
Contents

Foreword v
Preface vii
Contributors xiii

PART I: BIOLOGY

1 The Many Molecular Mysteries of Melanoma
Brian J. Nickoloff 3

2 Isolation of Tumor Suppressor Genes in Melanoma by
cDNA Microarray
Yan A. Su and Jeffrey M. Trent 15

3 Molecular Characterization of Melanoma-Derived Antigens
**Marten Visser, Markwin P. Velders, Michael P. Rudolf,
and W. Martin Kast** 31

4 Experimental Induction of Human Atypical Melanocytic Lesions
and Melanoma in Ultraviolet-Irradiated Human Skin Grafted to
Immunodeficient Mice
Carola Berking and Meenhard Herlyn 71

5 Dissection of Immunosuppressive Effects of Ultraviolet Radiation
Stephen E. Ullrich and David A. Schmitt 85

6 Antisense Oligonucleotides as Research Tools
Jennifer K. Taylor, Scott R. Cooper, and Nicholas M. Dean 99

PART II: DIAGNOSIS

7 Genetic Testing in Familial Melanoma: *Epidemiologic/Genetic
Assessment of Risks and Role of CDKN2A Analysis*
David Hogg, Ling Liu, and Norman Lassam 109

8 Role of Molecular Biology in Diagnostic Pathology of Melanoma
**Andrzej Slominski, Andrew Carlson, Jacobo Wortsman,
and Martin C. Mihm** 123

9 Identification of Altered Gene Expression Associated with
Pigmentary Lesions by Differential Display Analysis
I. Caroline Le Poole and Thomas L. Brown 165

10	Fluorescence <i>In Situ</i> Hybridization as a Tool in Molecular Diagnostics of Melanoma Lionel J. Coignet	181
PART III: TREATMENT		
11	Antigen-Pulsed Dendritic Cell Approach to Melanoma Frank O. Nestle, Adrian Tun-Kyi, and Michel F. Gilliet	195
12	Gene Therapy in Melanoma Giorgio Parmiani, Flavio Arienti, Cecilia Melani, Filiberto Belli, Gianfrancesco Gallino, and Arabella Mazzocchi	203
13	Use of Gene Gun for Genetic Immunotherapy: <i>In Vitro</i> and <i>In Vivo</i> Methods Alfred E. Chang, Keishi Tanigawa, Joel C. Turner, Edwin C. Chang, and Hua Yu	223
14	Role of Cytokines in Pathology of Melanoma and Use of Biologic Response Modifiers in Melanoma Joseph I. Clark	241
15	Surgical Techniques for Treatment of Primary Cutaneous Melanoma June K. Robinson	269
PART IV: MONITORING		
16	Utility of Fine-Needle Aspiration Biopsy for Prospective Analysis of Patients Undergoing Therapy for Metastatic Melanoma Adam I. Riker	287
17	A Molecular Technique Useful in the Detection of Occult Metastases in Patients with Melanoma: <i>RT-PCR Analysis of Sentinel Lymph Nodes and Peripheral Blood</i> James S. Goydos and Douglas S. Reintgen	301
18	Immunoscope Analysis of T-Lymphocytes Infiltrating Melanocytic Tumors Philippe Musette, Jos Even, Louis Dubertret, Philippe Kourilsky, and Gabriel Gachelin	321
19	T-Cell Receptor Clonotype Mapping Using Denaturing Gradient Gel Electrophoresis: <i>Analysis of Clonal T-Cell Responses in Melanoma</i> Per thor Straten, Jürgen C. Becker, Jesper Zeuthen, and Per Guldberg	339
20	Methods for Use of Peptide–MHC Tetramers in Tumor Immunology Cassian Yee and Peter P. Lee	353
	Index	363



<http://www.springer.com/978-0-89603-684-0>

Melanoma Techniques and Protocols
Molecular Diagnosis, Treatment, and Monitoring
Nickoloff, B.J. (Ed.)
2001, XVI, 368 p., Hardcover
ISBN: 978-0-89603-684-0
A product of Humana Press