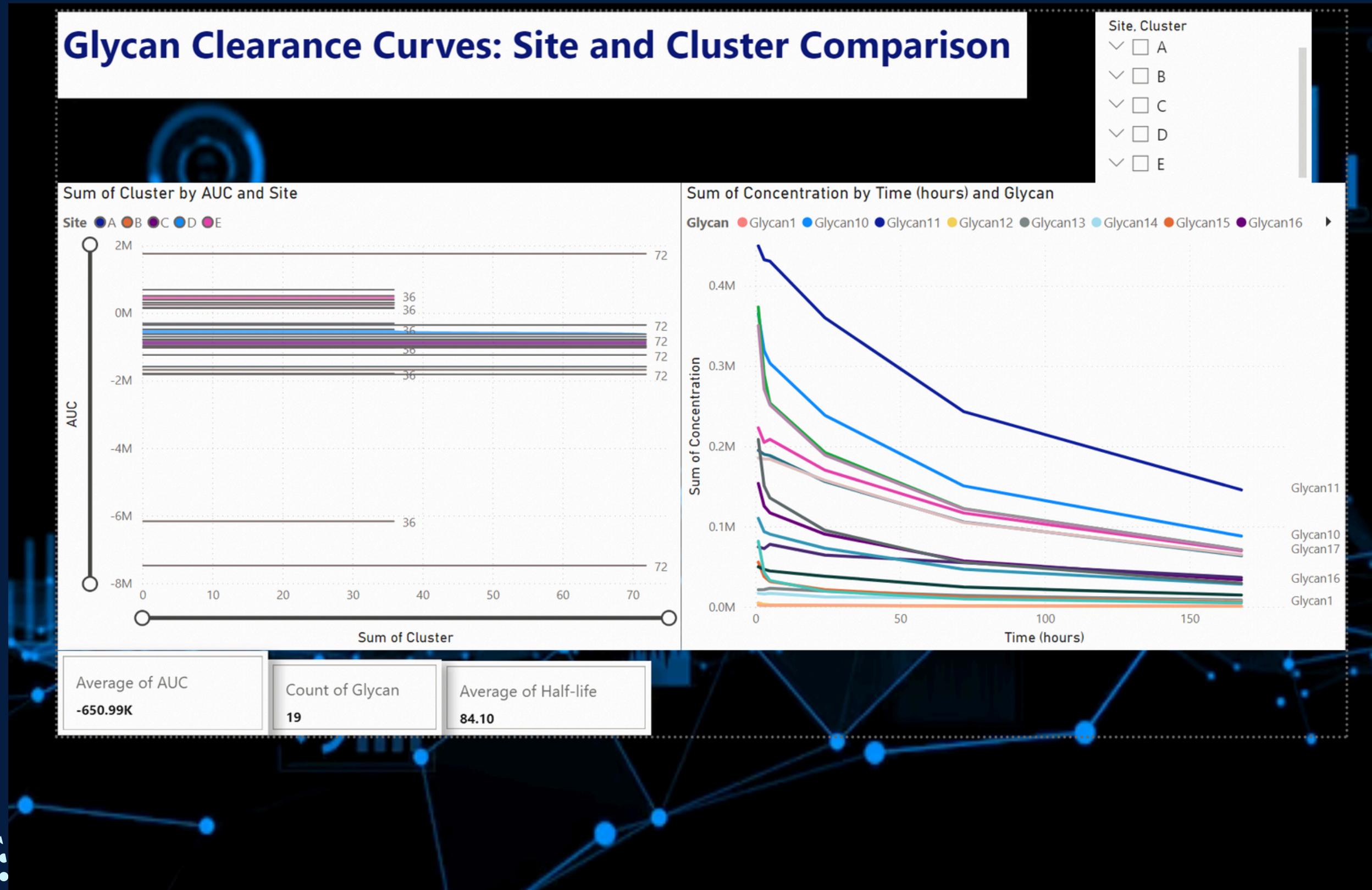
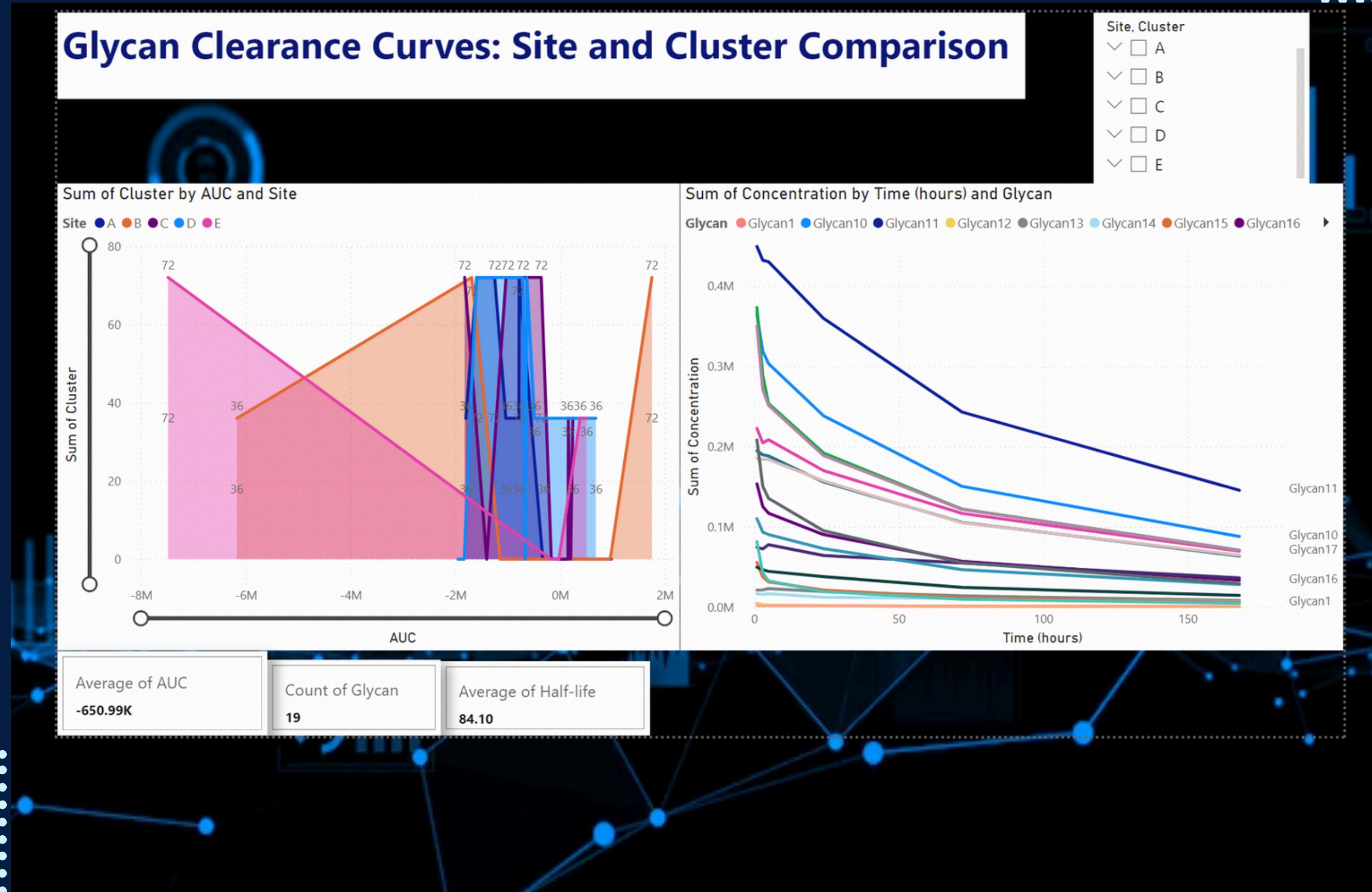


RESULTS AND FINDINGS

1) Overall Result for Site and Cluster Comparison Curves(Stacked Bar chart and Line Chart):

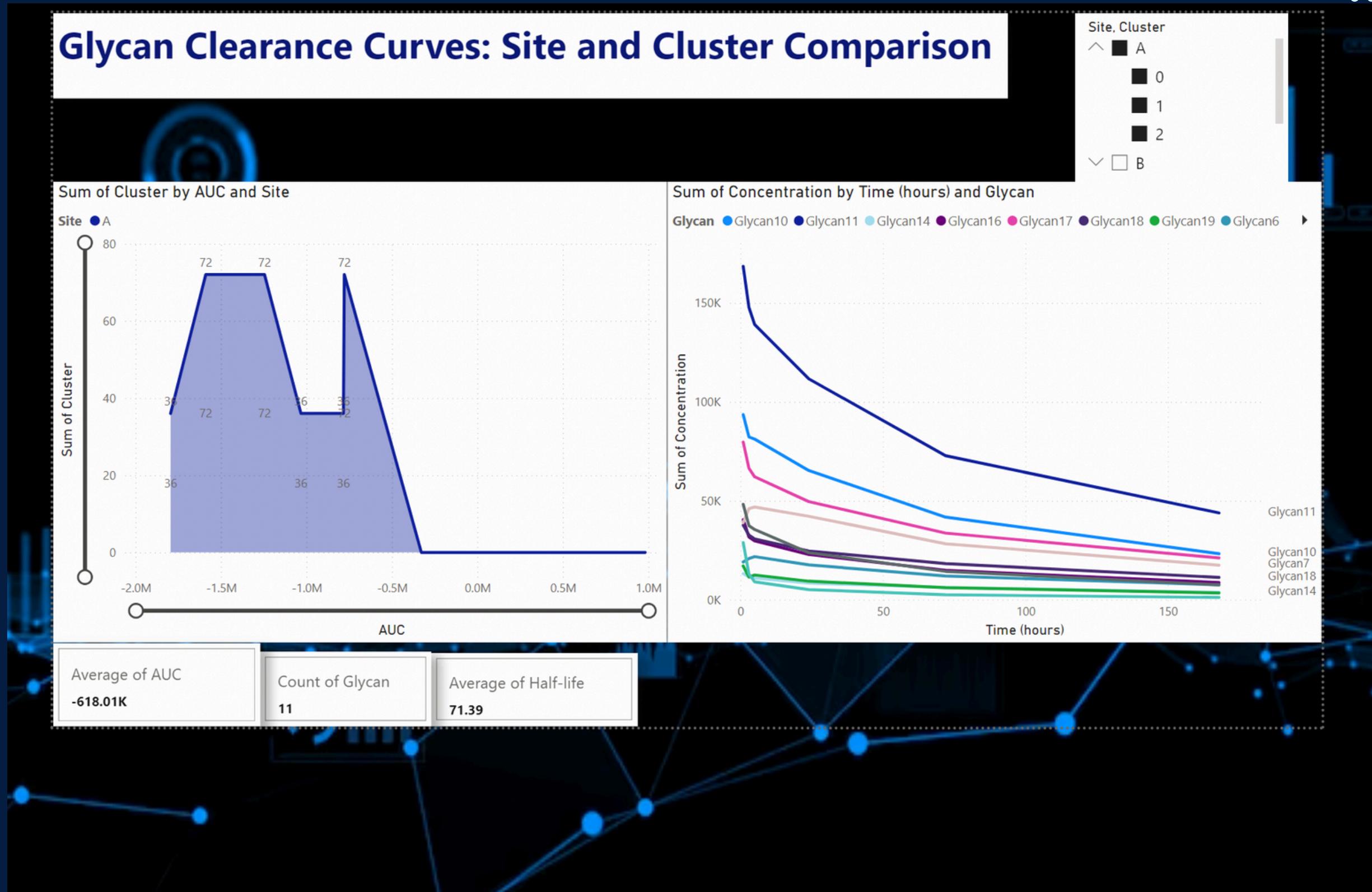


2) Overall Result for Site and Cluster Comparison Curves(Stacked Area Chart and Line Chart):



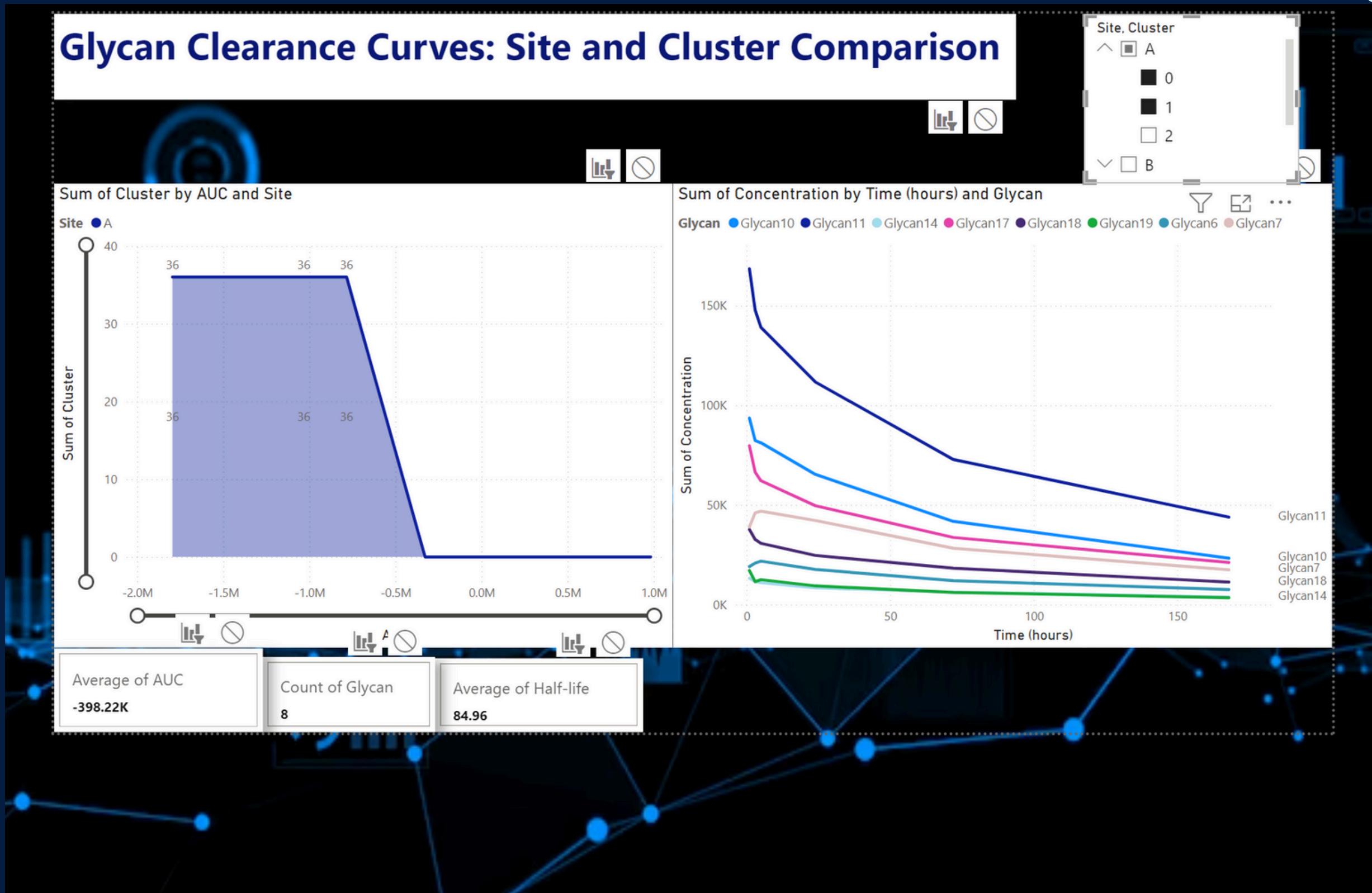
SITE A

- Cluster 0, 1, 2 Comparison using AUC and Glycan Concentration:



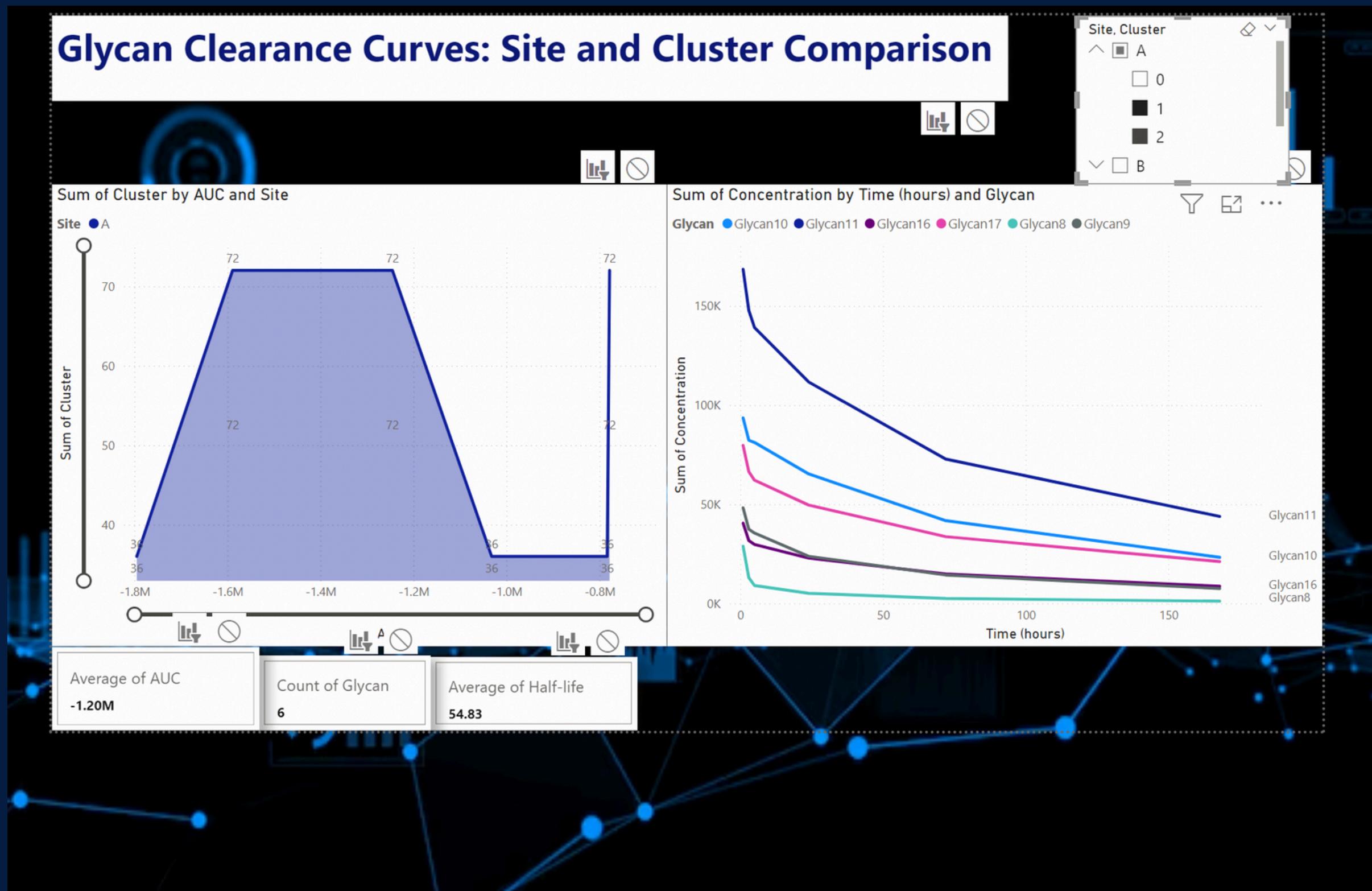
SITE A

- Cluster 0, 1 Comparison using AUC and Glycan Concentration:



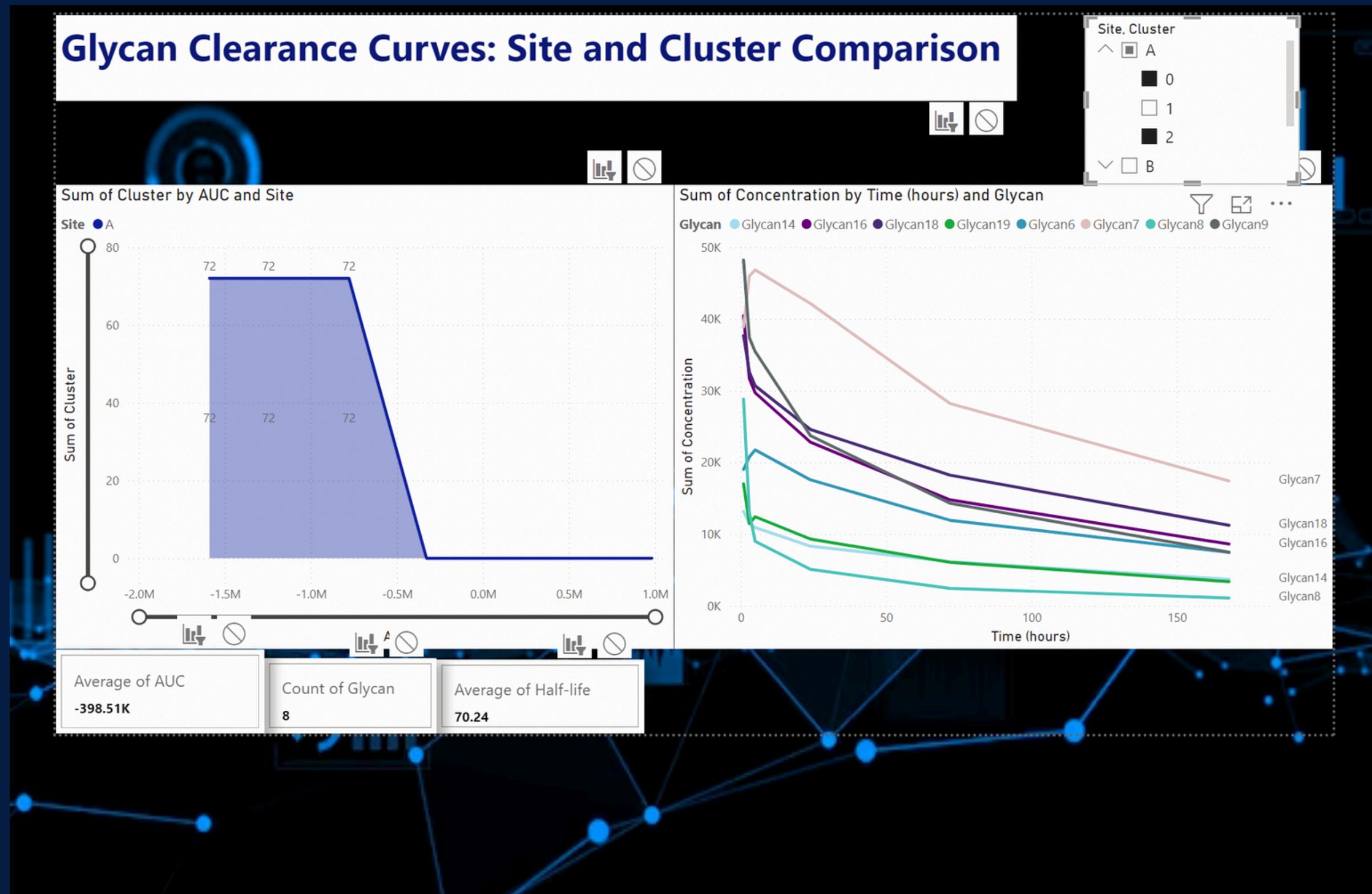
SITE A

- Cluster 1,2 Comparison using AUC and Glycan Concentration:



SITE A

- Cluster 0,2 Comparison using AUC and Glycan Concentration:



SITE A

Plot 1: Glycan Clearance Curve (Concentration vs. Time)

- Key Findings:
 - a. The plot displays glycan concentration over time for various glycans, showing the clearance behavior.
 - b. **Glycan 11 and Glycan 10** exhibit the steepest decline in concentration, indicating rapid clearance from the bloodstream.
 - c. **Glycan 18 and Glycan 14** show a much slower, more gradual reduction in concentration, indicating slow clearance.
 - d. The variance in clearance rates is visually significant, with clear differences in the rate at which glycans are cleared over time.
- Implications:
 - Glycans like **11 and 10** may lead to shorter therapeutic effects due to their rapid clearance.
 - Glycans **18 and 14** would likely have longer-lasting therapeutic effects, potentially being more effective for sustained drug delivery.
 - This plot helps visually identify which glycans can be grouped into clusters of rapid or slow clearance.

SITE A

Plot 2: AUC Distribution by Cluster

- **Key Findings:**

- The plot groups glycans into clusters based on their Area Under the Curve (AUC) values, a measure of the total exposure of glycans over time.
- **Cluster 0** contains glycans with low AUC, indicating they clear quickly and thus provide shorter exposure times.
- **Cluster 2** shows high AUC values, reflecting slow clearance and longer glycan exposure in the bloodstream.
- **Cluster 1** represents glycans with moderate AUC values, displaying intermediate clearance behavior.