## Contents

1 Controversies in Neoplastic Myeloplasia ......................... 1
   James E. Talmadge
   1.1 Introduction ............................................. 1
   1.2 Controversy 1: What Are MDSCs Phenotypically?........ 3
   1.3 Controversy 2: Is T-Cell Suppression by MDSCs Antigen
       Specific?............................................. 4
   1.4 Controversy 3: What Are the Differences Between
       PMN-MDSCs and Neutrophils (PMNs)?................. 5
   1.5 Controversy 4: What Are the Differences Between
       M-MDSCs and Monocytes/Macrophages?.............. 6
   1.6 Controversy 5: What Are Clinically Effective Therapeutic
       Interventions for MDSCs?......................... 7
       1.6.1 Inhibiting MDSC Immunosuppressive Activity ... 7
       1.6.2 Depleting MDSC Number ......................... 11
       1.6.3 Regulating MDSC Development/Apoptosis ....... 12
       1.6.4 Inducing MDSC Differentiation .............. 14
   References ............................................. 15

2 Differentiation of Murine Myeloid-Derived Suppressor Cells .... 25
   David Escors
   2.1 Introduction ............................................. 25
   2.2 Physiological Myeloid Differentiation ................. 26
       2.2.1 Conventional Myeloid Cell Types and Their Role
           in Immunity .................................. 26
       2.2.2 Physiological Myelopoiesis ...................... 28
       2.2.3 Transcription Factors Driving Myelopoiesis .... 29
   2.3 MDSC Differentiation in Cancer ...................... 30
       2.3.1 Myeloid Cells and Cancer Progression in Murine
           Models........................................... 30
       2.3.2 The Definition of Myeloid-Derived Suppressor Cells .. 30
Myeloid-Derived Suppressor Cells and Cancer
2016, IX, 102 p. 8 illus. in color., Softcover
ISBN: 978-3-319-26819-4