PROGRAM Standard Operating Procedure – Laboratory Services	
Title: MIC70500 – Vitek 2 YST Card	Policy Number:
Program Name: Laboratory Services	
Applicable Domain: Lab, DI and Pharmacy Services	
Additional Domain(s):	
Effective Date:	Next Review Date:
Issuing Authority: Director of Health Services	Date Approved:
Accreditation Canada Applicable Standard:	

GUIDING PRINCIPLE:
The Vitek 2 Yeast identification card (YST) is intended for use with the Vitek 2 System for the automated identification of most clinically significant yeasts and yeast-like organisms. Forty-six biochemical tests measure carbon source utilization, nitrogen source utilization and enzymatic activities. Final results are available in approximately 18 hours.

PURPOSE/RATIONALE:
To provide instructions on setting up the Vitek 2 YST card.

SCOPE/APPLICABILITY:
This procedure applies to Medical Laboratory Technologists (MLTs) using the YST card on the Vitek 2 instrument.

SAMPLE INFORMATION:

Type	Yeast and yeast-like organisms
Source	18 to 24 hour culture

REAGENTS and/or MEDIA:

Type	Vitek 2 YST Identification card
Stability	Stable until date of expiration indicated on the container
Storage Requirements	2°C to 8°C
Criteria for rejection	Do not use if: • The expiration date has passed • There are other signs of deterioration

SUPPLIES:

- 0.45% Saline
- Plastic Vitek tubes and caps
- Sterile swabs
- Vitek 2 supplies

EQUIPMENT

- DensiCHEK plus
- Vortex
- Smart Carrier Station and cassettes
- Vitek 2 instrument

SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potential infectious materials or cultures.

- Ensure that appropriate hand hygiene practices be used.
- Lab gown must be worn when performing activities with potential pathogens.
- Gloves must be worn when direct skin contact with infected materials is unavoidable.
- Eye protection must be used when there is a known or potential risk of exposure of splashes.
- All procedures that may produce aerosols, or involve high concentrations or large volumes should be conducted in a biological safety cabinet (BSC).
- The use of needles, syringes and other sharp objects should be strictly limited.

All patient specimens are assumed to be potentially infectious. Routine Practices must be followed. Since viable micro-organisms are used, all cultures must be handled with appropriate precautions. All equipment in contact with cultures should be decontaminated by appropriate methods.

QUALITY CONTROL:

- Refer to MIC60030-Vitek 2 Quality Control for Vitek 2 QC procedures
- Record all results on MIC60032-Vitek 2 Quality Control Results Record

PROCEDURE INSTRUCTIONS:

Step	Action
Setting up YST identification card on Vitek 2	
1	At the SMART CARRIER STATION (SCS): • Ensure that Smart Carrier Station is on • Place cassette on the Smart Carrier Station • Press F1 to erase cassette memory • Cassette ID is SCS and Tech ID is HAWK • At Bench ID type in bench you are working on: urine, wound, QC or testing
2	Place tube with 3 mL saline in first slot.

3	At Lab ID: scan or type in lab accession barcode number. **NOTE:** If isolate is NOT #1, arrow up to change Iso: to correct isolate number
4	Allow cards to come to room temperature before opening the package liner.
5	Scan YST card and place into first slot with blue stick pointing up.
6	Select isolated colonies from a primary isolation plate and inoculate tube to obtain a **1.80-2.20 McFarland** concentration. Use fresh 18 to 72 hour cultures.
7	Cap tube and vortex. If suspension is too heavy, dispense saline into an extra tube to use as a diluent. **NOTE:** Do NOT dilute bacterial suspensions directly from the dispensette. If suspension is too light, add more colonies from the plate.
8	Remove cap from tube and place the blue stick into the McFarland dilution tube and ensure the stick protrudes into the tube.
9	Repeat steps until carrier is full or until all isolates have been processed.

Step	Action
Loading YST identification card onto Vitek 2	
1	Check that the green Cassette Load Station light is on. A blinking light indicates that a cassette must be unloaded before loading a new cassette. If the light is off, the instrument is not ready to accept a cassette.
2	To avoid jams and terminated cards, check that: 1. The blue sticks are inside tubes 2. The caps on the McFarland Standard tubes are removed 3. The cards are sitting level in the cassette slots 4. The cassette is seated properly in the boat when loaded onto the instrument
3	After loading the cassette, wait for the "happy sound". If the Vitek 2 detects a discrepancy between data stored on the SCS and the actual location of cards in the cassette (load errors), the cassette will be returned to the Cassette Load Station and will not process. Use the SCS screen to keep track of which isolate is where: before lifting cassette off of the SCS and placing it into the Vitek 2 instrument, press F3 to review the list of barcode numbers and card types. Check carefully that the barcode number, card type, isolate number and cassette position match the F3 screen. Correct any discrepancies by using the F8 and/or F9 keys. It may be simpler to use F10 to erase the entire cassette and start over.
4	After the cards are loaded, the cassette will travel back to the loading dock. Unload the cassette when light is flashing green.
5	Replace the cassette onto the SCS. Press any key other than F1 to display the load list.
6	Make purity plates using the blue stick and appropriate media.

CROSS-REFERENCES:

- MIC60030-Vitek 2 Quality Control
- MIC60032-Vitek 2 Quality Control Results Record

REFERENCES:

1. bioMérieux. (2014-02). *Vitek 2 Instrument User Manual*, 510731-10EN1
2. bioMérieux. (2016-01). *Vitek 2 Product Information Manual*, 514740-3EN1
3. bioMérieux. (2019-03*). Vitek 2 YST* package insert

APPROVAL:

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Date

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REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0	22 Nov 17	Initial Release	L. Steven
2.0	19 Mar 21	Procedure reviewed and added to NTHSSA policy template	L. Steven