**SDC 1: Comparison of Pathogen Identification by Culture and by PCR**

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| --- | --- | --- | --- |
| **Pathogen** | **Positive by Culture of**  **Blood or Pleural Fluid**  **(% specimens positive)** | **Positive by PCR of**  **Pleural Fluid**  **(% specimens positive)** | **p-value**  **(detection by culture vs. by PCR)** |
| *Streptococcus pneumoniae*  Serotype 19A  Serotype 7F  Serotype 3  Serotype 1 | 15 (24%)  5 (8%)  8 (13%)  1 (2%)  1 (2%) | 45 (71%)  6 (10%)  21 (33%)  6 (10%)  2 (3%) | **<0.001\*\***  1  **0.010\***  0.115  1 |
|  | | |
| *Staphylococcus aureus*  MRSA  MSSA | 4 (6%)  4 (6%)  0 | 5 (8%)  3 (5%)1  2 (3%) | 1  1  0.496 |
|  | | |
| *Streptococcus pyogenes* | 3 (5%) | 7 (11%) | 0.323 |
|  | | |
| *Haemophilus influenzae* | 0 | 1 (2%) | 1 |
|  | | |
| *Mycoplasma pneumoniae* | 0 | 1 (2%) | 1 |
|  | | |
| **Total Specimens Pathogen-Positive** | 22 (35%) | 53(84%)2 | **<0.001\*\*** |

\*

1One patient with a negative PF culture and a blood culture positive for MRSA was negative by PF PCR

2By PCR 59 pathogens were identified from 53 PF specimens; 6 PF specimens were positive for 2 bacteria each;

9 patients had no pathogen identified by culture or PF PCR

\*p < 0.05

\*\*p < 0.001