# Evaluation of VITEK MS Prime Bacterial Identification performance in conjunction with a Fully Automated Slide Preparation System in Urine Cultures

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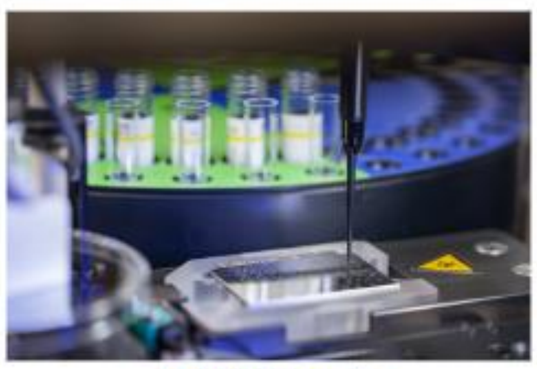
## Background

VITEK MS Prime® (BioMèrieux) is a MALDI-TOF (MT) tool which offers rapid and cost-effective bacterial identification, but manual plate handling, slide spotting, matrix addition and data traceability require a lot of hands-on time. Colibrí® (Copan) is an instrument that automates the picking and deposition of colonies on target slides for MT.

The aim of the present study is to evaluate the identification performance of the VITEK MS Prime ® coupled with the Colibrí®.

## Materials and Methods

Automated WASPLab® solution (Copan)



Colibrí® (Copan)

n=1.484 samples

VITEK MS Prime® (BioMèrieux)

## Results

| Bacterial specie | n | Colibrí correct ID (%) | NO ID (%) |
|---|---|---|---|
| ***Klebsiella spp.*** | 932 | 920 (98.7%) | 12 (1.3%) |
| ***Proteus spp.*** | 224 | 222 (99.1%) | 2 (0.9%) |
| ***Enterococcus spp.*** | 39 | 36 (92.3%) | 3 (7.7%) |
| **Non-Fermentative GNB** | 37 | 37 (100%) | 0 (0%) |
| **Other *Enterobacterales*** | 216 | 213 (98.6%) | 3 (1.4%) |
| ***S.aureus*** | 7 | 7 (100%) | 0 (0%) |
| ***S.saprophyticus*** | 11 | 11 (100%) | 0 (0%) |
| ***S.agalactiae*** | 12 | 12 (100%) | 0 (0%) |
| **Others** | 6 | 5 (83.3%) | 1 (16.7%) |
| **Total** | **1484** | **1463 (98.5%)** | **21 (1.5%)** |

**Table 1. Percentage of bacterial species VITEK MS Prime® identification (ID) picked by Colibrí®.**

## Conclusions

**Colibrí®** has demonstrated **high efficiency and accuracy** in automated slide preparation for the **VITEK MS Prime® system**. The integration of Colibrí® into the automated WASPLab® solution significantly streamlines and standardises manual sample processing. The combination of both instruments **reduces the time** spent on manual management of urine cultures.

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