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Nota di contenuto	Management of Chemical and Biological Samples for Screening Applications; Contents; Preface; List of Contributors; 1 Introduction to Sample Management; References; 2 Generating a High-Quality Compound Collection; 2.1 Defining Current Screening Collections; 2.2 Design Criteria for Enriching a Compound Collection with Drug-Like Compounds; 2.2.1 Physicochemical Tailoring of a Compound Collection; 2.2.2 Lipophilicity Design Considerations; 2.2.3 Other Physicochemical Roadblocks; 2.2.4 Assessing Risk - from Rule of 5 to Rule of 3/75; 2.2.5 Tools Enabling Desk Top In Silico Design 2.3 Concluding RemarksReferences; 3 Assessing Compound Quality; 3.1 Introduction; 3.2 Process Quality and Analytical Quality in Compound Management; 3.2.1 Process Quality (QA); 3.2.2 Analytical Quality (Sample QC); 3.3 Identity; 3.4 Purity/Stability; 3.4.1 Measuring Purity; 3.4.2 Determining the Most Appropriate Purity Cut-Off for Solutions; 3.4.3 Stability of Solutions; 3.5 Concentration/Solubility; 3.6 Conclusions; Acknowledgments; References; Further Reading; 4 Delivering and Maintaining Quality within Compound Management; 4.1 Introduction 4.2 What is Quality from a Compound Management Perspective?4.3

Storage and Delivery of Samples in Solution; 4.4 Intercepting Low Purity; 4.5 Storage and Delivery of Solids; 4.6 Automation Quality Control and Reliability; 4.7 High-Quality Data Management; 4.8 Conclusion; Acknowledgments; References; 5 Obtaining and Maintaining High-Quality Tissue Samples: Scientific and Technical Considerations to Promote Evidence-Based Biobanking Practice (EBBP); 5.1 Introduction; 5.1.1 Current Issues and Impediments to Benchmark Level Biospecimen Research
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5.1.3 Rationale for Best Practice Integration into Sample Management Procedures and Protocols; 5.2 The Path toward Integration of Evidence-based Biobanking Practice; 5.2.1 Conceptual Foundations of Evidence-based Biobanking Practice; 5.2.2 The Pre- and Post-Acquisition Analytic Variable Relationship to EBBP; 5.2.3 The Biospecimen Lifecycle Concept: a Framework to Aid EBBP Protocol Design; 5.3 Integrating Evidence-based Biobanking Practice into Sample Protocols; 5.3.1 Protocol Planning for EBBP-based Sample Management
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6 Thinking Lean in Compound Management Laboratories; 6.1 The Emergence of 'Lean Thinking'; 6.2 The Application of 'Lean Thinking'; 6.3 Lean Thinking in Drug Discovery
6.4 A Lean Laboratory Toolbox

Sommario/riassunto

Filling an obvious gap in the scientific literature, this practice-oriented reference is the first to tie together the working knowledge of largescreening centers in the pharmaceutical and biotechnological field. It spans the entire field of this emerging discipline, from compound acquisition to collection optimization for specific purposes, to technology and quality control. In so doing, it applies two decades of expertise gathered by several large pharmaceutical companies to current and future challenges in high-throughput screening. With its treatment of libraries of small molecules
