Analyzing the Effect of Curcumin on a Cervical Cancer Line

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This experiment focused on the effect Curcuma Longa, commonly known as Turmeric, on a HeLa cervical cancer cell line. It was conducted with the purpose to optimize an in-vitro model using a HeLa cervical cancer cell line to study the single and combination effects of Cisplatin and Curcumin on the induction of cells into apoptosis by comparing single and combination data using apoptosis, morphology, viability, and proliferation assays. I hypothesized that the combination treatment of Cisplatin and Curcumin would consequently result in the lowest number of viable cells. The efficacy of each treatment was determined with the use of three biological assays. The Trypan Blue Exclusion Assay, which measured cell viability, the MTT assay, which detailed cell proliferation and the TUNEL assay that was used to calculate the rate of apoptosis. Overall the data collected from this experiment shows a notable benefit derived from the addition of the Curcumin and a validation of the original hypothesis. Solubility of the Curcumin arose to be an issue with an eventual solution of absolute alcohol, which proved to be an effective solvent. Overall the data collected from this experiment shows a notable benefit derived from the addition of the Curcumin and a validation of the original hypothesis

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