

An example of a monoclonal antibody used in medicine today is pembrolizumab also known as Keytruda. It was approved in 2014 for medical use in the United States. It is now on the World Health Organization's essential medicines list. It is an immunotherapy medication that treats multiple types of cancer by enhancing the body's natural immune response. (*Keytruda: Uses, Dosage, Side Effects, Warnings*, n.d.) Keytruda is used to treat 18 types of cancers as different lines of treatment such as first line, neoadjuvant, second line, and advanced. First-line treatment treats cancers such as Gastric and Non-small-cell lung cancers. Neoadjuvant treatment treats Triple-negative breast cancer. Second-line treatment treats Bladder cancer and Head and neck squamous cell carcinoma. Advanced treatment treats endometrial, Esophageal squamous cell carcinoma, and Small-cell lung cancers. It is also used as other forms of treatment to treat other cancers.

Keytruda is an IgG4 isotype antibody used to block cancer cells' protective mechanisms allowing them to be destroyed by the immune system. It is a PD-1 inhibitor that triggers the PD-1 receptor of lymphocytes. It is either administered in combination with chemotherapy or after depending on if the cancer has EGFR or ALK mutations.

Keytruda: Uses, dosage, side effects, warnings. (n.d.). Drugs.com.

<https://www.drugs.com/keytruda.html>

KEYTRUDA. (n.d.). https://www.keytruda.com/?cid=PPC-accounttype:MICROSOFT-campaign:Keytruda+Pan+Tumor_Brand_BRND_NA_ENGM_PHRS_TEXT_NA-searchterm:keytruda-adgroup:Brand+Keyword_General-keywordid:p71488892785&utm_source=bing&utm_medium=cpc&utm_campaign=Keytruda%20Pan%20Tumor_Brand_BRND_NA_ENGM_PHRS_TEXT_NA&utm_term=keytruda&utm_content=Brand%20Keyword_General&utm_kxconfid=sq7irm3mh&gclid=c7ebb003242a17b052f9d7c633350327&gclsrc=3p.ds&msclkid=c7ebb003242a17b052f9d7c633350327

Wikipedia contributors. (2025, January 7). *Pembrolizumab*. Wikipedia.

https://en.wikipedia.org/wiki/Pembrolizumab#Mechanism_of_action

