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Titolo IschemiRs: MicroRNAs in Ischemic Stroke: From Basics to Clinics // by

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Nota di contenuto Preface -- Chapter 1: microRNAs in normal brain physiology -- Chapter

2: Ischemic stroke: An imperative need for effective therapy -- Chapter 3: MicroRNAs in ischemic stroke pathophysiology: Special emphasis on early molecular events -- Chapter 4: microRNA regulation of ischemic stroke inflammatory and immune response -- Chapter 5: Regulatory role of microRNAs in ischemic cell death -- Chapter 6: The emerging role of microRNAs in post-ischemic angiogenesis and neurogenesis -- Chapter 7: MicroRNAs as potential diagnostic, prognostic and therapeutic biomarkers in ischemic stroke -- Chapter 8: Interplay

between microRNAs and other cerebrovascular diseases -- Chapter 9: New insights into the regulatory role of IncRNA, circRNA, piRNAs, and

Sommario/riassunto

ceRNAs in ischemic stroke -- Chapter 10: Computational resources for microRNA research -- Chapter 11: MicroRNA-targeted therapeutics for ischemic stroke: Status, gaps and the way forward.

There has been an enormous increase in information relating to microRNA (miRNA) and its strategic role in numerous diseases. This book reviews the emerging role of microRNAs in cerebral ischemia, providing comprehensive details of the links between this small RNA molecule and ischemic stroke, the more prevalent of the two main types of stroke. The chapters address questions relating to microRNA's function in various pathological features of stroke, like oxidative stress, excitotoxicity and cell death, as well as its role as a biomarker and diagnostic agent, and the current therapeutic interventions. Further, the book highlights the latest research on how miRNAs contribute to neuroregeneration following stroke, discussing the myriad computational tools and databases used in miRNA research, and decsribes how how miRNA modulates other cerebrovascular diseases. The book concludes with fresh insights into the effect of long noncoding RNA in cerebral ischemia.