

Global Cancer Nanomedicine Market Outlook 2022

<https://marketpublishers.com/r/G9A7E2FF651EN.html>

Date: November 2016

Pages: 420

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

ID: G9A7E2FF651EN

Abstracts

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

Over the past several years, many innovative and revolutionary techniques have been developed in order to treat cancer. These techniques range from basic surgical removal to X-ray irradiation to system wide flooding with anticancer agents. However, each of these approaches has its own series of undesirable side effects that are both dangerous and damaging to the overall health of the patient. On the contrary, recent breakthroughs in nanomedicine have managed to change all that. Now at last there is hope for a cure that is effective and can be made it safe.

Use of nanomedicines for cancer is one of the largest and most evolving segments containing multiple products in both market and clinical pipeline. Nanotechnology based liposome products could be observed as one of the most advance segment among oncology medicines. For instance, Doxil by Ortho pharmaceuticals was among first approved cancer nanomedicines by US FDA in 1995 for treating AIDS-related Kaposi's sarcoma. DaunoXome by Galen Ltd is also a liposomal formulation used for the treatment of HIV relates Kaposi sarcoma and clinical trials for utilization of this medicine for leukemia is also under investigation. More products are at different stages of clinical trials which will be introduced in global market in coming years.

Nanoparticles are easily absorbed by cells due to smaller size and investigators used this property in disease diagnosis. Oncologists can get better idea of tumor shape and size along with exact location for better treatment. In market few nanoparticle based imaging agents are presents which are used for Magnetic Resonance (MR) imaging. For instance, Endorem by Guerbet, Resovist by Bayer and Feridex by Berlex Laboratories are SPIO nanoparticles commonly used for imaging. Besides oncology, they are also used in cardiovascular and cerebral disease diagnoses which also have mature market. Use of these nanoparticles in ultrasound based imaging has been

proposed by investigators. This market has less competition and few products which gives significant opportunities to tap this segment. New products are expected to enter in this segment in coming years due to which its size is expected to increase several folds in future.

The future of cancer nanotechnology lies on a multifunctional nanoplatform that combines both therapeutic components and multimodality imaging. The ultimate goal is that multifunctional nanomedicine works as efficient, targeted in vivo drug delivery without systemic toxicity, and the dose delivered as well as the therapeutic efficacy can be accurately measured noninvasively with time. In the future, nanotechnology could possibly be strategically implemented in new developing drug delivery systems which could lead to significant expansion in the drug markets. These new drug delivery methods are likely to provide the appropriate platform for the pharmaceutical companies to reformulate their existing drugs in the market. This would in turn lead to extending the life of their products and ensuring an improved performance of drugs by increasing effectiveness, safety and patient adherence, and ultimately reducing healthcare costs.

“Global Cancer Nanomedicine Market Outlook 2022” Report Highlights:

Overview & Mechanism of Action of Nanomedicine

Nanomedicine Engineering: Design & Strategy

Cancer Nanomedicine as Diagnostic & Therapeutics Tool

Global Cancer Nanomedicine Market Overview & Dynamics

Global Cancer Nanomedicine Clinical Pipeline by Company, Indication & Phase

Global Cancer Nanomedicine Clinical Pipeline: 124 Drug

Marketed Cancer Nanomedicine: 8 Drugs

Contents

1. CANCER NANOMEDICINE: AN OPTIMISTIC AVENUE

- 1.1 Introduction
- 1.2 Emergence of Nanomedicines

2. PREREQUISITE OF NANOMEDICINES

- 2.1 Conventional Cancer Treating Approaches
- 2.2 Nanomedicines: Overcoming the Hurdles

3. DIVERSIFICATION OF NANOMEDICINES

- 3.1 Classification on Basis of Constituents
 - 3.1.1 Inorganic Nanoparticles
 - 3.1.2 Organic Nanoparticles
- 3.2 Classification on Basis of Applicability
 - 3.2.1 Nanomedicine as Diagnostic Agents
 - 3.2.2 Nanomedicine as Therapeutic Agents
 - 3.2.3 Nanomedicine as Drug Delivery Agents
- 3.3 Classification on Basis of Dimensions

4. MECHANISM OF ACTION OF NANOMEDICINE

- 4.1 Targeting Tumor Cells
 - 4.1.1 Passive Targeting
 - 4.1.2 Active Targeting
- 4.2 Nanocarrier - Drug Complex
 - 4.2.1 Liposomes
 - 4.2.2 Dendrimers
 - 4.2.3 Micelles
 - 4.2.4 Inorganic Nanocarriers
- 4.3 Drug Release Systems

5. NANOMEDICINE ENGINEERING: DESIGN & STRATEGY

- 5.1 Organic Nanoparticles as Nanomedicines
 - 5.1.1 Polymeric Nanoparticle

- 5.1.2 Lipid Organic Nanoparticles
- 5.2 Inorganic Nanoparticles as Nanomedicines
 - 5.2.1 Synthesis of Gold Nanoparticle

6. CANCER NANOMEDICINE AS DIAGNOSTIC TOOL

- 6.1 Detection of Cancer Biomarkers
 - 6.1.1 Detection of Circulating Tumor Cell
- 6.2 Diagnostic Device & Nanoprobes
 - 6.2.1 Biosensors
 - 6.2.2 Microarrays
- 6.3 Quantum Dots for Early Cancer Detection
 - 6.3.1 Detection of primary Cancers
 - 6.3.2 Quantum Dots for Tumor Imaging

7. CANCER THERAPEUTICS WITH NANOMEDICINES

- 7.1 Nanomedicine as Therapeutic Agents
 - 7.1.1 Photodynamic Therapy
 - 7.1.2 Photo Thermal Therapy
- 7.2 Nanomedicines as Prophylactic & Therapeutic Approach
 - 7.2.1 Cancer Cell Destruction
- 7.3 Nanomedicine in Breast Cancer
- 7.4 Nanomedicine in Pancreatic Cancer
- 7.5 Nanomedicine in Brain Cancer
- 7.6 Nanomedicine in Lung Cancer

8. CANCER IMAGING WITH NANOMEDICINE

- 8.1 Positron Emission Tomography
 - 8.1.1 Applications in various Cancers
- 8.2 Single Photon Emitted Tomography
 - 8.2.1 Computed Tomography
- 8.3 Magnetic Resonance Imaging (MRI)
 - 8.3.1 Optical Imaging

9. DRUG DELIVERY WITH NANOMEDICINES

- 9.1 Nanocarrier & Chemotherapy

- 9.1.1 Peptide Nanomedicine- An Example of Nanocarrier Chemotherapy
- 9.2 Nanomedicine Endocytosis & Intracellular Mechanisms
- 9.3 Factors Affecting Drug Delivery

10. GLOBAL CANCER NANOMEDICINE MARKET OVERVIEW

- 10.1 Current Market Scenario
- 10.2 Global Cancer Nanomedicine Clinical Pipeline Overview

11. GLOBAL NANOMEDICINE MARKET DYNAMICS

- 11.1 Encouraging Market Aspects
- 11.2 Commercialization Challenges

12. GLOBAL CANCER NANOMEDICINE FUTURE PROSPECT

13. GLOBAL CANCER NANOMEDICINE CLINICAL PIPELINE BY COMPANY, INDICATION & PHASE

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

14. MARKETED CANCER NANOMEDICINE CLINICAL INSIGHT BY COMPANY, INDICATION & PHASE

- 14.1 Doxorubicin Liposomal (Caelyx & Doxil)
- 14.2 Albumin-Bound Paclitaxel (Abraxane & Coraxane)
- 14.3 Nilotinib (Tasigna)
- 14.4 Paclitaxel Polymeric Micelle Formulation (Cynviloq & Genexol-PM)
- 14.5 Paclitaxel Liposomal
- 14.6 Vincristine Liposomal (Marqibo)
- 14.7 Rexin-G
- 14.8 Paclitaxel Nanoparticle (Nanoxel)

15. COMPETITIVE LANDSCAPE

- 15.1 Abraxis BioScience
- 15.2 Access Pharmaceuticals
- 15.3 Alnylam Pharmaceuticals
- 15.4 Amgen
- 15.5 Arrowhead Research
- 15.6 BIND Therapeutics
- 15.7 Cadila Healthcare
- 15.8 Celegen Corporation
- 15.9 Celsion Corporation
- 15.10 Genzyme Corporation
- 15.11 Merck
- 15.12 NanoCarrier
- 15.13 Nippon Kayaku
- 15.14 Nanobiotix
- 15.15 Novavax
- 15.16 Pfizer
- 15.17 Roche
- 15.18 Samyang
- 15.19 Sanofi
- 15.20 Takeda Pharmaceutical

List Of Figures

LIST OF FIGURES

- Figure 1-1: Goals of Nanomedicines
- Figure 2-1: Advantages of Nanomedicines over Conventional Therapies
- Figure 3-1: Various Classes of Nanomedicines
- Figure 3-2: Classification of Nanoparticles
- Figure 3-3: Classification on Basis of Applicability
- Figure 3-4: Dimensional Nanoconstructs
- Figure 4-1: Mechanism of Nanomedicine to Destruct Tumor Cells
- Figure 4-2: Vasculature of Tumor & Normal Cell
- Figure 4-3: Nanoparticle Drug Delivery Benchmark
- Figure 4-4: Liposomes as Nanocarriers
- Figure 4-5: Structure of Dendrimers
- Figure 4-6: Diverse Drug Release Mechanisms
- Figure 5-1: Structure of Nanospheres & Nanocapsules
- Figure 5-2: Processes Involved in Organic Polymeric Nanoparticles
- Figure 5-3: Nanoparticle Production Methods
- Figure 5-4: Different Categories of Emulsions
- Figure 5-5: Scheme of Different Strategies of Interfacial Polymerization
- Figure 5-6: Different Type of Inorganic Nanoparticle
- Figure 5-7: Synthesis of Gold Nanoparticles
- Figure 6-1: Functioning of Biosensors in Cancer Detection
- Figure 6-2: Detection of Cancer Cells with Quantum Dots
- Figure 7-1: Cancer Therapeutics with Nanomedicines
- Figure 7-2: Cancer Cell Destruction via Nanomedicines
- Figure 7-3: Drug Delivery across Blood Brain Barrier
- Figure 8-1: Cancer Imaging Via Various Techniques
- Figure 9-1: Nanomedicine & Cell Intake Mechanisms
- Figure 9-2: Factors Affecting Drug Delivery
- Figure 10-1: Global Nanomedicine Market (US\$ Billion), 2013-2022
- Figure 10-2: Global - Cancer Nanoparticle Pipeline by Phase (%), 2016 till 2022
- Figure 10-3: Global - Cancer Nanoparticle Pipeline by Phase (Numbers), 2016 till 2022
- Figure 10-4: Global - Cancer Nanoparticle Pipeline by Phase (%),2016 till 2022
- Figure 10-5: Global - Cancer Nanoparticle Pipeline by Phase (Numbers), 2016 till 2022
- Figure 11-1: Driving Parameters of Nanomedicines
- Figure 11-2: Challenges of Nanomedicine Market
- Figure 15-1: Arrowhead Research Corporation Clinical Pipeline

Figure 15-2: NanoCarrier Clinical Pipeline

I would like to order

Product name: Global Cancer Nanomedicine Market Outlook 2022

Product link: <https://marketpublishers.com/r/G9A7E2FF651EN.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/G9A7E2FF651EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970