URINE-ID™ CASE REVIEW

PATIENT HISTORY

Patient is a 49-year-old female with UTI symptoms, negative culture; allergic to Cipro and Sulfa.

SYMPTOMS/DISEASE STATE

Patient reported burning, frequency, and urgency when urinating for the past several days.

WHY THE TEST WAS ORDERED

Patient's culture came back negative, but patient was exhibiting symptoms of a UTI and was adamant that was the cause of her symptoms. Provider determined the need for Vikor's Urine-ID[™] since patient was not having relief of symptoms.

RESULTS

PATHOGENS DETECTED				
Escherichia coli	1 x 10 ^{*7} copies/uL	90.827%		
Enterobacter aerogenes	1 x 10 ⁶ copies/uL	9.083%	tetM	
Streptococcus agalactiae	1 x 10 ⁴ copies/uL	0.091%		

RESISTANCE GENES DETECTED & POTENTIAL MED CLASS AFFECTED

Tetracycline

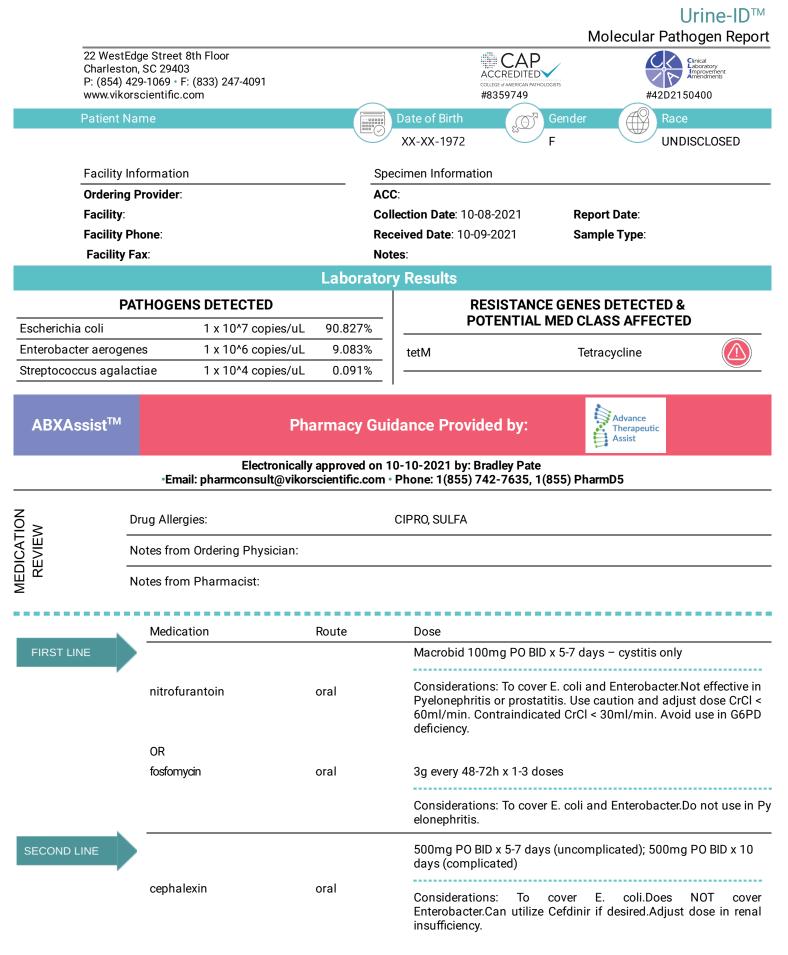


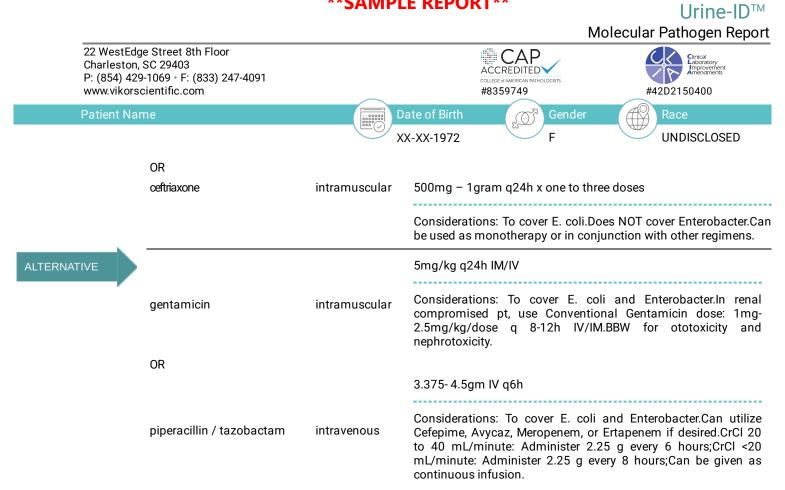
OUTCOME

Cephalexin 500mg PO BID for 7 days. Both the patient and provider were pleased Vikor Urine-ID[™] was able to successfully identify the pathogen of the patient's symptoms and provide PharmD guidance for appropriate treatment. Patient reported that she was relieved of her symptoms after following the recommended treatment regimen.





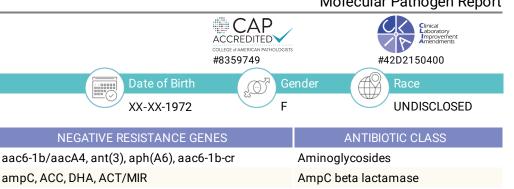




Methodology	The infectious disease and antibiotic resistance detection panels are tested utilizing Real-time PCR technology to detect the presence of genes associated with pathogens and antibiotic resistance via amplification of genomic DNA. Amplification and detection are performed using the Applied Biosystems [™] QuantStudio [™] 12K Flex Real-time PCR system, which includes the QuantStudio [™] 12k Software v1.3 and Thermo Fisher Scientific TaqMan [™] assays. The assays are preloaded onto TaqMan [™] OpenArray plates.
Limitations	This test only detects microorganisms and antibiotic resistance (ABR) genes specified in the panel. ABR genes are detected in the specimen and are not specific to a detected pathogen. ABR genes may be detected in bacterial strains not tested for in the panel.
	The resistance genes for Ampicillin, selected Extended-Spectrum-Betalactamases, Vancomycin, Carbapenems, Sulfonamide, Trimethoprim, Aminoglycosides and the Quinolone gyrase groupings are assays customized by pooling the individual genes listed in the associated group. If listed as positive, this indicates that at least one of the genes in the group was detected and the class of medication could have potential resistance.
Disclaimer	This test was developed and its performance characteristics determined by Vikor Scientific [™] . It has not been cleared or approved by the FDA. The laboratory is regulated under CLIA as qualified to perform high complexity testing. This test is used for clinical purposes. It should not be regarded as investigational or for research. Pharmacy guidance and recommendations therein are not under the purview of the laboratory or agencies which accredit the laboratory.
	The treatment guidance listed in the report is based on infectious disease treatment references, the organisms detected, and genes known to contribute to medication resistance. Important clinical information such as comorbidities, renal function, patient weight, platelet count, microbiology results, etc. may influence the overall appropriateness of therapy. The provided guidance only takes drug allergies into account when they are provided and available to the pharmacist making the recommendation. The overall appropriateness of therapy must be determined by the physician treating the patient. The provided puidence the other make that determination and should take the entire clinical presentation into account when making treatment decisions. Should the treating physician wish to discuss the provided guidance, the pharmacist is available for consult at the email and phone number provided.

Urine-ID[™] Molecular Pathogen Report

22 WestEdge Street 8th Floor Charleston, SC 29403 P: (854) 429-1069 • F: (833) 247-4091 www.vikorscientific.com



Bactrim

Beta-lactams

Carbapenems

Vancomycin

Class A Beta-lactams

ClassA Beta-lactamases

SULL, DFRA

VEB, blaNDM-1, OXA-1, GES, SHV, PER-1, PER-2 VIM, KPC, IMP-7, OXA-48, OXA-23, OXA-72, OXA-40, OXA-58, NDM, blaOXA-48, IMP-16 TEM. TEM E102K. TEM R162S. TEM G238S

CTX-M

ermA, ErmB Macrolides mecA Methicillin mcr-1 Polymyxins QnrB, QnrA, Gyrase A D87N_GTT, Gyrase A Quinolones S83L_TGG

VanB, VanA1, VanA2

Patient Name

NEGATIVE PATHOGENS

Acinetobacter baumannii

Alloscardovia omnicolens

Actinobaculum schaalii

Aerococcus urinae

Atopobium vaginae

Candida albicans

Candida glabrata

Candida parapsilosis

Chlamydia trachomatis

Corynebacterium riegelii Corynebacterium urealyticum

Enterobacter cloacae Enterococcus faecalis Enterococcus faecium Gardnerella vaginalis Haemophilus ducreyi

Klebsiella oxytoca Klebsiella pneumoniae Mobiluncus curtisii, mulieris

Morganella morganii Mycoplasma genitalium,

Neisseria gonorrhoeae

Pseudomonas aeruginosa Serratia marcescens Staphylococcus aureus

Prevotella bivia Proteus mirabilis Proteus vulgaris Providencia stuartii

HPV 16 HPV 18 HSV1 HSV2

hominis

Candida tropicalis

Citrobacter freundii

Candida krusei

BVAB2

			Urine-ID''''
			Molecular Pathogen Report
22 WestEdge Street 8th Floor Charleston, SC 29403 P: (854) 429-1069 • F: (833) 247-4091 www.vikorscientific.com		COLLEGE AF AMERICAN PATHOLOGISTS #8359749	Elinical Improvement #42D2150400
Patient Name	Date of Birth	Gender	
	XX-XX-1972	F	UNDISCLOSED
NEGATIVE PATHOGENS			
Staphylococcus epidermidis			
Staphylococcus saprophyticus			

Treponema pallidum (Syphilis)

Trichomonas vaginalis Uncultured Megasphera 1 Ureaplasma urealyticum Urine-ID[™]