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Nota di contenuto	Nitric Oxide Donors; Contents; Preface; List of Contributors; Part 1 Chemistry of NO Donors; 1 NO and NO Donors; 1.1 Introduction to NO Biosynthesis and NO donors; 1.1.1 Nitric Oxide Synthases; 1.1.2 Chemistry of Reactive Nitrogen Species; 1.2 Classification of NO Donors; 1.3 New Classes of NO Donors under Development; 1.3.1 Nitroarene; 1.3.2 Hydroxamic Acids; 1.4 Development of NO-Drug Hybrid Molecules; 1.4.1 Nitrate Hybrid Molecules; 1.4.2 Furoxan Hybrid Molecules; 1.5 New Therapeutic Applications of NO Donors; 1.5.1 NO Donors against Cancer 1.5.1.1 Diazeniumdiolates (NONOates) as Promising Anticancer Drugs1. 1.5.1.2 The Synergistic Effect of NO and Anticancer Drugs; 1.5.1.3 NO-NSAIDs as a New Generation of Anti-tumoral Agents; 1.5.1.4 Other NO Donors with Anticancer Activity; 1.5.2 NO against Virus; 1.5.2.1 HIV-1 Induces NO Production; 1.5.2.2 Antiviral and Proviral Activity of NO;

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4.2.1 Regulation of Blood Flow by HbSNO

Sommario/riassunto

Nitric oxide is a highly potent regulatory molecule with great pharmaceutical potential. This handbook fills a real gap in combining the chemistry of nitric oxide releasing substances with their practical applications in biology and drug design. It covers all classes of nitric oxide donors, from organic nitrates to nitroso compounds, guanidines and metal-NO complexes. In addition to a detailed treatment of the chemistry of NO donors, numerous examples of successful diagnostic and pharmacological applications are discussed, as well as further therapeutic targets for these substances.
