



MICROGEN DIAGNOSTICS
2002 W LOOP 289, SUITE 116 | LUBBOCK, TX 79407
FAX: 1 - 407 - 204 - 1401 | PHONE: 1 - 855 - 208 - 0019

Table with patient information: PATIENT, PATIENT NAME, SPECIMEN, URINE DNA, PHYSICIAN, MORRISROE, SHELBY; DOB, MM/DD/YYYY, RECEIVED, MM/DD/YYYY, PHONE, (###)###-####; PATIENT ID, PATIENT ID, COMPLETED, MM/DD/YYYY, FAX, (###)###-####; GENDER, Female, ACCESSION, ACCESSION#, COLLECTED, MM/DD/YYYY

RESISTANCE GENES DETECTED

None

Main diagnostic report table with columns for Gram Stain, Respiration, and Antimicrobial Recommendation. Includes 'LEVEL 2 NGS REPORT' and 'COMPREHENSIVE IDENTIFICATION NEXT-GEN DNA SEQUENCING RESULTS WITH PRIOR PCR RESULTS.' Results include Lactobacillus gasseri (77% NGS) and Cutibacterium acnes (3% NGS).

FUNGI DETECTED % ANTIFUNGAL RECOMMENDATION

Table for Fungi Detected and Antifungal Recommendation. Current result is 'None'.

LAB REPORT KEY

Key explaining symbols used in the report: DNA copies per g, Bacterial Load, Gram Stain, Respiration, and Antimicrobial.

[Handwritten Signature]



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<b>PATIENT</b>	PATIENT NAME	<b>SPECIMEN</b>	URINE DNA	<b>PHYSICIAN</b>	Morrisroe, Shelby
<b>DOB</b>	MM/DD/YYYY	<b>RECEIVED</b>	MM/DD/YYYY	<b>PHONE</b>	(###)###-####
<b>PATIENT ID</b>	PATIENT ID	<b>COMPLETED</b>	MM/DD/YYYY	<b>FAX</b>	(###)###-####
<b>GENDER</b>	Female	<b>ACCESSION</b>	ACCESSION #	<b>COLLECTED</b>	MM/DD/YYYY

qPCR TESTS FOR THE FOLLOWING BACTERIA			FUNGI	STIs	RESISTANCE GENES	
Enterococcus faecalis	Klebsiella pneumoniae	Streptococcus agalactiae	Candida albicans	Chlamydia trachomatis	Vancomycin	Methicillin
Streptococcus pyogenes	Enterococcus faecium	Pseudomonas aeruginosa		Neisseria gonorrhoeae	Beta-lactam	Carbapenem
Staphylococcus aureus	Serratia marcescens	Proteus mirabilis		Mycoplasma genitalium	Aminoglycoside	Macrolide
Escherichia coli	Mobiluncus curtisii	Mobiluncus mulieris		Trichomonas vaginalis	Tetracycline	Quinolone
Gardnerella vaginalis	Staphylococcus saprophyticus	Ureaplasma urealyticum				
Ureaplasma parvum						

### Next Generation Sequencing Results

MicroGen Diagnostics' comprehensive testing (patent pending) is a relative quantitative universal test for bacteria/fungi. DNA sequencing methods are used to identify the microorganisms' genetic signatures and the estimated percentage of organisms present in the specimen. Virtually all bacteria/fungi are screened for and the most predominant populations are reported.

ANTIBIOTIC CLASSES AND MOST-COMMONLY USED EXAMPLES			
CLASS	GENERIC formulations	CLASS	GENERIC formulations
Allylamines	Amorolfine; Naftifine	Flucytosine	5-fluorocytosine (Ancobon)
Aminoglycosides	Gentamycin; Tobramycin	Fluoroquinolones	Norfloxacin(PO); Levofloxacin;
Aminoglycosides+Aminopenicillins	Ampicillin/Gentamicin		Oxaxifloxacin(PO)
Aminopenicillins	Amoxicillin; Ampicillin(PO)	Glycopeptides	Vancomycin; Teicoplanin
Antifolates	TMP/SMX	Imidazoles	Ketoconazole(PO); Clotrimazole;
Anti-Pseudomonal Penicillins	Piperacillin; Nafcillin		Oxiconazole
Anti-Pseudomonal penicillins/Beta-lactamase inhibitors	Piperacillin/Tazobactam	Lipopeptides	Daptomycin
Anti-tuberculosis	Isoniazid; Rifampin; Streptomycin	Macrolides	Erythromycin; Azithromycin(PO)
Aztreonam	Azactam	Naphthyridones	Nalidixic acid
Carbapenems	Cilistatin/Imipenem; Meropenem	Oxacephem	Moxalactam
Cephalosporins First Gen	Cephalexin(PO); Cefazolin	Penicillins	Penicillin G; Penicillin V(PO)
Cephalosporins Fourth Gen	Cefepime	Polyenes	Natamycin; Amphotericin B
Cephalosporins Second Gen	Cefprozil; Cefotetan	Polyenes+Flucytosine	Amphotericin B/5-fluorocytosine
Cephalosporins Third Gen	Cefixime; Cefdinir; Ceftazidime	Quinolones	Ciprofloxacin (PO); Levofloxacin;
Cephams	Cefoxitin		Moxifloxacin(PO)
Echinocandins	Caspofugin; Micafungin	Tetracyclines	Doxycycline(PO); Minocycline
Extended spectrum penicillins / Beta-lactamase inhibitors	Amoxicillin / Clavulanate(PO); Ampicillin / Sulbactam	Triazoles	Fluconazole(PO); Terconazole
		Triazoles+Echinocandins	Voriconazole/Anidulafungin

### Complete Antibiotic Analysis

**ANTIBIOTIC DISCLAIMER:** The above results were run on a lab developed qPCR test run by SkyLine Urology Lab. Please consult this facility for any information regarding the qPCR results. Southwest Regional PCR, DBA MicroGen Diagnostics, LLC assumes no liability to patients with respect to the actions of physicians, health care facilities and other users, and is not responsible for any injury, death or damage resulting from the use, misuse or interpretation of information obtained through this antibiotic report. Therapeutic options listed by the program are based upon national antibiotic susceptibility data and antibiograms. Therapy should not be undertaken without a thorough assessment of the indications, contraindications and side effects of any prospective drug or intervention. Furthermore, the database is curated and derived from incidence and prevalence statistics whose accuracy will vary widely for individual diseases and regions of the country. Changes in endemicity, incidence, and drugs of choice may occur. The list of drugs, infectious diseases and even country names will vary with time. Although we endeavor to include such new information on a timely basis, a delay cannot be avoided. For more information please contact us at 855-208-0019.

**DISCLAIMER:** (i) This test was developed and performance characteristics have been determined by Southwest Regional PCR Laboratory dba MicroGen DX. It has not been cleared or approved by the U.S. Food and Drug Administration (FDA), however, the FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. Its use 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 laboratory testing. (ii) A negative result does not rule out the presence of PCR inhibitors, or DNA extraction inhibitors such as lidocaine, in patients' specimens or microbial DNA concentrations below the level of detection of the assay. (iii) This test is performed pursuant to an agreement with Roche Molecular Systems, Inc. (iv) Relative quantitation of swabs refers to analyte load levels of  $< 10^5$ ,  $10^5$  to  $10^7$ , and  $> 10^7$  for low, medium and high respectively.

#### ANTIBIOTIC ANALYSIS

*This antimicrobial recommendation sheet is not based on antibiotic sensitivities but is based on antimicrobial reference guides such as the John Hopkins ABX Guide.*