

**Commercial Opportunities from Biomarkers:
Transforming drug discovery, clinical development
and molecular diagnostics**





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Report overview

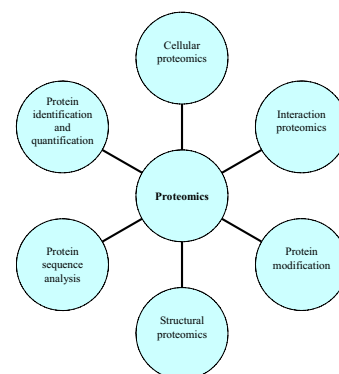
High clinical development costs coupled with declining drug discovery success rates have meant that pharmaceutical companies must re-evaluate their drug development process in order to reduce attrition rates and remain competitive. Over the next decade biomarkers will change the way in which pharma companies determine the economic viability of their drug discovery process. The use of biomarkers to aid the discovery of promising products will create an enhanced understanding of the clinical development process and help to facilitate the shift towards 'personalized medicine'.

'Commercial Opportunities from Biomarkers; Transforming drug discovery, clinical development and molecular diagnostics' is the latest addition to the drug discovery series, examining recent developments and applications within the biomarkers field. Using up-to-date case studies to indicate best practice strategies, this report will ensure that you are able streamline your R&D process and identify potential cost savings throughout drug discovery and development. Regulatory changes are analyzed and recent alliances are examined, enabling you to understand the role and future of this fast-moving field.

Key features

- Analysis of leading pharmaceutical and biotechnology companies and academic groups at the forefront of biomarker discovery, validation and utilization.
- Examination of the key trends which are currently affecting the discovery and application of biomarkers such as the development of molecular diagnostics and the application of valid, probable valid and exploratory biomarkers in drug discovery.
- Assessment of the pivotal role that biomarkers play in the development of new diagnostic devices both in conjunction with drugs as targeted therapies and in areas of unmet medical need.

Figure 3.15: The branches of proteomics for biomarker discovery



Source: Commercial Opportunities from Biomarkers

Key findings

- The biomarker market is a relatively mature market and is forecast to quadruple to around \$21.2bn by 2012 from just over \$5.4bn in 2005, boosted primarily by growth in proteomics and metabonomics biomarker discovery.
- The application of pharmacogenomics to targeted studies, in which patient populations are enriched with potential responders, can lead to cost savings of around \$80 million through the streamlining of clinical trials.
- The market for molecular diagnostics is gaining momentum, with Roche's AmpliChip P450 the first to receive regulatory approval. Tests for areas of high unmet need, such as Alzheimer's disease, are set to drive further growth in the market to 2012.
- The role of biomarkers spans all aspects of drug discovery and development from target discovery and validation, lead prioritization and optimization, study of drug and disease mechanisms, toxicity profiling and proof-of-concept in preclinical studies, to use in clinical trials as secondary and surrogate endpoints.





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