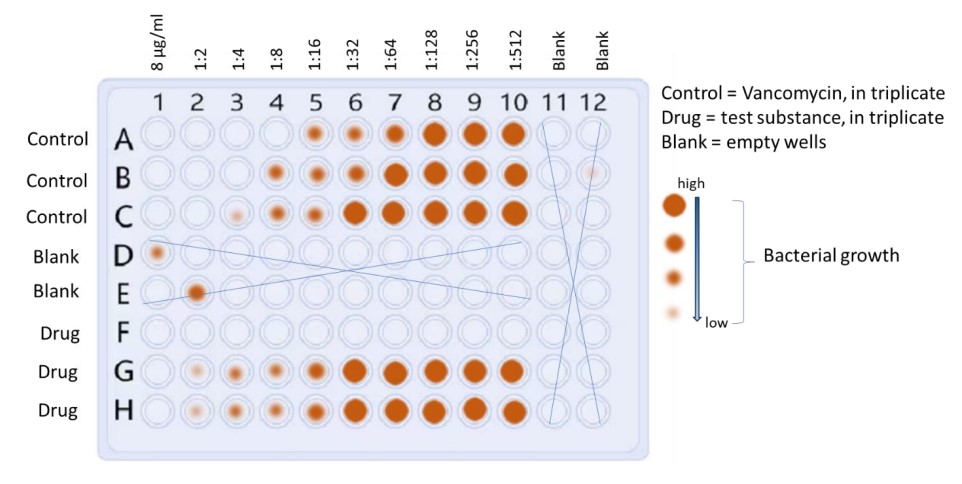
# Data Interpretation

## MIC Assay Result Analysis



**Plate Layout and Observations:**

The image depicts a 96-well plate used in a Minimum Inhibitory Concentration (MIC) assay to assess the effectiveness of an antibiotic (Vancomycin) and a test drug against Staphylococcus aureus bacteria. Each well represents a specific concentration of the drug or control. Orange circles represent the observed size of bacterial pellets, indicating growth.

Rows D and E, and columns 11 and 12 are blank (marked with 'X'), likely serving as negative controls to ensure the absence of contamination. Each concentration of the control antibiotic and test drug was plated in triplicate (three wells) to account for potential variability.

**Interpretation:**

By analyzing the presence and size of the orange circles, we can infer the growth or inhibition of bacteria at different drug concentrations. In this specific image, it appears that Vancomycin (control antibiotic) effectively inhibits bacterial growth at all tested concentrations (no orange circles observed). This indicates that Vancomycin is potent against the S. aureus strain used in this assay.

**Inference and Next Steps:**

For the test drug, the presence and size of orange circles indicate varying degrees of bacterial growth inhibition. Further analysis is needed to determine the Minimum Inhibitory Concentration (MIC), which is the lowest concentration of the test drug that completely inhibits bacterial growth (no visible orange circles).

## Absorbance Measurement Analysis

## Relative Cell Toxicity Analysis

