### Background

FilmArray is a cartridge-based FDA-approved multiplex PCR assay for identification of certain organisms direct from positive blood culture bottles in approximately 90 minutes.

### Aim

To audit the performance of FilmArray BC-ID panel over a four month period (September-December 2013) for identification of organisms from positive paediatric blood cultures in Alder Hey Hospital’s clinical microbiology laboratory.

### Method

The samples were processed in line with manufacturer’s instructions on the BacT/Alert automated blood culture monitoring machine. Once the sample flagged positive and the consultant microbiologist felt a rapid result would impact on patient management a FilmArray test was performed. No funding was received for the consumables in this project from the manufacturers.

### Results

57 samples were included in this study. 51 (89%) samples had organisms which were included in the FilmArray BC-ID panel. 50 (98%) of these 51 samples had agreement between the routine culture and FilmArray result, the predominant isolates identified were Coagulase Negative Staphylococci (CNS) 24/51. The one incorrect result was a technical failure as it was correct on repeat. The patients with samples that grew the 6 organisms not detected by the panel were clinically assessed and the isolates were deemed to be contaminants.

### Conclusion

The FilmArray BC-ID reliably (98% accuracy) offers the potential to identify certain organisms in blood cultures within 90 minutes, with approximately 90% coverage of positive blood cultures from a paediatric hospital.

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