

GUIDANCE COMPREHENSIVE

RECURRENT, PERSISTENT, OR COMPLICATED UTI REPORT



Patient:	Ordering Physician:	Case#: TUXR18-004783
DOB: 09/10/2018	Facility:	Collection Method:
Gender:		Date Collected: 09-10-2018
Phone:	Phone:	Date Received: 09-10-2018
MRN#:	Fax:	Date Reported: 09-10-2018

RESULTS: PATHOGENIC DNA DETECTED

Organism(s) Tested - Detected:

<i>Coagulase Negative Staph</i> >100,000 cells/mL	<i>Herpes 6</i>
<i>Enterococcus faecalis</i> >100,000 cells/mL	<i>Herpes 7</i>
<i>Streptococcus agalactiae</i> <10,000 cells/mL	<i>Candida albicans</i> >100,000 cells/mL
<i>Streptococcus pyogenes</i> 50,000-99,999 cells/mL	

See page 3 for organism(s) tested - not detected

Antibiotic Sensitivity Detected:

<i>Amoxicillin / Clavulanate (PO)</i>	<i>Nitrofurantoin (PO)</i>
<i>Cefepime (IV)</i>	<i>Piperacillin / Tazobactam (IV)</i>
<i>Ceftazidime (IV)</i>	<i>Sulfamethoxazole / Trimethoprim (PO/IV)</i>
<i>Gentamicin (IM/IV)</i>	<i>Tetracycline (PO)</i>
<i>Meropenem (IV)</i>	

Antibiotic Resistance Detected:

<i>Ampicillin (PO/IV)</i>	<i>Ceftriaxone (IM/IV)</i>
<i>Ampicillin / Sulbactam (IV)</i>	<i>Ciprofloxacin (PO/IV)</i>
<i>Cefaclor (PO)</i>	<i>Levofloxacin (PO/IV)</i>
<i>Cefazolin (IV)</i>	<i>Vancomycin (IV)</i>
<i>Cefoxitin (IV)</i>	

Antibiotic Resistance Genes Detected:

<i>Macrolide Resistance</i>	<i>Methicillin Resistance</i>
-----------------------------	-------------------------------

GUIDANCE COMPREHENSIVE

RECURRENT, PERSISTENT, OR COMPLICATED UTI REPORT



Patient:

DOB: 09/10/2018

Case#: TUXR18-004783

	Amoxicillin / Clavulanate	Ampicillin	Ampicillin / Sulbactam	Cefaclor	Cefazolin	Cefepime	Cefoxitin	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin	Piperacillin / Tazobactam	Sulfamethoxazole / Trimethoprim	Tetracycline	Vancomycin
Formulations	PO	PO/IV	IV	PO	IV	IV	IV	IV	IM/IV	PO/IV	IM/IV	PO/IV	IV	PO	IV	PO/IV	PO	IV
Pooled Phenotypic Sensitivity	S	R	R	R	R	S	R	S	R	R	S	R	S	S	S	S	S	R
MIC Results (ug/mL)	8/4					4		4			4		1	32	16/4	2/38	2	
Pooled Resistance Gene(s) Identified	RGI	RGI	RGI	RGI	RGI	RGI	RGI	RGI	RGI						RGI			
Bacterial Organism(s)																		
<i>Coagulase Negative Staph</i>	✓								✓	✓	✓	✓	✓			✓		✓
<i>Enterococcus faecalis</i>	✓	✓	✓							✓	✓	✓	✓	✓	✓			✓
<i>Streptococcus agalactiae</i>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
<i>Streptococcus pyogenes</i>	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓				✓	✓

✓ = Supportive Evidence S = Sensitive R = Resistant **RGI** = Resistance Gene Identified

Antibiotics sensitivity testing not routinely performed on Streptococcus pyogenes

GUIDANCE COMPREHENSIVE

RECURRENT, PERSISTENT, OR COMPLICATED UTI REPORT



Patient:

DOB: 09/10/2018

Case#: TUXR18-004783

Organism(s) Tested - Not Detected:

Bacteria: Acinetobacter baumannii, Citrobacter freundii, Enterobacter aerogenes, Escherichia coli, Klebsiella oxytoca, Klebsiella pneumoniae, Morganella morganii, Proteus mirabilis, Pseudomonas aeruginosa, Serratia marcescens, Staphylococcus aureus, Citrobacter koseri, Providencia stuartii, Pantoea agglomerans

Fastidious Bacteria: Actinobaculum schaalii, Aerococcus urinae, Alloscardovia omnicolens, Corynebacterium riegelii, Mycoplasma hominis, Mycoplasma genitalium, Ureaplasma urealyticum, Viridans Group Strep

Yeast: Candida glabrata, Candida parapsilosis

Virus: BK Virus, JC Virus, HSV 1/2, Adenovirus, CMV

Antibiotic Resistance Genes Tested - Not Detected:

ESBL Resistance, Broad Spectrum[^], Carbapenem Resistance, Quino/Fluoroquinone, Ampicillin Resistance, Vancomycin Resistance

Clinically Recommended Antifungal Agents: Amphotericin B (IV), Anidulafungin (IV), Caspofungin (IV), Fluconazole (PO/IV), Isavuconazole (PO/IV), Itraconazole (PO), Micafungin (IV), Posaconazole (PO/IV), Voriconazole (PO/IV)

Antiviral Agents: Cidofovir for BK virus; Cidofovir or Vidarabine for Adenovirus; Foscarnet or Cidofovir for CMV; Acyclovir or Valacyclovir for HSV 1/2 and HHV 6/7. Please refer to DOI: 10.1007/s11918-007-006-7 for further specific treatment information.

Information About the Table: Supportive Evidence indicates situations for which antibiotic use (either FDA-approved or off label) is illustrated in peer reviewed literature. Treatment options are not intended to be prescriptive for this patient. Appropriate medical judgement should be exercised by the attending physician before prescribing a course of treatment. Moreover, changes in research studies may occur. Although we attempt to update the report with new data promptly, we cannot prevent delays. White boxes indicate situations where the pool of organisms was susceptible to an antibiotic and there is supportive evidence for all bacterial organisms listed. In the case for which pooled antibiotic sensitivity could not be performed, highlighted boxes reflect situations for which the antibiotics are clinically recommended for all bacteria listed.

Pooled Phenotypic Sensitivity: Antibiotic susceptibility testing performed when at least a single organism within a pool of organisms reaches at least 10,000 cells/ml and can grow in the presence of the antibiotic in the assay within the time of testing. Antibiotic susceptibility testing is currently unavailable for *Ureaplasma urealyticum*, *Actinobaculum schaalii*, *Aerococcus urinae*, *Alloscardovia omnicolens*, *Corynebacterium riegelii*, *Mycoplasma hominis*, and *Mycoplasma genitalium* due to fastidious characteristics in vitro. Susceptibility testing is not performed for Viridans Streptococci and *Streptococcus pyogenes* because suggested antibiotics have a high efficacy rate.

Pooled Resistance Genes Identified: Detects the presence of targeted resistance genes within the pool of DNA isolated from the detected organisms.

[^]"=Broad Spectrum Resistant genes identified confers resistance across multiple classes of antibiotics including Penicillin derivatives, cephalosporins, monobactams and carbapenems. Refer to table to identify antibiotics for which the resistance gene may impact.

Methodology and Clinical Significance: Pathnostics' Guidance utilizes PCR amplification for the targeted detection of agents. Pathogens are reported in ranges: 'no pathogenic DNA detected'. Detected: "<10,000", "10,000-49,999", "50,000-99,999", or ">100,000" organism(s) per milliliter of urine. Detected resistance genes are shown as RGI (Resistance Gene Identified). In addition, phenotypic antimicrobial susceptibility results are ascertained for the detected polymicrobial population by employing a high-throughput, broth microdilution, spectrophotometric assay in which the detected mono or polymicrobial population is applied to a panel of antimicrobial agent's array on a microplate to determine the minimum inhibitory concentration (MIC).

*Coagulase Negative Staphylococcus includes: *Staphylococcus epidermidis*, *Staphylococcus haemolyticus*, *Staphylococcus lugdunensis*, and *Staphylococcus saprophyticus*

*Viridans Streptococci group 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).

Electronically Signed By : Ryan Gnewuch at 08/30/2018 11:35 am