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**RECOMMENDATIONS & FUTURE STUDIES**

We recognize that there are flaws in our experimental design. Here are some ways that we realized that could improve the design and provide more accurate data:

1. For the first week of the experiment, we did not aspirate the cells before adding the treatment solutions. This altered the concentrations of soy and diadzein, causing some deviations in our data. Instead, we should have aspirated the cells for each time that we imposed the treatment.

2. It would be beneficial to find an alternative solvent for the soy protein and diadzein, rather than DMSO. DMSO is such a strong substance that it could potentially harm the cancer cells. Otherwise, we should have included a vehicle control, in which we impose DMSO in the amounts used in each treatment on a row in each of our plates.

3. We could have tested the cancer cells with a treatment that consisted of unprocessed or raw soybeans, rather than soy protein.

4. We should have measured the proliferation at 0 hours. We should have plated the cells and added the treatments after 24 hours so that we can obtain an initial proliferation measurement before treatment.

5. Varying concentrations of estradiol should have been tested for an extended period of time to better understand the effects of estradiol on cell proliferation.

In addition, we developed several extensions based on our experiment that could further examine the potential of soy and isoflavones as an adjunct treatment for cancer:

1. More concentrations of soy and diadzein could be tested to see an expanded growth curve.

2. Tests could be performed to observe the effects of soy and isoflavones on healthy human tissue. While it is beneficial that soy and isoflavones halt the proliferation of cancer cells, it is unknown whether they will have the same effect on healthy human tissue.

3. An experiment could be conducted to see the effects of various other isoflavones on cancer cells.

4. It is uncertain whether the soy or isoflavones bind through the estrogen receptor, or through another receptor. Also, it is uncertain whether the soy and isoflavones affect genes or protein expression. Thus, radioactive markers could be tagged onto soy and isoflavones to trace the actual metabolic path and observe the actual mechanism by which soy and isoflavones affect the cells.