

Guidance on initial management of positive blood cultures in adults ≥16 years old

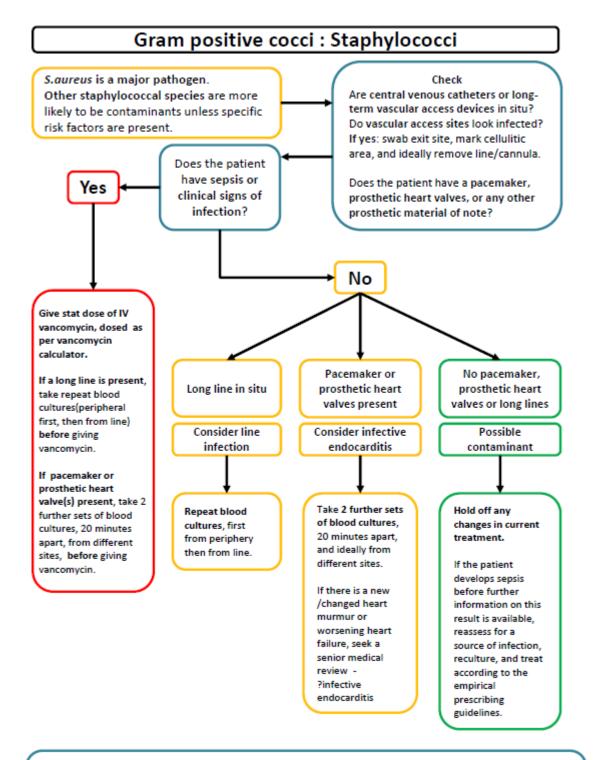
For ANP and medical staff

This document contains information to guide initial management of new positive blood culture results. It can not cover all eventualities, but addresses the most important and frequently encountered scenarios. Note: Gram positive cocci can not always reliably be differentiated into staphylococci or streptococci on microscopy alone. In such situations, please refer to both flowcharts.

All significant blood stream infections will be followed up by the Consultant Microbiology team, either by telephone or in person.

Reference: ADTC 283/04 **Supersedes**: ADTC 283/3 Page 1 of 5 **Written by:** KA Calder and K Hamilton on behalf of the Antimicrobial Management Team (AMT)





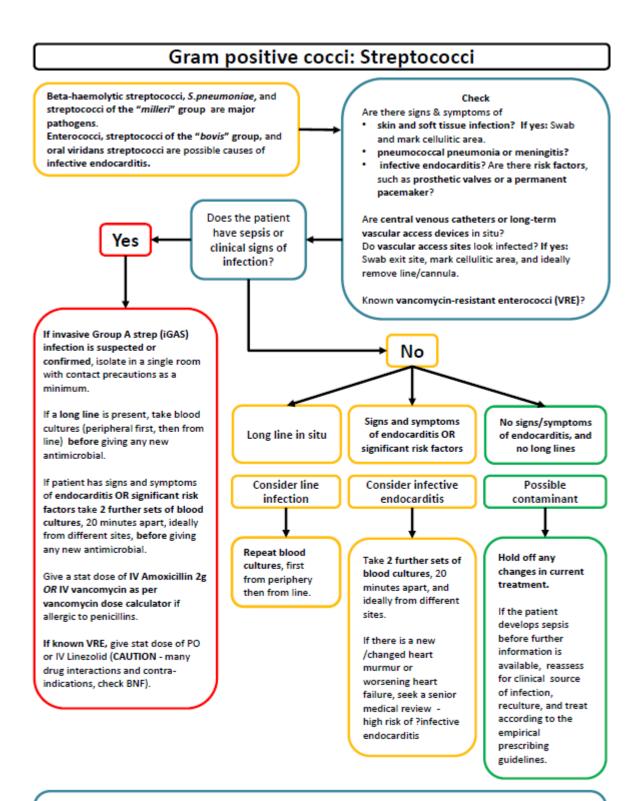
Document result, clinical review, and plan in notes

All S.aureus bacteraemias are followed up by a consultant microbiologist.

Reference: ADTC 283/04 **Supersedes**: ADTC 283/3 Page 2 of 5 **Written by:** KA Calder and K Hamilton on behalf of the Antimicrobial Management Team (AMT)

AREA DRUG AND THERAPEUTICS COMMITTEE





Document result, clinical review, and plan in notes.

Significant isolates are followed up by a by a consultant microbiologist who will advise on further investigations and duration of treatment.

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Gram negative rod/bacillus

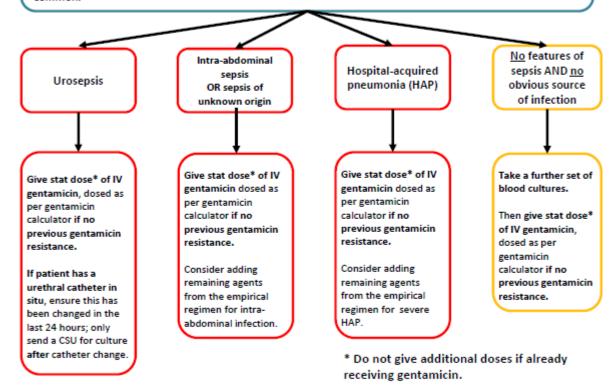
Always consider result to be significant.

E.coli is the most common gram negative organism in blood cultures.

Check

Review <u>all</u> previous microbiological culture results for gram negative organisms RESISTANT to gentamicin. Are there any localising signs or symptoms of infection?

Most frequent sources are urinary or intra-abdominal sepsis; hospital-acquired pneumonia (HAP) is less common.



If there is a contra-indication to gentamicin use, ask for senior clinical review.

If the blood culture was drawn after ≥2 doses of gentamicin, and there are no known gentamicinresistant organisms, review for deep seated infections requiring (surgical) source control. If the
patient is septic or in septic shock ask for urgent senior clinical review.

If previous cultures show gentamicin-resistant gram negatives and no other suitable IV antimicrobials were reported, contact the duty microbiologist for advice.

Document result, clinical review, and plan in notes.

All cases of gram negative bacteraemia are followed up by a consultant microbiologist who will advise on further investigations and duration of treatment.

Reference: ADTC 283/04 **Supersedes**: ADTC 283/3 Page 4 of 5 **Written by:** KA Calder and K Hamilton on behalf of the Antimicrobial Management Team (AMT)



Yeast

Always consider result to be significant.

Candidaemia has a high mortality rate if untreated (60%).

Patients may not immediately appear to be clinically unwell.

Check

Are central venous catheters or long-term vascular access devices in situ?

Have any Candida species been isolated in the past? Review reported susceptibility to fluconazole.

Has patient received any antifungal treatment or prophylaxis recently?

Are there signs & symptoms of infective endocarditis?

Assess patient for the following additional risk factors: diabetes, cancer, age >65 yrs, neutropenia, recent azole treatment, previously isolated azole-resistant yeasts, haemo-dynamic instability

One or more risk factors present OR suspected endocarditis

No risk factors present

Repeat blood culture and give a stat dose of IV caspofungin 70mg.

If the patient has a long line in situ, take repeat peripheral blood cultures first, and then repeat blood cultures from the line, before giving IV caspofungin. Avoid using the line.

Repeat blood culture and give a stat dose of IV fluconazole 800mg (unlicensed dose).

If the patient has a long line in situ, take repeat peripheral blood cultures first, and then repeat blood cultures from the line, before giving IV fluconazole. Avoid using the line.

If the patient has <u>possible fungal CNS infection</u> liposomal <u>amphotericin B</u>

(Ambisome) is the antifungal of choice.

Document result, clinical review, and plan in notes.

All cases of candidaemia are followed up by a consultant microbiologist who will advise on further investigations and duration of treatment.

Reference: ADTC 283/04 **Supersedes**: ADTC 283/3 Page 5 of 5 **Written by:** KA Calder and K Hamilton on behalf of the Antimicrobial Management Team (AMT)