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Nota di contenuto	Contents; Preface; Chapter 1 Introduction: Prostate Cancer; Chapter 2 The Prostate Gland Dynamics; Chapter 3 Apoptosis Pathways Signaling Execution of Cancer Cells; 3.1 Cell Choices of Life and Death; 3.1.1 "Classic" apoptosis; 3.1.2 Anoikis; 3.2 Caspases: The Apoptosis Executioners in a Therapeutic Setting; 3.3 The Mitochondrion: A Convenient Cell-Killing Platform; 3.4 Cell Surface Death Receptors and the FAS Ligand; 3.5 Meet the BCL-2 Family: Governors of Cell Survival and Death; 3.6 The Transcriptional Controllers; 3.7 The p53 Tumor Suppressor 3.8 PTEN/PI3K/AKT: The Downstream Intracellular Players3.9 The Antagonists of Death: Inhibitors of Apoptosis Proteins (IAPs); 3.10 Apoptosis Signaling in the Endoplasmic Reticulum: A Death Platform for Stress; 3.11 The Tumor Microenvironment: Extracellular Forces Control Intracellular Death Outcomes; 3.11.1 Role of hypoxia; 3.11.2 The key growth factors; 3.11.3 Inflammation; Chapter 4 Androgen Receptor-Mediated Apoptosis: Significance in Development of Castration-Resistant Prostate Cancer; 4.1 The Androgen Receptor (AR); 4.2 Androgen Ablation: The Glory and the Failures 4.3 AR Status in Castration-Resistant Prostate Cancer4.4 AR Interactions with Growth Factor Signaling Leads to Apoptosis; 4.4.1 AR connects with EGF; 4.4.2 AR and IGF interactions; 4.4.3 AR and TGF-:

partners in life and death (of the cell); 4.4.4 AR and FGF interactions; 4.4.5 AR and VEGF: Vascular exchanges for the "road"; 4.4.6 AR and growth factor interplay in the stroma; Chapter 5 Anoikis in Prostate Cancer Metastasis; 5.1 Anoikis Interrupted: Survival of the Homeless (Cells); 5.2 The Integrin Connection; 5.3 Impairing the Route to Angiogenesis; 5.3.1 Doxazosin; 5.3.2 Suramin
5.3.3 Thalidomide5.3.4 Bevacizumab; 5.3.5 SU5416; 5.4 Anoikis and the Tumor Microenvironment: No "Resting" in the Stroma; 5.5 Signaling the "Homeless" State: Intracellular Anoikis Effectors; 5.6 Significance of Apoptosis in Cytoskeleton and Microtubule Targeting; 5.7 Autophagy: The Cellular Benefits of Starving to Death; Chapter 6 Epithelial-Mesenchymal Transition (EMT) in Prostate Cancer Metastasis; Chapter 7 Novel Molecular Therapeutics for Targeting Castration-Resistant Prostate Cancer; 7.1 Therapeutic Targeting of TGF- Signaling
7.2 Exploitation of Quinazolines: Lifting Anoikis Resistance to Impair Metastasis7.3 Receptor Tyrosine Kinase Targeting; 7.4 Histone Deacetylase Inhibitors (HDACs): Therapeutic Inhibitors; 7.5 Selective Death Action by Cancer-Specific PAR-4 in Prostate Tumors; 7.6 Death Synergy Between Proteosome and Death Receptor Leads to Tumor Regression; 7.7 The SERCA Pump as a Therapeutic Target; 7.8 Endothelin-Receptor Antagonists; 7.9 The Power of Sex Steroid Targeting; Chapter 8 Apoptotic-Based Molecular Markers of Therapeutic Response; Chapter 9 Role of Apoptosis in Prostate Cancer Prevention
9.1 Aspirin and Non-Aspirin Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

Sommario/riassunto

This book focuses on the functional significance of targeting apoptosis for the treatment of prostate cancer. New concepts on the challenges relating to the development of resistance by androgen-independent tumors are introduced, in terms of the contribution of anoikis and cross-talk of androgens with key growth factor signaling pathways. This volume also provides insightful discussion on the exploitation of the apoptotic and angiogenic synergism towards complete eradication of prostate tumors. Last but not least, it includes reflections on the drug development challenge based on the analysis