Comparison of Turnaround Time (TAT) and Time to Osteolamivir Discontinuation between Two Respiratory Viral Panel Testing (RVP) Methodologies

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Abstract (revised)

Background
Respiratory viral infections contribute to many emergency room visits and hospitalisations throughout the year. Rapid detection is crucial for optimal management, appropriate use of antibiotics, avoidance of unnecessary evaluations, decisions on infection control and overall cost savings to the health care system.

Primary Endpoint
Turnaround time (TAT) for RVP result

Secondary Endpoint
Time to discontinuation of oseltamivir following negative RVP result

Methods
All adult inpatients with an RVP test result reported between 12/1/2011-2/28/2012 performed on BDFA were evaluated for average TAT (defined as the time period between when the specimen was received to the time when the result was reported). Among patients with influenza negative RVP results, the time to discontinuation of oseltamivir was also determined.

Results: The average TAT for the LxT testing performed 2.3±0.2 days between 12/1/2011-2/28/2012 (n=230 assays) was 46.4 hours compared to an average TAT of 3.1 hours (p<0.001) for BDFA performed 24 days/3 days per week from 12/1/2012-2/28/2013 (BDFA assays). The average time to discontinuation of oseltamivir among patients with an RVP negative for influenza was 4 and 2 days for the LxT (n=42) and BDFA (n=74) groups, respectively (p=0.001).

Conclusion: Use of BDFA testing has important clinical advantages compared to LxT. Consistent with previous literature showing that the TAT for BDFA is significantly shorter than for LxT testing, we observed an average TAT of 3.1 hours shorter. We also found that the average duration of empitical oseltamivir was reduced by 50% when the RVP was performed with BDFA.

References

Disclosures
The authors of this presentation have no financial interests with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.