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The Effect Of Chloroquine On Glioblastoma Multiforme

The project's objective was to test effects of chloroquine on glioblastoma multiforme and lymphoma, also to test to see if there is an increase of Fas (a death inducing receptor that when engaged would cause cell death). Cell lines are grown to an appropriate confluence before being split into one flask per cell line. Flasks are then grown for twenty-four hours before being split into two flasks per cell line. The cells are then treated with one millimolar chloroquine. The cells then grow overnight before the cells are stained to check for the presence of Fas on the surface. The cells would then be placed in a flow sample to be run on the flow cytometer. The data from the flow cytometer is then analyzed with FlowJo. The analyzed data showed that the glioma had a slight increase in cell death and that on all cells there was an increase in Fas. The lymphoma showed a slight increase of cell death and the cells showed increase of Fas on the dead cells. The increase in the presence of Fas shows that chloroquine can induce cells to die naturally or apoptotically. If cells die naturally the treatment causing the cells to die that way would not cause a person pain or harm. The results also suggest that chloroquine allows for an increase of cell death.