1. Record Nr. UNINA9910136778203321

| | |
|---|---|
| Titolo | Circulating tumor cells : isolation and analysis / / edited by Z. Hugh Fan |
| Pubbl/distr/stampa | Hoboken, New Jersey : , : John Wiley & Sons, Incorporated, , [2016]<br>©2016 |
| ISBN | 1-119-24454-4<br>1-119-24453-6 |
| Descrizione fisica | 1 online resource (512 p.) |
| Collana | Chemical analysis : a series of monographs on analytical chemistry and its applications |
| Disciplina | 616.99/4 |
| Soggetti | Tumor markers<br>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 and index. |
| Nota di contenuto | Title Page; Copyright; Table of Contents; List of Contributors; Foreword; References; Preface; Part I: Introduction; Chapter 1: Circulating Tumor Cells and Historic Perspectives; 1.1 Early Studies on Cancer Dormancy Led to the Development of a Sensitive Assay for CTCs (1970-1998); 1.2 Modern Era for Counting CTCs: 1998-2007; 1.3 Proof of Malignancy of CTCs; 1.4 New Experiments Involving CTCs; 1.5 Clinical Cancer Dormancy; 1.6 Human Epidermal Growth Factor Receptor 2 (HER2) Gene Amplification can be Acquired as Breast Cancer Progresses; 1.7 uPAR and HER2 Co-amplification<br>1.8 Epithelial-Mesenchymal Transition (EMT)1.9 New Instruments to Capture CTCs; 1.10 Genotypic Analyses; 1.11 Conclusions; References; Chapter 2: Introduction to Microfluidics; 2.1 Introduction; 2.2 Scaling Law; 2.3 Device Fabrication; 2.4 Functional Components in Microfluidic Devices; 2.5 Concluding Remarks; References; Part II: Isolation Methods; Chapter 3: Ensemble-decision Aliquot Ranking (eDAR) for CTC Isolation and Analysis; 3.1 Overview of eDAR; 3.2 Individual Components and Analytical Performance of eDAR; 3.3 Application and Downstream Analyses of eDAR; 3.4 Conclusion and Perspective ReferencesChapter 4: Sinusoidal Microchannels with High Aspect Ratios for CTC Selection and Analysis; 4.1 Introduction; 4.2 Parallel Arrays of High-Aspect-Ratio, Sinusoidal Microchannels for CTC Selection; 4.3 |