Record Nr. UNINA9910686469303321 Autore Hobson Adrian Titolo The Medicinal Chemistry of Glucocorticoid Receptor Modulators / / by Adrian Hobson Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 3-031-28732-0 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (IX, 142 p. 172 illus.) Collana SpringerBriefs in Molecular Science, , 2191-5415 Disciplina 612.405 615.77 Soggetti Medicinal chemistry Pharmaceutical chemistry Drugs - Design Chemistry - Data processing Chemistry - History **Medicinal Chemistry Pharmaceutics** Structure-Based Drug Design Computational Chemistry History of Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto Introduction -- cortisol-based glucocorticoids -- metabolically inactivated glucocorticoids -- prodrugs -- selective glucocorticoid receptor modulators -- polymers and particles -- QSAR and Modelling -- Antibody Drug Conjugates -- Conclusion. This book covers the design and development of glucocorticoid Sommario/riassunto receptor modulators (GRM) from cortisol to antibody-drug conjugate payloads over the last 70 years. The author starts with an introduction to the background of glucocorticoid receptor modulators as potential therapeutic modalities. This is followed by seven chapters in which he

collates and discusses the medicinal chemistry journey of GRMs, reviewing topics such as cortisol-based glucocorticoids, the different approaches that have been pursued to enable chronic dosing of GRM

compounds by inactivation in plasma and the liver, the application of prodrugs to GRMs, selective GRMs, targeted delivery of GRMs using polymers and nanoparticles, and rational drug design approaches applied in the development of GRMs. Particular attention is given to the development of glucocorticoid receptor modulators as immunology antibody-drug conjugate payloads. In the book's final chapter, the author critiques the medicinal chemistry progress made since the discovery of cortisone and the promise of the latest antibody-drug conjugates that release a GRM payload. In this book, readers will also find an overview of the X-ray structures of glucocorticoid receptor antagonists and a list of all the earlier reviews that cover part of the medicinal chemistry story of GRM collated by keywords organized in a table. With several examples of crystal structures and molecular modeling, this book illustrates the huge effort by multiple companies and research groups to develop glucocorticoid receptor modulators. Professionals and scholars alike will find it a handy tool, and appreciate the latest research findings that it presents.