
Contents

1	Introduction to Diagnostic and Prognostic Biomarkers and Therapeutic Targets in Melanoma	1
	Michael J. Murphy	
2	Diagnostic and Prognostic Biomarkers in Melanoma: Current State of Play	9
	Jochen Utikal, Jürgen C. Becker, and Selma Ugurel	
3	Molecular Pathogenesis of Melanoma: Established and Novel Pathways	19
	Paolo Antonio Ascierto, Maria Libera Ascierto, Mariaelena Capone, Zendee Elaba, Michael J. Murphy, and Giuseppe Palmieri	
4	Staging of Melanoma	39
	Zendee Elaba, Michael J. Murphy, Philip Kerr, and Jane M. Grant-Kels	
5	Clinical and Histopathological Parameters in Melanoma	49
	Cheryl Bilinski, Avery LaChance, and Michael J. Murphy	
6	Genetic/Epigenetic Biomarkers: Distinction of Melanoma from Other Melanocytic Neoplasms.....	69
	Minoru Takata	
7	mRNA Biomarkers in Melanoma	79
	Giovanna Chiorino and Maria Scatolini	
8	Epigenetic Biomarkers in Melanoma	89
	Suhu Liu, Suping Ren, Paul M. Howell Jr., and Adam I. Riker	
9	MicroRNA Biomarkers in Melanoma	113
	Jim Kozubek, Faseeha Altaf, and Soheil Sam Dadras	
10	MicroRNAs as Biomarkers and Therapeutic Targets in Melanoma	127
	Daniel W. Mueller and Anja K. Bosserhoff	
11	Mitochondrial DNA Biomarkers in Melanoma.....	145
	Mark L. Steinberg	

12 Tissue-Based Protein Biomarkers in Melanoma: Immunohistochemistry: (A) Diagnosis	159
Steven J. Ohsie, Basil A. Horst, Alistair Cochran, and Scott W. Binder	
13 Tissue-Based Protein Biomarkers in Melanoma: Immunohistochemistry: (B) Prognostication	177
Basil A. Horst, Steven J. Ohsie, Alistair Cochran, and Scott W. Binder	
14 Tissue-Based Protein Biomarkers in Melanoma: Mass Spectrometry-Based Strategies	189
Michael J. Murphy, Karim Rezaul, and David K. Han	
15 Serological Biomarkers in Melanoma	195
Mel Ziman, Michael Millward, Robert Pearce, and Mark Lee	
16 Molecular Markers of Lymph Node Disease in Melanoma	209
Sandro Pasquali, Augustinus P.T. van der Ploeg, and Simone Mocellin	
17 Melanoma Cell Propagation: Cancer Stem Cell, Clonal Evolution and Interconversion Models of Tumorigenicity	227
Qiuzhen Liu, Marianna Sabatino, David F. Stroncek, Ping Jin, Francesco M. Marincola, and Ena Wang	
18 Surgical Management of Melanoma: Concept of Field Cancerization and Molecular Evaluation of Tissue Margins	243
Amanda Phelps and Michael J. Murphy	
19 Chemotherapy for Melanoma	247
Hedwig Stanisiz, Thomas Vogt, and Knuth Rass	
20 Molecular-Targeted Therapy for Melanoma	265
Alessia E. Russo, Ylenia Bevelacqua, Andrea Marconi, Andrea Veronesi, and Massimo Libra	
21 Anti-Angiogenesis Therapy for Melanoma	281
Roberta Ferraldeschi and Paul Lorigan	
22 Immunological Biomarkers and Immunotherapy for Melanoma	295
Jochen T. Schaefer	
23 Diagnostic and Prognostic Biomarkers and Therapeutic Targets in Melanoma: An Overview	305
Ahmad A. Tarhini and John M. Kirkwood	
Index	319



<http://www.springer.com/978-1-60761-432-6>

Diagnostic and Prognostic Biomarkers and Therapeutic
Targets in Melanoma

Murphy, M.J. (Ed.)

2012, XIV, 322 p., Hardcover

ISBN: 978-1-60761-432-6

A product of Humana Press