

Project_Objective

In a pre-clinical trial of an anti-cancer drug D1344320 different concentrations of the drug were applied to the cultures of five types of cells. The cell lines used in the study were MCF7 (cells derived from breast adenocarcinoma), Colo205 (cells derived from male with colon cancer), HeLa (immortalized cervical cancer cells), HMEC-1 (human microvascular endothelial cell line), and HLF (primary lung fibroblast cells). For each cell type three concentrations of the drug were added to the culture media and the number of cells were counted at an interval of 12 hours till 5 days. Data for each cell type are give in the sheets named same as the cell lines.

With this information,

1. You are expected to explore the data and identify patterns, if any.
2. Perform appropriate statistical tests to infer the effectiveness of the drug on different cells.
3. Can you identify any optimal drug concentration ?
4. Can you suggest any changes in the experimental methodology in this study.