

Warm Up

- ★ What do you know about cancer?
- ★ And what do you think about it?
- ★ How does it affect in your life?

What is Cancer?

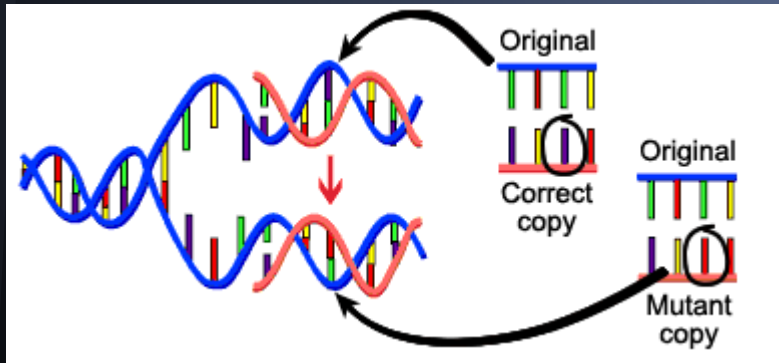
- The disease caused by an uncontrolled division of abnormal cells in a part of the body.
- All cancers effects in cells, the body's basic unit of life



Cancer's Effect on Molecules

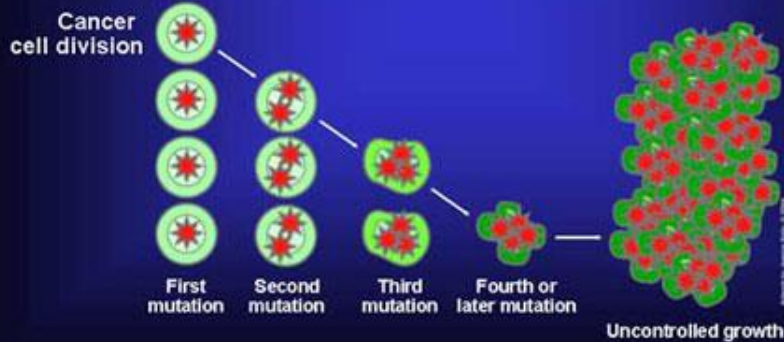
DNA Mutation

Ignoring Signals

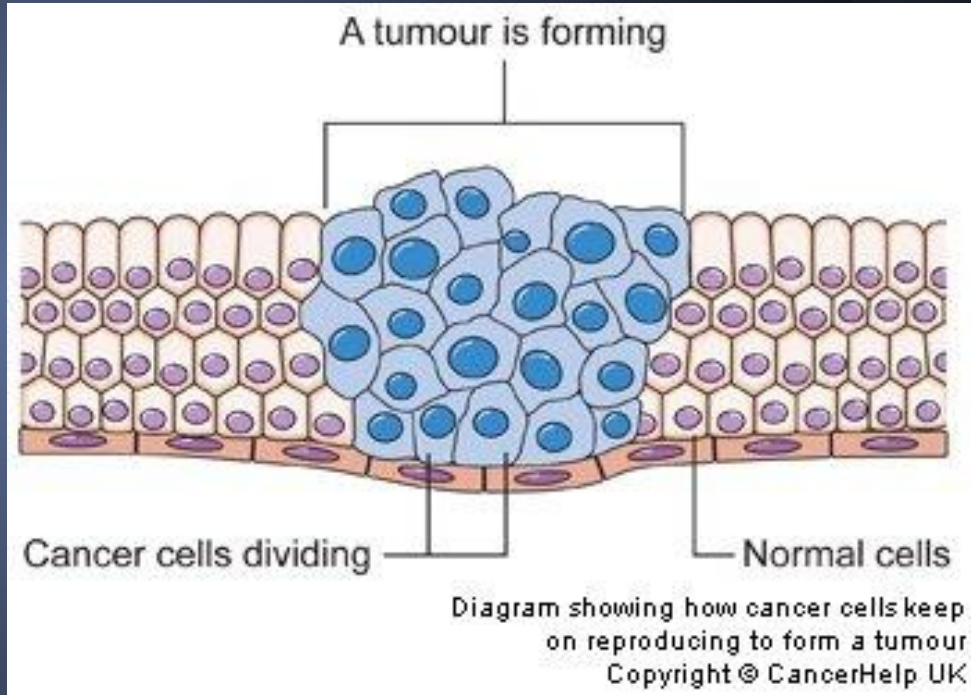


How the cells are affected?

Loss of Normal Growth Control

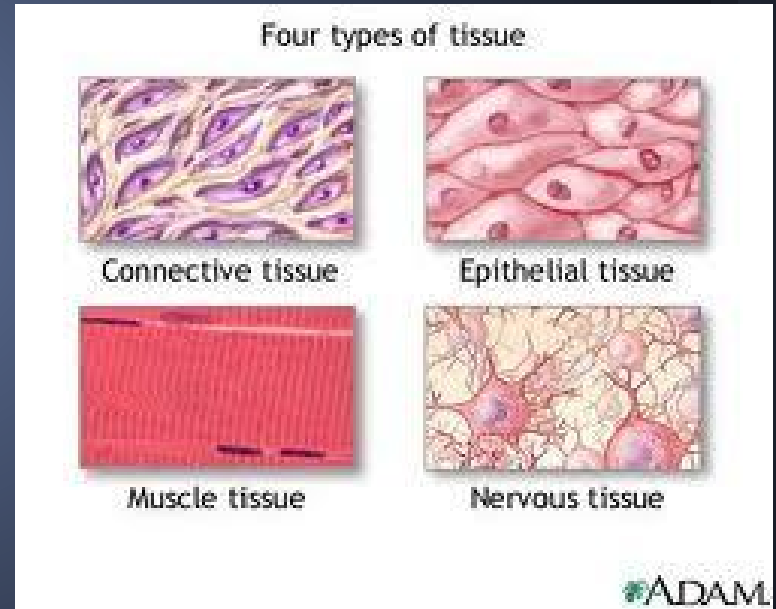


NATIONAL
CANCER
INSTITUTE



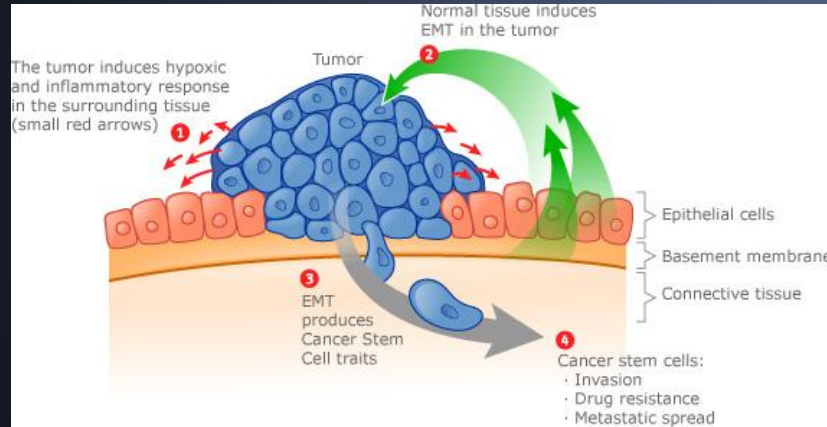
How does cancer affect Tissue?

- Epithelial Tissue
- Connective Tissue
- Muscle Tissue
- Nervous Tissue

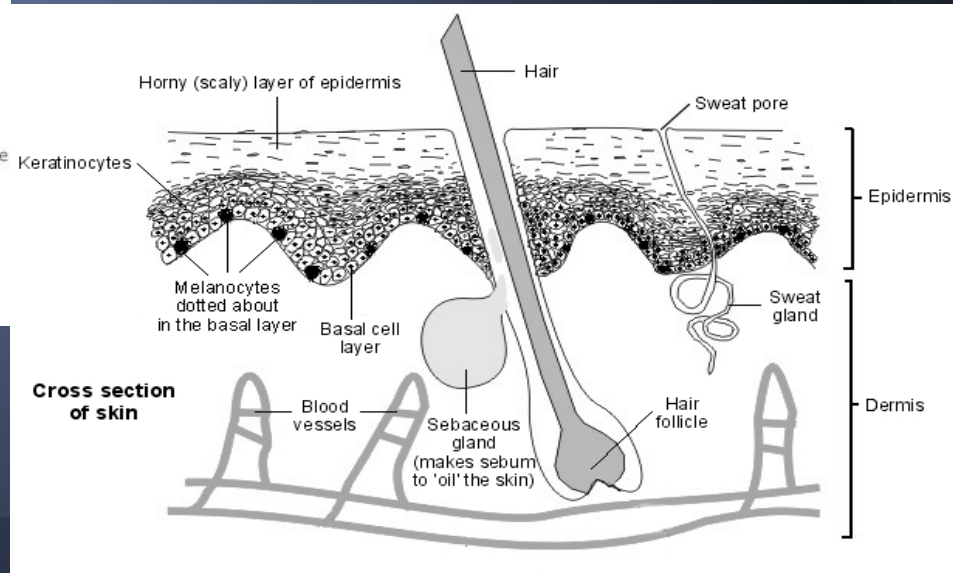


How does the disease affect the organ?

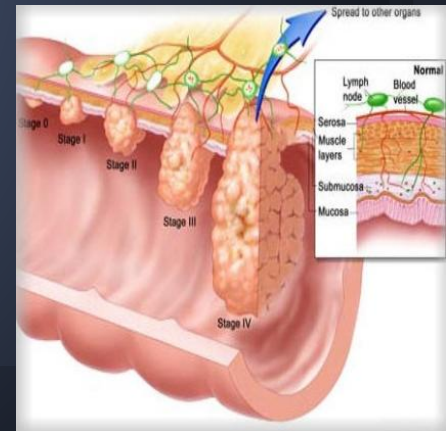
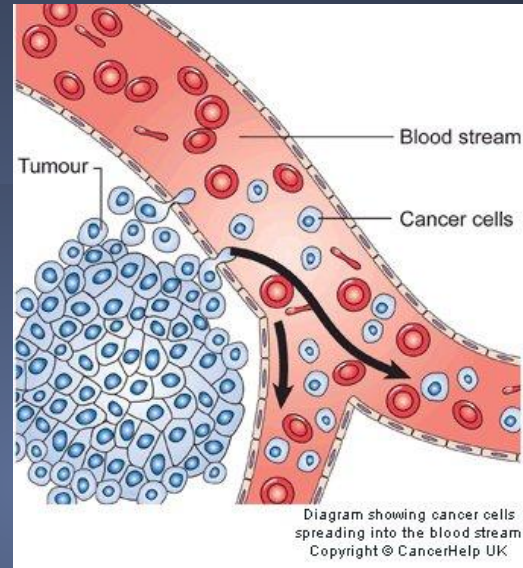
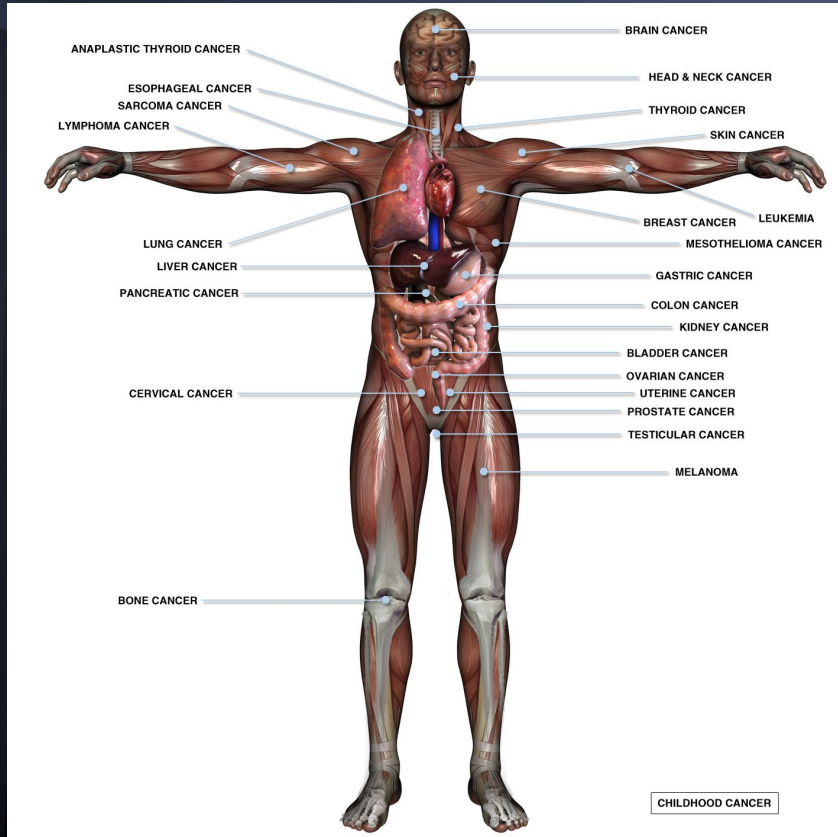
Disease is characterized by out-of-control cell growth



Melano- = pigment cell



System



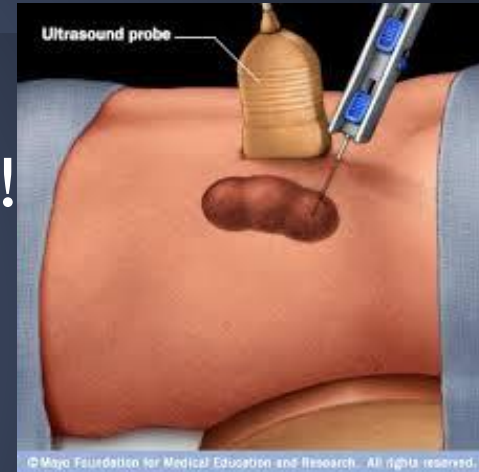
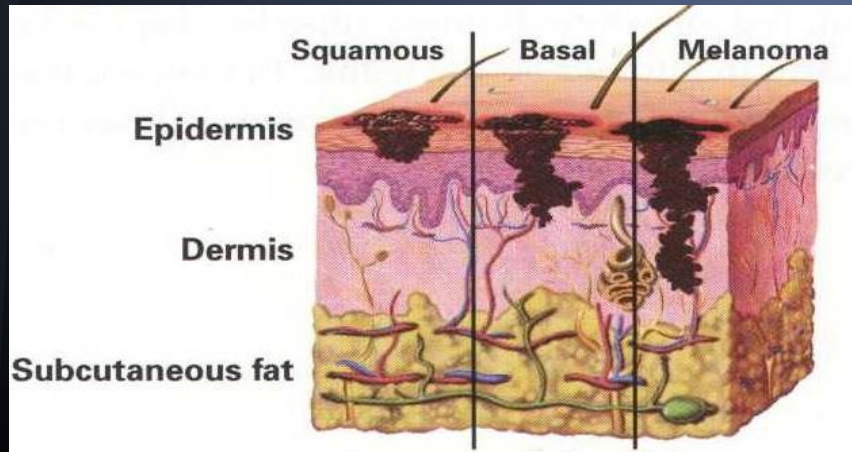
Take Aways

- Damage in the gene.
- Cancer cells grow rapidly and don't die.
- The cells or tumor affect the organs around it.
- Cancer spreads through the bloodstream and lymph nodes.
- Cancer is bad.

What research is going on to understand ?

A simple way to research cancer is a Biopsy!

- Needle Biopsy
- Lump Biopsy



- Shave Biopsy
- Punch Biopsy
- Excisional Biopsy
- Incisional Biopsy

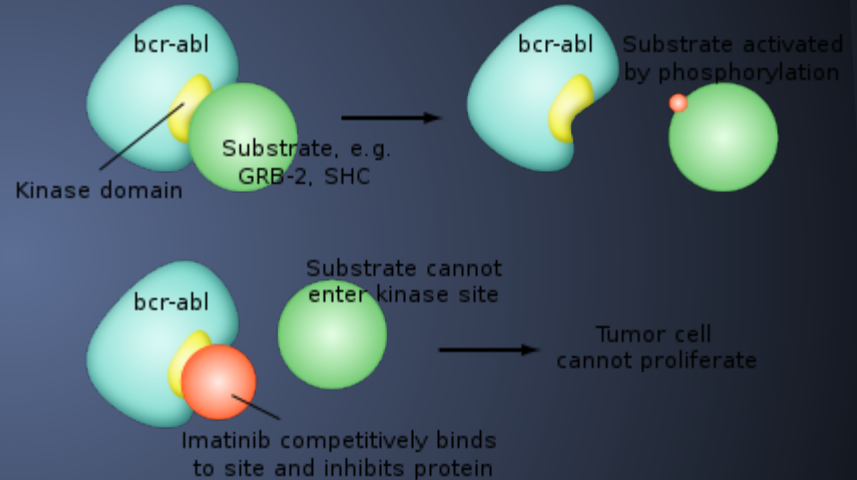
Current Therapies

Receptor blockers

Targeting activators

Chemotherapy

Radiation Therapy



BCR-ABL protein targeted by imatinib (Gleevec)

Disease Prevention

- Healthy Lifestyle
- Physical healthy

