

INTERPRETATION OF BLOOD CULTURE

Clues that a bacteremia represents a true infection:

> 1 blood culture positive for the same organism

1 + BCx for Coagulase-negative staph is **not** usually a true infection

Infection with the same organism at another site- e.g. pneumonia

Time to positive culture < 3 days

Table 1: Chance that a single +BCx for the following organisms represents contamination vs a true infection.

Pathogen	% Contaminants
<i>Staphylococcus aureus</i>	< 1
Enterobacteriaceae eg <i>E. coli</i>	< 1
<i>Pseudomonas aeruginosa</i>	< 1
<i>Streptococcus pneumoniae</i>	< 1
Group A streptococcus	< 1
<i>Candida spp.</i>	< 1
<i>Listeria monocytogenes</i>	< 1
<i>Alpha hemolytic strep (viridans)</i>	48
<i>Coagulase negative staph.*</i>	78
Diphtheroids (not JK)	79
<i>Bacillus spp.</i> (not anthracis)	94
<i>Propionibacterium acnes</i>	99

*Clues to true infection: >1 + BCx WITH same antibiogram, line-related, prosthetic valve, immunocompromised