

Will Combined BTK Inhibitors Decrease Growth of Multiple Myeloma Cancer Cells?

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The purpose of this experiment was to test the combination of two different inhibitors on the 8266 Multiple Myeloma cell line. While conducting this experiment, all of the materials, procedures, and lab safety precautions were directed by a qualified scientist who was an assistant professor at M.D. Anderson Medical Research Center. While conducting this experiment, the lab and materials used for this experiment were sterilized. 100 microliters of Multiple Myeloma cancer cells were tested, a media was created to neutralize the cells being tested, and the cells were tested by viewing the reaction that two different types of inhibitors had on the cells. Using multiple sizes of pipette tips the media, cancer cells, and BTK Inhibitors were transferred into the various 6 well and 96 well plates. After the cells, media, and drugs were mixed into the wells by their designated Concentrations, the plate was sealed and placed in an incubator to incubate for 48 hours. After the plates cancer cells decreased with the combination of drugs and high concentration level. Upon receiving the data and obtaining the results, the results showed that the higher the concentration of the combination of both inhibitors with the cancer cells, the cancer cells decreased. In conclusion, my hypothesis was correct, the higher the concentration and use of both inhibitors against the Multiple Myeloma cell line did decrease the life of cancer cells.