1. Record Nr. UNINA9910557627203321 Autore Riccardi Giovanna

Titolo Tuberculosis Drug Discovery and Development 2019

Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing

Institute, 2020

1 online resource (296 p.) Descrizione fisica

Soggetti Biology, life sciences

Research & information: general

Lingua di pubblicazione Inglese

**Formato** Materiale a stampa

Monografia Livello bibliografico

Tuberculosis (TB) is an infectious disease caused by Mycobacterium Sommario/riassunto

> tuberculosis and still represents one of the global health threats to mankind. The World Health Organization estimated more than 10 million new cases and reported more than 1.5 million deaths in 2019, thus ranking TB among the main causes of death due to a single pathogen. Standard anti-TB therapy includes four first-line antibiotics that should be administered for at least six months. However, in the case of multi- and extensively drug-resistant TB, second-line medications must be used and these frequently cause severe side effects resulting in poor compliance. Developing new anti-TB drug candidates is therefore of outmost importance. In this Special Issue dedicated to Tuberculosis Drug Discovery and Development, we present the main and latest achievements in the fields of drug and target discovery, host-directed therapy, anti-virulence drugs, and describe the development of two advanced compounds: macozinone and delpazolid. In addition, this Special Issue provides an historical perspective focused on Carlo Forlanini, the inventor of pneumothorax for TB treatment, and includes an overview of the state-of-the-art technologies which are being exploited nowadays in TB drug development. Finally, a summary of TB vaccines that are either approved or undergoing clinical trials concludes the Special Issue.