Record Nr. UNINA9910253931703321 Next Generation Antibody Drug Conjugates (ADCs) and Immunotoxins / **Titolo** / edited by Ulf Grawunder, Stefan Barth Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-46877-4 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XI, 181 p. 57 illus., 39 illus. in color.) Milestones in Drug Therapy, , 2296-6056 Collana Disciplina 615.373 Soggetti Pharmacology **Antibodies** Pharmacotherapy Cancer research Oncology Pharmacology/Toxicology Cancer Research Oncology 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. Chemical Assembly of Antibody-Drug Conjugates -- Pre-clinical Nota di contenuto evaluation of ADCs delivering highly potent pyrrolobenzodiazepine (PBD) dimers -- Stable and homogeneous drug conjugation by sequential bis-alkylation at disulfide bonds using bis-sulfone reagents -- Calicheamicin antibody-drug conjugates for liquid- and solid tumor indications -- Enzyme-based strategies to generate site-specifically conjugated Antibody Drug Conjugates -- Substance P - Saporin for the Treatment of Intractable Pain -- Recombinant immunotoxins for Chronic Inflammatory Disease -- BL22: A milestone in targeting CD22. This book describes the newest developments in antibody drug Sommario/riassunto conjugates and immunotoxins, paving their way to clinical application. Lessons learned from the current state of the art are used to further improve our understanding of their mechanisms of action and off

target activities. The book introduces scientists to all of the

prerequisites that must be properly addressed, including identification of the right target, specific traits of target binding antibodies, proper selection of the toxic payload, internalization induced by binding, and next generation conjugation and linker technologies. These knowledge-based, revolutionary new drug principles will form the cornerstone of the future standard of care and will lead to major advances in application, as well as improved quality of life and patient survival rates. This book will be of interest to biotech companies and researchers working in the fields of immunology, pharmacology, and oncology.