NUMERICAL IMPLEMENTATION OF REACTION-DIFFUSION-CHEMOTAXIS MODEL OF CANCER INVASION USING NONSTANDARD FINITE DIFFERENCE METHOD

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ABSTRACT
In this paper we present a nonstandard numerical scheme for solving a reaction-diffusion-chemotaxis mathematical model of migration and invasion of cancer cells. The model is approximated by a system of nonlinear algebraic equations, whose solution is non-negative. The role of the production rate of cancer cells on their invasive ability is analyzed by numerical experiments.

REFERENCES