Drug Sensitivity in presence of mutation in primary gene
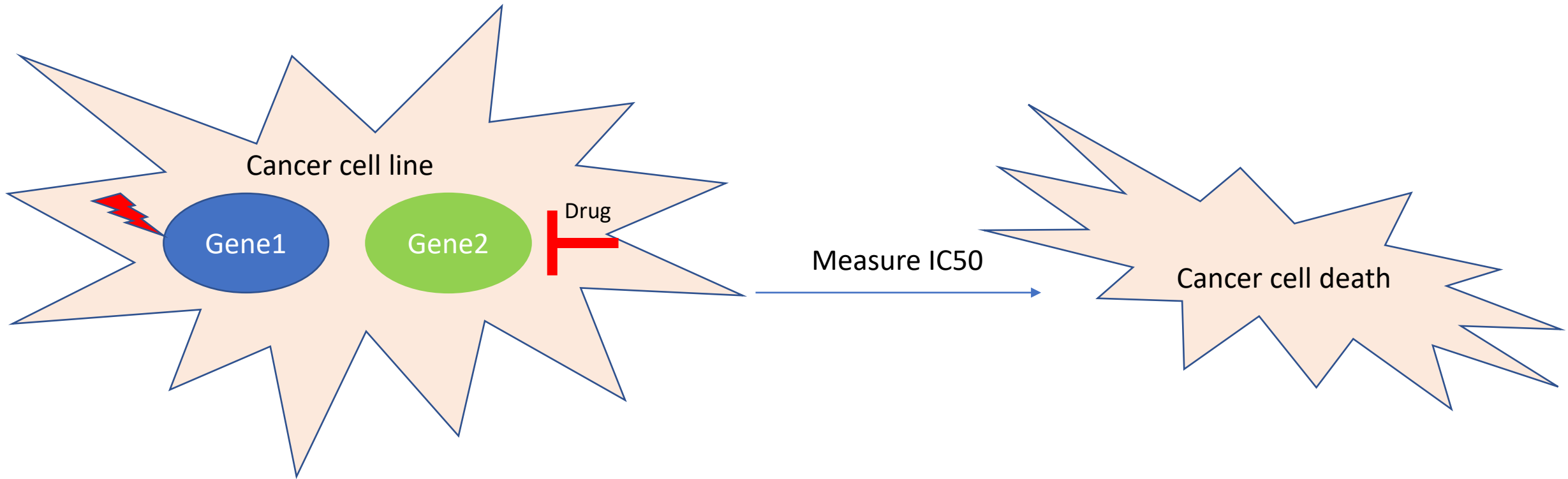

❖ To assess the drug-targetability of the SL gene (gene2) in cancer cell lines where the primary gene (gene1) is mutated, *DrugSensitivity* is calculated using the Genomics of Drug Sensitivity in Cancer (GDSC) project data.

❖ Cancer cell lines carrying mutation in the primary gene is collected from COSMIC mutation data.
   Samples are stratified in two groups: with mutation in gene1 and without mutation in gene1.

❖ T-test is performed with GDSC drug LN IC50 values between these two groups of cell lines (+/- mutation in gene1) to check whether drug sensitivity ($-\log_{10}(IC50)$) for targeting gene2 is more in cells carrying mutation in gene1.