

Small Molecule Kinase Inhibitors: Market Research Report

<https://marketpublishers.com/r/SBC9507943BEN.html>

Date: July 2009

Pages: 558

Price: US\$ 3,950.00 (Single User License)

ID: SBC9507943BEN

Abstracts

This report analyzes the Global Market for Small Molecule Kinase Inhibitors in Millions of US\$ by the following Product Segments: Gleevec/Glivec, Tarceva, Sutent, Nexavar, Sprycel, Iressa, Tykerb/Tyverb, and Others.

Annual forecasts are provided for the period 2006 through 2015.

The report profiles 83 companies including many key and niche players worldwide such as Amgen, Inc., Asahi Kasei Pharma Corporation, AstraZeneca plc., Bayer Schering Pharma AG, Bristol-Myers Squibb Company,.Celgene Corporation, Exelixis, Inc., F. Hoffmann-La Roche, Ltd., Chugai Pharmaceutical Co, Ltd., Genentech, Inc., GlaxoSmithKline plc., KAI Pharmaceuticals, Inc., Merck & Co., Inc., Mitsubishi Tanabe Pharma Corporation, Novartis International AG, Onyx Pharmaceuticals, Inc., OSI Pharmaceuticals, Inc., Pfizer, Inc., Takeda Pharmaceutical Company Limited, Millennium Pharmaceuticals Inc, S*Bio Pte Ltd., Sanofi-Aventis, Vertex Pharmaceuticals Incorporated, and Wyeth.

Market data and analytics are derived from primary and secondary research.

Company profiles are mostly extracted from URL research and reported select online sources.

Contents

I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations
Disclaimers
Data Interpretation & Reporting Level
Quantitative Techniques & Analytics
Product Definitions and Scope of Study

II. EXECUTIVE SUMMARY

1. INDUSTRY OVERVIEW

Kinase Inhibitors Industry: A Prelude
Understanding Kinase Inhibitors
Drug Development Interest in Kinase Inhibitors Soars

Table 1. Clinical Phase Transition Percentage for Novel Kinase Inhibitor Compounds in Clinical Development - All Drugs Vs Kinase Inhibitors, During the Period (1995-2007) (includes corresponding Graph/Chart)

Protein Kinases As Potential Drug Targets: Opportunities Abound
Kinase Profiling: The Backbone for pKi Drug Development
Developing Kinase Inhibitors
Kinase Inhibitors: Huge Potential Envisaged in the Treatment of Cancer
Rising Incidences of Cancer & Unmet Treatment Needs: A Prime Driver

Table 2. Global New Cases Registered and Total number of Deaths Resulting From Cancer (2007): Breakdown by Male and Female (In Million)

In the Cancer End-Use Market Growth Fundamentals Get Stronger
Interest in Non-Cancer Therapies Gains Traction
Multi-Targeted Kinase Inhibitors: The Next Frontier
Rising Incidences of Resistance Sparks Interest in Combination Drug Therapies
Single Vs Multi-Target Kinase Inhibitor Drugs
Tough Regulatory Riders Threaten to Slow Down Number of Approvals

Spiraling Cost of Next Generation Cancer Drugs: A Cause for Concern

Table 3. Average Monthly Costs of Anti-Cancer Drugs (2007): Breakdown of Treatment Costs by Cancer Drug Brands - Rituxan, Erbitux, Revlimid, Avastin - High Dose, Avastin - Low Dose, Nexavar, Sutent, Herceptin, Gleevec, Tarceva, Tykerb, Iressa, Vectibix, Torisel and Targeted Therapies (In US\$) for US, EU and Japan

Adequate Reimbursements: Critical to Product Success in the Marketplace
The Truth Behind Inadequate Reimbursement of New Cancer Drugs
Manufacturers Find Risk-Sharing, Rebating, & Contracting As Effective Antidotes
Financial-based Contracts
Performance-based Contracts
Reimbursements Issues in UK
On Cards: Reimbursement for Pfizer's Sutent in UK
Reimbursement for GlaxoSmithKline's Tyverb Hits a Roadblock in UK
Reimbursements Issues in the United States
Medicare Shifts Oral Anti Cancer Drugs to Higher Drug Formulary Tiers
Implications for the Patient

Table 4. Oral Anticancer Drugs Covered in Medicare Part D Plans (2009): Percentage Share Breakdown of Plans, Which Require Prior Authorization, & Plans, Which Have Quantity Limits, by Drug Brand (includes corresponding Graph/Chart)

Table 5. Oral Anticancer Drugs Covered in Medicare Part D Plans (2009): Breakdown of Cost Sharing Range by Drug Brand

Table 6. Placement of Select Oral Anticancer Drugs in the Drug Tier System Covered in Medicare Part D Plans for the Year 2009)

Transition of Oral Anti-Cancer Drugs to Higher Cost Sharing Tiers: Gleevec A Case in Point:

Table 7. Percentage Breakdown of Beneficiaries Prescribed Gleevec and Covered Under Standalone Prescription Drug Plans (PDPs) by Tier For Years 2006 through 2009 (includes corresponding Graph/Chart)

Table 8. Change in Percentage of Co-insurance Amount for Leading Oral Cancer Therapies Under Standalone Prescription Drug Plans (PDPs) (During 2006 to 2009) – For Gleevec, Tarceva, Sutent, and Tykerb (includes corresponding Graph/Chart)

Emergence of Newer Side effects: An Area of Concern for Modern pKis
Hsp90 Inhibitors: Hope for Cancer Patients Resistant to Kinase Inhibitor Drugs
Noteworthy Issues Related to Major Drugs: An Evaluation of Pros and Cons
Tussle Between Tasigna and Sprycel, to Break Into the Gleevec Empire

Table 9. A Review of the Effectiveness of Sprycel and Tasigna in the Treatment of Chronic Myeloid Leukaemia (CML): Percentage Breakdown of Efficiency Levels by Clinical Endpoints As a Measure of Patient Response (includes corresponding Graph/Chart)

Challenges Ahead for Tykerb
Nexavar Shows Promise in the HCC Market
Key Statistical Findings

Table 10. Global Tykerb Market (2007&2015): Percentage Breakdown of Revenue by Indication - Breast Cancer (HER2 positive) 1st, Breast Cancer (HER2 positive) 2nd, Breast Cancer (HER2 positive) 3rd, Breast Cancer (HER2 positive) Brain, H&N adjuvant, Gastric (HER2 positive) 2nd line and Adjuvant Breast (HER2 positive) (includes corresponding Graph/Chart)

Table 11. Tykerb Market (2009 & 2015): Percentage Breakdown of Dollar Sales by Region - US, Europe and Rest of World (includes corresponding Graph/Chart)

Table 12. Global Sales of Iressa in the Treatment of NSCLC (2009E): Percentage Breakdown by First Line NSCLC, Second Line NSCLC and Third Line NSCLC (includes corresponding Graph/Chart)

Table 13. Global Sales of Nexavar (2009 & 2015P): Percentage Breakdown of Dollar Sales by Indication – Renal Cell Carcinoma, Hepato Cellular Carcinoma, Melanoma, and Non-small Cell Lung Cancer (includes corresponding Graph/Chart)

Table 14. Global Sales of Nexavar (2009 & 2015P): Percentage Breakdown of Dollar Sales by Geographic Region/Country – United States, Europe, and Rest of World

(includes corresponding Graph/Chart)

Table 15. Global Tarceva Market (2009 & 2015): Percentage Breakdown of Patient Penetration (%) in Treatment of First Line NSCLC, First line Maintenance Therapy following Avastin in NSCLC, Second line NSCLC, and Third line NSCLC, in the US and Rest of World Markets (includes corresponding Graph/Chart)

Table 16. Canadian Healthcare Market (2007): Breakdown of Total Payments Made by Private and Public Insurers Towards Take Home Cancer Drugs (THCDs) by Select Drug Brands - Gleevec, Tarceva, Sutent, Nexavar, Sprycel, and Iressa (In US\$ million) (includes corresponding Graph/Chart)

Table 17. Canadian Healthcare Market (2007&2008): Percentage Share Breakdown of Patient Claims Made for Small Molecule Kinase Inhibitors by Select Drug Brands – Gleevec, Tarceva, Sprycel, and Tasisa (includes corresponding Graph/Chart)

Outlook

Future Directions: The Shape of Things to Come

Spotlight On HER3 Kinase Inhibitors to Overcome Resistance to EGFR & HER2 Kinase Inhibitors

Ras-Raf-MEK-ERK: A New Kinase Pathway to Achieve Cell Cycle Arrest

Key Small Molecule pKis Under Different Stages of Clinical Trials

Pharmaceutical Industry: Review of the Present Scenario

Developing Countries Hold the Key to Future Growth

Table 18. World Pharmaceutical Industry (2007): BRIC Nations (Brazil, Russia, India and China), & United States Ranked by Percentage Growth (includes corresponding Graph/Chart)

Consolidation Gets Underway

Landmark Deals Announced or Completed by Pharma and Biotech Companies

Engaged in Developing Kinase Inhibitor Drugs, During the Year 2008 & 2009

Impact of the Recession: An Unequivocal Review

Recession Brings Drug Development Efforts Under Siege

Biotech Bankruptcies: Casualties On the Rise

2. KINASE INHIBITOR DRUGS: AN OVERVIEW

Small Molecule Kinase Inhibitors: A Definition

Imatinib (Gleevec®, Glivec® – Novartis)

Approvals

Approvals Pending

Erlotinib (Tarceva® - OSI Pharmaceuticals/ Genentech/ Roche)

Approvals

Approvals pending

Related Clinical Trials

Sunitinib (Sutent® - Pfizer)

Approvals

Related Clinical Trials

Sorafenib (Nexavar™ - Bayer / Onyx)

Approvals

Related Clinical Trials

Dasatinib (SPRYCEL® - Bristol-Myers Squibb)

Approvals

Gefitinib (Iressa® - AstraZeneca)

Iressa®: A Controversial Anti-Cancer Drug

Approvals

Approvals Pending

Related Clinical Trials

Key Ongoing Clinical Trials on Iressa

Lapatinib (Tyverb® / Tykerb® - Glaxo SmithKline)

Approvals

Related Clinical Trials

Temsirolimus (TORISEL™ - Wyeth)

Approvals

Rapamycin (Rapamune® - Wyeth)

Approvals

Nilotinib (Tasigna® - Novartis)

Approvals

Approvals Pending

Related Clinical Trials

Everolimus (Afinitor® - Novartis)

Approvals

Approvals Pending

Related Clinical Trials

Small Molecule Kinase Inhibitor Drugs In Pipeline

Pazopanib (Glaxo SmithKline)

Approvals Pending
Related Clinical Trials
Vandetanib (Zactima® - AstraZeneca)
Related Clinical Trials
Cediranib (Recentin™ - AstraZeneca)
Related Clinical Trials
Ridaforolimus (Merck/ ARIAD)
Related Clinical trials
Bosutinib (Wyeth)
Related Clinical Trials
Alvocidib (Sanofi-Aventis)
Related Clinical Trials
Motesanib (Amgen/ Takeda)
Related Clinical Trials
CP-690550 (Pfizer)
Related Clinical Trials

3. KINASE INHIBITORS: A RUDIMENTARY OVERVIEW

Kinase Inhibitors: A Definition
Kinase Inhibitors Vs Monoclonal Antibodies (mAbs): A Comparison
Comparison of Various Pharmacological and Pharmacokinetic Parameters For Small Molecules and Monoclonal Antibodies
Types of Protein Kinase Inhibitors: A Classification
Receptor Tyrosine Kinase (RTK) Inhibitors
EGFR (Epidermal Growth Factor Receptor) Inhibitors
HER2 Inhibitors
VEGF (Vascular Endothelial Growth Factor) Inhibitors
FLT3 (Fms-like tyrosine kinase 3) Inhibitors
Non- Receptor Tyrosine Kinase Inhibitors
BCR-Abl Kinase Inhibitors
Src Kinase Inhibitors
Janus (JAK) Kinase Inhibitors
Serine-Threonine Kinase Inhibitors
mTOR (Mammalian Target of Rapamycin) Inhibitors
Rho Kinase Inhibitors
CDK (Cyclin Dependent Kinase) Inhibitors
Protein Kinase C (PKC) Inhibitors
PI3K (Phosphatidylinositol-3-Kinase) Inhibitors

Aurora Kinase Inhibitors

MAP (Mitogen activated protein) / MEK Inhibitors

JNK (C-JUN N-TERMINAL KINASE) INHIBITORS

Others

4. PRODUCT LAUNCHES

KAI Initiates Third Phase IIa Trial for KAI-1678

SuperGen Discovers a New Class of Kinase Inhibitors

AVEO Joins Hands with Biogen to Develop and Market ErbB3-Targeted Antibodies

AVEO Identifies New Indication for AV-951 Triple VEGF Receptor Inhibitor

GPC Biotech Demonstrates Role of Kinase Inhibitor in Multiple Myeloma Treatment

MD Biosciences and PharmaGap Join Hands

New JAK Inhibitor Drug from Pfizer Enters Phase III Trial

Millennium Commences Phase II Trials for MLN8237

Astex Therapeutics Develops Structure of Cyclin Dependent Kinase 4

Astex Teams up with Cancer Research UK on Clinical Trials of AT9283

Astex Presents AT7519, a Cyclin Dependent Kinase Inhibitor

Cell Biosciences Unveils First Kits for Oncoprotein Analysis

Plexxikon Partners with Roche to Develop and Commercialize PLX5568

OSI Applies Additional NDA for Tarceva

KAI and BMS Forms Global Alliance on KAI-9803

Kosan Biosciences Commences Phase II Trial for Alvespimycin

Plexxikon Announces Commencement of Phase 1 PLX5568 Trial

Exelixis Instigates Phase III XL184 Trial

Oncothyreon Commences Phase I PX-866 Clinical Trial

Iressa As Efficient as Chemotherapy for Lung Cancer

Iressa Proves Useful for Non-smoker Patients

GPC Biotech Commence Enrollment in Phase 1 RGB-286638 Trial

AVEO Commences Phase I Clinical Trials of AV-951

Onyx and Bayer Secure FDA and EC Approval for Nexavar®

Product Patent Application for Iressa Rejected

OSI Pharmaceuticals to Launch Tarceva® in Japan

New Plk1 Kinase Inhibitor BI 2536 Developed

Kinex Files IND Application for KX2-391

Wyeth Receives FDA Approval for TORISEL for Advanced Renal Cancer Treatment

Nexavar Gets Approval from Swiss Authorities for Treatment of Kidney Cancer
(Switzerland)

5. RECENT INDUSTRY ACTIVITY

Merck Agrees to Merge with Schering-Plough
Pfizer Agrees to Acquire Wyeth
S*Bio, Tragara Signs Exclusive Agreement
GPC Biotech to Merge with Agennix
Sanofi-Aventis to acquire Bipar Sciences
Pfizer Takes Over Serenex
Roche to Acquire Piramed
Eli Lilly Acquires SGX Pharmaceuticals
Takeda Acquires Millennium
Eli Lilly Acquires ImClone Systems
Antisoma Acquires Xanthus
Cellzome and GSK to Jointly Develop Kinase Inhibitors
Deciphera Pharmaceuticals Partners with Eli Lilly in Oncology Therapy
ACT Biotech Agrees to Acquire the Under Clinical Stage Oncology Portfolio of Bayer Healthcare
Cancer Research UK Enters into Clinical Development Agreement with AstraZeneca
Daiichi and ArQule Enter into Product Development Agreement
Cellzome and GlaxoSmithKline Form Alliance
Emiliem Enters into Agreement with NIH
Astex and Janssen Pharmaceutica Form Alliance
Millipore Launches Tyrosine Kinases Integrated with BioForm Technology
Aegera Therapeutics Takes over LymphoSign
ARIAD and Merck Collaborate on AP23573
Invitrogen Form Partnership with Emiliem
Pfizer Collaborate with Rigel, to Develop R343 as Treatment for Allergic Asthma

6. FOCUS ON SELECT PLAYERS

Amgen, Inc. (US)
Asahi Kasei Pharma Corporation (Japan)
AstraZeneca plc (UK)
Bayer Schering Pharma AG (Germany)
Bristol-Myers Squibb Company (US)
Celgene Corporation (US)
Exelixis, Inc. (US)
F. Hoffmann-La Roche, Ltd. (Switzerland)
Chugai Pharmaceutical Co, Ltd. (Japan)

Genentech, Inc. (US)
GlaxoSmithKline plc (UK)
KAI Pharmaceuticals, Inc (USA)
Merck & Co., Inc (USA)
Mitsubishi Tanabe Pharma Corporation (Japan)
Novartis International AG (Switzerland)
Onyx Pharmaceuticals, Inc. (US)
OSI Pharmaceuticals, Inc. (US)
Pfizer, Inc. (US)
Takeda Pharmaceutical Company Limited (Japan)
Millennium Pharmaceuticals Inc (USA)
S*Bio Pte Ltd (Singapore)
Sanofi-Aventis (France)
Vertex Pharmaceuticals Incorporated (US)
Wyeth (US)

7.GLOBAL MARKET PERSPECTIVE

Table 19. World Recent Past, Current & Future Analysis for Kinase Inhibitors by Product Segment – Gleevec/Glivec, Tarceva, Sutent, Nexavar, Sprycel, Iressa, Tykerb/Tyverb and Others Independently Analyzed with Annual Sales Figures in US\$ Million for Years 2006 through 2015 (includes corresponding Graph/Chart)

Table 20. World 10-Year Perspective for Kinase Inhibitors by Product Segment – Percentage Breakdown of Dollar Sales for Gleevec/Glivec, Tarceva, Sutent, Nexavar, Sprycel, Iressa, Tykerb/Tyverb and Others For Years 2006, 2009 & 2015 (includes corresponding Graph/Chart)

III. COMPETITIVE LANDSCAPE

Total Companies Profiled: 83 (including Divisions/Subsidiaries - 95)

Region/CountryPlayers

The United States

Canada

Japan

Europe

France1

Germany

The United Kingdom
Rest of Europe10
Asia-Pacific (Excluding Japan)

I would like to order

Product name: Small Molecule Kinase Inhibitors: Market Research Report

Product link: <https://marketpublishers.com/r/SBC9507943BEN.html>

Price: US\$ 3,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/SBC9507943BEN.html>