Cell Types

PLAY PICMONIC

Permanent
Permed-hair
Permanent cells are a type of cell that remains in G0 in the cell cycle. It has less significant regenerative capabilities than other types of cells.

Remain in G0
Gangster (0)
G0 is the resting phase, characterized by no dividing and no preparation to divide in the cell cycle. Permanent cells can't produce new cells. During growth adaptation, they can only progress to hypertrophy.

Cardiac Muscle
Heart Muscle
Cardiac muscle is an example of a permanent cell. Other samples of cells may include neurons, skeletal muscle, and red blood cells.

RBCs
Red Blood Cell
RBCs have a lifespan of 120 days. After that, they will be engulfed by the macrophages. These occur due to the absence of a nucleus in the cell. Even though it has a short lifespan, RBCs are a type of permanent cell that cannot regenerate itself.

Neurons
Neuron-guy
Another example of a permanent cell is neurons, meaning they cannot regenerate themselves. However, the term neurogenesis continues to be learned, suggesting it can occur especially in conditions such as stroke.

Stable
Stable-ground
Stable cells are a type of cell that enter G1 from G0 when stimulated in the cell cycle. The tissue will generate if necessary.

G0 Enter G1 when Stimulated
Gangster (0) Become Gangster (1) Wand after Drinking Stim-mule
G0 enters G1 when stimulated in stable cells. Stable or quiescent cells may include hepatocytes, periosteal cells, lymphocytes, and PCT.

Hepatocytes
Liver-cell
Hepatocytes are a sample of stable cells. These cells will regenerate in the form of compensatory hyperplasia due to partial resection. Extra cells will be produced by each hepatocyte and then will continue to a quiescence state.

Labile
Label
Labile cells are a type of cell that never go to G0 in the cell cycle. These cells divide rapidly with a short G1. These are a common cell affected by chemotherapy.

Never Go to G0

Never Go to Gangster (0)

Labile never goes to the G0 phase in the cell cycle.

Skin

Skin-suit

Labile cells are the cells that continue to regenerate and possess stem cells. These cells are skin, bone marrow, hair follicles, germ cells, and gut epithelium.

Hair

Hair

Hair within epithelial tissue divides continuously. Therefore, a common side effect affected of chemotherapy is hair loss.

Bone Marrow

Red Bone Marilyn-Monroe

Bone marrow is an example of a labile cell, and it can also be affected by chemotherapy, resulting in bone marrow suppression.

Germ Cells

German-cells

Chemotherapy will affect most of the types of labile cells, including germ cells.