

# Global Dendritic Cell Cancer Vaccine Market Dosage Price & Clinical Trials Outlook 2024

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### **Abstracts**

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"Global Dendritic Cell Cancer Vaccine Market Dosage Price & Clinical Trials Outlook 2024" Report Highlight:

Role of Dendritic Cells in Immune System & Cancer

Price & Dosage Analysis of Marketed Dendritic Cell Cancer Vaccine

Availability & Efficacy Analysis

Marketed Dendritic Cell Cancer Vaccines Clinical Insight: 3 Vaccines

Comparative Assessment of Provenge v/s other Key Therapeutics

Dendritic Cell Cancer Vaccines Clinical Pipeline by Company, Indication &

Phase: 63 Vaccines

Conventional therapies like surgery, radiotherapy and chemotherapies are the initial approaches for treating cancer. However, several researchers indicated that these conventional therapies are unable to treat cancer from its root cause and also produce many adverse effects thus, cannot be considered as a future of cancer therapy. Further findings demonstrated that cancer cells directly affect T-cells of the immune system and suppresses the immune activity against it resulting in uninhibited growth of cancer cells. Such incidences triggered the era of modern cancer therapy.



Advances in cellular technologies initiated the research towards exploitation of immune cells for the development of advanced vaccines for treating cancer. One of the cells which are found to be the most attractive target for developing therapeutic vaccines are Dendritic cells as they have the ability to present multiple antigens which are most suited to be a therapy for a multi-cause disease like cancer.

Dendritic cell cancer vaccines have gained significant importance in the market with the approval of first dendritic cell cancer vaccine for metastatic prostate cancer called Provenge. Provenge was approved almost a decade ago and has generated high revenues for the pharmaceutical companies. Dendritic cell vaccines became one of the most promising approaches as it works by boosting up the immune system which in turn will cause no or minimal side effects. Furthermore, cancer is disease with multiple causes and risk factors; researchers stated that instead of preventive vaccines, effective therapeutic vaccines can be developed to treat cancer.

Followed by the approval of Provenge, several similar products were developed for other indications in different regions of the world including CreaVax in South Korea for prostate and kidney cancer and Apceden in India for multiple solid tumors. Additionally, a wide range of dendritic cell vaccines entered in different phases of clinical pipeline such as Vaccell in Japan, TAP Cells in Chile, MelCancerVac in North America and Rocapuldencel-T in US etc. All these dendritic cell cancer vaccines are expected to be approved and commercialized and enhance the Global Dendritic cell vaccine market.

Dendritic cell vaccine is the fastest growing segment of cancer vaccine market with other classes of vaccine like peptide vaccines, HPV vaccine, HBV vaccines etc. Dendritic cell vaccines are more specific for treating cancer while others are limited to the treatment of chronic conditions which can cause cancer. Additionally, development of dendritic cell vaccine has been one of the fastest growing sectors amongst all and has resulted in a strong clinical pipeline with more than 60 products in different phases of clinical trials.

Moreover dendritic cell vaccines are unique of its kind which is specifically approved for advanced stages of cancer. Lack of availability of targeted therapies for advance stage of diseases, highly unmet medical needs of metastatic cancer patients indicates exponential rise in the demand for dendritic cell cancer vaccines. Furthermore, commercial successes of Provenge which is available in more than 35 countries; CreaVax in South Korea due to large target patient base has resulted in significant growth of the market.



Increasing prevalence of cancer around the globe will fuel the commercial success of unique dendritic cell vaccines. For instance, in 2018 more than 70000 and 120000 people are expected to be affected by renal cell carcinoma in US and Europe respectively which will result in great market success of Rocapuldencel-T in the coming future. Additionally, nearly 1 Million new incidences of cancer are expected to occur in Japan in 2018 which will fuel the dendritic cell cancer vaccine market in this region.

Moreover, dendritic cell vaccines are considered to be the future of cancer therapy. With the advancement in technology and better understanding of cancer cells, dendritic cells can be used as a preventive measure in the coming future. Additionally, dendritic cell cancer vaccines are one of the safest methods to treat cancer as they boost patient's own immune system by presenting and activating specific antigens at the tumor site. Additionally, presence of a wide range of antigens in human immune system and cancer cells provides opportunities for the development of a wide range of unique products.



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