



**INTEGRATED PATHOLOGY SERVICE
MICROBIOLOGY DOCUMENT
WEST SUSSEX**

**Pathology User Manual
Microbiology Investigations
Antibiotic Assays
[PD-MIC-UMAntibAssay]**

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Antibiotic Assays

Only routinely available for Gentamicin and Vancomycin.

Sample Type: Clotted blood.

1. Gentamicin monitoring for once daily regime

Once daily regime needs single level 6 – 14 hours post dose.

Gentamicin monitoring is a medical procedure/ Do not delegate it to the nursing staff.

Dose: Follow the 5 mg/kg regime (“grey book”)

Levels: A single serum level 6 – 14 hours after initial dose.

Request form: Blood sciences.

Specimen: Clotted blood sample.

Details: Exact time of dose (start of infusion) and blood sample must be recorded

OR exact time post dose (e.g. 12 hours post dose).

Practical points:

- “ If asking the phlebotomist to take blood; you must ensure that the timing of the phlebotomists round will be within the 6 – 14 hour post dose interval.
- “ If asking the phlebotomist to take blood; she/he must be instructed to note the time of the blood sample and the time of the dose must be noted on the request form.
- “ When noting the time of the dose on the request form; this means the actual time the infusion started and not the time it was prescribed for.
- “ Send blood straight to the laboratory and await result before giving next dose.
- “ Out-of-hours. Send the blood to the Clinical Chemistry laboratory and telephone the on-call Clinical Chemist to ask for it to be processed.
- “ If the next dose is not due until within working hours; do not ask for the blood to be processed out-of-hours.
- “ Results will be released to SEMA when available and should be interpreted using the Urban-Craig nonogram.
- “ Thereafter; levels should be monitored (following the same protocol) for a minimum of twice weekly.
- “ If in doubt; telephone a consultant microbiologist for advice.

2. Vancomycin

Dose: usually 1gr bd but this depends on renal function; age etc. (discuss with pharmacy)

Levels: usually trough dose only required which is collected pre 3rd dose unless renal impairment.

Collected immediately prior to the next dose

Give next dose without waiting for the result unless there is a reason to suspect toxicity e.g. sudden change in renal function

Request form: Blood sciences.

Specimen: Clotted blood sample.

Details: Exact time of dose and blood sample must be recorded.

The sample does not need to be processed overnight unless the next dose is being withheld for reasons as above.

See [‘The Guidelines For The Management Of Common Medical Emergencies And For The Use Of Antimicrobial Drugs “The Grey Book”’](#).

3. Other Antibiotic Assays

Chloramphenicol & other aminoglycosides: If used; monitoring will be necessary.

Please discuss with Medical Microbiologist.

For more information – see antibiotic policy in [“The Guidelines For The Management Of Common Medical Emergencies And For The Use Of Antimicrobial Drugs “The Grey Book””](#).
