Contents

Contributors, v
Introduction, vii

1 The Blood Donor: Demographics, Donor Selection and Tests on Donor Blood, 1
   Liz Gaffrey, Patricia Hewitt and John Barbara

2 Supply and Demand for Blood and Blood Components and Stock Management, 6
   Judith Chapman, Peter Garwood and Sue Knowles

3 Compatibility Testing Before Transfusion; Blood Ordering and Administration, 10
   Marcela Contreras and Aleksandar Mijovic

4 Red Cell Transfusion, 15
   Mike Murphy and Jonathan Wallis

5 Platelet and Granulocyte Transfusions, 22
   Modupe Elebute, Simon Stanworth and Cristina Navarrete

6 Haemolytic Disease of the Newborn and its Prevention, 27
   Fiona Regan, Sailesh Kumar and Marcela Contreras

7 Fetal and Neonatal Transfusion, 33
   Helen V. New and Sailesh Kumar

8 Plasma Products and Indications for Their Use, 40
   Hannah Cohen and Trevor Baglin

9 Human Albumin Solutions and the Controversy of Crystalloids Versus Colloids, 48
   Neil Soni

10 Treatment of Massive Haemorrhage in Surgery and Trauma, 54
    Tim Walsh

11 Immunological Complications of Blood Transfusion, 61
    Marcela Contreras and Cristina Navarrete

12 Infectious Complications of Blood Transfusion: Bacteria and Parasites, 69
    John Barbara and Marcela Contreras

13 Infectious Complications of Blood Transfusion: Viruses, 74
    John Barbara and Marcela Contreras

14 Variant Creutzfeldt–Jakob Disease and its Impact on the UK Blood Supply, 79
    Patricia Hewitt, James Ironside and Marcela Contreras

15 Risks of Transfusion in the Context of Haemovigilance: SHOT – the UK Haemovigilance System, 83
    Dorothy Stainsby, Hannah Cohen and Brian McClelland

16 Alternatives to Allogeneic Blood Transfusion, 89
    Dafydd Thomas and Beverley Hunt
17 Blood Substitutes and Oxygen Therapeutics, 95
   Kenneth C. Lowe

18 Appropriate Use of Blood and Better Blood Transfusion, 99
   Mike Murphy

19 Stem Cell Transplantation and Cellular Therapies, 104
   Aleksandar Mijovic, Derwood Pamphilon and Suzanne Watt

20 Blood Transfusion in a Regulatory Environment and the EU Directives, 110
   Shubha Allard, Clare Taylor and Angela Robinson

Index, 117