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*BONE BACK: Statins Inhibit Osteosarcoma Cells' Growth And Metastasis*

The purpose of this project is to delay the metastatic potential and growth rate of U-2 osteosarcoma cells by exposing them to statins in vitro. It is hypothesized that the statins will reduce the malignancy of the osteosarcoma cells, minimize the risk of metastasis and decrease growth rate after exposure by inhibiting the development of the bone cells. Each statin will be put into solution equaling to 1 $\mu$ M and applied to U-2 osteosarcoma cells in the amounts of .15 $\mu$ M and .30 $\mu$ M. The statins' effectiveness will be measured by the means of a hemocytometer to count the number of cells after treatment. A soft agar analysis will also be conducted to observe the extent of the U-2 cells' metastasis with the presence of statins. The results observed after testing established that the introduction of statins into U-2 osteosarcoma cells slowed the growth rate and proliferation of the cells by about 76 percent. If further research was done, a new alternative, via the use of statins, can be used to stop osteosarcoma, the most common bone cancer, and sixth most common cancer among children (who are usually affected).