

Cancers

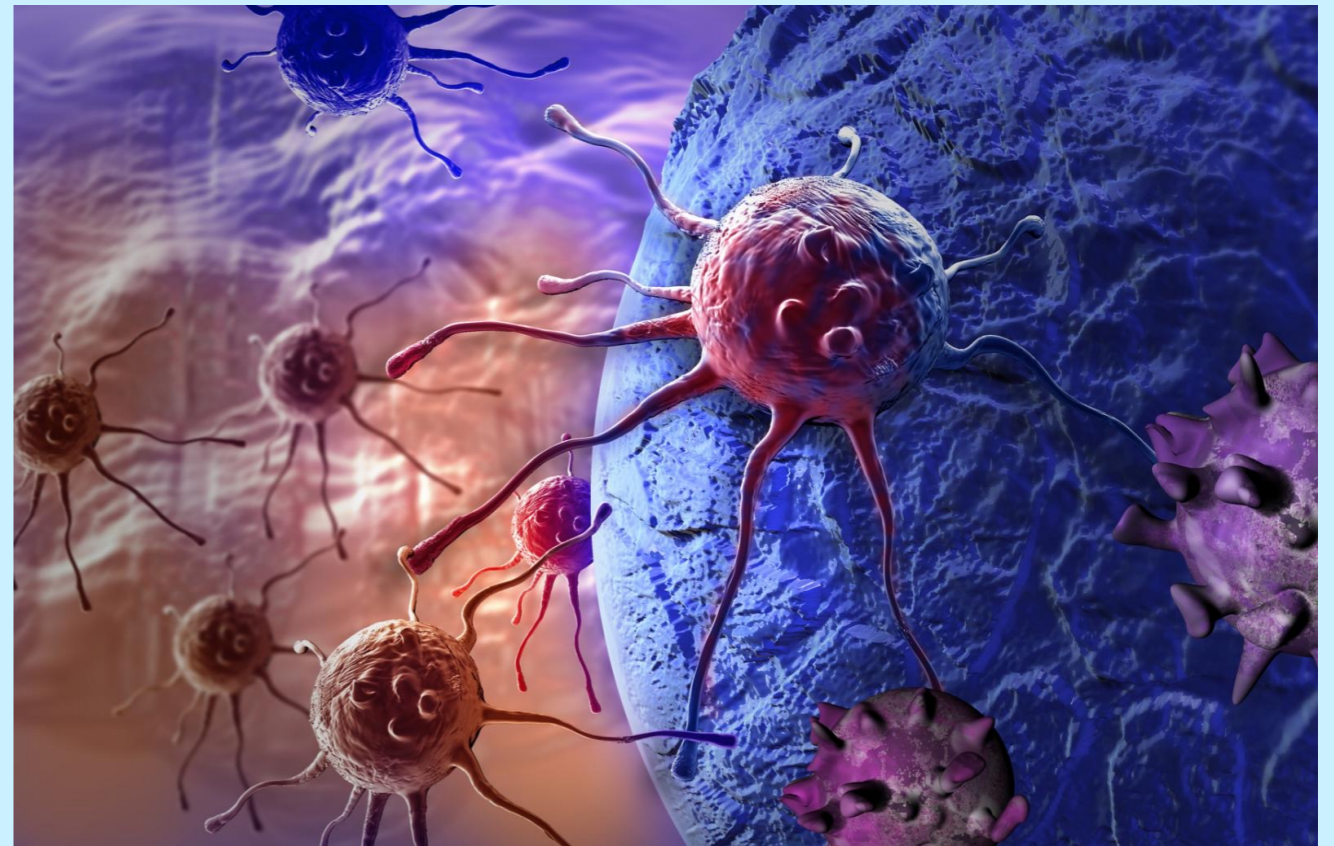
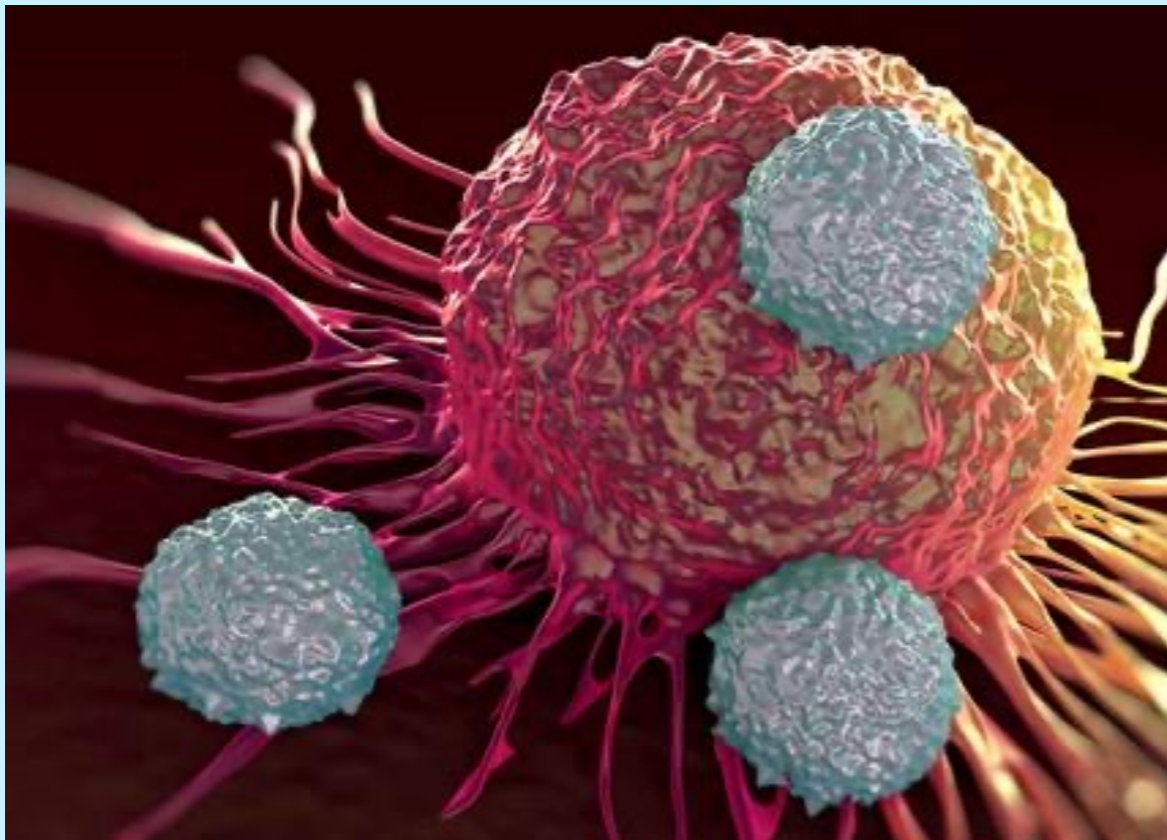


What is it?

Cancer is a disease in which some of the body's cells grow uncontrollably and spread to other parts of the body.

Cancer can start almost anywhere in the human body, which is made up of trillions of cells. Normally, human cells grow and multiply (through a process called cell division) to form new cells as the body needs them. When cells grow old or become damaged, they die, and new cells take their place.

Sometimes this orderly process breaks down, and abnormal or damaged cells grow and multiply when they shouldn't. These cells may form tumors, which are lumps of tissue. Tumors can be cancerous or not cancerous (benign).



Cancer

Most deadly (2020)

Lungs cancer

Colorectum cancer

Liver cancer

Most common (2020)

Breast cancer

Lungs cancer

Colorectum cancer

Global Statistics

36 types of cancer in 185 countries

1 of 5 people develop it

1 in 8 men

1 in 11 women

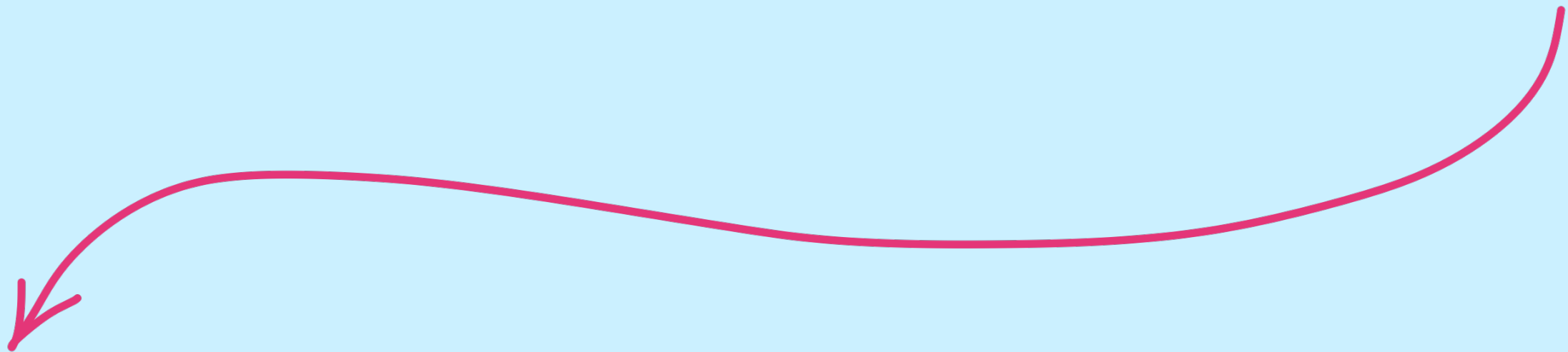
How to face it

Chemioteraphy

Prodrugs

Surgery

Radiation



How to face cancer?

Cancer treatment options include surgery, radiation and chemotherapy, or a combination of them. However, these agents, being non-selective, usually damage healthy cells and tissues with rapid turnover, causing severe toxic effects. To overcome these limitations, two or more chemotherapeutics are usually used in combination. An effective strategy to increase the selectivity of chemotherapeutics involves the use of prodrugs. Prodrugs can be useful in reducing drug toxicity. The design of transition-metal-based prodrugs could, make them less toxic, allowing the drug to reach therapeutically useful levels. Prodrug therapy provides an alternative approach to designing less reactive and less cytotoxic drugs. They can be used to increase solubility and improve chemical stability and organoleptic characteristics. Since these agents offer a number of advantages, to date, several prodrug formulations have been developed and effectively used for the treatment of different forms of cancer.





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