



# Glossary

<b>Term</b>	<b>Meaning</b>
<b>Anaplastic</b>	Rapidly growing malignant tumours with a loss of normal cell characteristics.
<b>Angiogenesis</b>	The process of how new blood vessels form from pre-existing blood vessels.
<b>ATP</b>	A nucleotide that is an energy source.
<b>Carcinogenesis.</b>	The multistep process where a normal cell evolves into a invasive cancer cell.
<b>Carcinoma</b>	Cancer that arises from the epithelium that lines the skin and internal organs.
<b>Catalytic subunit</b>	Protein subunit that contains the active site where the specific molecule/substrate binds with the enzyme. They are other sites where they bind with the regulatory subunits.
<b>Cation</b>	An ion that has a positive charge.
<b>Chemokine</b>	Proteins that guide the movement of white blood cells and cells that line organs (epithelial) and blood vessels (endothelial)
<b>Chemotherapy</b>	Chemicals used to treat cancer.
<b>Cirrhosis</b>	Liver condition as a result of alcoholism or injury.
<b>Cyclin</b>	A protein that facilitates the cell to go through the cell cycle by binding to a cyclin-dependent kinase.
<b>Deformation</b>	A change in shape
<b>Depolarisation</b>	The movement of charged ions across the membrane of a nerve/muscle cell.
<b>Differentiation</b>	Changes to cell shape and function where unspecialised cells divide to become specialised for specific functions.
<b>Fibrolamellar hepatocellular carcinoma (FHC)</b>	A rare liver cancer that grows in teens and adults under the age of 40. Patients with FHC do not necessarily have damage nor alcohol, some cases have healthy livers.
<b>Glutamate</b>	Otherwise known as glutamic acid. It is a type of neurotransmitter and amino acid.
<b>GTPase</b>	GTPase activating proteins (GAPs) catalyze the hydrolysis of GTP to GDP.
<b>Guanosine exchange factor (GEF)</b>	They are proteins that stimulate GTPases by releasing guanosine diphosphate (GDP) to allow binding of guanosine triphosphate (GTP)
<b>Haemopoiesis</b>	Production of red blood cells and platelets. It occurs in the bone marrow
<b>Hepatitis</b>	Inflammation of the liver caused by viruses or immunological changes.
<b>Hepatocellular</b>	Related to liver cells
<b>Heteromeric</b>	Different parts
<b>Homolog</b>	The similarity of form in living organisms



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<b>Hyperpolarisation</b>	A change in the membrane potential when a cell becomes more polar. The membrane potential is the difference between electric charges inside and outside the cell.
<b>Innate immune</b>	It is the pre-existing defence mechanisms that help prevent infection by pathogens.
<b>Interleukin</b>	They are proteins produced by white blood cells and released when activated by an antigen. They control haemopoiesis and immune system.
<b>Interleukin 8 (IL-8)</b>	A chemokine produced by macrophages, epithelial cells, smooth muscle cells in the airways and endothelial cells. Its function is in cell survival and proliferation and has a specific target for the neutrophil.
<b>Lysophosphatidic acid (LPA)</b>	A lipid that has effects on tissues on the nervous system.
<b>Metabolism</b>	The sum of chemical and physical changes that occurs in the body.
<b>Neuropeptides</b>	A peptide found in the nerves.
<b>Nucleotide</b>	A molecule that has a phosphate group, five-carbon sugar and base.
<b>Perception</b>	Information about the world received by senses
<b>Pleomorphic dermal sarcoma (PDS)</b>	A rare dermal-based malignant tumours that presents invasion in the subcutaneous tissue, necrosis and invasion in the lymph vessels (LVI)
<b>Polymerisation</b>	The process of how polymers are formed from small molecules called monomers.
<b>Promoter</b>	The site where transcription starts. It is also the name of the site where in conjunction with an initiator leads to production of cancer.
<b>Radiotherapy</b>	The treatment of cancer using radiation e.g. X-rays.
<b>Regulatory</b>	a protein subunit that helps or inhibit the activity. It is bound with the catalytic subunit.
<b>ROCK Rho-associated kinases</b>	An effector protein in which the GTPase, RhoA, binds. RhoA regulates the actin proteins involved in cellular movement.
<b>Tetramer</b>	A protein made of four subunits.
<b>Transmembrane</b>	A transmembrane protein embedded in the membrane embedded in the hydrophobic region of the phospholipid layer.