

# MOLECULAR PATHOLOGY REPORT

<b>FACILITY INFORMATION</b> <b>Facility Name:</b> Facility Demo, LLC. <b>Provider Name:</b> PHYSICIAN DEMONSTRATION M.D. <b>NPI:</b> 100000000 <b>Address:</b> 1500 Interstate 35 Denton, TX 76207 <b>Phone:</b> 940-383-2223	<b>PATIENT INFORMATION</b> <b>Name:</b> HTRXTEST, DEMO <b>DOB:</b> 01/12/1984  <b>Gender:</b> Female <b>Address:</b> 1234 AStreet Dr Denton, TX 79606, Taylor, US <b>Phone:</b> <b>Race:</b> Asian <b>Ethnicity:</b> Hispanic or Latino	<b>SPECIMEN INFORMATION</b> <b>Lab Accession Number:</b> 7941868 <b>Date Collected:</b> 08/04/2022  <b>Date Received by Lab:</b> 08/05/2022 <b>Date Reported:</b> 08/05/2022 <b>Sample Type:</b> Urinary Tract Infection <b>Area of Interest:</b> URINE SWAB <b>Cross Reference #:</b>
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## Urinary Tract Infection Plus Pathogens Detected

### Bacterial Pathogens

	Results	Copies/mL*	Microbial Load*
Enterococcus spp (faecalis, faecium)	Detected	320,000	Moderate
Escherichia coli	Detected	13,000,000	High

**Microbial Load\***  
 \*Approximate copies of target nucleic acid per mL  
 (Low: <100,000;  
 Moderate: 100,000-3.9 Million;  
 High: >3.9Million)

### Quick Summary Antibiotic Table Legend:

(++): BEST ACTIVITY  
 (+): GOOD ACTIVITY  
 (±): VARIABLE ACTIVITY

		Enterococcus spp	Escherichia coli
Penicillins	Ampicillin (IV/IM/po)	+	±
	Amoxicillin (po)	+	±
	Amoxicillin Clavulanic acid (po)	+	+
Fluoroquinolones	Ciprofloxacin (po/OT/OP/IV)	±	+
	Delafloxacin (po/IV)	+	+
	Ofloxacin (po/OT/OP)	±	+
	Levofloxacin (po/OP/IV)	+	+
	Moxifloxacin (po/OP/IV)	+	+
	Norfloxacin (po)	+	+
	Gemifloxacin (po)	+	+
Tetracyclines	Doxycycline (po/IV)	±	±
	Minocycline (po/IV)	±	±
	Omadacycline (po/IV)	+	+
	Tetracycline (po)	±	±
Nitrofurantoin (Macrobid) (po)	+	+	
Phosphidic acid derivative	Fosfomycin (po)	±	+

**Quick Summary Table** above shows potentially effective oral antibiotic(s) for the above-noted bacteria (assumes mono-antimicrobial therapy, unless otherwise specified). Detected antimicrobial resistance gene(s) (as applicable) has(have) been integrated into antibiotic selection. Based on patient-specific clinical data, multi-antimicrobial therapy might be indicated in some cases (see Summary Antibiogram below).\*\*\*

### Comments:

**Antimicrobial Resistance Genes Detected**

**Results**

dfr (A1, A5), sul (1,2)

Detected

! Potential resistance to Trimethoprim and/or Sulfamethoxazole.

**PERSONALIZED SUMMARY ANTIBIOGRAM**

**Antibiotic Table Legend:**

(++): BEST ACTIVITY, >90% of bacterial cultural isolates are sensitive.  
 (+): GOOD ACTIVITY, 70-90% of bacterial cultural isolates are sensitive.  
 (±): VARIABLE ACTIVITY, 50-70% of bacterial cultural isolates are sensitive.  
 (0): Non-Recommended antimicrobial;  
**Note:** Personalized (patient specific) data included in this report, are a correlation of detected microbes and antimicrobial resistance genes (if any), with national antimicrobial sensitivity data.  
 Administration Mode: po = oral, IV = intravenous, IM = intramuscular, OP = ophthalmic, OT = otic.  
 Some antibiotics might not be available in the US (see www.pdr.net, www.drugs.com, or www.rxlist.com for current information).

		Enterococcus spp	Escherichia coli
<b>Penicillins</b>	Penicillin G (IV/IM)	+	0
	Ampicillin (IV/IM/po)	+	±
	Amoxicillin (po)	+	±
	Amoxicillin Clavulanic acid (po)	+	+
	Ampicillin Sulbactam (IV/IM)	+	+
	Piperacillin Tazobactam (IV)	+	+
<b>Carbapenems</b>	Doripenem (IV)	±	+
	Ertapenem (IV/IM)	±	+
	Imipenem (IV/IM)	±	+
	Imipenem Cilastatin Relebactam (IV)	±	+
	Meropenem (IV)	±	+
	Meropenem Vaborbactam (IV)	±	+
<b>Monobactam</b>	Aztreonam (IV/IM)	0	+
<b>Fluoroquinolones</b>	Ciprofloxacin (po/OT/OP/IV)	±	+
	Delafloxacin (po/IV)	+	+
	Oxfloxacin (po/OT/OP)	±	+
	Levofloxacin (po/OP/IV)	+	+
	Moxifloxacin (po/OP/IV)	+	+
	Norfloxacin (po)	+	+
	Gemifloxacin (po)	+	+
	Gatifloxacin (OP)	+	+
<b>Parenteral Cephalosporins</b>	Cefazolin (IV/IM)	0	+
	Cefotetan (IV/IM)	0	+
	Cefoxitin (IV)	0	+
	Cefuroxime (po/IV/IM)	0	+
	Cefotaxime (IV/IM)	0	+
	Ceftizoxime (IV/IM)	0	+
	Ceftriaxone (IV/IM)	±	+
	Ceftazidime (IV/IM)	0	+
	Cefepime (IV/IM)	0	+
	Ceftazidime Avibactam (IV)	0	+
	Ceftaroline (IV)	0	+
	Ceftobiprole (IV)	0	+

		Enterococcus spp	Escherichia coli
	Ceftolozane Tazobactam (IV)	0	+
	Cefiderocol (IV)	0	+
<b>Oral Cephalosporins</b>	Cefadroxil (po)	0	±
	Cephalexin (po)	0	±
	Cefaclor (po)	0	±
	Cefprozil (po)	0	+
	Cefuroxime Axetil (po/IV/IM)	0	+
	Cefixime (po)	0	+
	Ceftibuten (po)	0	+
	Cefpodoxime (po)	0	+
	Cefdinir (po)	0	+
<b>Aminoglycosides</b>	Gentamicin (IV/IM/OP)	±	+
	Tobramycin (IV/IM/OP)	0	+
	Amikacin (IV/IM)	0	+
	Plazomicin (IV)	0	+
<b>Macrolides</b>	Azithromycin (po/IV/OP)	0	±
<b>Tetracyclines</b>	Doxycycline (po/IV)	±	±
	Eravacycline (IV)	+	+
	Minocycline (po/IV)	±	±
	Omadacycline (po/IV)	+	+
	Tetracycline (po)	±	±
<b>Glycylcycline</b>	Tigecycline (IV)	+	+
<b>Glycopeptides Lipopeptide Lipoglycopeptide</b>	Daptomycin (IV)	+	0
	Vancomycin (po/IV/OP)	++	0
	Telavancin (IV)	+	0
	Oritavancin (IV)	+	0
	Dalbavancin (IV)	+	0
<b>Oxazolidinones</b>	Linezolid (po/IV)	+	0
	Tedizolid (po/IV)	+	0
<b>Polymyxin Peptides</b>	Polymyxin B (IV/IM/OP)	0	+
	Colistin (IV/IM/OT)	0	+
<b>Peptidyl transferase inhibitor</b>	Chloramphenicol (OP)	±	+
<b>Nitrofurantoin</b>	Nitrofurantoin (Macrobid) (po)	+	+

## PERSONALIZED SUMMARY ANTIBIOGRAM

		Enterococcus spp	Escherichia coli
Phosphidic acid derivative	Fosfomycin (IV)	±	+
	Fosfomycin (po)	±	+
Streptogramin Combination	Quinupristin Dalfopristin (IV)	+	0

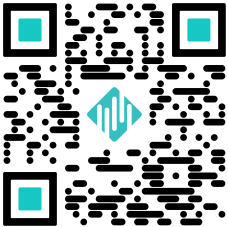
## TESTED ASSAY RESULTS

All tested microbe-related and resistance gene results (see below) are NOT DETECTED (NEGATIVE), unless indicated as DETECTED (POSITIVE), in above Detected Results Summary section.

Candida spp (albicans, glabrata, parapsilosis, tropicalis)	Morganella morganii
Trichomonas vaginalis	Streptococcus pyogenes (Group A strep)
Acinetobacter baumannii	Citrobacter freundii
Enterobacter spp (aerogenes, cloacae)	Enterococcus spp (faecalis, faecium)
Escherichia coli	Klebsiella spp (pneumoniae, oxytoca)
Mycoplasma spp (genitalium, hominis)	Proteus spp (mirabilis, vulgaris)
Pseudomonas aeruginosa	Serratia marcescens
Staphylococcus aureus	Staphylococcus spp (coagulase negative: epidermidis, haemolyticus, lugdunensis, saprophyticus)
Streptococcus agalactiae (Group B Strep)	Ureaplasma spp (urealyticum, parvum)
ACT, MIR, FOX, ACC Groups	SHV, KPC Groups
CTX-M1 (15), M2 (2), M9 (9), M8/25 Groups	IMP, NDM, VIM Groups
OXA-48, 51	qnr A2, B2
ermB, C; mefA	mecA
tet B, tet M	dfr (A1, A5), sul (1,2)
VanA, VanB	

Analyzed by: Carrie Wilks, PhD

Date: 08/05/2022 15:27



## MEET WITH OUR CLINICAL EXPERTS

Real-Time polymerase chain reaction (TaqMan qPCR) was utilized for detection. Microbial sensitivity testing is not performed at this lab. Testing performed by AIT Laboratories (a HealthTrackRx Company; 1500 Interstate 35W, Denton TX 76207; CLIA# 45D2009077). This test was developed and its performance characteristics determined by American Institute of Toxicology, Inc. It has not been cleared or approved by the FDA. However, such approval/clearance is not required, as the laboratory is regulated and qualified under CLIA to perform high-complexity testing. This test is used for clinical purposes, and should not be regarded as investigational or for research.

\*\*National Infectious Disease Consensus Data

\*\*\*Potentially effective oral antibiotics, based on presence of detected microbes, antimicrobial resistance genes, and national antimicrobial sensitivity data (see Summary Antibigram).