The number of kinase inhibitors entering clinical development has increased significantly in recent years. In addition to major pharmaceutical and biotech companies, an increasing number of emerging companies are focusing on their development. By 2020, small-molecule kinase inhibitors could generate annual revenues > $25 billion. This report assesses:

- R&D considerations specific to targeting kinases
- Current kinase inhibitor pipelines
- Commercial successes to date
- Near- and longer-term market outlook
- Corporate activities of firms involved with kinases
- Expert Interviews
OVERVIEW

KINASE THERAPEUTICS: Pipeline Assessment and Commercial Prospects

Author: Peter Norman, PhD, MBA

Kinases are now firmly established as a major class of drug targets. It was previously thought that kinases would be intractable drug targets due to the presumed need to compete with ATP and the assumption that sufficient selectivity would be unattainable. However, considerable progress has been made in understanding kinases and their function, and the past few years have seen a number of kinase inhibitors reach the market. Imatinib (Novartis’ Gleevec) is currently the most commercially successful, with sales reaching $3.7 billion in 2008. Erlotinib (OSI/Roche’s Tarceva) generated revenues of $1.1 billion the same year.

In recent years, there has been an explosion in the number of kinase inhibitors entering the clinic, and many more are in preclinical development. Kinase Therapeutics: Pipeline Assessment and Commercial Prospects identifies which kinase families and their respective members have attracted the greatest interest for therapeutic development and in which indications these kinases play a physiological or pathophysiological role and thus are most relevant for kinase inhibitor development.

Figure 5.1. Kinase Inhibitors in Development by Phase

This report extensively reviews small-molecule kinase inhibitors identified as being in active clinical development. Oncology indications accounted for 79% of these inhibitors, while inflammatory indications accounted for nearly half of the kinase inhibitors not being developed to treat cancers. Kinase inhibitors identified as being in clinical development are analyzed by clinical phase (Phases I–III) and by target.

Kinase Therapeutics: Pipeline Assessment and Commercial Prospects examines the considerable discrepancies in the levels of activities amongst major companies regarding kinase inhibitor development. The perceived tractability of kinases as drug targets has led to an increasing number of emerging companies focused on kinase inhibitor development. Many are developing kinase inhibitors in partnership with major companies, while others may be potential acquisition targets. Further, the desire to extensively profile kinase inhibitors has led to the emergence of companies that offer such services. The activities of selected specialist and service companies are also examined.

The period to 2015 should see a number of additional kinase inhibitors reach the market. As a result, annual revenues generated by kinase inhibitors should approximately double by 2015 from the near $8 billion generated in 2008. The large number of kinase inhibitors currently in Phase II should ensure that the period between 2015 and 2020 sees a steady flow of new kinase inhibitors approved for use, ensuring continued growth of their commercial revenues.
About Insight Pharma Reports

CHI’s Insight Pharma Reports are written by experts who collaborate with CHI to provide a series of reports that evaluate the salient trends in pharmaceutical technology, business, and therapy markets. Insight Pharma Reports are used by senior decision makers at life sciences companies to keep abreast of the latest advances in pharmaceutical R&D, their potential applications and business impacts. Our clients include the top 50 pharmaceutical companies, top 100 biotechnology companies, and top 100 vendors of life science products and services. Typical purchasers are managers, directors, and VPs in business development, discovery research, clinical development, strategic planning, portfolio management, new product planning, and marketing.

Insight Pharma Reports offer:
- Current information and analysis of R&D technologies, therapeutic market, and critical business issues.
- Analysis of the probability of success for various applications of each technology.
- Expert insight based on interviews with key personnel in companies at the forefront of technological advances who share their views on their technology’s current status, applications, future direction, and market environment.

Insight Pharma Reports

Print: $2,995.00
Single-Site/Operational Unit License*: $3,750.00
Total: $_________________