Mitotic activity

Increased mitotic activity (≥3 mitoses per 10 high-power fields)

Mitotic activity refers to the process of cell division, specifically mitosis, which is essential for growth, development, and tissue repair in multicellular organisms. Mitosis involves the replication and division of a cell's chromosomes into two identical sets, resulting in the formation of two daughter cells that are genetically identical to the parent cell.

Mitotic activity can be observed and measured in tissues undergoing active cell division. It is often assessed in medical and research contexts to evaluate tissue health, growth rates, and pathological conditions such as cancer. High mitotic activity may indicate rapid cell proliferation, which can be characteristic of cancerous growth, while low mitotic activity may indicate normal tissue turnover or a state of quiescence. Mitotic activity is commonly quantified by counting the number of dividing cells within a given area of tissue under a microscope.