

METHODS IN MOLECULAR MEDICINE™

# Bone Marrow and Stem Cell Transplantation

Edited by  
Meral Beksac

 HUMANA PRESS

---

# Contents

Preface .....	v
Contributors .....	ix
1 Molecular Profiling of Hematopoietic Stem Cells <i>Teresa V. Bowman, Akil A. Merchant, and Margaret A. Goodell</i> .....	1
2 Methods for Imaging Cell Fates in Hematopoiesis <i>Jennifer Duda, Mobin Karimi, Robert S. Negrin, and Christopher H. Contag</i> .....	17
3 An Overview of HLA Typing for Hematopoietic Stem Cell Transplantation <i>Ann-Margaret Little</i> .....	35
4 Sequence-Specific Primed PCR (PCR-SSP) Typing of HLA Class I and Class II Alleles <i>Klara Dalva and Meral Beksac</i> .....	51
5 HLA Typing with Sequence-Specific Oligonucleotide Primed PCR (PCR-SSO) and Use of the Luminex™ Technology <i>Klara Dalva and Meral Beksac</i> .....	61
6 Sequencing-Based Typing of HLA <i>Berthold Hoppe and Abdulgabar Salama</i> .....	71
7 Molecular Typing Methods for Minor Histocompatibility Antigens <i>Eric Spierings and Els Goulmy</i> .....	81
8 Non-HLA Polymorphisms in Stem Cell Transplantation <i>Pete G. Middleton</i> .....	97
9 Polymorphisms Within Epithelial Receptors: <i>NOD2/CARD15</i> <i>Julia Brenmoehl, Ernst Holler, and Gerhard Rogler</i> .....	115
10 Role of Natural Killer Cells and Killer Immunoglobulin-like Receptor Polymorphisms: <i>Association of HLA and KIRs</i> <i>M. Tefvik Dorak</i> .....	123
11 Identification of Bone Marrow Derived Nonhematopoietic Cells by Double Labeling with Immunohistochemistry and <i>In Situ</i> Hybridization <i>Isinsu Kuzu and Meral Beksac</i> .....	145

12	Molecular Methods Used for Detection of Minimal Residual Disease Following Hematopoietic Stem Cell Transplantation in Myeloid Disorders <b>Ahmet H. Elmaagacli</b> .....161
13	Molecular Methods Used for the Detection of Autologous Graft Contamination in Lymphoid Disorders <b>Paolo Corradini, Matteo G. Carrabba, and Lucia Farina</b> .....179
14	Detection of Impending Graft Rejection and Relapse by Lineage-Specific Chimerism Analysis <b>Thomas Lion</b> .....197
15	Application of Proteomics to Posttransplantation Follow-Up <b>Eva M. Weissinger and Harald Mischak</b> .....217
	Index .....229