A MATHEMATICAL MODEL FOR LOW GRADE GLIOMAS

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The optimal management of low grade gliomas remains an open problem. Although complete surgical resection is recommended, given the diffuse infiltrative nature of these tumors and the risk of major surgery in important areas of the brain, they often result in tumors that are incompletely resected or simply biopsied. For this reason, the use of TMZ combined with other options is increasingly used [1, 2]. We present a modification of the system appeared in [2] to understand the late response to the chemotherapy observed in LGG without using an excessive number of unknown parameters. In our approach we consider separately the proliferation process and natural death process [3]. This allows us to obtain a good agreement of model solutions with medical data which was impossible in the approach presented in [2].

REFERENCE

