

1. Record Nr.	UNINA9910784636103321
Autore	Gad Shayne C. <1948->
Titolo	Acute toxicology testing [[electronic resource] /] / Shayne C. Gad, Christopher P. Chengelis
Pubbl/distr/stampa	San Diego, : Academic Press, c1998
ISBN	1-281-03290-5 9786611032906 0-08-052592-X
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (561 p.)
Altri autori (Persone)	ChengelisChristopher P. <1949->
Disciplina	615/.704/028
Soggetti	Alternative toxicity testing Acute toxicity testing
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.
Nota di contenuto	Front Cover; Acute Toxicology Testing; Copyright Page; Contents; Preface to the First Edition; Preface to the Second Edition; Chapter 1. Introduction; Questions of Relevance and Sensitivity; Defining Test Objectives; Display of Study Designs: The Line Chart; Theory and Use of Screens, Innovations, and Alternatives; References; Chapter 2. Acute Toxicology Program: Study Design and Development; Defining the Objective; Defining Exposure Potential; The Data Matrix; Test Selection and Design; Study Design; References; Chapter 3. Tests for Dermal Irritation and Corrosion Primary Dermal Irritation TestDermal Corrosivity Test; Factors Affecting Responses and Test Outcome; Problems in Testing (and Their Resolutions); Design Alternatives and Innovations; In Vitro Alternatives; Percutaneous Absorption; Intracutaneous Reactivity (Irritation); Intracutaneous Test; References; Chapter 4. Ocular Irritation Testing; History of Ocular Irritation Testing; Current in Vivo Test Protocols; Ocular Irritation Test; 21-Day Eye Irritation Study in Rabbits; Adequacy of Current in Vivo Methods; Limitations of the Rabbit Eye Test; In Vivo vs in Vitro Tests; In Vitro Tests ReferencesChapter 5. Dermal Sensitization; Mechanisms; Objectives and General Features; History; Modified Buehler Procedure; Guinea Pig Maximization Test; Guinea Pig Split Adjuvant Test; Mouse Ear Swelling

Test; Local Lymph Node Assay; Test System Manipulation (for all in Vivo Test Systems); Current Test Systems: Practical Problems and Solutions; References; Chapter 6. Photosensitization and Phototoxicity; Theory and Mechanisms; Factors Influencing Phototoxicity/Photosensitization; Predictive Tests for Phototoxicity; Guinea Pig; Mouse Ear Swelling Model; Alternative Designs: In Vivo Systems
In Vitro Test SystemsReferences; Chapter 7. Lethality Testing; Historical Perspective; Protocol Designs; Alternatives to Lethality Testing; References; Chapter 8. Safety Considerations for the Administration of Agents by the Parenteral Routes; Parenteral Routes and Rates; Bolus vs Infusion; Test Systems for Parenteral Irritation; Alternatives; Pyrogenicity; Blood Compatibility; Vaginal Irritation; References; Chapter 9. Systemic Acute Toxicity Testing; Screens; Acute Systemic Toxicity Characterization; Acute Toxicity Testing with Nonrodent Species; Acute Mechanistic Studies; References
Chapter 10. Routes, Formulations, and VehiclesMechanisms; Common Routes; Mechanisms of Absorption; Techniques; Gavage Procedure (Rat or Mouse); Volume Limitations by Route; Selection of Route; Vehicles and Formulation of Materials; Dosing Calculations; Comparisons and Contrasts of Routes; References; Chapter 11. Considerations Specific to Animal Test Models; Common Model Species and Their Characteristics; Cross-Species Extrapolation; Model Selection; Limitations of Models; Susceptibility Factors; Species Peculiarities; Considerations of Strain; Animal Care, Husbandry, and Welfare; References
Chapter 12. Statistical Analysis of Acute Toxicology and Safety Studies

Sommario/riassunto

Acute toxicology testing provides the first line of defense against potentially dangerous chemicals. This book is a complete and practical guide to conducting and interpreting all regulatory required and commonly used acute toxicity tests. It presents detailed protocols for all of the common test designs and reviews their development and objectives. Acute Toxicology Testing, Second Edition will interest not only workers in the pharmaceutical industry, but also researchers and students in toxicology and public health. Key Features* Over 100 tables summarizing and interpreting
