Journal of Biochemistry and Cell

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Mitotic catastrophe (MC) has long been considered as a mode of cell death that results from premature or inappropriate entry of cells into mitosis and can be caused by chemical or physical stresses. Whereas it initially was depicted as the main form of cell death induced by ionizing radiation, it is today known to be triggered also by treatment with agents in uencing the stability of microtubule, various anticancer drugs and mitotic failure caused by defective cell cycle checkpoints. Although various descriptions explaining MC exist, there is still no general accepted de nition of this phenomenon. Here, we present evidences indicating that death-associated MC is not a separate mode of cell death, rather a process (‘prestige’) preceding cell death, which can occur through necrosis or apoptosis. e nal outcome of MC depends on the molecular pro le of the cell.

4. Korsnes MS, Korsnes R (2017)"Mitotic Catastrophe in BC3H1 Cells Following Yessotoxin Exposure". Front Cell Dev Biol 5: 30.

5. Erenpreisa J, Kalejs M, Ianzini F, Kosmacek EA, Mackey MA, et al. (2005)"Segregation of Genomes in Polyploid Tumour Cells Following Mitotic Catastrophe". Cell Biol Int 29: 1005-1011.