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Nota di contenuto	Industrial Challenges of Recombinant Proteins -- Insights on the Formulation of Recombinant Proteins -- Therapeutic Antibody Engineering and Selection Strategies -- Cytokines and Growth Factors -- Hormones, Blood Products and Therapeutic Enzymes -- Advances in Vaccines -- Human Pluripotent Stem Cells: Applications and Challenges for Regenerative Medicine and Disease Modeling -- Addressing the Manufacturing Challenges of Cell-Based Therapies -- Bioprinting Technologies in Tissue Engineering -- Gene Therapy -- The Impact of Pharmacogenomics in Personalized Medicine.

This book offers an authoritative review of biopharmaceuticals and their clinical relevance. Biopharmaceuticals have been showing high therapeutic potential by means of biological and biosimilar medicines, particularly for the treatment of cancer, chronic diseases (e.g. diabetes, Crohn's disease, psoriasis and rheumatoid arthritis), neurodegenerative disorders (e.g. multiple sclerosis), and they have also been contributing to the progress of innovative therapies such as assisted reproductive medicine. Since the eighties, several biopharmaceuticals have been approved and, due to patents expiration, many biosimilars are also marketed. In this book, readers will find the most relevant updated information about the main clinical applications of pharmaceutical biotechnology. The authors provide expert analysis about the industrial challenges of recombinant proteins and the different classes of biopharmaceuticals, including monoclonal antibodies, vaccines, growth factors and stem cells. Topics such as bioprinting technologies in tissue engineering, gene therapy and personalized medicine are also covered in this book. Professionals, students and researchers interested in this field will find this work an important account.
