Record Nr. UNINA9910828027703321 Autore Shunmugaperumal Tamilvanan **Titolo** Biofilm eradication and prevention: a pharmaceutical approach to medical device infections / / Tamilvanan Shunmugaperumal Pubbl/distr/stampa Oxford, : Wiley-Blackwell, 2010 **ISBN** 1-118-04355-3 1-282-65368-7 9786612653681 0-470-64046-4 0-470-64045-6 Edizione [1st ed.] Descrizione fisica 1 online resource (448 p.) Disciplina 610.284 Soggetti Medical instruments and apparatus - Microbiology **Biofilms** Medical instruments and apparatus - Sterilization Anti-infective agents - Therapeutic use Drug carriers (Pharmacy) - Therapeutic use Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. BIOFILM ERADICATION AND PREVENTION; CONTENTS; PREFACE; Nota di contenuto ACKNOWLEDGMENTS: PART I. DEVELOPMENT AND CHARACTERIZATION OF BIOFILMS; 1. INTRODUCTION AND OVERVIEW OF BIOFILM; 2. RATIONALE FOR BIOFILM ERADICATION FROM MODERN MEDICAL DEVICES; 3. PATHOGENESIS OF DEVICE-RELATED NOSOCOMIAL INFECTIONS; 4. BIOFILM RESISTANCE-TOLERANCE TO CONVENTIONAL ANTIMICROBIAL AGENTS; 5. ANALYTICAL TECHNIQUES USEFUL TO STUDY BIOFILMS; PART II. BIOFILM-RELATED INFECTIONS IN VARIOUS HUMAN ORGANS (NONDEVICE-RELATED CHRONIC INFECTIONS); 6. BIOFILM-RELATED INFECTIONS IN OPHTHALMOLOGY 7. BIOFILM-RELATED INFECTIONS IN THE ORAL CAVITY8. IMPLICATIONS OF BIOFILM FORMATION IN CHRONIC WOUNDS AND IN CYSTIC FIBROSIS; PART III. DRUG DELIVERY CARRIERS TO ERADICATE BIOFILM FORMATION ON MEDICAL DEVICES: 9. STRATEGIES FOR PREVENTION OF

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Sommario/riassunto

Biofilm Eradication and Preventions presents the basics of biofilm formation on medical devices, diseases related to this formation, and approaches pharmaceutical researchers need to take to limit this problem. Split into three parts, the first deals with the development and characterization of biofilm on the surfaces of implanted or inserted medical devices. Questions as to why biofilms form over medical device surfaces and what triggers biofilm formation are addressed. In the second section, the author discusses biofilm-mediated chronic infections occurred in various organs (eyes, mou