

TRAVELLING WAVES IN MODELLING CHEMOTHERAPY FOR GLIOMAS

Agnieszka Bartłomiejczyk

Gdańsk University of Technology, Gdańsk, Poland

Monika J. Piotrowska

University of Warsaw, Warsaw, Poland

Marek Bodnar

University of Warsaw, Warsaw, Poland

Low grade gliomas are primary brain tumours which evolve very slowly in time, however inevitably cause patient death. We are going to study the possibility of existence of travelling waves in the Fisher-Kolmogorov type model describing evolution in time of low grade glioma cells proposed in [1]. Considered system describes the evolution in time of functionally alive tumour cells and cells irreversibly damaged by chemotherapy treatment.

REFERENCE

- [1] Bogdańska M., Bodnar M., Piotrowska M.J., Modeling chemotherapy for low grade gliomas, Proceedings of the XXI National Conference on Applications of Mathematics in Biology and Medicine, 33–38 (2015).