Mathematical and Statistical Analysis of the Interactions between Tumor Cells and Cells of the Immune System

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An analysis of glioblastoma tumour growth data, gathered through proliferation assays and confocal microscopy *in vivo*, is presented. Glioblastoma cells interact with cells of the immune system, such as macrophages/microglia and neutrophils. These interactions may promote cancer growth and invasiveness, as suggested from previous studies [1], [2], [3] and results from an ongoing research project. Until now, researchers have failed to elucidate completely the outcome of the dynamics of interactions between glioblastoma cells and the cells from the immune system. Mathematical and statistical models are employed in the analysis of these interactions. The data analysis may be used for future less invasive therapies of glioblastoma and other types of cancers.

References

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