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## CBD efficacy in human DLBCL and MCL

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**C**BD Efficacy in Human DLBCL and MCL: Diffuse Large B-Cell Lymphoma (DLBCL) and Mantle Cell Lymphoma (MCL) represent the most common and most aggressive forms of Non-Hodgkin Lymphoma (NHL) respectively; where DLBCL are characterized in two gene expressing groups: germinal center B-Cell-like (GCB) and aggressive activated B-cell like (ABC). Previous work has demonstrated CB1 antagonists as potential therapeutics for both DLBCL and MCL. Cannabidiol (CBD) is a natural cannabinoid analog that has mixed affinity across CB1 and CB2 receptors; known in the literature as a CB1 antagonist. Our previous work has demonstrated that CB1 antagonists have activity against DLBCL cell lines. Our study is aimed at demonstrating whether CBD has activity in DLBCL and MCL cell lines. Cells from representative DLBCL and MCL cell lines were plated at 5,000 cells per well. The cells were incubated for 72 hours in 20  $\mu$ L medium with 10% FBS and varied concentrations of CBD or Dimethylsulfoxide (DMSO) vehicle. Viability assays were conducted using Celltiter-Glo Luminescent Cell Viability Assay. Experiments were performed 2-3 times independently with each concentration tested in triplicate. *In vitro* studies were done to determine the efficacy of CBD in DLBCL (GCB and ABC), as well as MCL. GCB-DLBCL, aggressive ABC-DLBCL and MCL cell lines treated with CBD showed similar patterns of reduction in viability. Most cell lines dropped dramatically in viability at concentrations of 10 $\mu$ M or greater with most cell lines at 0% of control at concentrations of 50 $\mu$ M.

## Biography

Tori Strong has completed his PhD from the University of Texas Medical Branch at Galveston. He is the director of Intellectual Property and Technology at Vyripharm Biopharmaceuticals, a premier biotech organization. He has served as a Patent Examiner for the USPTO and is now directly involved in the technology development to commercialization which includes strategies of building intellectual property.

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