

Abstract Submitted
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Modeling spread of oncolytic viruses¹ ANH NGUYEN, HANA DOBROVOLNY, Texas Christian University — Cancer has inflicted devastating social and financial costs to the global population for many years. In order to reduce its detrimental impacts, there have been various methods and treatments. One of which is oncolytic virotherapy. In fact, researchers use the ability of certain viruses to eradicate tumor cells as a cancer treatment. This method is well known and was dated back more than a century. In this project, we focus on an ordinary differential equation (ODE) model in virotherapy, which assess the effects of virus on both normal and cancer cells. We use the model to find the optimal parameters so that we can minimize the number of cancer cells and also maximize the number of normal cells.

¹Modeling spread of oncolytic viruses

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