1. Record Nr. UNINA9910253939903321 Biochemical Basis and Therapeutic Implications of Angiogenesis // Titolo edited by Jawahar L. Mehta, Pankaj Mathur, Naranjan S. Dhalla Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-61115-1 Edizione [2nd ed. 2017.] 1 online resource (IX, 548 p. 62 illus., 55 illus. in color.) Descrizione fisica Collana Advances in Biochemistry in Health and Disease, , 2512-2150 ; ; 6 Disciplina 612 Soggetti Human physiology Cardiology Cancer **Proteins** Medicine - Research Biology - Research Stem cells Human Physiology Cancer Biology Biomedical Research Stem Cell Biology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Part1. Molecular Mechanisms in Angiogenesis -- 1. Endothelial Growth Factor Receptors in Angiogenesis -- 2. The Role of Integrins in Angiogenesis -- 3.Toll-Like Receptors in Angiogenesis -- 4.Vascular Stem Cells in Regulation of Angiogenesis -- 5. Role of Transforming Growth Factor Beta Family in Angiogenesis -- 6. Angiogenesis-based Strategy by Hepatocyte Growth Factor for the Treatment of Ischemic Organ Diseases: From Biology to Clinical Trials -- 7. Functions of MicroRNAs in Angiogenesis -- 8. Mast Cells in Angiogenesis. The role of Angiogenic Cytokines -- Part2. Therapeutic Implications of Angiogenesis in Cancer -- 9. Therapeutic Implications of Angiogenesis

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Sommario/riassunto

This book covers the latest developments in the therapeutic implications of angiogenesis, ranging from angiogenesis in the brain, angiogenesis in cancer, angiogenesis' role in atherosclerosis and heart disease as well as metabolic disorders and peripheral vascular disease. The book is comprehensive in its coverage of angiogenesis in a diverse set of diseases and examines the role of cellular and subcellular structures during the development of angiogenesis. Well-organized and thorough, this is an ideal book for researchers and biomedical engineers working in the field of therapeutic implications of angiogenesis. This book also: Covers the basics of the physiology of angiogenesis, including VEGF pathways in angiogenesis, integrins in angiogenesis, angiogenesis and exercise physiology, and more Details the role of angiogenesis in atherosclerosis and heart disease, including vascular endothelial growth factor and atherosclerotic plaque progression as well as angiogenesis and heart failure Illustrates in detail brain angiogenesis after stroke and the relationship between angiogenesis and Alzheimer's disease .