The csv file, Assay_Level_QC_Metrics_{barcode_assignment}.csv, scores each viral assay in this experiment against four quality control (QC) tests. The final score per assay is included for easy comparison of assay performance across experiments.

Quality Control (QC) Test #1: Assay Performance Evaluation Based on NTC Sample Results

The first QC test assesses the performance of each assay by examining the percentage of negative results among the NTC (No Target Control) samples.
The result from QC Test #1 is a score per assay. Below are the possible QC Scores that an assay can earn based on this evaluation:

- QC Score = 0: If <=25% of NTC controls are negative for an assay, the assay has failed this test.
- QC Score = 0.25: If the percent of negative NTC controls for an assay is >25% and <=50%, the assay has marginally passed this test.
- QC Score = 0.50: If the percent of negative NTC controls for an assay is >50% and <=75%, the assay has partially passed this test.
- QC Score = 0.75: If the percent of negative NTC controls for an assay is >75% and <100%, the assay has nearly passed this test.
- QC Score = 1: If 100% of NTC controls are negative for an assay, the assay has completely passed this test.

The ideal outcome is for ALL viral assays tested to score 1 for QC Test #1.

Quality Control (QC) Test #2: Assay Performance Evaluation Based on NDC Sample Results

The second QC test assesses the performance of each assay by examining the percentage of negative results among the NDC (No Detection Control) samples.
The result from QC Test #2 is a score per assay. Below are the possible QC Scores that an assay can earn based on this evaluation:

- QC Score = 0: If <=50% of NDC controls are negative for an assay, the assay has failed this test.
- QC Score = 1: If >50% of NDC controls are negative for an assay, the assay has passed this test.

The ideal outcome is for ALL viral assays tested to score 1 for QC Test #2.

Quality Control (QC) Test #3: Assay Performance Evaluation Based on CPC Sample Results

The third QC test assesses the performance of each assay by examining the percentage of positive results among the CPC (Combined Positive Control) samples.
The result from QC Test #3 is a score per assay. Below are the possible QC Scores that an assay can earn based on this evaluation:

- QC Score = 0: If <=50% of CPC controls are positive for an assay, the assay has failed this test.

- QC Score = 1: If >50% of CPC controls are negative for an assay, the assay has passed this test.

The ideal outcome is for ALL viral assays tested, except for no-crRNA, to score 1 for QC Test #3.

Quality Control (QC) Test #4: Assay Performance Evaluation Based on Clinical Sample Results for RNaseP

The fourth QC test assesses the performance of the RNaseP assay (included as a positive internal control for human samples) by examining the percentage of positive results among clinical samples.
The result from QC Test #4 is a score for the RNaseP assay. Below is the explanation of the QC Score that the RNaseP assay can earn based on this evaluation:

- QC Score = 0.XX: The score is the fraction of clinical samples positive for RNaseP out of the total clinical samples tested.

The ideal outcome is for the RNaseP assay to score 1 for QC Test #4.