



Keytruda: A Breakthrough in India's Cancer Treatment

Published On: 15-04-2026



What is Keytruda?

Keytruda is an advanced cancer drug (generic name: pembrolizumab) used in immunotherapy, a modern approach to treating cancer. Developed by Merck & Co., it works differently from traditional treatments by helping the body's immune system recognize and attack cancer cells. It has been approved for treating multiple cancers such as lung, breast, cervical, and melanoma.

How Does It Work?

Keytruda is a checkpoint inhibitor that blocks the PD-1 protein pathway. Normally, cancer cells use this pathway to hide from immune cells. By blocking PD-1, Keytruda allows T-cells to identify and destroy cancer cells more effectively. This makes it a targeted and innovative treatment compared to conventional methods.

Why is it in News?

Keytruda is gaining attention in India as a potential game-changer in cancer care, especially due to its effectiveness across various cancer types. However, the high cost of treatment—running into lakhs of rupees per dose—has raised concerns about affordability and accessibility for patients in India.

Advantages over Traditional Treatments:

Kamaraj IAS Academy

Plot A P.127, AF block, 6 th street, 11th Main Rd, Shanthi Colony, Anna Nagar, Chennai, Tamil Nadu 600040
Phone: 044 4353 9988 / 98403 94477 / Whatsapp : 09710729833

Unlike chemotherapy, which directly kills both cancerous and healthy cells, immunotherapy like Keytruda is more target-specific and generally has fewer side effects. It represents a shift toward precision medicine, where treatment is tailored to the patient's immune response.

Challenges in India:

Despite its benefits, the major challenges include:

High treatment cost

Limited access in public healthcare systems

Need for advanced diagnostic infrastructure

These factors make widespread adoption difficult in a country with a large population and diverse healthcare access.

Key Facts:

Keytruda is included in the WHO Essential Medicines List

First approved in 2014 (USA)

Belongs to the class of monoclonal antibodies

Used in multiple cancer types (multi-indication drug)