What is a primary cell culture?

What is a primary cell culture?

 A primary cell culture is derived from explanted animal or human tissue. Cells are dissociated using enzymatic methods and kept in cell medium. Such cultures are heterogeneous (contain different cell types) and are not passaged.

What is a cell strain?

What is a cell strain?

• A cell strain may be derived from primary cells but comprises only a single cell type that can be propagated in cell culture for a limited number of cell divisions (approximately 40-60) due to cell strain senescence (Hayflick limit).

Provide the name of the first continuous (immortal) cell line and describe its characteristics

Provide the name of the first continuous (immortal) cell line and describe its characteristics

- HeLa
- Derived from a tumor. It can be propagated indefinitely in cell culture
- HeLa cells are characterized by an unstable genome

Due to which biosafety reasons are CHO cells the preferred cell substrate for recombinant protein production?

Due to which biosafety reasons are CHO cells are the preferred cell substrate for recombinant protein production?

- They do not propagate most human viruses
- CHO cells possess endogenous retrovirus sequences which may form retroviral particles, however these particles have found to be non-infections for other cells.

Name 3 adventitious agents which can occur in animal cell culture

Name 3 adventitious agents which can occur in animal cell culture

- Viruses
- Prions
- Bacteria + (Mycoplasma)