

1. Record Nr.	UNINA9910143176103321
Autore	Lee Mike S. <1960->
Titolo	LC/MS applications in drug development [[electronic resource] /] / Mike S. Lee
Pubbl/distr/stampa	New York, : J. Wiley & Sons, c2002
ISBN	1-280-36642-7 9786610366422 0-470-35636-7 0-471-45930-5 0-471-21881-2
Descrizione fisica	1 online resource (257 p.)
Collana	Wiley-Interscience series on mass spectrometry
Disciplina	615.19 615/.19
Soggetti	Drug development - Methodology Drugs - Analysis Liquid chromatography Mass spectrometry Combinatorial chemistry Gel permeation chromatography Drugs - Testing - Methodology Electronic books.
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 (p. 205-234) and index.
Nota di contenuto	LC/MS APPLICATIONS IN DRUG DEVELOPMENT; CONTENTS; Preface; Acknowledgments; 1. Introduction; Emerging Analytical Needs; Integration of LC/MS into Drug Development; Partnerships and Acceptance; Overview; 2. Drug Development Overview; Analysis Perspectives; The Four Stages of Drug Development; Drug Discovery; Preclinical Development; Clinical Development; Manufacturing; 3. Accelerated Drug Development; Accelerated Development Strategies; Quantitative and Qualitative Process Elements; Quantitative Process Pipeline; Qualitative Process Pipeline; Motivating Factors Analysis Opportunities for Accelerated DevelopmentFull-Time

Equivalent; Sample Throughput Model; Elimination Model; Rate-Determining Event Model; Accelerated Development Perspectives; 4. LC/MS Development; The Elements of LC/MS Application; HPLC; Mass Spectrometry; LC/MS Interface; LC/MS Growth; 5. Strategies; Standard Methods; Template Structure Identification; Databases; Screening; Integration; Miniaturization; Parallel Processing; Visualization; Automation; Summary; 6. LC/MS Applications; Drug Discovery; Proteomics; Protein Expression Profiling; Quantitation; Glycoprotein Mapping
Natural Products Dereplication
Lead Identification Screening; Bioaffinity Screening; Combinatorial Library Screening; Open-Access LC/MS; Structure Confirmation; High Throughput; Purification; Combinatorial Mixture Screening; In Vivo Drug Screening; Pharmacokinetics; In Vitro Drug Screening; Metabolic Stability Screening; Membrane Permeability; Drug-Drug Interaction; Metabolite Identification; Preclinical Development; Metabolite Identification; Impurity Identification; Degradant Identification; Clinical Development; Quantitative Bioanalysis-Selected Ion Monitoring
Quantitative Bioanalysis-Selected Reaction Monitoring
Quantitative Bioanalysis-Automated Solid-Phase Extraction; Quantitative Bioanalysis-Automated On-Line Extraction; Metabolite Identification; Degradant Identification; Manufacturing; Impurity Identification Using Data-Dependent Analysis; Peptide Mapping in Quality Control; Patent Protection; 7. Future Applications and Prospects; Workstations; Multidimensional Analysis; Miniaturization; Information Management; Strategic Outsourcing; Summary; 8. Perspectives on the Future Growth of LC/MS; 9. Conclusions; Glossary; References; Index

Sommario/riassunto

Breakthroughs in combinatorial chemistry and molecular biology, as well as an overall industry trend toward accelerated development, mean the rate of sample generation now far exceeds the rate of sample analysis in the pursuit of producing new and better pharmaceuticals. LC/MS is an analytical tool that helps the researcher identify the most promising sample early in the selection process, effectively creating a shortcut to finding new drugs. This book is the first to describe LC/MS applications within the context of drug development, including the discovery, preclinical, clinical, and manufac
