
Description: For six editions, this authoritative resource has defined the market opportunity for companies assisting in the beginning phase of the drug development process.

'Outsourcing in Drug Discovery' provides an in depth look into the trends that have shaped the drug discovery outsourcing market today, and details the current and future global market. As part of its coverage, the report provides markets and forecasts for the following segments.

- Chemistry Services Market: Building Blocks, Compound Synthesis, Libraries, Process Research, and Other Services,
- Biology Market Revenue by Protein Expression, Structural Analysis, Target Validation, Pathways Analysis, and Other Service
- Screening Services Market: Assay Development, Primary Screening, Secondary Screening
- Lead Optimization Services Market: Early ADMET/Tox, Create Analogues, Computational Support, and Other Services

The drug discovery process consists of iterative cycles between chemistry and biology that begin with the target finding phase, or selecting a protein (a drug target) leading to the identification of a chemical compound with biological activity (a hit). After confirmation of biological activity and chemical feasibility, the hit becomes a lead structure, which is improved through chemical modifications until it fulfills the criteria for a clinical candidate. A drug candidate then moves into the next stage of drug development, the preclinical phase.

The drug discovery process is long, arduous and costly, which has driven outsourcing in this field. The first phase is discovery of a lead compound, a molecule that affects biological function by binding to a target protein or nucleic acid in a way that is useful for treatment of disease. The process by which molecules are identified for their therapeutic value involves synthesis and analysis of many derivatives of the original leads. There are several steps in the drug discovery process including hit confirmation, lead generation, lead optimization, and other studies. Drug discovery is a high-cost, risky business because only a fraction of the therapeutic targets selected for study will actually yield products that achieve regulatory approval by the Food & Drug Administration (FDA)

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