

## Editorial on Cancer Cells

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### EDITORIAL

Cells are the basic units and our bodies are made up of trillions of cells grouped to form tissues and organs.

Features of normal cells: 1) reproduce when and where it's needed 2) stick together in the right place in the body 3) self-destruct when they become damaged or too old 4) become specialised (mature) [1].

Cancer cells are different to normal cells in many ways and they have gene mutations that turn the cell from a normal cell into a cancer cell. Due to genetic changes interfere with this orderly process, cancer begins. These cells start to grow uncontrollably and may form a mass called a tumor. Tumors can be cancerous (malignant) or noncancerous (benign). In Malignant tumors, the cells can grow and spread to other parts of the body. A benign tumor either cannot spread or grow, or they do so very slowly [2]

#### Properties of Cancer cells:

- 1) Divide out of control
- 2) are immature and don't develop into mature cells with specific jobs
- 3) Avoid the immune system
- 4) Ignore signals that tell them to stop dividing or to die when they should
- 5) Don't stick together very well and can spread to other parts of the body through the blood or lymphatic system
- 6) Grow into and damage tissues and organs

### HOW CANCER SPREAD?

During the early stages of cancer, tumours are typically benign and remain confined within the normal boundaries of a tissue. As a cancerous tumor grows, it has the same needs as normal cells. Blood supply to bring oxygen and nutrients to grow and survive is needed. Tumour continues to grow and needs more blood to bring oxygen and other nutrients to the cancer cells. So, cancer cells send signals for a tumour to make new blood vessels and this is called angiogenesis (one of the reasons that tumours grow and get bigger). It allows cancer cells to get into the blood and spread more easily to other parts of the body [3].

**Invasive cancer:** Cancer that grows into nearby tissue is called local invasion or invasive cancer. These cancer cells often secrete proteases that enable them to degrade the extracellular matrix at a tissue's boundary.

**Metastasis:** One of the terminal stages of cancer. They can also spread from where it first started to other parts of the body and this process is called metastasis [4].

### CONCLUSION

Cancer is unchecked cell growth. Gene's mutations can cause cancer by accelerating cell division rates or inhibiting normal controls on the system, such as cell cycle arrest or programmed cell death. Cancer sometimes comes back after treatment. This is called a recurrence. Many cancers can be cured with treatment [3,5].

### REFERENCES

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