platelet count (>31000) and PCT (>0.03) predicted patient survival with 100% specificity and 100% positive predictive value.

Table 1: Demographic and laboratory characteristics of patients with severe and mild/moderate CCHF

|                          | Severe cases | Mild/moderate cases |
|--------------------------|--------------|---------------------|
| Age                      | 45.8 ± 15.6  | 51.8 ± 17.1         |
| Female, %                | 35 (61.4)    | 38 (41.3)           |
| Blood/blood product transfusion | 39          | 42                  |
| IV/G                     | 14           | 5                   |
| Mortality                | 7            | 0                   |
| PCT                      | 0.06 ± 0.07  | 0.08 ± 0.03         |
| PDV                      | 174 ± 1.5    | 168 ± 1.5           |
| MPV                      | 8.6 ± 1.3    | 8.6 ± 1.2           |

Methods. A randomized control trial in a 900-bed tertiary-care academic hospital was conducted between December 2016 and January 2017. Fifty consecutive samples of patients with respiratory infections on our ICU, BMT and Respiratory wards to received either BioFire FilmArray Respiratory Panel (BF) diagnostic testing or our routine diagnostic testing (RO) consisting of an influenza A/B/RSV PCR (in-house) followed by luminex XTAG Respiratory Pathogen Panel that was batched at a reference lab. Five patient charts with missing data were excluded from analysis. Statistical analysis was completed using RStudio Version 1.0.136. - © 2009–2016 RStudio, Inc.

Results. Patients randomized to the BF arm remained on respiratory isolation precautions on average (42.3 ± 72.9 hours) over 100 hours less than patients randomized to the routine arm (151.3 ± 151.8 hours) (95% CI: 35.6–184.4 hours, P = 0.0052).

Conclusion. Implementing the BioFire FilmArray Respiratory Panel decreased infection isolation time by approximately 4 days compared with routine testing; further study is warranted to determine the impact of this technology on patient outcomes and cost benefit.

Table 1: Mean Hours in Respiratory Isolation is Statistically Significantly Decreased with BioFire FilmArray Respiratory Panel

| Arm        | N  | Mean (hours) | SD (hours) | Median (hours) | 95% CI* | P value* |
|------------|----|--------------|------------|----------------|---------|----------|
| BioFire    | 24 | 42.3         | 72.9       | 8.2            | 35.6–184.4 | 0.005253 |
| Routine    | 21 | 152.3        | 151.8      | 670            |         |          |

*Welch two-sample t-test (assumed unequal variance), significance set at p<0.05.