1	The Fundamental Role of Epigenetic Regulation in Normal and Disturbed Cell Growth, Differentiation, and Stemness	1
2	Mouse Models to Study DNA Methylation in Cancer Research Irina Savelyeva and Frank Rosenbauer	43
3	Epigenetic Regulation of Normal Hematopoietic Development Pratima Chaurasia, Dmitriy Berenzon, and Ronald Hoffman	67
4	Epigenetic Regulation of Globin Genes and Disturbances in Hemoglobinopathies	89
5	DNA Methylation Abnormalities in Hematopoietic Disorders: Biological Significance and Methodological Approaches Rainer Claus, Maximilian Schmutz, Gabriele Greve, and Lars Bullinger	107
6	Epigenetic Modifications Mediated by the AML1/ETO and MLL Leukemia Fusion Proteins	121
7	Treatment of Hematologic Malignancies with DNA Hypomethylating Agents Michael Daskalakis, Tina E. Joeckel, Michael Lübbert, and A. Kuendgen	145
8	Pharmacodynamic Responses to DNA Methyltransferase Inhibition Elizabeth Griffiths, Richard L. Momparler, and Adam R. Karpf	171
9	Histone Methyltransferases: Opportunities in Cancer Drug Discovery	189



10	Histone Deacetylase (HDAC) Inhibitors in Recent Clinical Trials for Cancer Therapy Kristina Keller and Manfred Jung	227
11	Clinical Implications of Epigenetic Alterations in Lung Cancer	257
12	Epigenetic Disturbances in Colorectal Cancer	283
13	Epigenetic Therapies in Solid Tumours: From Preclinical Models to Clinical Trial Results	299
Ind	ex	319