Stability Analysis of Endemic Equilibrium Points On Cancer Cells Mathematical Model

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ABSTRACT

The purpose of this study are to find an endemic equilibrium point and to analyze the equilibrium point in the mathematical model of the spread of cancer cells. The pattern of the spread of cancer cells can be modeled in the form of differential equations systems. Equilibrium solution was obtained and the analysis of cell behavior distribution with chemotherapy. From the analysis it is expected that the spread of cancer cells can be controlled by the rate of drug concentration in chemotherapy. In addition, factors that influence the spread of cancer cells are also obtained through parameter values in numerically simulated models.

Kata Kunci: mathematical models, cancer cells, chemotherapy