

Patient Name : Demo Patient Name
Age / Sex : 28 Y / M
Referred By : DEMO HOSPITAL
Centre : HOD Head Office

Lab No : Demo Visit No
Registration On : 21-Jan-25 17:43
Patient ID : UHID.DEMO.001

Semen C/S		Semen Sample
Accession No: DEMO_BARCODE	Collected On: 21-Jan-25 17:43	Received On: 21-Jan-25 19:04
		Approved On: 23-Jan-25 10:38
Organism: Escherichia coli		
Colony Count: CFU/mL		
Antibiotic	Susceptibility	Breakpoint
Amoxicillin/Clavulanic Acid	R	MIC: >=32
Trimethoprim/Sulfamethoxazole	R	MIC: >=320
Colistin	I	MIC: <=0.5
Fosfomycin	S	MIC: <=16
Tigecycline	S	MIC: <=0.5
Ciprofloxacin	R	MIC: >=4
Gentamicin	S	MIC: <=1
Amikacin	S	MIC: 2
Imipenem	S	MIC: <=0.25
Meropenem	S	MIC: <=0.25
Ertapenem	S	MIC: <=0.12
Cefepime	R	MIC: >=32
Cefoperazone/Sulbactam	S	MIC: <=8
Ceftriaxone	R	MIC: >=64
Cefuroxime Axetil	R	MIC: >=64
Cefuroxime	R	MIC: >=64
Piperacillin/Tazobactam	S	MIC: <=4



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Legend:

- S: Susceptible/Sensitive
- I: Intermediate
- R: Resistance
- SDD: Susceptible Dose Dependent
- MIC: Minimum Inhibitory Concentration. Measured in ug/mL

Procedure : Culture/Sensitivity samples are inoculated in Biosafety Type II Cabinet and incubated at 37 degree celsius in BOD Incubator for a period of upto 24-48 Hours and observed for growth of pathogenic bacteria. Subsequently, observations of pathogenic growth are further evaluated for identification and antibiotic/antifungal susceptibility testing on Fully Automated Vitek 2C System.

Detailed Legend:

- S : Susceptible/Sensitive : It implies that isolates are inhibited by the usually achievable concentrations of anti-microbial agent when dosage recommended to treat the site of infection is used.
- I : Intermediate: It includes isolates with antimicrobial agent MICs that approach usually attainable blood and tissue levels, and for which response rates may be lower than for susceptible isolates. The intermediate category implies clinical efficiency in body sites where the drugs are physiologically concentrated or when a higher than normal dosage of a drug can be used.
- R : Resistance: It implies that isolates are not inhibited by the usually achievable concentrations of the agent with normal dosage schedules, and /or that demonstrate MICs or zone diameters that fall in the range where specific microbial resistance mechanisms (e.g. Beta-lactamases) are likely, clinical efficiency of the agent against the isolate has not been reliable shown in treatment studies.

Note: The following conditions can cause a False Negative Culture:

- Patient is on antibiotics. Please repeat culture post therapy.
- Anaerobic bacterial infection.
- Fastidious aerobic bacteria which are not able to grow on routine culture media.
- Besides all these factors, at least in 25-40 % of cases there is no direct correlation between in vivo clinical picture and in vitro culture result

Clinical Remarks: The AST results are in vitro and in vivo clinical results may be unreliable depending upon PK - PD of the patient. Clinical correlation is required.

Advantages of Automated VITEK 2C System:VITEK 2 systems use Advanced Colorimetry™, an identification technology that enables identification of routine clinical isolates. Advanced Colorimetry provides:

- High discrimination between species Low rate of multiple choice and misidentified species
- The system includes an ADVANCED EXPERT SYSTEM (AES) that analyzes MIC patterns and detects phenotypes for most organisms tested. This helps optimize laboratory efficiency for lean laboratory management. Rapid results allow clinicians to discontinue empiric therapy and prescribe targeted therapy, resulting in improved patient outcomes and enhanced antibiotic stewardship. With its ability to provide accurate "fingerprint" recognition of bacterial resistance mechanisms and phenotypes, the ADVANCED EXPERT SYSTEM (AES) is a critical component of VITEK 2 technology. VITEK 2 technology with the ADVANCED EXPERT SYSTEM offers:
- Knowledge base developed from >100,000 references
- >2,000 described phenotypes
- >20,000 MIC distributions
- >100 resistance mechanisms detected
- >99 organisms
- On average, provides a resulting range of five to seven MIC doubling dilutions per antibiotic
- Extended MIC range to enable low-level resistance detection

Advise: Please correlate results with clinical conditions.



This is a Demo Signature
and the doctor's signature should appear here

In case of any unexpected or alarming results, please contact us immediately for re-confirmation, clarifications, and rectifications, if needed.

