

**Patient: First Last**

DOB: 01-01-1800  
 Gender: U  
 Phone:  
 MRN#: 1234

Physician: Best Physician  
 Facility:  
 Phone:  
 Fax:

Case#: PUXR19-010846-TS  
 Collection Method: Voided  
 Date Collected: 06-25-2019  
 Date Received: 06-26-2019  
 Date Reported: 06-27-2019

**RESULTS: PATHOGENIC DNA DETECTED**

**ORGANISM(S) TESTED - DETECTED:** (See last page for Organism(s) Tested - Not Detected)

- *Citrobacter freundii* >100,000 cells/mL
- *Enterococcus faecalis* >100,000 cells/mL
- *Escherichia coli* >100,000 cells/mL
- *Viridans Group Strep* >100,000 cells/mL
- *Actinotignum schaalii* 50,000-99,999 cells/mL
- *Alloscardovia omnicolens* 50,000-99,999 cells/mL

LEGEND																			
<b>S</b> = Pooled Phenotypic Sensitivity Detected																			
<b>R</b> = Pooled Phenotypic Resistance Detected																			
<b>RGD</b> = Resistance Gene(s) Detected																			
	Levofloxacin	Tetracycline	Ciprofloxacin	Nitrofurantoin	Fosfomycin	Ampicillin	Piperacillin / Tazobactam	Ceftazidime	Sulfamethoxazole / Trimethoprim	Gentamicin	Amoxicillin / Clavulanate	Cefaclor	Ceftriaxone	Meropenem	Vancomycin	Ampicillin / Sulbactam	Cefepime	Cefazolin	Cefoxitin
<b>Formulations</b>	PO/IV	PO	PO/IV	PO	PO	PO/IV	IV	IV	PO/IV	IM/IV	PO	PO	IM/IV	IV	IV	IV	IV	IV	IV
<b>Pooled Phenotypic Sensitivity</b>	S	S	S	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	R
<b>Resistance Gene(s) Detected</b>						RGD	RGD	RGD			RGD	RGD	RGD	RGD	RGD	RGD	RGD	RGD	RGD
<b>MIC Results (ug/mL)</b>	1	2	1	32	64		16/4												

**Organism(s) Tested - Detected:** ✓ = Check marks are supportive data and are NOT patient specific.

<i>Citrobacter freundii</i>	✓	✓	✓	✓			✓	✓	✓	✓			✓	✓			✓		
<i>Enterococcus faecalis</i>	✓	✓	✓	✓	✓	✓	✓				✓			✓	✓	✓			
<i>Escherichia coli</i>	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
<i>Viridans Group Strep</i> ****	✓	✓				✓	✓	✓					✓	✓	✓	✓	✓	✓	
<i>Actinotignum schaalii</i>	✓	✓	✓	✓		✓				✓			✓		✓				
<i>Alloscardovia omnicolens</i>	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓				✓				

✓ = Check marks indicate situations for which antibiotic use is either FDA-approved or off label use for antibiotics is illustrated in peer review literature. References available upon request.

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### POOLED PHENOTYPIC SENSITIVITY DETECTED (S):

- Ampicillin (PO/IV)
- Cefazidime (IV)
- Ciprofloxacin (PO/IV)
- Fosfomycin (PO)
- Levofloxacin (PO/IV)
- Nitrofurantoin (PO)
- Piperacillin/Tazobactam (IV)
- Tetracycline (PO)

### POOLED PHENOTYPIC RESISTANCE DETECTED (R):

- Amoxicillin/Clavulanate (PO)
- Ampicillin/Sulbactam (IV)
- Cefaclor (PO)
- Cefazolin (IV)
- Cefepime (IV)
- Cefoxitin (IV)
- Ceftriaxone (IM/IV)
- Gentamicin (IM/IV)
- Meropenem (IV)
- Sulfamethoxazole/Trimethoprim (PO/IV)
- Vancomycin (IV)

### RESISTANCE GENE(S) DETECTED (RGD):

- Ampicillin Resistance
- Broad Spectrum \*
- Macrolide Resistance
- Vancomycin Resistance

### RESISTANCE GENE(S) TESTED - NOT DETECTED:

- Carbapenem Resistance
- ESBL Resistance \*\*\*
- Methicillin Resistance
- Quino/Fluoroquinolone

### ORGANISM(S) TESTED - NOT DETECTED:

#### BACTERIA:

- *Acinetobacter baumannii*
- *Aerococcus urinae*
- *Citrobacter koseri*
- *Coagulase Negative Staph Group \*\**
- *Corynebacterium riegelii*
- *Klebsiella aerogenes*
- *Klebsiella oxytoca*
- *Klebsiella pneumoniae*
- *Morganella morganii*
- *Mycobacterium tuberculosis*
- *Mycoplasma genitalium*
- *Mycoplasma hominis*
- *Pantoea agglomerans*
- *Proteus mirabilis*
- *Providencia stuartii*
- *Pseudomonas aeruginosa*
- *Serratia marcescens*
- *Staphylococcus aureus*
- *Streptococcus agalactiae*
- *Streptococcus pyogenes*
- *Ureaplasma urealyticum*

#### VIRUS:

- Adenovirus
- BK Virus
- Human Herpes Virus-1,-2 (HSV -1,-2)
- Human Herpes Virus-5 (CMV)
- Human Herpes Virus-6 (HHV-6)
- Human Herpes Virus-7 (HHV-7)
- JC Virus

#### STI:

- *Chlamydia trachomatis*
- *Neisseria gonorrhoeae*
- *Trichomonas vaginalis*

#### YEAST:

- *Candida albicans*
- *Candida glabrata*
- *Candida parapsilosis*

#### References:

- \* Broad Spectrum Resistant genes identified confers resistance across multiple classes of antibiotics including penicillin derivatives, cephalosporins, monobactams and carbapenems
- \*\* Coagulase Negative Staphylococcus includes: *Staphylococcus epidermidis*, *Staphylococcus haemolyticus*, *Staphylococcus lugdunensis*, and *Staphylococcus saprophyticus*
- \*\*\* ESBL Positive for extended-spectrum beta-lactamases (ESBL) which are enzymes that confer resistance to most beta-lactam antibiotics, including penicillins, cephalosporins, and the monobactam aztreonam. Infections with ESBL producing organisms have been associated with poor outcomes
- \*\*\*\* Viridans Group Strep includes: *Streptococcus anginosus*, *Streptococcus oralis*, and *Streptococcus pasteuranus*

**Disclaimer:** This test was developed and its performance characteristics determined by Pathnostics. It has not been cleared or approved by the US Food and Drug Administration. The FDA has determined that such clearance or approvals is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical testing. Urine specimens received greater than 5 days post collection may give unreliable cells/mL counts due to overgrowth of microorganism(s). **Methodology and Clinical Significance:** Microbes and resistance genes are detected through multiplex PCR. Pathogens are reported as: 'no pathogenic DNA detected'. Detected: "<10,000", "10,000-49,999", "50,000-99,999", or ">100,000" organism(s) per milliliter of urine. Resistance genes are either detected or not detected. Minimum inhibitory concentration (MIC) is determined by subjecting the polymicrobial population to a panel of antimicrobial agents. For full methodology visit [pathnostics.com/methodology](http://pathnostics.com/methodology) V10A-2

Electronically Signed By: