

Global Cancer CDK Inhibitors Market & Clinical Pipeline Outlook 2022

https://marketpublishers.com/r/G0B58882B6EEN.html

Date: November 2017

Pages: 150

Price: US\$ 2,200.00 (Single User License)

ID: G0B58882B6EEN

Abstracts

Please note: extra shipping charges are applied when purchasing Hard Copy License depending on the location.

"Global Cancer CDK Inhibitors Market & Clinical Pipeline Outlook 2022" report gives comprehensive insight on clinical and non-clinical parameters related to emergence and growth of CDK inhibitors in cancer therapy. As per report findings, CDK inhibitors have emerged as new growth frontier for the organizations involved in the research, development, licensing and commercialization of targeted cancer therapies. There are 2 CDK inhibitors commercially available in the market for the treatment of cancer and more than 45 CDK inhibitors are in various phases of clinical pipeline.

"Global Cancer CDK Inhibitors Market & Clinical Pipeline Outlook 2022" report highlights:

Selectivity & Working Mechanism of a Cancer CDKs Inhibitor

Recent Advances in the CDKs Related Cancer Therapy

Global Cancer CDK Inhibitors Clinical Trials Insight: 45 Drugs in Pipeline

Market Opportunity Assessment: More Than US\$ 20 Billion (2022)

Price Analysis of Cancer CDKs Inhibitors:

Sales Analysis of Available Drugs: More Than US\$ 2 Billion (2017)



The Cyclin Dependent Kinase (CDK) Inhibitors have recently emerged as one of the most promising therapeutics in the cancer pharmaceuticals segment. The progress in the scientific and technical knowledge of how the cell cycle works, pathways involved in normal and tumorous cells and the role of cyclin in tumor cell formation (Tumorigenesis) has led to an excellent boost in the research and development of special molecules or inhibitors which can prevent tumorigenic processes in effected cells.

Cyclin Dependent Kinase (CDK) Inhibitors are considered as promising and immensely effective targeted therapy of the future as it aims at targeting the tumor cell formation at its root level, before it can progress to affect other healthy cells of the body. In addition, it has opened up multiple opportunities and avenues for the life sciences industry to work upon due to the vast diversity and variations seen in the CDK pathways and their specific role and response in various types of tumors, thus suggesting the need of different types of inhibitors for different cancer therapies.

Currently, Pfizer's Ibrance is the only successfully market drug that has shown impressive growth in within two years of its introduction into the cancer therapy segment. Ibrance or Palbociclib first received an accelerated approval in February 2015, becoming the first CDKs inhibitor to receive approval for breast cancer therapy. In just two years Ibrance has shown excellent growth with time which is sure to make Ibrance the dominant CDKs inhibitor in the breast cancer therapy segment.

The recent advances in the discovery of newer cyclin pathways and their inhibitors have opened up new avenues in the CDKs therapy market. Multiple companies are now currently working on various therapeutics that have shown some kind of novel response in stopping or inhibiting the cell cycle. While it is obvious that Pfizer's Ibrance is currently the most effective drug in breast cancer tumor management, it is expected that Eli Lilly and Novartis are currently working on much better therapeutic having higher overall efficacy than the Ibrance.

A strong clinical pipeline presents an encouraging scenario regarding the future of a particular therapeutic like the CDK inhibitor. The intense research and development in the CDK inhibitor segment has led to many of these newly discovered compounds showing excellent results in various phase of the clinical trials. While very few CDKs have come out of the clinical pipeline and showed excellent commercial success, many of the inhibitors are anticipated to be a blockbuster drug once they come out of the clinical pipeline.

With the advancement in science and further knowledge about the technical know-how



of the cyclin dependent kinase and cell cycle, the ability and potential of CDKs inhibitor as cancer therapeutic is bound to improve. Previous success of approved CDKs inhibitors like Ibrance has shown the immense market potential of the CDKs inhibitor market which largely remains untapped, especially in the developing countries which are bound to show an increased demand for effective cancer therapeutic like the CDKs in the future.



Contents

1. CYCLIN DEPENDENT KINASE INHIBITORS –AN INTRODUCTION TO A PROMISING CANCER THERAPEUTIC

- 1.1 History of Discoveries Leading to Cyclin Dependent Kinase Inhibitor Drug
- 1.2 An Insight into Cell Cycle, Cyclin & the Role of CDKs
- 1.3 Cyclin Dependent Kinase Inhibitors for Cancer An Overview

2. CYCLIN DEPENDENT KINASE PATHWAY AS TARGETS FOR CANCER THERAPY

- 2.1 CDK Pathway & Cell Cycle Checkpoints
- 2.2 Role of Cyclin Dependent Kinases in Carcinogenesis
- 2.3 Cyclin Dependent Kinases Associated With Various Cancers

3. SELECTIVITY & WORKING MECHANISM OF A CANCER CDKS INHIBITOR

4. TYPES OF CDK INHIBITORS

- 4.1 ATP Competitive CDK Inhibitors
- 4.2 ATP Non Competitive Inhibitors
- 4.3 Allosteric Inhibitors

5. RECENT ADVANCES IN THE CDKS RELATED CANCER THERAPY

- 5.1 CDK 4/6 in Breast Cancer
- 5.2 Role of CDKs in Hematological Malignancies

6. CDK INHIBITORS AS COMBINATIONAL CANCER THERAPEUTIC

7. CURRENT MARKET SCENARIO OF CANCER CDKS INHIBITORS

- 7.1 Commercial Aspects of CDKs Inhibitor
- 7.2 Key Market Players in the Cancer CDKs Inhibitor Market
- 7.3 Global Cancer CDK-Inhibitors Pipeline Overview

8. MARKETED CANCER CDK INHIBITORS CLINICAL INSIGHT



- 8.1 Palbociclib (Ibrance)
- 8.2 Ribociclib (Kisqali)

9. PRICE ANALYSIS OF CANCER CDKS INHIBITORS

- 9.1 Commercially Available CDK Inhibitors Price Analysis
 - 9.1.1 Cost of Approved Cancer CDKs Inhibitor
 - 9.1.2 Average Cost of CDKs Inhibitors Currently Under Research
- 9.2 Comparison of Cancer CDKs inhibitor to other Cancer Drugs & Therapies

10. DRIVING FACTORS OF THE CANCER CDKS INHIBITORS MARKET

- 10.1 Accelerated Approval of Previously Introduced CDKs Inhibitor for Breast Cancer-Ibrance
- 10.2 Increasing Prevalence of Cancer
- 10.3 Presence of a Robust Clinical Pipeline
- 10.4 Advancement in Research & Development
- 10.5 High Unmet Medical Needs

11. CDK INHIBITORS MARKET CHALLENGES

- 11.1 High Cost Factor Associated with Cancer CDKs Inhibitor
- 11.2 Scientific & Technical Limitations
- 11.3 Side Effects & unreliable Efficacy
- 11.4 Competition from other Cancer Therapeutic Segments
- 11.5 Slow FDA Approvals
- 11.6 Commercial Challenges

12. ANTICIPATION REGARDING THE FUTURE OF CDKS INHIBITOR CANCER THERAPY MARKET

13. GLOBAL CANCER CDK INHIBITORS CLINICAL TRIALS INSIGHT BY COMPANY, INDICATION & PHASE

- 13.1 Preclinical
- 13.2 Phase-I
- 13.3 Phase-I/II
- 13.4 Phase-II
- 13.5 Phase-III



13.6 Preregistration

14. COMPETITIVE LANDSCAPE

- 14.1 Amgen
- 14.2 Anygen
- 14.3 Astex
- 14.4 Bayer Pharmaceuticals
- 14.5 BioCAD
- 14.6 Cyclacel
- 14.7 Eli Lilly
- 14.8 G1 Therapeutics
- 14.9 Nerviano Medical Science
- 14.10 Merck
- 14.11 Pfizer
- 14.12 Piramal Life
- 14.13 Syros Pharmaceuticals
- 14.14 Sanofi-Aventis



List Of Figures

LIST OF FIGURES

- Figure 1-1: Timeline Depicting CDK's Development
- Figure 1-2: Cyclin The Key Regulators of Cell Cycle
- Figure 1-3: Cyclin Dependent Kinase and Their cyclin Regulatory Subunits
- Figure 2-1: Tumor Proliferation Due to Hyperactive Kinase
- Figure 3-1: Mechanism of Cell Cycle Inhibition by a CDKs Inhibitor
- Figure 4-1: Allosteric Inhibitors in Action
- Figure 5-1: Flowchart depicting CDK 4/6 Inhibitor in Action
- Figure 5-2: CDK 4/6 Inhibition Preventing Tumor Proliferation
- Figure 7-1: Global Ibrance CDK Inhibitor Revenue (US\$ Billion), 2017
- Figure 7-2: Global Cancer CDK Inhibitors Pipeline by Phase (%), 2017 till 2022
- Figure 7-3: Global Cancer CDK Inhibitors Pipeline by Phase (Number), 2017 till 2022
- Figure 7-4: Global Cancer CDK Inhibitors Pipeline by Phase (%), 2017 till 2022
- Figure 7-5: Global Cancer CDK Inhibitors Pipeline by Phase (Number), 2017 till 2022
- Figure 9-1: Global- Ibrance Revenue (US\$ Million), Q1'2015-Q2'2017
- Figure 9-2: Ibrance- Average Treatment Cost (US\$), 2017
- Figure 9-3: Kisqali Average Treatment Cost (US\$), 2017
- Figure 9-4: Abemaciclib Average Treatment Cost (US\$), 2017
- Figure 9-5: Seliciclib- Price Analysis by 10mg, 50mg & 200mg Tablet for CDK5 Inhibitor (US\$), 2017
- Figure 9-6: Dinaciclib Price Analysis by 5mg, 25mg & 50mg Tablet for CDK1/2, CDK5 & CDK9 Inhibitor (US\$), 2017
- Figure 9-7: SNS-013-Price Analysis by 5mg, 10mg & 50mg Tablet for CDK 7/9/2 Inhibitor (US\$), 2017
- Figure 9-8: Milciclib- Price Analysis by 5mg & 10mg Tablet for CDK 2/7/4/5 Inhibitor (US\$), 2017
- Figure 9-9: Flavopiridol -Price Analysis by 5mg, 25mg & 100mg Tablet for CDK 1/2/4/6 Inhibitor (US\$), 2017
- Figure 9-10: Comparative Price of Approved CDKs Inhibitors (US\$/Month), 2017
- Figure 9-11: Comparative Cost Analysis Average Price of Existing Breast Cancer Drugs & CDK inhibitors (US\$), 2017
- Figure 9-12: Comparative Cost Analysis CDK Inhibitor (Ibrance) & other Targeted Therapy Drugs (US\$), 2017
- Figure 9-13: Comparative Cost Analysis CDK Inhibitors & Commonly Recommended Cancer Therapeutics (US\$), 2017
- Figure 9-14: Comparative Cost Analysis CDKs Inhibitor & the Best Available Therapy



for Breast Cancer (US\$), 2017

Figure 10-1: Driving Factors of the Cancer CDKs Inhibitors Market

Figure 10-2: Global - Breast Cancer Incidence ('000'), 2015

Figure 10-3: Global-Cancer Deaths (%), 2016

Figure 11-1: Global - Cancer CDK Inhibitors Market Challenge

Figure 12-1: Global- CDKs Inhibitors Market Revenue Forecast (US\$ Billion), 2022

Figure 12-2: Global - Expected Market Share of CDKs Inhibitor (%), 2022



List Of Tables

LIST OF TABLES

Table 2-1: CDK Aberrations Associated With Various Types of Cancer

Table 9-1: Monthly Cost Analysis of Available CDKs Inhibitor for Breast Cancer Therapy

COMPANIES MENTIONED

Amgen

Anygen

Astex

Bayer Pharmaceuticals

BioCAD

Cyclacel

Eli – Lilly

G1 Therapeutics

Nerviano Medical Science

Merck

Pfizer

Piramal Life

Syros Pharmaceuticals

Sanofi-Aventis



I would like to order

Product name: Global Cancer CDK Inhibitors Market & Clinical Pipeline Outlook 2022

Product link: https://marketpublishers.com/r/G0B58882B6EEN.html

Price: US\$ 2,200.00 (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/G0B58882B6EEN.html