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Titolo	Multi-Factorial Approach as a Therapeutic Strategy for the Management of Alzheimer's Disease // edited by Ghulam Md Ashraf, Ali T. Zari, Md. Habibur Rahman, Chenmala Karthika, Veera Venkata Satyanarayana Reddy Karri
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Descrizione fisica	1 online resource (595 pages)
Altri autori (Persone)	ZariAli T RahmanHabibur KarthikaChenmala KarriVeera Venkata Satyanarayana Reddy
Disciplina	612.8
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Nota di contenuto	Part 1. Basic Concepts of neurodegeneration and Alzheimer's disorder -- Basic anatomy and physiology of the central nervous system -- Neurodegenerative disorders: Types, Classification, and basic concepts -- Alzheimer's disorder: epidemiology, etiology, risk factors, future predictions -- Pathophysiology and underlying mechanisms: pathways to Alzheimer's plaque formation -- Correlation of Alzheimer's and other psychologic and non-psychologic conditions -- Part 2. Current scenario of Alzheimer's disorder -- Hurdles & strategies in treating Alzheimer's disorder -- Diagnosis of Alzheimer's, types of plaques and their detection, imaging techniques, and other tests -- Current drugs used: classification, pharmacology -- Approved drug regimens, combinations, and delivery systems for Alzheimer's disorder -- Traditional therapies for Alzheimer's disorder -- Part 3. Novel

therapeutic approaches to Alzheimer's Therapy -- Nanotechnology in Alzheimer's -- Targeted drug delivery: amyloid beta targeting drugs, immunotherapy, anti-tau, and aggregation inhibitor, microtubule-stabilizing, and neuro-inflammation modulation -- Neuroprotective approach, microbiome therapy, and overcoming insulin resistance in the brain -- Nonpharmacological approaches: Brain stimulations, vagus nerve stimulation, magnetic and electrical transcranial stimulations -- Part 4. Alzheimer's drug development -- Understanding the potential targets of Alzheimer's disorder -- Upcoming nano and conventional drug delivery strategies for Alzheimer's disorder -- Animal models and ethics in the testing of drugs for Alzheimer's disorder -- Regulatory guidelines and approval process for drugs and formulations for AD -- Part 5. Future of Alzheimer's disorder -- Prevention and reduction of risk of AD: lifestyle changes, dietary changes, supplements, etc -- Natural medicines (phytoconstituents) and probiotics as the future of Alzheimer's Disorder -- Future barriers and possible solutions with recent advances in the field of Alzheimer's disease.

Sommario/riassunto

This book is a comprehensive guide to the pathology, underlying mechanisms, and treatment options for Alzheimer's disease (AD). The book starts with an introduction to the basic anatomy and physiology of the central nervous system, followed by an overview of the types, classifications, and basic concepts of neurodegenerative disorders. The epidemiology, etiology, risk factors, and future predictions of AD have been covered in detail. The book then delves into the pathophysiology and underlying mechanisms of plaque formation and explores the correlation of AD with other psychological and non-psychological conditions. The chapters also explore the diagnosis of AD, including types of plaques and their detection, imaging techniques, and other tests. The book also covers traditional therapies for AD and explores the potential application of nanotechnology in AD treatment. The book also covers animal models and ethics in the testing of drugs for AD, regulatory guidelines, and the approval process for drugs and formulations for AD. Prevention and reduction of AD risk are explored, including lifestyle changes, dietary changes, supplements, natural medicines (phytoconstituents), and probiotics as the future of AD. The book concludes with a discussion of future barriers and possible solutions with recent advances in the field of AD. This book is an essential guide for students, researchers, and healthcare professionals interested in Alzheimer's disease research.
