



Prelim Report

LAB INFORMATION	PATIENT INFORMATION	SPECIMEN INFORMATION
Name: Precision Health Solutions Address: 9675 4th St N St Petersburg, FL 33716 Phone: 727-235-0886 Fax: 833-288-9397 Medical Director: Fatemeh Mousavi, MD CLIA: 10D2181177	Patient: Mickey Mouse DOB: 03/22/1947 Age: 76 Years Gender: Female Patient Address: 123 Lake City: Orlando State: FL Zipcode: 33605	Acc #: D23325555 Facility: Nurse Practitioner Heal Provider: John Smith Collection Date: 11/15/2023 15:00 Received in Lab: 11/15/2023 Resulted Date: 11/16/2023 10:15 Specimen Type: Urine + Clean Catch Color: Other Clarity: Slightly Cloudy

Urine Panel

Result Summary

Organism(s)	Patient Result	Qualitative	Reference Range
Enterococcus faecalis	Detected	Low	Not Detected
Escherichia coli	Detected	High	Not Detected

Resistance Gene Marker	Patient Result	Drug Classes	Contraindicated Medications
erm(A) and erm(B): 23S rRNA (adenine(2058)-N(6))-methyltransferase ErmA and ErmB	Detected	Macrolide,Lincosamide	Azithromylin, Clarithromycin, Erythromycin
mecA: PBP2a family beta-lactam-resistant peptidoglycan transpeptidase mecA	Detected	Betalactam: Penam	Methicillin, Penicillin, Amoxicillin
tet(M):tetracycline resistance ribosomal protection protein Tet(M)	Detected	Tetracycline	Doxycycline, Tetracycline
vanA and vanB: D-alanine--(R)-lactate ligase VanA and VanB	Detected	Glycopeptide	Vancomycin

Lab Comment:

Limitations

Negative results do not preclude a urine infection and should not be used as the sole basis for diagnosis, treatment or other patient management decisions. Positive results do not rule out infection, or co-infection with other pathogens not on our panel. The agent detected may not be the definite cause of disease. The use of additional laboratory testing (e.g. bacterial and viral culture, immunofluorescence and radiography) and clinical presentation must be taken into consideration in the final diagnosis of a Urine. Detection of a marker of antibiotic resistance does not preclude other antibiotic resistance mechanisms not tested for in the panel. Positive detection of an antibiotic resistance marker only indicates that marker is present in the flora in the sample tested and may not indicate potential for use in Urine. Conversion estimates determined by a correlation study, for additional details go to our website: www.precision-healthsolutions.com.



The following organisms and resistance genes were tested using this Urine panel test and are **NOT DETECTED**

Organism(s)	Patient Result	Reference Range
Gram Positive Bacteria		
Enterococcus faecium	Not Detected	Not Detected
Staphylococcus aureus	Not Detected	Not Detected
Staphylococcus saprophyticus	Not Detected	Not Detected
Streptococcus agalactiae	Not Detected	Not Detected
Gram Negative Bacteria		
Citrobacter freundii	Not Detected	Not Detected
Enterobacter cloacae	Not Detected	Not Detected
Klebsiella aerogenes	Not Detected	Not Detected
Klebsiella oxytoca	Not Detected	Not Detected
Klebsiella pneumoniae	Not Detected	Not Detected
Proteus mirabilis	Not Detected	Not Detected
Proteus vulgaris	Not Detected	Not Detected
Pseudomonas aeruginosa	Not Detected	Not Detected
Serratia marcescens	Not Detected	Not Detected
Fungus		
Candida albicans	Not Detected	Not Detected
Parasite		
Resistance Genes		
blaKPC: carbapenem-hydrolyzing class A beta-lactamase KPC(blaKPC)	Not Detected	Not Detected
blaGES: class A beta-lactamase GES(blaGES)	Not Detected	Not Detected
CTXM1 group: Class A beta-lactamase ESBLCTX-M GROUP	Not Detected	Not Detected
blaOXA OXA-48: OXA-48 family class D beta-lactamase OXA (blaOXA)	Not Detected	Not Detected
qnrA and qnrS: quinolone resistance pentapeptide repeat protein QnrA2 and quinolone resistance pentapeptide repeat protein QnrS9	Not Detected	Not Detected
VIM: B1 Beta lactamse VIM	Not Detected	Not Detected

Calling Notes:**Methodology and Intended Use**

Real-Time PCR was performed on genomic DNA extractions using the King Fisher and analyzed on a QuantStudio 7 and 12 Flex Platform. Data was obtained for each assay to detect species specific sequences within a sample. During amplification, sequence specific oligonucleotide probes (dually labeled with a fluorophore and quencher) hybridize to a specific DNA template. The 5'-3' exonuclease activity of DNA polymerase during elongation cleaves the fluorophore from being quenched on the oligonucleotide probe, causing the fluorophore to be excited; emitting fluorescence. The accumulation of fluorescence for each sample, in each well is measured by the instrument software during each cycle of amplification, directly corresponding to amplification of target sequence. The Applied Biosystems™ QuantStudio 7 and 12 Flex system software analyzes the data generated, producing quality scores and confidence values for each assay in each well, for each sample. The Applied Biosystems™ QuantStudio 7 and 12 Flex system software provides a qualitative and quantitative result, the presence or absence of the pathogens or drug resistance markers contained in the panel, along with the internal controls, based upon whether the amplification is above or below the threshold of detection, in conjunction with the quality and confidence values.

The detection and identification of specific pathogens and drug resistance markers from individuals exhibiting signs and symptoms of urinary tract infection (UTI). This test aids in the diagnosis of UTI if used in conjunction with other clinical and epidemiological information. This UTI test is a Laboratory Derived (LDT) qualitative nucleic acid multiplex diagnostic test intended for use on an Applied Biosystems™ QuantStudio 7 and 12 Flex Real-Time PCR System for the simultaneous detection and identification of multiple pathogen nucleic acids in urine samples obtained from individuals exhibiting signs and symptoms of UTI.



Treatment Considerations

The following antibiotic report is based on FDA drug labels and standard practice. All treatment decisions are the responsibility of the ordering physician and should be made in conjunction with a physical assessment including the off-label prescription of antibiotics.

Medications for Oral (PO) Administration

Organism Name	Medication
Enterococcus faecalis	Nitrofurantoin
	Ciprofloxacin
Escherichia coli	Trimethoprim/Sulfamethoxazole
	Cefdinir
	Cefixime
	Cefpodoxime
	Cefuroxime
	Cephalexin
	Nitrofurantoin
	Ciprofloxacin

Medications for Intravenous (IV) Administration
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Organism Name	Medication
Enterococcus faecalis	Meropenem*
	Ciprofloxacin
Escherichia coli	Trimethoprim/Sulfamethoxazole
	Ceftriaxone
	Cefuroxime
	Ertapenem
	Meropenem*
	Colistin
	Ciprofloxacin

Medications for Intramuscular (IM) Administration
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Organism Name	Medication
Escherichia coli	Ceftriaxone
	Ertapenem
	Colistin

*Medication not FDA indicated for this use, but it is frequently used to treat gram neg resistant bacteria in UTIs when no other option is available