Record Nr. UNINA9910682555503321 **Titolo** Tubercular drug delivery systems: advances in treatment of infectious diseases / / Ranjita Shegokar and Yashwant Pathak, editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2023] ©2023 **ISBN** 3-031-14100-8 [1st ed. 2023.] Edizione 1 online resource (334 pages) Descrizione fisica 616.90461 Disciplina Soggetti Communicable diseases - Chemotherapy Drug delivery systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Global health and Tuberculosis past, present and Future --Tuberculosis: cellular understanding of disease.-Metal nanoparticles in TB -- TB: current treatment options -- Polymeric nanoparticles in TB --Solid lipid nanoparticles in TB -- Dendrimers in TB -- Liposomes in TB -- Micro, nano emulsions in TB -- Nano suspension in TB -- Alginate. gelatin nanoparticles in TB -- Niosome in TB -- Surface modified drug delivery systems in TB -- Clinical trials in TB -- Herbal platforms in TB. Sommario/riassunto The disability-adjusted life year (DALY) is a generic measure of health effect that can be used in cost-effectiveness analysis as an alternative to the quality-adjusted life year (QALY). Infectious diseases are one of the major to cause significant losses of DALY and QALY. Human infectious diseases are disorders that are triggered by the microorganisms such as bacteria, fungi, viruses, or parasites. The majority of such diseases are contagious and create a public health menace. There are several reasons why infectious diseases are deadly diseases, and one of the primary reasons is the drug resistance developed over time. Drug resistance-associated mutations are linked to increasing drug efflux, modifications of the drugs, or their targets. Every year, new drugs are being approved by FDA to treat infectious diseases. Nonetheless, the infectious diseases will undoubtedly persist

as permanent and main threats to humanity now and in the future, primarily due to increased longevity that almost always comes at a cost

of impaired immunity. A total of four books are covered under the series of Infectious diseases. • Malarial drug delivery systems • Tubercular drug delivery systems • Viral drug delivery systems • Infectious disease drug delivery systems The theme of the second book is Tuberculosis (TB). This book addresses the recent trends in drug delivery for treating TB using new formulation technologies, and the mechanism how it can prevent or delay the drug resistance. It covers current drug therapy and new drug targeting approaches focusing on innovative trend-defining technologies and drug delivery platforms. It is essential to understand the relationship between host pathogens for better treatment. Various novel and nano-formulations using promising technologies are being explored to deliver TB drugs via different administration routes at right pathological site. This book addresses the gap between new and old treatment TB modalities and how they are superior in pharmacological performance when tested in in-vitro and in-vivo. Audiences from a broad range of groups, from researchers, academicians, and public health bodies to regulatory experts, can benefit from the compiled information to learn more about patient needs and current research advances in the field of TB research.