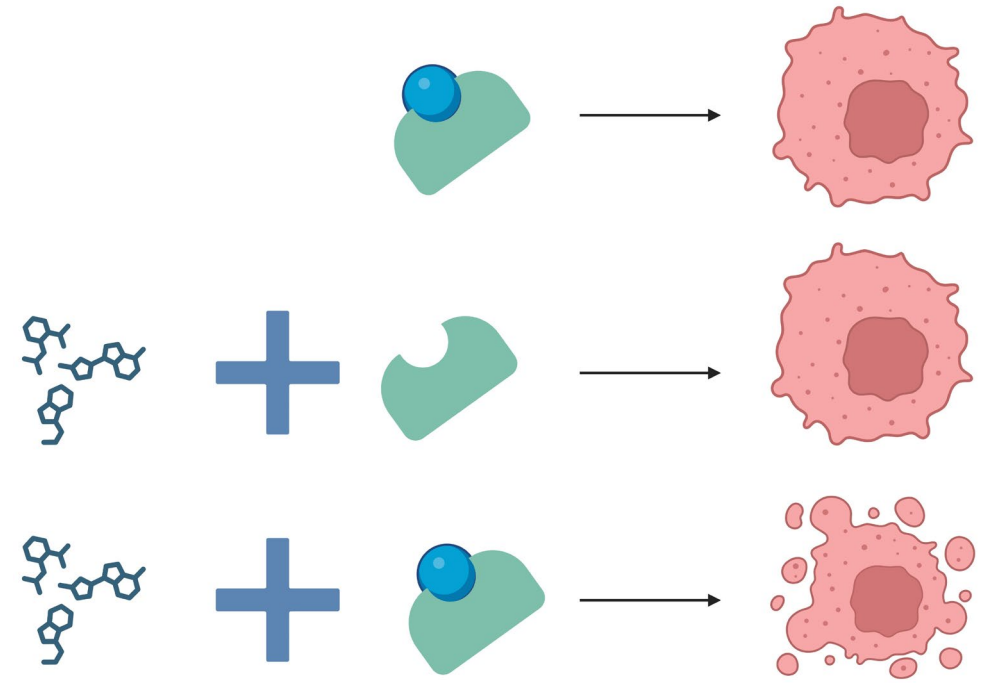


Investigating Compounds and their Combinations as Cancer Therapeutics

Rhand Wood

Background

- The aryl hydrocarbon receptor (AhR) is a transcription factor regulating downstream target genes
- Previous work has shown its ability to regulate cell death when treated with appropriate ligands
- Combinations of treatments has increased the amount of cell death

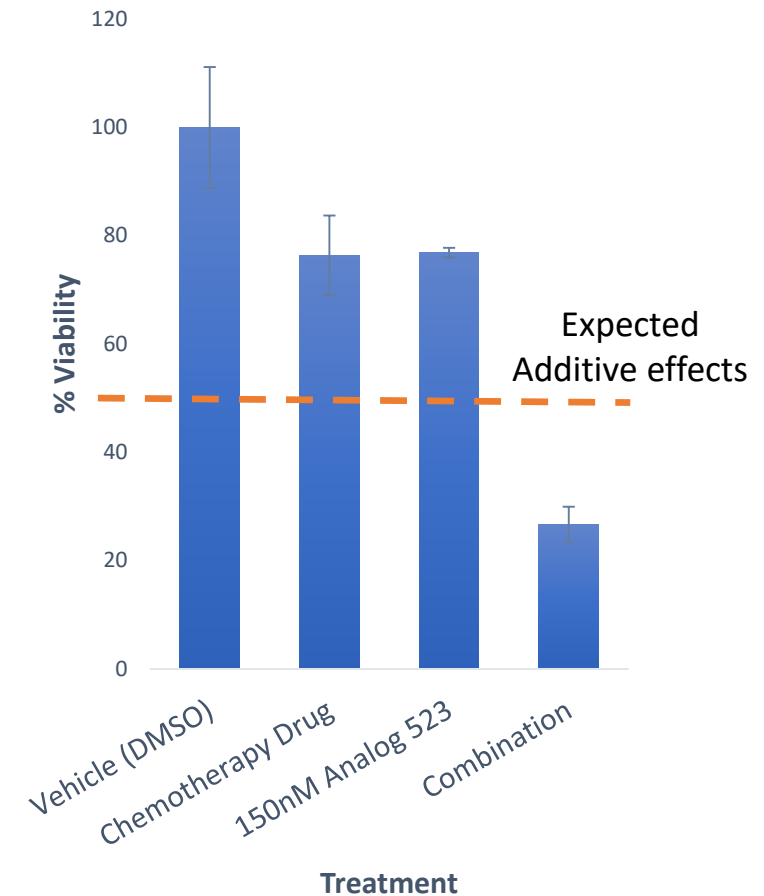


Results

HCC70 breast cancer cells were treated for 48hrs with Analog 523 and chemotherapy drugs.

- Analog 523 and certain chemotherapy drugs showed decreased cell viability when combined
- Lower dosages of each compound is needed for a greater effect

**Combination Effects
of Chemotherapy
Drug and Analog
523**



Conclusions and Future Experiments

- The data showed promising effects in breast cancer cells with multiple types of combination experiments
- Experiments going forward could look to treat different cell lines to see expanded applications of these combinational effects
- Experiments could compare the effects in cells with the AhR and those with the AhR knocked down to confirm the effects are being mediated by the AhR

Thank you for everyone who helped

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