I. Background
The rapid emergence and spread of the Zika virus prompted the increased availability of screening assays in the US. LabCorp launched an RT-PCR-based test (RealStar® Zika Virus RT-PCR, Altona Diagnostics) to quantitatively detect Zika virus RNA in serum and urine (RNA test), and was the first commercial lab to provide the CDC’s MAC-ELISA test for detection of Zika IgM antibodies in serum or CSF (IgM test). This analysis characterizes over 10,000 results from these two tests, providing age, gender, and geographical views of the results.

II. Methods
The data from Zika tests performed between June and mid-September 2016 for both RNA (June to mid-Sept) and IgM tests (mid-Aug to mid-Sept) were downloaded from the LabCorp database and were filtered such that only those with complete records were included in the analysis. For example, records with missing gender data were eliminated. The data were analyzed to determine frequencies of female and male testing, negative vs non-negative results, age distributions, and geography.

III. Results
A total of 11,129 result records, of which 6410 were from the RNA test and 4719 from the IgM test:

- We found negative result rates of 94.2% and 98.2% from the RNA and IgM assays, respectively (Figures 1A and 1B).
- Nearly half of the samples (48.6%) came from Florida, which demonstrated a negative rate of 97.8% (Figure 1A).
- Testing in females represented 78.7% of all samples submitted and 83% of these samples came from patients between the ages of 21-40. Comparatively, 60.6% of male samples came from the 21-40 age group and 15% came from the 41-50 age demographic (Figure 3).
- For the RNA test, we found a concordance rate of 97% between the serum and urine results. For females, the concordance rate was 97.2%, and for males it was 96.3%.
- A statistically significant difference (p=0.0002) in the frequency of urine samples testing positive between females (4.39%) and males (6.67%) was observed. A similar statistically significant difference (p=0.018) was observed between positivity in female serum (3.11%) compared to male serum (4.32%).

IV. Conclusion
Our data represents one of the first characterizations of Zika virus testing in the United States. This early review demonstrates that approximately one in every 25 samples results is presumptive positive/positive result. The high negative result rate from Florida is consistent with the broader screening approach that has occurred due to endemic Zika virus concerns. The significant difference in positive Zika RNA detection in the urine of males versus females was unexpected. The high rate of testing in males was generally a surprise because there is no screening algorithm for males.