for its generous support of this important workforce initiative.

## Immunohematology/ Serology

#### **Antibody Identification: Art or Science?** A Case Study Approach

By Janis R. Hamilton, MS, MT(ASCP)SBB; Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>; and Sally V. Rudmann, PhD. MT(ASCP)SBB



Written by practicing serologists and educators, these case study simulations

examine techniques for alloantibody identification including use of chemicals, inhibition, adsorption, and adsorption/elution. Each case begins with a clinical scenario and initial test results, which are followed by a series of multiple-choice questions that offer testing options and protocols for resolution. Along the way, the reader is provided with detailed feedback designed to enhance reflection and critical thinking. Equally suited to classroom or individual study, the book includes access to a set of the questions without the answers, to provide a realistic testing situation.

**PRINT EDITION:** AABB Press, 2013, 506 pages, ISBN 978-1-56395-837-3 Product Code: 132020 | Member Price: \$82 | Nonmember Price: \$105 **DIGITAL EDITION:** AABB Press, 2013

Product Code: 132020DB | Member Price: \$82 | Nonmember Price: \$105

#### **Investigating Positive DAT Results: A Case** Study Approach

By Susan T. Johnson, MSTM, MT(ASCP) SBB<sup>CM</sup>; Janis R. Hamilton, MS, MT(ASCP) SBB; and Sally V. Rudmann, PhD, MT(ASCP)SBB<sup>CM</sup>



The case studies in this book can help sharpen your skills for investigating a positive DAT result. Written by experienced serologists, the case studies in this volume provide a realistic testing situation for those professionals who investigate hemolytic transfusion reactions. Each case opens with a clinical scenario and results of initial laboratory testing, followed by multiplechoice questions that take the reader through further testing options and protocols for resolution. The cases also include detailed feedback for correct, as well as incorrect, choices made. Well-suited to both classroom and individual study, the book includes access to a set of the questions without the answers for a realistic simulation.

PRINT EDITION: AABB Press, 2016, spiral binding, 641 pages, ISBN 978-1-56395-911-0

Product Code: 152770 | Member Price: \$95 | Nonmember Price: \$125 **DIGITAL EDITION: AABB Press, 2016** 

Product Code: 152770DB | Member Price: \$95 | Nonmember Price: \$125

#### Judd's Methods in Immunohematology, 4th edition

By W. John Judd, FIBMS, MIBiol; Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>; and Jill Storry, PhD,

This well-respected compilation has for many years been one of the most widely used references for serologic methods to address dilemmas in areas such as detection, identification, and investigation of antibodies; perinatal testing of mother and neonate;



resolution of problems encountered with ABO typing; and in-house preparation of reagents. The authors—all experts—have thoroughly updated this edition, but also retained the valuable and still-relevant material from previous editions.

#### Contents include:

- Routine tube methods.
- Antibody detection.
- Enzyme techniques.
- Elution techniques.
- Cell separation methods.
- Alternative serologic methods for antibody detection.
- Reagent red cells (non-enzyme-treated).
- Antibody identification.
- Investigating antibodies to high-prevalence antigens.
- Prenatal and perinatal testing.
- Investigating samples containing autoantibodies.
- Investigating drug-induced hemolysis.
- Investigating ABO grouping problems.
- Investigating red cell polyagglutination.
- Miscellaneous methods.

In addition, helpful appendices provide tips on reagent preparation and storage and a template for documentation of reagent preparation.

This resource can be used to save time for blood centers, transfusion services, and reference laboratories in developing or updating their standard operating procedures. Print edition comes with digital files for ease of customization.

PRINT EDITION: AABB Press 2021, hard cover, 719 pages, ISBN 978-1-56395-

Product Code: 212190 | Member Price: \$140 | Nonmember Price: \$190

**DIGITAL EDITION: AABB Press, 2021** 

Product Code: 212190DB | Member Price: \$140 | Nonmember Price: \$190



I've used Judd's Methods both when I was working in an immunohematology reference lab and a hospital transfusion service. It provides all the basic serologic testing methods you need in a crossmatch lab as well as the specialized testing most often performed in the reference lab. And everything is organized in the most convenient manner to help you complete your own documentation.

-Dawn Rumsey, ART(CSMLS), BB<sup>CM</sup>(ASCP)

#### Blood Banker Favorites: A Collection of the Best Recipes for Blood Sample Preparation

By Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>, and Michael J. Schanen, MLS<sup>CM</sup>(ASCP)SBB<sup>CM</sup>

Blood Banker Favorites is intended for medical laboratory scientists, technicians, and educators who prepare samples for training, teaching, and competency assessment. Formatted as if it were a traditional "cookbook," it contains almost 60 "recipes" (procedures) that have been validated to work. From weak expected ABO alloantibodies to immediate transfusion reactions, from cold autoantibody with broad specificity to positive DAT results with both IgG and C3—the upbeat presentation belies over 15 years of collecting sample preparation procedures from AABB colleagues. The authors carefully tested the recipes chosen for inclusion and developed this book as a gift to their profession. Destined to become a classic.

#### Contents:

- Entertaining guests.
- · Measurements and substitutions.
- ABO appetizers.
- Mixed-field salads.
- Antibody soups.
- Side dishes.
- · DAT desserts.
- Full course meals.

PRINT EDITION: AABB Press, 2020, 202 pages, ISBN 978-1-56395-978-3 Product Code: 202887 | Member Price: \$55 | Nonmember Price: \$80 DIGITAL EDITION: AABB Press, 2020

Product Code: 202887DB | Member Price: \$55 | Nonmember Price: \$80

## Polyagglutination: An Update and Review

Edited by Gregory R. Halverson, MT(ASCP)SBB, DLM

Since the publication in 1980 of the slim AABB volume on the topic, much has changed. This update covers several new types of polyagglutination as well as some of the cell markers that have become associated with polyagglutination and disease. The intervening 40+ years of change have presented today's professionals with new challenges, including the predominance of monoclonal, rather than polyclonal, reagents; lack of commercial sources of lectins; and a need to understand glycan array chips and computer-generated data analysis.

#### Topics include:

- Lectins.
- Acquired polyagglutination.
- Inherited and rare forms.
- Identification of TR polyagglutination.
- · NOR blood group antigen.
- Transfusion support for the patient with polyagglutination.
- · Bonus! Helpful appendices of hard-to-find data.

PRINT EDITION: AABB Press, 2022, 115 pages, ISBN 978-1-56395-453-5 Product Code: 222080 | Member Price: \$60 | Nonmember Price: \$80

DIGITAL EDITION: AABB Press, 2022

Product Code: 222080DB | Member Price: \$60 | Nonmember Price: \$80



#### **AABB Guide to Antibody Identification**

Wen Lu, MD; Tony S. Casina, MT(ASCP)SBB; Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>; Heather Jorissen, MLS(ASCP)SBB; Jennifer E. O'Connor, MSTM, MLS(ASCP)<sup>CM</sup>SBB<sup>CM</sup>; and Heather M. Smetana, MLS(ASCP)<sup>CM</sup>SBB<sup>CM</sup> for the Transfusion Medicine Section Coordinating Committee

The identification of antibodies in patients with a reactive pretransfusion antibody detection test is a critical element of safety in blood transfusion. This instructive AABB Guide to Antibody Identification addresses three key areas: 1) routine testing and interpretation of the results, 2) additional testing, including guidance on what alternatives to use and when, and 3) situations that call for unusual antibody testing.



Examples of the detailed content include:

- Developing policies and procedures for antibody identification.
- How unexpected antibodies can be detected and identified.
- When to use different test methods (gel, tube, solid phase, etc).
- What findings affect the decision to transfuse.
- Definitions for compatibility, incidence, detection vs screen vs panel, plasma vs serum, etc.
- And so much more!

With appendices containing case studies, useful examples of "ruling out," and a compilation of relevant regulatory and accreditation requirements—the scope and depth of the content will appeal to many facilities and technologists.

PRINT EDITION: AABB, 2021, 113 pages, ISBN 978-1-56395-418-8 Product Code: 213001 | Member Price: \$68 | Nonmember Price: \$98 DIGITAL EDITION: AABB, 2021

Product Code: 213001DB | Member Price: \$68 | Nonmember Price: \$98



Working on the guides, as with working on any project with AABB, is always a fantastic experience, because I am able to meet and learn from incredibly knowledgeable colleagues. The workgroup meetings are always intellectually stimulating and provide wonderful opportunities to dig deeper into my own understanding and practices. Contributing to AABB publications as the final product is an exciting endeavor.

-Wen Lu, MD



## Introduction to Molecular Immunohematology

By Sunitha Vege, MS; Michael Gannett, MLS (ASCP)<sup>CM</sup>SBB<sup>CM</sup>; and Meghan Delaney, DO, MPH

Foreword by Tony S. Casina, MT(ASCP)SBB

This book covers the basics of red cell genetics and how molecular testing is used in the clinical setting. It connects the test performed to the genes, to the expressed phenotype, and to its relevance in clinical transfusion medicine. It should be a useful tool for evaluating patients who may benefit from blood group genetic testing and for interpretation of genotype results.

#### Includes:

- Basic concepts and terminology.
- Methods and applications for red cell genotyping.
- "Simple" and complex blood group systems.
- · Resolution of discordances.

PRINT EDITION: AABB Press, 2020, 151 pages, ISBN 978-1-56395-365-1
Product Code: 202503 | Member Price: \$89 | Nonmember Price: \$120

**DIGITAL EDITION:** AABB Press, 2020

Product Code: 202503DB | Member Price: \$89 | Nonmember Price: \$120

#### Relationship Testing Toolkit: Tools to Advance Your Understanding of Relationship Testing Calculations and Standards

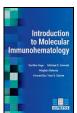
This digital toolkit will assist practitioners with the evaluation of both standard and complex relationship testing (RT) situations. The combination of go-to reference documents on RT calculations and practical templates will make development of facility-specific forms for operational compliance much smoother. The toolkit also provides access to supplemental resources on the following topics:

- Mass fatality DNA identification operations.
- RT calculations.
- Likelihood ratios.
- Twinship.
- Chimeras.
- Hydatidiform moles.
- · Incestuous parentage.

In addition, forms may be downloaded in Microsoft Word format for customization to assist in compliance with the record-keeping requirements in AABB *Standards for Relationship Testing Laboratories* (eg, competency record, continuing education, review of proficiency test results, software validation of calculations, and review of qualifications for the RT laboratory director).

DIGITAL EDITION: AABB, 2020, 212 pages

Product Code: 203062DB | Member Price: \$100 | Nonmember Price: \$149



#### **Relationship Testing 1.0**

By Robert E. Wenk, MD, MS<sub>hGEN</sub>

This primer on relationship testing may begin with paternity issues, but it also discusses other uses of the science. Automation in the laboratory has enabled rapid and accurate test results, with computers processing the calculations for relationship

probabilities. Unfortunately, these advances have come at the expense of our understanding of the testing logic that underlies those results. This concise text fills the gap in the current literature by providing a fundamental explanation of relationship testing in easily understood terms. Chapters address the basic science, how statistics are used, how the logic of relationship testing evolved, the types of testing used for paternity, and testing for other blood relatives. Suggested readings and a helpful glossary are included.

PRINT EDITION: AABB Press, 2018, 170 pages, ISBN 978-1-56395-966-0 Product Code: 182871 | Member Price: \$75 | Nonmember Price: \$105 DIGITAL EDITION: AABB Press, 2018

Product Code: 182871DB | Member Price: \$75 | Nonmember Price: \$105 PRINT AND DIGITAL BUNDLE: Product Code: 182877 | Member Price: \$120 |

Nonmember Price: \$168

## Bloody Brilliant! A History of Blood Groups and Blood Groupers

By Steven R. Pierce, SBB(ASCP), and Marion E. Reid, PhD, FIBMS, DSc(Hon)

"The story of blood groups always begins in Vienna with Karl Landsteiner." So begins this uniquely fascinating tale of how the blood groups were

discovered and the interesting people who made those discoveries. Meticulously referenced, this volume is also lavishly illustrated as it recalls the progression of knowledge in blood grouping that continues today. This is the story not only of Landsteiner and other early giants, but also of Mollison, Garratty, and many others who have made their mark on the profession.

**PRINT EDITION:** AABB Press, 2016, hard cover, color illustrations, 633 pages, ISBN 978-1-56395-910-3

Product Code: 162963 | Member Price: \$180 | Nonmember Price: \$210





What a joy it is to read this unique and informative history! In addition to being a formal history of blood group serology, this volume is a scrapbook of snapshots, personal recollections, and intimate profiles of the personalities behind the serologic discoveries of the 20th century. It is a valued resource not only for our generation, but for those who follow.

—S. Gerald Sandler, MD, FCAP, FACP



## **Complications**

#### Transfusion Reactions, 5th edition

Edited by Patricia M. Kopko, MD

Transfusion reactions may vary widely in severity and symptomology, appearing from minutes to weeks after starting the procedure. This trusted AABB reference has been updated throughout to provide information from the latest scientific literature on adverse reactions to transfusion, common and uncommon. Aspects of each potential complication are examined, including clinical presentation, epidemiology, risk factors, morbidity, mortality,



pathophysiology, differential diagnosis, and/or others. With a scope that is comprehensive, the book offers subtopics and tabular material that provide easy access to critical information for clinicians at all levels, as well as laboratory staff, involved in the care of transfusion recipients.

#### Important features:

- Two new chapters cover unconfirmed transfusion reactions and hemovigilance.
- Specific chapters devoted to nursing practices, prevention, and lowresource settings.
- Significant changes in TRALI and TACO prevention and identification since the previous edition.
- Thirteen other chapters cover complications by type of reaction, procedure, or product used.

PRINT EDITION: AABB Press, 2021, 732 pages, ISBN 978-1-56395-413-9 Product Code: 212160 | Member Price: \$155 | Nonmember Price: \$195 DIGITAL EDITION: AABB Press, 2021

Product Code: 212160DB | Member Price: \$155 | Nonmember Price: \$195

In reading this book, particularly Chapter 17, Hemotherapy Bedside Biovigilance and Nursing Surveillance in the Recognition, Reporting, and Management of Transfusion-Associated Adverse Events, I felt a renewed call to action to engage my teammates in optimizing each step in the transfusion process to improve quality, reduce cost, identify safety gaps, and decrease unnecessary or unwarranted transfusions.

—Alyssa Ziman, MD

#### AABB Guide to the Laboratory Evaluation of Transfusion Reactions

By Wen Lu, MD; J. Peter Pelletier, MD, MT(ASCP); Kathleen E. Puca, MD; Glenn Ramsey, MD; and NurJehan Quraishy, MD for the Transfusion Medicine Section Coordinating Committee

The evaluation and diagnosis of a suspected transfusion reaction is a matter of clinical judgment by a physician trained in adverse effects of transfusion. Negative testing results do not always exclude a reaction if there is strong suspicion that the patient's symptoms are related to blood transfusion. The laboratory evaluation of these events is critical not only for the patient's health, but also for corrective and preventive actions that are part of process



improvement. Contents of this updated reference, the AABB Guide to the Laboratory Evaluation of Transfusion Reactions, include step-by-step guidance for:

- Hemolytic Transfusion Reactions.
- Transfusion-Related Acute Lung Injury.
- Transfusion-Associated Circulatory Overload.
- Allergic/Anaphylactic Reactions.
- Septic Transfusion Reactions.
- Posttransfusion Purpura.
- Iron Overload.
- Transfusion-Associated Graft-vs-Host-Disease.

Includes an extremely useful Appendix summarizing common acute and delayed transfusion reactions with their associated primary symptoms, additional symptoms, usual timing of onset, initial laboratory evaluation, and confirmatory/supplemental evaluations.

PRINT EDITION: AABB, 2021, 57 pages, ISBN 978-1-56395-421-4 Product Code: 213030 | Member Price: \$45 | Nonmember Price: \$68

DIGITAL EDITION: AABB, 2021

Product Code: 213030DB | Member Price: \$45 | Nonmember Price: \$68

#### See Also

If you think of *Transfusion*Reactions, 5th edition as a meal and AABB Guide to the Laboratory Evaluation of Transfusion Reactions as a snack, what's available if you want just a bite? The answer

1. STOP TRA 2. Keep IV o After Transdusi	per with \$ 9% No.Ct. on its Terminated (expent)	Verily carried unit was given to correct patient.     Notify attending physician and blood b <sub>ank</sub> .  emild allongic, see below):  cold blood and using samples, and blood unit with administration set to blood.		
Reaction Type	Signs and Symptoms	Existopy	Clinical Action	
Alonga (min)	Plantial, afficiency (final)	problem to poors	Steps 1 Earliese, advancedor additionament (FG, MI, or NI), recurs transfacian if improved, if no improvement in 20 minutes bract as delow.	
Abegic (receips to severe)	Mer, dypnes, abdomisé pair, hypotenian, rouses, angriganis, whening-trister, admis of trisoffice	Artificities to placesa problem, including typ.	Steps 1-6 above administer arthroporous, appeals from vacupement, and controllerate an mediate award fature machine by prevedication protein and insolved orbital product. Avoid places products.	
None	Heart, strikt, report, amarty, milit dyspines	Antibodies to Bussicyto antipose, (mostly HLA); cytosines	Edge 1 Fusione, administer adaptivities as needed, accordises reactions by use of teacocyte-reduced extracts and postetic and promedication, rigors may be treated with respectator (as quisal).	
Accreting injury (TAKE)	Fear, chilo, dyspins, respictory failure	Actions to respect MICs, artificides to donor MICs, biologic response readilies.	Stigs 1-6 allow, supporter theapy for respiratory failure, supporter section of verticator, textocyte-reduced bland components and existing is clear planner is recipient antibody.	
Acata tamagin.	Month, shed pan, fare pan, dyspose, chill, freet, shack, smeplained bleeding, femo- phonemia/ temophilmania, cardiac arrest	Herodyla Torochoson Hactori, wouldy due to MEO incomputability	Stigs 1 flustrate (marchinal with unapressure, in family, controderinals as reselve, maintain arrang increase resultand fil (fill family, forderinals), maintain a brink alternitis, maintair resultant for access results family, families completion-catals, for DC, administration of the configuration and control of the distingly or later.	
Septe Sand	Chill, Seet, Sypoletope	Sood	Stigs 1 subset had door with unspressing in finds. Culture patient and bug history appropriate artinicial artifecting.	
(DACE)	Dygona, Schiptera, codero, hyperbosian, jugatar venaus dicterioris, increased oxygen lased.	epinates paramay some da to avarbining produtiny syden	stigs 1 6 states that will parentary support duretex. Acode false reactions by transfering story or quiting units and considering patient's volume status.	

can be found on page 15—specifically, the *Blood Transfusion Therapy Data Card*. The essential actions to take when a reaction is suspected are on the data card, along with key information on components and their administration. Anyone who is monitoring a patient during or after blood transfusion (eg, transfusion service, nursing, or ICU staff) will benefit from having the essential actions listed on the laminated card, conveniently sized for a lab coat pocket.

## Special Patients/Situations

## AABB Guide to the Use of Blood Warming Devices

Patrick Ooley, MS, MLS(ASCP), CMQ/ OE(ASQ)CQA, et al for the Transfusion Medicine Section Coordinating Committee

This updated *Guide* addresses the concerns of those who establish policies, processes, and procedures to

achieve the desired outcome of the AABB standard on blood warming. Contents include blood-warming technologies, advantages of bloodwarming devices, indications for use, contraindications, warnings, and administrative aspects. The helpful hints from experienced authors of this *Guide* may not be widely available elsewhere.

PRINT EDITION: AABB, 2023, 13 pages, ISBN 978-1-56395-424-5 Product Code: 233015 | Member Price: \$25 | Nonmember Price: \$40

**DIGITAL EDITION:** AABB, 2023

Product Code: 233015DB | Member Price: \$25 | Nonmember Price: \$40

## Pediatric Transfusion: A Handbook, 5th edition

Edited by Edward C.C. Wong, MD; Susan D. Roseff, MD; and Nicholas Bandarenko, MD

Pediatric Transfusion: A Handbook, 5th edition is a concise yet comprehensive reference book for all practitioners who transfuse neonatal and pediatric

populations. This book is invaluable for physicians treating patients in the hospital or those answering questions while on call in the blood bank. Written in response to questions from a variety of professionals in the field, this unique book presents, in one easy-to-use handbook, information that typically would require multiple volumes of text. Charts and tables outline information concerning volumes of blood components and doses of medication for neonatal and pediatric patients. Contributors with a wealth of practical experience share their knowledge in a resource that fits conveniently in your lab coat pocket.

This edition includes the latest updates addressing patients with special transfusion needs, including neonates, patients undergoing extracorporeal membrane oxygenation, cardiovascular surgery patients, trauma patients, sickle cell disease patients, and other pediatric patients who require chronic transfusion support. In addition, the latest updates on pathogen inactivation and the use of new blood products in children are discussed.

PRINT EDITION: AABB, 2020, 299 pages, ISBN 978-1-56395-405-4 Product Code: 203020 | Member Price: \$45 | Nonmember Price: \$60



Pediatric Transfusion

## Pediatric Hemotherapy Data Card (Set of 10)

Edited by Edward C.C. Wong, MD; Susan D. Roseff, MD; and Nicholas Bandarenko, MD

This *Data Card* is a handy reference that folds down to easily fit in your lab or suit coat pocket. Laminated

for durability, the card features information used for small volume transfusions, formulas and calculations to determine volume of blood, general infectious risks of transfusion and special considerations in pediatric patients.

PRINT EDITION: AABB, 2020, laminated cards, ISBN 978-1-56395-406-1 Product Code: 203225 | Member Price: \$33 (set) | Nonmember Price: \$40 (set)

## Together Again

Buy a bundle and save!

Pediatric Transfusion: A Handbook, 5th edition & Pediatric Hemotherapy Data Cards (set of 10)

**BOTH ITEMS:** Product Code: 213688 | Member Price: \$62 | Nonmember Price: \$80



#### **■Want to Know More?**■

Interested in knowing more before you order? The online descriptions of our current publications, available at aabb.org/store, provide additional information not found in the catalog. Where possible, we have shared the preface, the detailed table of contents, some sample pages, and even reviews by other readers. In many cases, we are able to identify for you related publications in our distinctive library that may also suit your needs.

As always, if you'd like to speak with one of our knowledgeable customer service associates, you can call toll-free in the United States (866-222-2498) or long distance internationally (+1 301-215-6489). Of course, you can order online anytime from anywhere.

Details on course adoptions, return policy, library orders, expedited delivery, purchase orders, shipping and handling fees, etc are also posted at aabb.org/ store.

NEW!

Coagulation:

#### Coagulation: A Handbook

Edited by Marian Rollins Raval, MD; Jay R. Raval, MD; and Nick Bandarenko, MD

Coagulation: A Handbook is the answer to a longawaited need for a practical coagulation resource. Recognizing the need for a current, consolidated coagulation guide for students, trainees,

technologists, nurses, and physicians, the editors and authors of this 1st edition have assembled a new present-day compact text that covers topics ranging from introductory principles to more recent, cutting-edge updates in the field.

Readers from all backgrounds will find this handbook useful in its conceptual content, key illustrations, and most up-to-date compiled references. Big things come in small packages! The book includes:

- · An overview of hemostasis.
- Clinical approach for evaluating patients with bleeding or thrombosis.
- An introduction to, and overview of, laboratory testing.
- Diagnosis and treatment of thrombotic, fibrinolytic, and vascular disorders.
- Diagnosis therapy and monitoring of platelet disorders.
- Coagulation and extracorporeal circuits and more.

In this rapidly developing field, which combines both clinical and laboratory medicine, this book brings the reader the most recent developments including the latest pharmacotherapy and key references to delve deeper in any coagulation topic. Authored by a team made up of the brightest and most passionate coagulation experts, this invaluable resource is sure to aid readers in their learning and clinical practice.

PRINT EDITION: AABB, 2024, 420 pages, ISBN 978-1-56395-432-0
Product Code: 233100 | Member Price: \$85 | Nonmember Price: \$110

**DIGITAL EDITION: AABB, 2024** 

Product Code: 233100DB | Member Price: \$85 | Nonmember Price: \$110

## Massive Transfusion Protocol Data Card (Set of 10)

Shouldn't *all* your staff be prepared when an MTP is activated? This Massive Transfusion Protocol Data Card describes not only the steps to take when a protocol is activated, but also what actions to take while the MTP is ongoing. This card gives you the upto-date information you'll need during this tension-filled situation. And it is concisely presented on a laminated card that slips easily into a lab coat pocket for use anywhere in the facility. Includes information on:

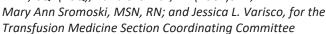


- Key information needed for activating a protocol.
- Components to expect for adult patients.
- Components to expect for pediatric patients.
- Ordering emergency hemorrhage panels.
- Careful labeling of specimens.
- · Key data on dilutions.
- Equivalents and results expected for pooled components.

PRINT EDITION: AABB, 2021, laminated cards, ISBN 978-1-56395-433-7 Product Code: 212320 | Member Price: \$32 (set) | Nonmember Price: \$42 (set)

#### AABB Guide to Massive Transfusion

Vaanush Nazaryan, MBA, SBB(ASCP), CMQ/OE, CPHQ; Anna B. Choi, MPH, MT(ASCP); Mary E. Harach, MT(ASCP); Daniela Hermelin, MD; Mary A. Lieb, MT(ASCP)SBB, CQA(ASQ); Susan Noone, MPH, CQA(ASQ); Karla S. Smith, MT(ASCP)SBB;



This *Guide*, a collaboration of clinical laboratory scientists, medical directors, and quality experts, represents best practices and regulatory requirements to assist transfusion services in providing quality care during massive transfusion. It will benefit anyone starting or enhancing a massive transfusion protocol or massive hemorrhage protocol and will help transfusion services provide the best care for their patients. It includes an appendix on situations to consider when creating a massive transfusion protocol.

PRINT EDITION: AABB, 2023, 26 pages, ISBN 978-1-56395-469-6 Product Code: 233055 | Member Price: \$35 | Nonmember Price: \$50

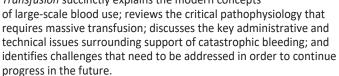
**DIGITAL EDITION: AABB, 2023** 

Product Code: 233055DB | Member Price: \$35 | Nonmember Price: \$50

#### **Massive Transfusion**

By Lynn G. Stansbury, MD, MPH, MFA, FACP, and John R. Hess, MD, MPH, FACP, FAAAS

Recent changes in massive transfusion response efforts are being implemented by many institutions around the world, with excellent results. *Massive Transfusion* succinctly explains the modern concepts



#### Content includes:

- How historical approaches are being replaced by modern concepts.
- What components are needed for balanced resuscitation.
- · How coagulopathic bleeding can evolve.
- Patient groups most likely to need massive transfusion.
- Changing approaches to resuscitation from expert practitioners.
- USB flash card of flowcharts, protocols, two case studies, and process documentation for adult and pediatric patients.
- Extra Bonus! Laminated data card features massive transfusion protocol activation steps on one side and what to do while the massive transfusion protocol is ongoing on the flip side.

PRINT EDITION: AABB Press, 2019, 169 pages, ISBN 978-1-56395-964-6 Product Code: 192318 | Member Price: \$84 | Nonmember Price: \$122 DIGITAL EDITION: AABB Press, 2019

Product Code: 192318DB | Member Price: \$84 | Nonmember Price: \$122



# Transfusion Support for Patients with Sickle Cell Disease, 2nd edition

Edited by Jennifer Andrews, MD, MSc, and Marisa B. Marques, MD

Affecting millions around the world, sickle cell disease (SCD) in the United States disproportionately affects African Americans and Hispanic Americans at a rate of 1 in 365 or 16,300 births, respectively.

Since the first edition of this book more than 20 years ago, significant advances have made this a truly exciting time with new therapies and curative options. Transfusion remains a critical tool in the therapeutic armamentarium, and this book offers the most recent research and best clinical practices from leading experts, including something for everyone involved in the treatment of SCD patients-clinicians, laboratory staff, and administrators.

Eleven chapters cover the following topics:

- · Pathology of SCD.
- Indications and best approaches for transfusion.
- · Alloimmunization and the use of molecular diagnostics.
- Complications of transfusion in SCD patients.
- Pragmatic clinical and coordinated laboratory model of best care.
- Stem cell and other cellular therapies.

PRINT EDITION: AABB Press, 2022, 292 pages, ISBN 978-1-56395-447-4 Product Code: 222090 | Member Price: \$80 | Nonmember Price: \$110

**DIGITAL EDITION:** AABB Press, 2022

Product Code: 222090DB | Member Price: \$80 | Nonmember Price: \$110

#### Apheresis: Principles and Practice, 4th edition, Volume 1: Therapeutic Apheresis

Edited by Nancy Dunbar, MD Series edited by Jeffrey L. Winters, MD

The classic apheresis text *Apheresis: Clinical Principles* and *Practice* has been significantly reorganized into three separate volumes. The first volume focuses on therapeutic apheresis; the second and third volumes address donor apheresis and cellular therapy, respectively.

The first half of Volume 1 covers the history of therapeutic apheresis, current instrumentation, basic principles, clinical consultation, and patient management. The second half of the book covers disease-specific applications of therapeutic apheresis in hematologic, neurologic, renal, rheumatologic, and endocrine disorders; transplantation; and vascular and cardiac disorders. The updates are extensive.

PRINT EDITION: AABB Press, 2020, 234 pages, ISBN 978-1-56395-408-5 Product Code: 202009 | Member Price: \$95 | Nonmember Price: \$130 DIGITAL EDITION: AABB Press, 2020

Product Code: 202009DB | Member Price: \$95 | Nonmember Price: \$130



## Therapeutic Apheresis: A Handbook, 7th edition

Edited by Joseph Schwartz, MD, MPH; Huy P. Pham, MD, MPH; and Nicholas Bandarenko, MD

Published jointly by AABB and the American Society for Apheresis (ASFA), *Therapeutic Apheresis: A Handbook* provides a thorough yet succinct account of the most commonly practiced apheresis procedures, indications for their use, and treatment recommendations for the diseases discussed.

Apheresis:
A Handbook

Y

t of
ess,

It reflects 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." It represents an indispensable resource for every apheresis physician, nurse, and related support personnel.

PRINT EDITION: AABB/ASFA, 2024, 357 pages, ISBN 978-1-56395-494-8 Product Code: 243025 | AABB and ASFA\* Member Price: \$80 | Nonmember Price: \$115

\*Please call +1.866.222.2498 to receive your discount.



## **Donors**

#### AABB Guide to Donor Hemoglobin Determination

Developed for the Transfusion Medicine Section Coordinating Committee by Richard R. Gammon, MD, and Susan Noone, MPH, CQA(ASQ)

Anemia in prospective blood donors may indicate an underlying disease, may result in an ineffective transfusion product, and may cause harm to the recipient. Red cells are the most-transfused blood component; measurement of the donor hemoglobin level to determine donor eligibility is, therefore, of paramount importance. This *Guide* updates the previous publication on the topic (2007) and details the advantages, disadvantages, technical aspects, and quality assurance considerations for each of several methods currently in use to ascertain the donor hemoglobin level

**NEW!** 

PRINT EDITION: AABB, 2024, 12 pages, ISBN 978-1-56395-492-4 Product Code: 243070 | Member price: \$27 | Nonmember Price: \$43 DIGITAL EDITION: AABB, 2024

Product Code: 243070DB | Member price: \$27 | Nonmember Price: \$43

## Blood Banking and Transfusion Medicine 101 Course

AABB offers an education course focusing on the fundamentals of blood banking and transfusion medicine. Designed for early-career professionals or those looking to refresh their knowledge, AABB's Blood Banking and Transfusion Medicine 101 Course provides a thorough overview of blood banking and transfusion medicine from top experts in the field. The series is divided into four main topics with 24 subtopics:

Topic 1: Industry Review/Overview
Topic 2: Blood Banking Fundamentals

Topic 3: Transfusion Medicine Fundamentals

Topic 4: Regulatory/Compliance Deep Dive

Learners receive access to 24 on-demand eCasts in varying lengths covering 24 subtopics, with unlimited access to the course's content for up to 2 years.

Interested? You can learn more about this course at aabb.org/Blood101.

## Blood Donor Health and Safety, 2nd edition

Edited by Anne F. Eder, MD, PhD, and Mindy Goldman, MD

Since publication of the first edition of *Blood Donor Health and Safety* (2009), many concerns have been raised and solutions have been implemented. Readers of this revision will develop a greater understanding of why some donors may be deferred for their own safety rather than the recipient's, blood centers will be able to implement innovative strategies for preventing adverse consequences, and donors themselves will benefit from an improved donation experience.

#### Topics covered:

- Donor education, consent, and counseling.
- Donor iron balance and consequences.
- Syncope and vasovagal reaction prevention/treatment.
- Needle-related issues.
- · Collection by automated measures.
- · Frequent plasmapheresis.
- Special situations (teens, seniors, disabled, etc). NEW!
- HPC donors.
- Donor hemovigilance.
- Future directions for research.

PRINT EDITION: AABB Press, 2022, 270 pages, ISBN 978-1-56395-448-1 Product Code: 222015 | Member Price: \$90 | Nonmember Price: \$120 DIGITAL EDITION: AABB Press, 2022

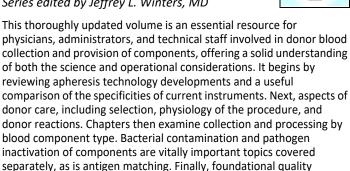
Product Code: 222015DB | Member Price: \$90 | Nonmember Price: \$120



## **Donors**

#### Apheresis: Principles and Practice, 4th edition, Volume 2: Collection of Blood Components by Apheresis

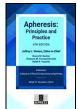
Edited by Ralph R. Vassallo, Jr, MD, FACP Series edited by Jeffrey L. Winters, MD



PRINT EDITION: AABB Press, 2021, 226 pages, ISBN 978-1-56395-416-0 Product Code: 212009 | Member Price: \$95 | Nonmember Price: \$130 DIGITAL EDITION: AABB Press, 2021

systems are discussed in the context of donor apheresis.

Product Code: 212009DB | Member Price: \$95 | Nonmember Price: \$130



## Regulatory Toolkits

(free to AABB members



#### **Donor Blood Pressure and Pulse**

"Regulatory Considerations to Support Implementation of FDA's Compliance Policy on Donor Blood Pressure and Pulse" describes options for facilities implementing new guidance regarding 21 CFR 630.10(f)(4) and 21 CFR 630.10 (f)(2) issued in July 2024. Because these changes do not add requirements, this toolkit can help blood centers identify the flexible options for implementation.

#### **Licensed COVID-19 Convalescent Plasma**

"Toolkit to Support Implementation of Licensed COVID-19 Convalescent Plasma" provides information to support blood establishments on FDA's pathways for manufacture and distribution of CCP. In addition to guidance on licensure under a BLA and study under an IND application, the information clarifies the parts of the October 2023 guidance that remain in effect vs those superseded in the July 2024 guidance.

These members-only PDFs and additional toolkits and regulatory resources can be downloaded at aabb.org/toolkits.

#### Additional Resources





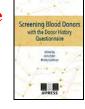


AABB donor center resources are not always in book form. Take advantage of these resources on the AABB website.

- On the Front Lines: Research and Donation. [aabb.org/ frontlines1]
- On the Front Lines: Products and Delivery. [aabb.org/frontlines2]
- On the Front Lines: Recruitment and Operations. [aabb.org/ frontlines3]
- On the Front Lines: Diversity and Challenges. [aabb.org/ frontlines4]

# Screening Blood Donors with the Donor History Questionnaire Free Addendum with FDA Updates

Edited by Anne F. Eder, MD, PhD, and Mindy Goldman, MD



Screening Blood Donors captures the significant information regarding use of the donor history questionnaire to assess donor eligibility. It now is accompanied by an addendum that updates the book chapters affected by the FDA Guidance updates through May 2023—and it is free! Internationally recognized experts provide essential information on current regulations and standards, variability in practices, a framework for decision-making in situations of absent or incomplete data, and differences between policies for collection of blood components and cellular therapy products. This essential text centers on three aspects: donor health issues, recipient risk of transfusion-transmitted diseases, and postdonation considerations. The book concludes with helpful appendices.

Have the book already? Go to www.aabb.org/store, enter "Screening Blood Donors" in the Search box, and click on the Addendum under the product details.

**PRINT EDITION:** AABB Press, 2019, 269 pages, ISBN 978-1-56395-992-9 Product Code: 192165 | Member Price: \$95 | Nonmember Price: \$138

**DIGITAL EDITION:** AABB Press, 2019

Product Code: 192165DB | Member Price: \$95 | Nonmember Price: \$138

# Management

NEW!

#### **AABB Guide to Informed Consent in Transfusion** Medicine

Developed for the Transfusion Medicine Section Coordinating Committee by Vaanush Nazaryan, MBA, BB(ASCP)SBB, CMQ/OE, CPHQ; Anna B. Choi, MPH, MT(ASCP); Mary E. Harach, MT(ASCP); Sherry Hogan, RN, PCU; Mary Lieb, CQA(ASQ); Donna Lucia, MT(ASCP), CQA(ASQ); Susan Noone, MPH, CQA(ASQ); Karla S. Smith, MT(ASCP)SBB; Mary Ann Sromoski, MSN, RN; Dawn M. Thut, CABP; Jessica L. Varisco, PBMC; and Ljiljana Vladimira Vasovic, MD, CABP(H)

This Guide explains the medical consent doctrine and describes the process that should be included in both donor and recipient settings. It emphasizes that informed consent is an educational process and a conversation between a lay person and a health-care professional not merely the signing of a form that may not be understood or even read.

The roles of the physician directing the phlebotomy (an invasive procedure) in the blood center, the transfusion service medical director in the hospital, and the treating physician are reviewed. Options for a separate consent document vs one that is part of an overall facility document are discussed.

PRINT EDITION: AABB, 2024, 25 pages, ISBN 978-1-56395-495-5 Product Code: 243080 | Member Price: \$35 | Nonmember Price: \$50

**DIGITAL EDITION: AABB, 2024** 

Product Code: 243080DB | Member Price: \$35 | Nonmember Price: \$50

#### **Ethical Issues in Transfusion** Medicine and Cellular Therapy

Edited by Ronald E. Domen, MD, FACP, FCAP

Ethical Issues in Transfusion Medicine and Cellular Therapy captures today's issues and provides thoughtprovoking discussions from multiple perspectives. The book contains several case studies that can stimulate

consideration by professionals in all areas. Content includes:

- Massive transfusion.
- MSM donors.
- Donor incentives.
- Cord blood.
- Informed consent.
- Research ethics.
- Hematopoietic mobilization.

**PRINT EDITION:** AABB Press, 2015, 192 pages, ISBN 978-1-56395-909-7 Product Code: 152150 | Member Price: \$95 | Nonmember Price: \$125

**DIGITAL EDITION:** AABB Press, 2015

Product Code: 152150DB | Member Price: \$95 | Nonmember Price: \$125



By Holly Rapp, MT(ASCP)SBB, CQA(ASQ)CMQ/OE, and Judith Sullivan, MS, MT(ASCP)SBB, CQA(ASQ)

This manual provides hospital-based blood banks and transfusion services with process flow charts and procedure documents that assist with quality management systems documentation and regulatory and accreditation compliance. Sections address:



- Pretransfusion testing.
- Crossmatching.
- Automated testing.
- Antibody identification.
- Mother and infant.
- Transfusion reactions.
- Issue and return.
- Training and competence assessment.

Forms are provided for developing a complete training guide and competence assessment packet for each work process. Accompanying USB drive contains SOPs for adoption and customization by facilities.

PRINT EDITION: AABB Press, 2017, spiral bound, 143 pages, ISBN 978-1-56395-

950-9

Product Code: 172180 | Member Price: \$140 | Nonmember Price: \$170

**DIGITAL EDITION: AABB Press, 2017** 

Product Code: 172180DB | Member Price: \$140 | Nonmember Price: \$170



The Transfusion Service Manual has been both mentor and reference, providing templated examples of procedures in blocked format, clear process flow diagrams, and thoughtful training and competency assessment tools. These resources are invaluable.

-Jacolyn D. Liebold, MBA, MT(ASCP)SBB

#### AABB Billing Guide for Blood **Products and Related Services**

The AABB Billing Guide is an indispensable tool that provides up-to-date information on coding, Medicare billing, and reimbursement relating to blood products. The seven major sections contain critical details on the rules and exceptions that apply in both inpatient and outpatient settings. Nine appendices



address specific situations, such as nonhospital settings, molecular testing, billing for other blood-related services, and handling rejected or denied claims. This revision is made possible through the efforts of the AABB Coding and Reimbursement Committee and the support of the Commonwealth Transfusion Foundation.

**DIGITAL EDITION:** AABB, 2023, 46 pages, ISBN 978-1-56395-407-8 Product Code: 203055DB | Member Price: FREE | Nonmember Price: FREE

# Management

## Global Education, Training, and Staffing in Transfusion Medicine

Edited by Quentin G. Eichbaum, MD, PhD, MPH, MFA, MMHC, MA, MSc, MMEd; Claire Barrett, MBChB, PG Dipl (Transfusion Medicine), MMed, FCP(SA); Mohammed Farouk, MD, MBA; Nanci Fredrich, RN, BSN, MM; Susan T. Johnson, MSTM, MT(ASCP)SBB<sup>CM</sup>; Faten Moftah, MD; and Cees Th. Smit Sibinga, MD, PhD, FRCP Edin, FRCPath

The gaps in transfusion medicine education and training affect clinical outcomes and patient survival. One cannot assume that adequate and safe blood transfusion will seamlessly "happen" in health-care delivery unless we pay deliberate attention to how we educate and train health-care professionals, and how we staff our facilities.

Laboratories in low-, middle-, and high-income countries suffer from persistent resource limitations of one kind or another—medical technologists, equipment, work environments, and career structures—all of which ultimately affect the quality and accuracy of test results. Without quality-assured test results, clinicians are compelled to resort to presumptive diagnoses, which can be suboptimal.

The intended audience for this book is physicians, students, clinical trainees, nurses, medical technologists, transfusion safety officers, phlebotomists, and blood administrators. It should be of particular value to transfusionists actively engaged in teaching as well as for self-directed learners.

This book is a collaborative project from members of the AABB Global Transfusion Forum as well as outside reviewers who provided objective critiques. It is intended to be a valued resource for transfusionists around the world.

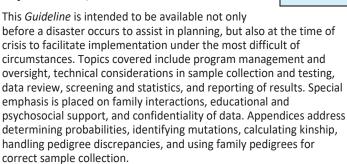
**PRINT EDITION:** AABB, 2024, 433 pages, ISBN 978-1-56395-490-0 Product Code: 243090 | Member Price: \$58 | Nonmember Price: \$75

**DIGITAL EDITION: AABB, 2024** 

Product Code: 243090DB | Member Price: \$58 | Nonmember Price: \$75

## Guidelines for Mass Fatality DNA Identification Operations

By Amanda Sozer, PhD; Michael Baird, PhD; Michelle Beckwith, BS; Brian Harmon, PhD; Demris Lee, MSFS; George Riley, PhD; and Stefan Schmidtt, PhD



**DIGITAL EDITION:** AABB, 2010, 53 pages, ISBN 978-1-56395-853-3 Product Code: 103055DB | Member Price: FREE | Nonmember Price: FREE



Developed to be used with the *Technical Manual*, this popular resource helps trainees learn and review concepts in an examination format. This edition contains 900 new multiple-choice questions covering 18 topics in

blood collection/transfusion and cellular therapies. Most explanations cover both correct and incorrect choices. New in this edition:

- Three new chapters—massive transfusion/ECMO, neonatal/pediatric issues, and lab management.
- Expansion of cellular therapy chapter to include biotherapies.
- Updated per 2023 ASFA indications for apheresis.
- · Updated per 2023 FDA guidance on donor eligibility.
- "Bonus test" of random questions in realistic simulation.

*Transfusion Medicine Self-Assessment and Review* will be of value in both the classroom and self-study settings.

PRINT EDITION: AABB Press, 2023, ISBN 978-1-56395-477-1

Product Code: 232040 | Member Price: \$115 | Nonmember Price: \$150

**DIGITAL EDITION:** AABB Press, 2023

Product Code: 232040DB | Member Price: \$115 | Nonmember Price: \$150

## Together Again

Buy a bundle and save!

Transfusion Medicine Self-Assessment and Review, 4th edition AND Technical Manual, 21st edition

**BOTH BOOKS:** Product Code: 232916 | Member Price: \$242 | Nonmember Price: \$353



#### AABB Guide to Pneumatic Tube Delivery Systems: Validation and Use to Transport Blood Components

By Julie Katz Karp, MD; Mary E. Harach, MT(ASCP), CQA(ASQ), SSGB; Monique Mohammed, MS, MT(ASCP)SBB; Roger Richard, MS, MT(AMT); Lynne Uhl, MD; and Julie van der Hoop, PhD for the Transfusion Medicine Section Coordinating Committee

Pneumatic tube delivery systems are an integral component of many blood banks and transfusion services. Reliance on their speed has grown and the software used to operate them has become highly sophisticated. Adequate staffing at receiving stations is an increasing concern, as is the overall system workload. This *Guide* details the "nuts and bolts" of system planning, operation, and maintenance for facilities considering such a



system, those needing to expand an existing system, those who are considering the use of an existing system not originally designed for transport of blood, or those wanting to increase the efficiency of their current operations.

**PRINT EDITION:** AABB, 2020, 31 pages, ISBN 978-1-56395-410-8 Product Code: 203045 | Member Price: \$35 | Nonmember Price: \$50

**DIGITAL EDITION: AABB, 2020** 

Product Code: 203045DB | Member Price: \$35 | Nonmember Price: \$50



# AABB'S DIGITAL PUBLICATIONS



- 1 Purchase AABB's digital publications in the AABB Store. Look for the icon or select "Downloads" from the product type filter.
- Access your publication by going directly to ebooks.aabb.org/bookshelf.\*
  Once logged in, you will have access to your digital bookshelf with all purchased digital publications.

Digital publications can be accessed through most web-enabled devices, either online or through the app.

<sup>\*</sup> Digital publications can also be accessed through the "Digital Content Access" area of your "My Account" page on aabb.org, as indicated on the purchase confirmation screen. Email confirmation with access instructions are also provided after purchase.

# Index by Title

(New titles in bold)	How Do I
AABB Billing Guide for Blood Products and Related Services 26	How Do I
AABB Guide to Antibody Identification	Introduct
AABB Guide to Blood Recovery and Reinfusion in Surgery	Investigat
and Trauma	Judd's Me Key Conce
AABB Guide to Donor Hemoglobin Determination 24	Massive T
AABB Guide to Informed Consent in Transfusion	Massive T
Medicine	On-Call M
AABB Guide to Massive Transfusion	Commo
Utilization	Patient Bl
AABB Guide to Pneumatic Tube Delivery Systems:	Approac
Validation and Use to Transport Blood Components 27	PBM Met
AABB Guide to the Laboratory Evaluation of Transfusion	Pediatric
Reactions	Pediatric Periopera
AABB Guide to the Quality Assessment of Transfusion 6	Handbo
AABB Guide to the Use of Blood Warming Devices	Polyagglu
AABB-ISCT Good Tissue Practice Interpretive Tool 7	Practical I
AABB Quality Certificate Program/El Programa de Certificado de Calidad de la AABB	Preoperat
Antibody Identification: Art or Science? A Case Study	Prophylad
Approach	RBC Trans
Apheresis: Principles and Practice, 4th edition, Volume 1:	Regulator
Therapeutic Apheresis	Regulator
Apheresis: Principles and Practice, 4th edition, Volume 2:	<b>Plasma</b> Relations
Collection of Blood Components by Apheresis	Relations
Auditing for Success in Blood Centers, Transfusion	Underst
Services, and Cellular Therapy Laboratories 6	Standar
Basic Principles in Flow Cytometry	Screening
Blood Banker Favorites: A Collection of the Best Recipes	Questio
for Blood Sample Preparation	Standards
Blood Donor Health and Safety, 2nd edition	4th edit
Blood Transfusion Therapy Data Card (Set of 10)15	Standard: 34th ed
Blood Transfusion Therapy: A Guide to Blood Component	Standards
Administration, 5th edition	(effective
Blood Transfusion Therapy: A Handbook, 14th edition 15	Standard
Bloody Brilliant! A History of Blood Groups and Blood Groupers	13th ed
CABP Sample Exam Questions	Standards
Case Studies in Patient Blood Management	and Net
Cellular Product Toolkit: Guidance and Templates for	January
Evaluating Requests, Fulfilling Requirements, and	Standards
Delivering Compliant Products9	Services Standards
Cellular Therapy: A Handbook, 2nd edition	Adminis
Circular of Information for the Use of Cellular Therapy Products, 2024	Standard
Circular of Information for the Use of Human Blood and	edition
Blood Components, 2024 (Set of 50)	Stem Cell
Citations in Patient Blood Management, 3rd edition	_ A Prime
Coagulation: A Handbook22	Technical
Error Management: Turning a Negative Situation into a	Therapeu The Trans
Positive One6	3rd edit
Estándares Fundamentales para Recolección y	Transfusio
Transfusión de Sangre	4th edit
Fundamental Standards for Blood Collection and	Transfusio
Transfusion4	Transfusio
Getting Started in Patient Blood Management	Procedu
Getting Started in Processing for Biotherapies	Assessm
Global Education, Training, and Staffing in Transfusion	Transfusion 2nd edit
Medicine	Zna ean Transfusio
Global Perspectives and Practices in Transfusion	4th edit
Medicine	. c care
duidennes for iviass ratality DINA IDENTIFICATION OPERATIONS 2/	

How Do I Do It? Volume 2	13
How Do I? Volume 1	13
Introduction to Molecular Immunohematology	19
Investigating Positive DAT Results: A Case Study Approach	17
Judd's Methods in Immunohematology, 4th edition	17
Key Concepts in Transfusion Medicine	13
Massive Transfusion	22
Massive Transfusion Protocol Data Card (Set of 10) On-Call Manual: A Systematic Approach to Solving	22
Common Issues in Transfusion Medicine	14
Patient Blood Management: Multidisciplinary	14
Approaches to Optimizing Care	12
PBM Metrics	11
Pediatric Hemotherapy Data Card	21
Pediatric Transfusion: A Handbook, 5th edition	21
Perioperative Blood Management: A Physician's	
Handbook, 3rd edition	11
Polyagglutination: An Update and Review	
Practical Handbook of Cellular Therapy Cryopreservation	
Preoperative Anemia Management	
Prophylactic Platelet Transfusion Data Card (Set of 10)	16
RBC Transfusion Data Card (Set of 10)	. 16
Regulatory Toolkit: Donor Blood Pressure and Pulse Regulatory Toolkit: Licensed COVID-19 Convalescent	25
Plasma	25
Relationship Testing 1.0	19
Relationship Testing Toolkit: Tools to Advance Your	
Understanding of Relationship Testing Calculations and	
Standards	19
Screening Blood Donors with the Donor History	
Questionnaire Free Addendum with FDA Updates	25
Standards for a Patient Blood Management Program,	
4th edition (effective June 1, 2023)	. 4
Standards for Blood Banks and Transfusion Services, 34th edition (effective April 1, 2024)	2
Standards for Cellular Therapy Services, 11th edition	. 3
(effective July 1, 2023)	. 3
Standards for Immunohematology Reference Laboratories,	
13th edition (effective April 1, 2024)	. 5
Standards for Molecular Testing for Red Cell, Platelet,	
and Neutrophil Antigens, 6th edition (effective	
January 1, 2023)	. 3
Standards for Out-of-Hospital Transfusion Administration	_
Services, 1st edition (effective July 1, 2018)	. 5
Standards for Perioperative Autologous Blood Collection and Administration, 10th edition (effective January 1, 2023)	1
Standards for Relationship Testing Laboratories, 16th	. 4
edition (effective January 1, 2024)	. 3
Stem Cell Collection, Infusion, and Transfusion Support:	
A Primer	. 8
Technical Manual, 21st edition	
Therapeutic Apheresis: A Handbook, 7th edition	23
The Transfusion Committee: Putting Patient Safety First,	
3rd edition	11
Transfusion Medicine Self-Assessment and Review, 4th edition	27
Transfusion Reactions, 5th edition	
Transfusion Service Manual of Standard Operating	۷۷
Procedures, Training Guides, and Competence	
Assessment Tools, 3rd edition	26
Transfusion Support for Patients with Sickle Cell Disease,	_
2nd edition	23
Transfusion Therapy: Clinical Principles and Practice,	
4th edition	14

# Index by Author/Editor

Α	Harmon, Brian 27	R
Alsaqri, Faisal Saud6	Hermelin, Daniela 22	Ramsey, Glenn
Andrews, Jennifer	Hess, John R	Rapp, Holly26
AuBuchon, James P10	Hogan, Sherry	Raval, Marian Rollins
В	•	Reich-Slotky, Ronit
Baird, Michael27	I-J	Richard, Roger27
Bakhtary, Sara12	Ipe, Tina S	Richards, Cheryl A11
Bandarenko, Nicholas 7, 15, 21-23	Jacobs, Jeremy W	Riley, George27
Barnes, Linda S	Johnson, Susan T 13, 17, 18, 27	Rockwood, Linda11
Beckwith, Michelle27	Jones, Kristy	Roseff, Susan D
Bloch, Evan M	Jorissen, Heather18	Rudmann, Sally V17
Bocquet, Christopher11	Judd, W. John 17	S
Booth, Garrett7	K	Saxena, Sunita 10, 11
С	Kalodimou, Vasiliki E 9	Schanen, Michael J
Cancelas, Jose A	Kaplan, Alesia12	Schmidt, Amy E
Casina, Tony S	Karp, Julie Katz27	Schmidtt, Stefan
Celluzzi, Christina M 9	Katz, Louis M	Schwab, Rita
Chanez, Tina 6	King, Karen E11	Sengsayadeth, Salyka7
Chenoweth, Anne6	Kopko, Patricia M	Shander, Aryeh11
Choi, Anna B	Krull, Ashley7	Shaz, Beth H13
Coberly, Emily12	L	Shepherd, Janine12
Cohn, Claudia S	Lee, Demris 27	Shulman, Ira A10
Cooling, Laura8	Lemas, M. Victor 9	Sibinga, Cees Th. Smit 14, 27
Creer, Michael H9	Lieb, Mary A	Smetana, Heather M
Cushing, Melissa15	Loper, Kathy9 Lu, Wen	Smith, Karla S
D	Lucia, Donna	Sromoski, Mary Ann 22, 26
Delaney, Meghan 13, 14, 19		Stansbury, Lynn G
Domen, Ronald E26	M	Stephens, Laura11
Dunbar, Nancy	Mangwana, Sadhana	Storry, Jill
E	Marques, Marisa B	Sullivan, H. Cliff
<del>-</del>	McCoy, Kelly	Sullivan, Judith
Eder, Anne F	Moftah, Faten 27	T
El-Dusouqui, Soraya Amar14	Mohammed, Monique 27	Tanhehco, Yvette C6
r	N	Tauer, Robin
F. San J. Makanana J. 27	Nazaryan, Vaanush 6, 22, 26	Thut, Dawn M
Farouk, Mohammed	Nichols, Tracie	Tolich, Deborah
Frank, Steven M	Noone, Susan	Tubby, Barbara12
Fredrich, Nanci	0-Р	U-V
Frey, Kathrine10	O'Connor, Jennifer E 18	Uhl, Lynne
Friedman, Mark T	Ooley, Patrick 6, 21	van der Hoop, Julie
G	Peedin, Alexis	Varisco, Jessica L
Gammon, Richard R 11, 12, 24	Pelletier, J. Peter 20	Vassallo Jr, Ralph R
Gannett, Michael 19	Pham, Huy P 13, 23	Vege, Sunitha
George, Melissa	Pierce, Steven R	W
Goldman, Mindy	Poisson, Jessica	
Gross, Irwin10	Puca, Kathleen E10, 20	Waters, Jonathan H 10, 11, 12 Wenk, Robert E19
Н	Q	Winters, Jeffrey L 23, 25
Halverson, Gregory R 18	Quast, Shylah	Wong, Edward C.C21
Hamilton, Janis R17	Quraishy, NurJehan20	Wu, Yan Yun
Harach, Mary E 6, 22, 26, 27		

## AABB Publications Order Form

PRODUCT CODE QTY	TITLE		UNIT PRICE	TOTAL	
All prices are valid until 9/30/25. Delivery order has been received, please allow 5-7			SUBTOTAL		
please allow 10 to 15 business days. To en	, , ,	· · · · · · · · · · · · · · · · · · ·	State Tax		
order form with payment. <b>Get your copy tomorrow!</b> For next day se.	rvices, call +1.866.222.2498 by noon ET	Г, Monday – Friday	(see list below)		
(excluding holidays) and receive your order Ordering information: AABB, PO Box 791.	The state of the s	charges apply.	Shipping & Handling		
Fax: 1.301.951.7150. Email: sales@aabb.o	org.				
*If mailing a check, please send to AABB,	PO Box 791251, Baltimore, MD 21279-1	1251.	TOTAL		
SHIPPING (please print clearly)	(Please check one) Home Office	PREPAYMENT IS REQU	JIRED Check encl	losed in U.S. cui	rrencv*
Silir rind (please print clearly)		VISA		ub AMEX	
Member # (Member number required for	nr member prices.)				
	,	Credit Card #			
Name (required for processing)					
		Exp. Date			
Facility Name (if applicable)		CMA Consuits Code			
<u> </u>		CVV Security Code			
Street Address 1 (PO boxes are not acc	epted)	Cardholder's Name			
Street Address 2					
Street Address 2		Signature			
City/State/Zip+4					
			COUNTY, AND CITY SA to residents of these sto		
Country/Postal Code		CA, CO, DC, FL, GA, IL, N	<u> </u>		/I. WV
		Before completing your		, , , ,	•
Phone #		aabb.org/store because			J ut.
Email			SHIPPING & HANDLING	G	
DIGITAL BUBLICATIONS (vileace assistant	-+ -  <sub>1</sub>   - \	U.S. Orders		tside the U.S.	UPS
DIGITAL PUBLICATIONS (please pri	nt clearly)	UP TO \$59.00	Ground (including \$15 UP TO \$99.	Puerto Rico)	Int'l \$35
Intended Heads Nove		\$59.01 – \$99.00	\$20 \$99.01 - \$2		\$55
Intended User's Name		\$99.01 – \$249.00	\$25 \$249.01 - \$		\$90
Intended User's email		\$249.01 - \$349.00	\$28 \$349.01 - \$	499.00	\$125
		\$349.01 - \$499.00	\$32 \$499.01 - \$	649.00	\$155
BILL TO (please print clearly)	Same as Shipping Above	\$499.01 – \$649.00	\$37 \$649.01 - \$	2500.00	\$175
DILL 10 (please print clearly)	Tallie as suibhilig Anove	\$649.01 - \$2500.00	\$40 \$2500.01 -	\$14,000.00	\$250
Name		\$2500.01 - \$14,000.00	\$100 \$14,000.01	+, CONTACT AABB	1
Ivailic		\$14,000.01+, CONTACT A	ABB		
Street Address					
City/State/Zip+4/Country/Postal (	Code			24	

+1.866.222.2498 31

# **Ordering Information**

#### **PUBLICATIONS ORDERING INFORMATION**

#### **AABB**

P.O. Box 791251

Baltimore, MD 21279-1251
Phone: +1.866.222.2498 or
Intl: +1.301.215.6489
Fax: +1.301.951.7150

Fax: +1.301.951.7150 Email: sales@aabb.org

Order online anytime at aabb.org/store

AABB MEMBER DISCOUNTS: As one of the many benefits of AABB membership, members are entitled to discounts of up to 40 percent off AABB publications. You must include your membership number on the order form to receive the discount.

**PAYMENT:** Payment must be made in US dollars in the form of a check payable to AABB, or we also accept Visa, MC, AMEX, Discover, and Diners Club. Please allow two to three weeks shipping for international orders not placed online.

**PURCHASE ORDERS:** Purchase orders without accompanying payment will be accepted only from city, state, and federal agencies. This must be completed on a standard government form issued by the purchasing office of the city, state, or federal treasury.

**RETURN POLICY:** A book may be returned for any reason for exchange, refund, or credit when sent to AABB, along with the packing slip, postmarked within 21 days of receipt. Returns must be fully prepaid and packed so that they arrive undamaged (unless the return is due to a defect). Any book defaced, damaged, or marked by the purchaser will not be accepted.

RETURNS
BrightKey Inc.
Attn: AABB Returns
1780 Crossroads Drive
Odenton, MD 21113

**COURSE ADOPTIONS:** Many AABB publications are valuable resources for the classroom. AABB will provide instructors with an examination copy of the book for possible classroom application. To receive this, an instructor must provide AABB with the school's name, course, and estimated enrollment. The examination copy will be sent along with an invoice for the purchase price. This charge will be canceled if an order for 10 or more books is placed within 15 days, thereby providing the instructor with a complimentary copy of the text. If the book is not adopted, the instructor must either send payment for the book or return the book to AABB.

LIBRARY ORDERS: AABB is pleased to provide a 10 percent discount off the nonmember price to all libraries and bookstores. For more information contact the AABB Sales Department at sales@aabb.org or call +1.866.222.2498 (8:30 am – 5:00 pm ET). Be sure to include shipping and handling charges.

**DISTRIBUTORS:** AABB welcomes inquiries about possible distribution and resale of AABB publications. For more information please contact the AABB Sales Department at sales@aabb.org or call +1.866.222.2498.

**STUDENT PRICING:** Students are entitled to receive the member price for all publications. Students must call AABB Sales at +1.866.222.2498 within the US or +1.301.215.6489 internationally (8:30 am – 5:00 pm ET).

publications are available digitally on a platform where you can make notes, bookmark, and access your publication 24/7. Check out the growing list at aabb.org/store/publications/digital-publications, and remember to use the right digital product codes when ordering to get the digital version you intend to purchase.

**ONLINE ORDERING:** Ordering is easy online, and you can receive your publications faster. Please allow 5 to 7 business days in the United States and

7 to 10 business days for most international orders to be delivered.

MAIL-IN ORDER FORM: Delivery for all orders is dependent upon product availability. Once the order has been received, please allow 7 to 10 business days for delivery. For most international deliveries, please allow 10 to 15 business days. To ensure prompt delivery of your publication(s), please include the order form with payment.

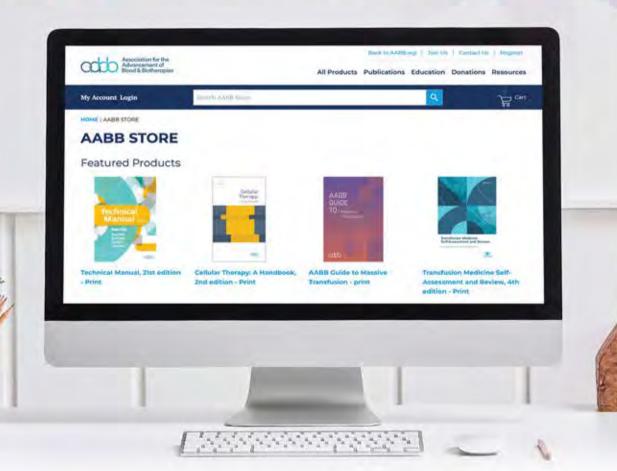
**NEXT-DAY SERVICES:** For next-day services, call +1.866.222.2498 by noon ET in the U.S. (GMT – four hours) Monday - Friday (excluding holidays) and receive your order by the next business day. Additional charges apply.

OUR COMMITMENT TO YOU: If you are not 100 percent satisfied with any product you purchase from AABB, please call and give us the opportunity to make it right. We want you to be completely satisfied with every product you purchase. Contact our Customer Service Department at +1.866.222.2498 within the U.S. and +1.301.215.6489 internationally.

SHIPPING & HANI	DLING
U.S. Orders	UPS Ground
UP TO \$59.00	\$15
\$59.01 – \$99.00	\$20
\$99.01 – \$249.00	\$25
\$249.01 - \$349.00	\$28
\$349.01 – \$499.00	\$32
\$499.01 – \$649.00	\$37
\$649.01 – \$2500.00	\$40
\$2500.01 - \$14,000.00	\$100
\$14,000.01+ CONTACT AABB	
Orders Outside the U.S. (including Puerto Rico)	UPS Int'l
UP TO \$99.00	\$35
\$99.01 – \$249.00	\$55
\$249.01 – \$349.00	\$90
\$349.01 – \$499.00	\$125
\$499.01 - \$649.00	\$155
\$649.01 – \$2500.00	\$175
\$2500.01 - \$14,000.00	\$250
\$14,000.01+, CONTACT AABB	



# **Explore The AABB Store**



Visit the AABB Store — your comprehensive destination for expanding your knowledge and advancing your career.

The AABB Store comprises a wealth of blood and biotherapies resources all in one place, including an array of highly acclaimed publications, eCasts and courses, continuously updated and categorized by product type and topic.

Visit today and discover the latest tools and insights from AABB.

aabb.org/store

