

Notes

Cancer occurs when bodily cells grow uncontrollably and spread.

Normally, human cells develop and divide to generate new cells when the body requires them. When cells get old or damaged, they die and new ones take their place.

Defective or damaged cells sometimes grow and reproduce when they shouldn't. These cells may grow tumor, which are masses of tissue. Tumors can be malignant or noncancerous (benign).

Normal cells divide, grow, and die. But cancer cells don't follow this cycle. Instead of dying, they proliferate abnormal cells. These cells can infiltrate body areas such as the breast, liver, lungs, and pancreas.

Types of cancer: Cancer has 100+ types.

Types of cancer are usually named for the organs or tissues where they form. Lung and brain cancers start in their respective organs. Cancers are also described by the type of cell that formed them, such as epithelial or squamous.

- **Carcinoma:** Most cancers are carcinomas. Epithelial cells cover the body's inside and outside. Epithelial cells are column-shaped under a microscope.
- **Sarcomas:** Sarcomas form in bone and soft tissues like muscle, fat, blood vessels, lymph vessels, and fibrous tissue (such as tendons and ligaments).
- **Leukaemia:** Cancers that originate in the blood-forming tissue of the bone marrow are known as leukaemia. These tumours aren't solid. Leukaemia cells and leukemic blast cells crowd out normal blood cells in the blood and bone marrow. Low normal blood cell count can make it harder for the body to oxygenate tissues, control bleeding, or fight infections.
- **Lymphoma:** Lymphoma starts in lymphocytes (T cells or B cells). Disease-fighting white blood cells in the immune system. In lymphoma, abnormal lymphocytes build up in lymph nodes, lymph vessels, and other body organs.

Detection method:

Imaging tests used to diagnose cancer include CT, MRI, PET, ultrasound, and X-ray. For further confirmation biopsy is performed in which cells are extracted from organs for lab testing.