1. Record Nr. UNINA9910300308503321

| | |
|---|---|
| Titolo | Development of Antibody-Based Therapeutics [[electronic resource] ] : Translational Considerations & Challenges / / edited by Mohammad A. Tabrizi, Gadi G. Bornstein, Scott L. Klakamp |
| Pubbl/distr/stampa | Singapore : , : Springer Singapore : , : Imprint : Adis, , 2018 |
| ISBN | 981-13-0496-3 |
| Edizione | [Second edition.] |
| Descrizione fisica | 1 online resource (255 pages) |
| Disciplina | 615.37 |
| Soggetti | Pharmacy<br>Toxicology<br>Biochemistry<br>Pharmacology/Toxicology<br>Biochemistry, general |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | 1. Introduction -- 2. Translational Considerations and Challenges: An Overview -- 3. Considerations for Construct and Affinity Design Goals -- 4. Epitope Characterization and Isotype Selection -- 5. Biophysical Considerations for Development of Antibody-Based Therapeutics -- 6. Novel Technologies for Generation of Bispecific Constructs -- 7. Stimulus-Response Mechanisms: An Overview -- 8. Evaluation of Tumor Growth Inhibition in Preclinical Tumor Models –A Quantitative Approach -- 9. Application of Proof-of-Mechanism Biomarkers (POM) in Design and Development of Biologics Modalities -- 10. Antibody Drug Conjugates: Translational Considerations -- 11. Application of PK-PD Modeling and Simulation Approaches for Immuno-Oncology Drugs -- 12. Translational Biomarkers: Application in the Clinical Development of Combination Therapies. |
| Sommario/riassunto | With a key focus on recent developments and advances in the field, this book provides in-depth coverage of topics fundamental to the development of targeted therapeutics. The expansion of targeted modalities in rapidly evolving therapeutic areas, such as immune-oncology, and developments with respect to combination therapies, |

novel technologies, and the therapeutic application of antibody-drug conjugates, are presented. Additionally, the book builds upon topics discussed in the first edition (2012) where recent innovations warrant elaboration. This, the second edition of Development of Antibody-Based Therapeutics: Translational Considerations, represents a comprehensive evaluation of progress in the field, which sits alongside the first edition to inform, in detail, professional and academic researchers, as well as graduate students. Mohammad A. Tabrizi, Ph.D. is a leader in translational sciences as related to development of antibody-based therapeutics. His product development experience spans many therapeutic areas including oncology and inflammatory disease, and his technical expertise includes preclinical pharmacology and safety, preclinical and clinical pharmacokinetics, pharmacodynamics, GLP-compliant bioanalytics, and clinical pharmacology of therapeutic monoclonal antibodies. Gadi Bornstein, Ph.D. has over seventeen years of experience in Oncology R&D with an emphasis in preclinical antibody discovery and development. Dr. Bornstein currently leads and directs biologics discovery efforts at TESARO. He received his B.S. in biochemistry at the University of California, Davis and his doctoral degree in biochemistry at the University of Southern California Keck School of Medicine. Dr. Bornstein completed his postdoctoral training at Stanford University in the Division of Immunology and Rheumatology. Following his postdoctoral training, Dr. Bornstein joined Amgen Fremont, Inc. (formerly Abgenix, Inc.) as a Staff Scientist in the Preclinical Oncology department. Dr. Bornstein has held roles of increasing responsibility at AstraZeneca, Pfizer, and Novartis, where he was a project team leader, lead biologist, and key contributor to scientific strategies for multiple oncology programs. Dr. Bornstein has authored numerous research papers, reviews, as well as book chapters, and is a co-inventor on multiple patents. Scott L. Klakamp, Ph.D. is one of the leading scientists in utilizing Surface Plasmon Resonance (SPR) and KinExA® to measure the binding kinetics and equilibrium dissociation constants of human monoclonal antibody/antigen complexes. He was the founder of SKD Consulting LLC and acted as Principal Consultant at that company during the development of this title. Prior to SKD Consulting LLC, he was the Vice President of Chemistry and Biochemistry at BiOptix Inc., a company that provided the 404pi biosensor. Dr. Klakamp has also held positions of increasing responsibility in the areas of analytical and biophysical characterization at Chiron, Amgen/Abgenix, AstraZeneca/MedImmune, and Takeda Pharmaceuticals. Dr. Klakamp has been an author on over 30 research and review papers, book chapters, and patents. He has also been an invited speaker at numerous international and national meetings. Dr. Klakamp received his B.A. in Chemistry from Houghton College and his PhD in Chemistry at the Pennsylvania State University. From 1990 to 1993, he completed a postdoctoral fellowship (funded by a National Research Service Award from the National Institutes of Health) at the California Institute of Technology in bioinorganic chemistry.