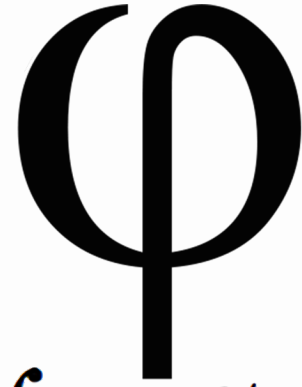




Phi Life Sciences

Precision Health Innovations

October 17, 2023



ABOUT US

- Phi Life Sciences is a Molecular Diagnostic and Laboratory Service company with two convenient locations.
- Our goal is to commercialize novel technologies and develop products that empower physicians to deliver precision treatments and diagnoses by incorporating molecular tests that will improve patients' health.



645 Meeting St., Suite 3
Charleston, SC 29403
CLIA#: 42D2114196
CAP#: 8079143



9430 Key West Ave #130
Rockville, MD 20850
CLIA #: 21D2158103



MOLECULAR INFECTIOUS DISEASE DIAGNOSTICS



Available Infectious Disease Testing

- UTI
- Wound
- Nail
- SARS-CoV-2 / Flu A/B / RSV A/B
- Infectious Disease Report Interpretation

Testing Includes

- Complete test packet for easy sample collection and return to the lab.
- Return shipping and or courier to the laboratory.
- Online results reporting through our HIPAA compliant portal or to your EMR.

UTI PATHOLOGY



Most Common Pathogens Associated with UTI

- E. coli
- S. aureus
- E. faecalis
- K. pneumoniae
- S. pyogenes

Health Issues Associated with UTI

- Death
- Severe Infection
- Can spread elsewhere in the body
- Urinary pain

UTI DIAGNOSTICS

UTI Diagnostic Report

Phi Life Sciences, LLC • 645 Meeting St. Ste 3 • Charleston SC, 29403 • Phone: (888) 576-5445 • CLIA #: 42D2114196 • Laboratory Director: Edwin Naylor, PhD / Eric Johnson, PhD



Phi Life Sciences
Precision Health Innovations

Patient: Doe, Jane
Date of Birth: Jul 26, 1953
Sex: Female

Physician: Smith, John, MDPA
NPI #: 123456789
Practice: Smith, John, MDPA
Anywhere, USA
Phone: (888) 123-4567

Date Collected: Oct 25, 2021
Date Received: Oct 26, 2021
Date Processed: Oct 27, 2021
Specimen type/Source: Urine
Sample ID: UTM10162

1. About This Report

This UTI Assay is a urinary tract infection screen that consists of clinical, molecular tests for microorganisms implicated in UTIs.

2. Molecular Diagnostic Results

UTI	UTI	UTI
- A. baumannii	Negative	- HPV 16
- C. freundii	Negative	- HPV 18
- E. aerogenes	Negative	
- E. cloacae	Negative	
+ E. coli	Positive	
+ E. faecalis	Positive	
- E. faecium	Negative	
- K. oxytoca	Negative	
+ K. pneumoniae	Positive	
+ M. morganii	Positive	
- P. aeruginosa	Negative	
- P. mirabilis	Negative	
- P. stuartii	Negative	
- P. vulgaris	Negative	
- S. agalactiae	Negative	
- S. aureus	Negative	
- S. epidermidis	Negative	
- S. haemolyticus	Negative	
- S. marcescens	Negative	
- S. pneumoniae	Negative	
- S. pyogenes	Negative	
- S. saprophyticus	Negative	

3. Antibiotic Treatment Options

The following table shows common treatment options for organisms assayed as present in this sample, combined with any positive or negative assayed resistance markers. "T" indicates a treatment option; "T:R" indicates a treatment option that may be affected by the detected resistance marker(s).

UTM10162 - Doe, Jane - Reported Oct 28, 2021

The information contained in this report is intended to be interpreted by a licensed physician or other licensed healthcare professional. This report is not intended to take the place of professional medical advice. Decisions regarding use of prescribed medications must be made only after consulting with a licensed physician or other licensed healthcare professional, and should consider each patient's medical history, and current treatment regimen.

Portions © 2014-2021, Coriell Life Sciences Inc.

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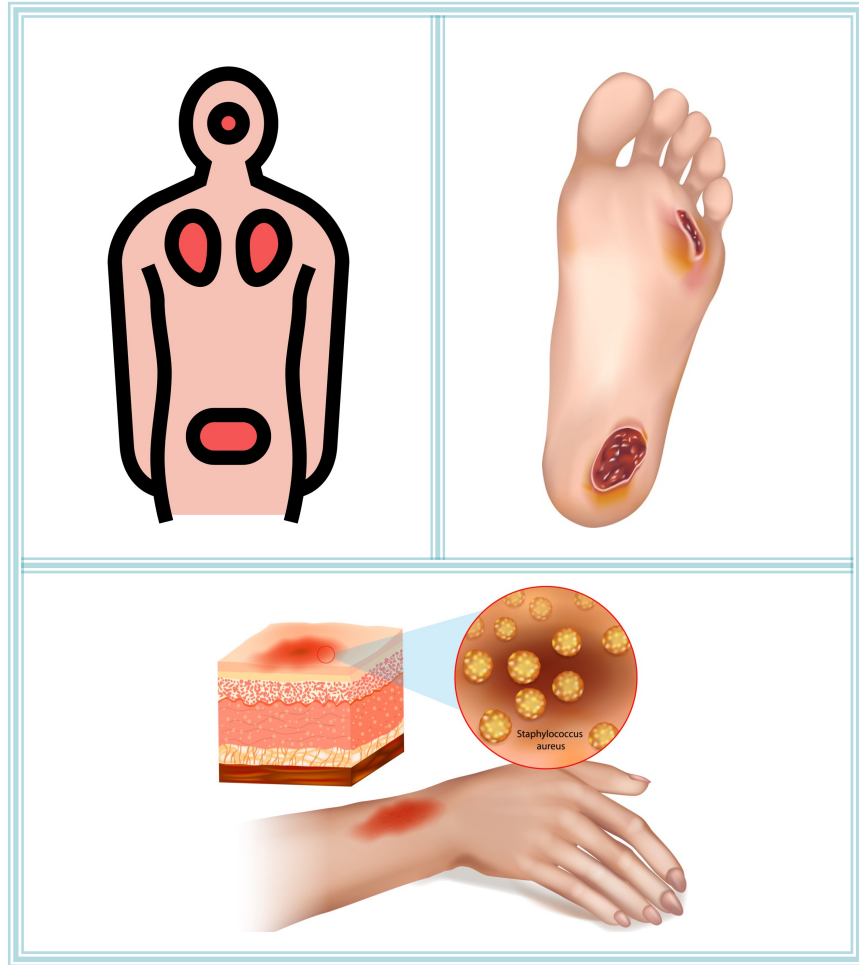
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Pg. 1 of 4

Molecular Pathology

- Acinetobacter baumannii
- Citrobacter freundii
- Enterobacter aerogenes
- Enterobacter cloacae
- Enterococcus faecalis
- Enterococcus faecium
- Escherichia coli
- Human Papillomavirus 16
- Human Papillomavirus 18
- Klebsiella oxytoca
- Klebsiella pneumoniae
- Morganella morganii
- Proteus mirabilis
- Proteus vulgaris
- Providencia stuartii
- Pseudomonas aeruginosa
- Serratia marcescens
- Staphylococcus aureus
- Staphylococcus epidermidis
- Staphylococcus haemolyticus
- Staphylococcus saprophyticus
- Streptococcus agalactiae
- Streptococcus pneumoniae
- Streptococcus pyogenes

WOUND PATHOLOGY



Most Common Pathogens Associated with Wound Infection

- MRSA
- Staph
- E. coli

Health Issues Associated with Wound Infection

- Death
- Severe Infection
- Can spread elsewhere in the body
- Sepsis

NAIL PATHOLOGY



Most Common Pathogens Associated with Nail Infection

- Klebsiella
- Pseudomonas
- Staph
- Lichen Planus
- Psoriasis

Health Issues Associated with Nail Pathogens

- Loss of Nail
- Severe Infection
- Can spread elsewhere in the body
- Appearance

NAIL DIAGNOSTICS

Coriell Dermatological Fungus Report



Coriell Life Sciences • 4747 S. Broad St. Philadelphia, PA • Phone: (800) 555-1212 • Fax: (800) 555-1212
• Web: <http://coriell.com/> • CLIA #: SAMPLE • Laboratory Director: John Doe, M.D.

Patient: Doe, Franklin
Date of Birth: Feb 01, 2009
Sex: M

Physician: Dr. Amy Miller, M.D.
NPI #: 999999999
Practice: Coriell Life Sciences
Philadelphia, PA
Phone: (888) 415-7834

Date Collected: Jan 30, 2019
Date Received: Jan 31, 2019
Date Processed: Jan 31, 2019
Specimen type/Source: Skin
scraping
Sample ID: fungusexemplar

1. About This Report

This Coriell Dermatological Fungus Report consists of clinical, molecular tests for microorganisms implicated in dermatological fungal infections.

2. Molecular Diagnostic Results

Assay Results		Assay Results	
A. fumigatus	Negative	M. nanum	Negative
A. niger	Negative	N. mangiferae	Negative
A. strictum	Negative	P. onychis	Negative
A. terreus	Negative	S. brevicaulis	Negative
+ A. versicolor	Positive	S. dimidiatum	Negative
Alternaria spp.	Negative	S. scabiei	Negative
C. albicans	Negative	T. beigelii	Negative
C. lunata	Negative	T. interdigitale	Negative
C. parapsilosis	Not Tested	T. mucoides	Negative
E. floccosum	Negative	+ T. rubrum	Positive
F. solani	Negative	T. soudanense	Negative
G. candidum	Negative	T. tonsurans	Negative
M. audouinii	Negative	T. violaceum	Negative
M. canis	Negative	Zygosaccharo spp.	Negative
M. gypseum	Negative		

fungusexemplar - Doe, Franklin - Reported Jan 31, 2019 - DRAFT

The information contained in this report is intended to be interpreted by a licensed physician or other licensed healthcare professional. This report is not intended to take the place of professional medical advice. Decisions regarding use of prescribed medications must be made only after consulting with a licensed physician or other licensed healthcare professional, and should consider each patient's medical history, and current treatment regimen. Portions © 2014-2019 Coriell Life Sciences Inc.

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Page 1 of 2

Molecular Pathology not limited to

- Acinetobacter baumannii
- Citrobacter freundii
- Enterobacter aerogenes
- Enterobacter cloacae
- Enterococcus faecalis
- Enterococcus faecium
- Escherichia coli
- Klebsiella oxytoca
- Klebsiella pneumoniae
- Morganella morganii
- Proteus mirabilis
- Pseudomonas aeruginosa
- Serratia marcescens
- Staphylococcus aureus
- Staphylococcus epidermidis
- Streptococcus agalactiae
- Streptococcus pneumoniae
- Streptococcus pyogenes
- Clostridium perfringens
- Corynebacterium striatum
- Finegoldia magna
- Salmonella enterica
- Varicella Zoster

REPORT INTERPRETATION – INFECTIOUS DISEASE

The Infectious Disease report is broken down into four sections.

UTI Diagnostic Report

Phi Life Sciences, LLC • 4155 N. 10th St. • Suite 200 • Phoenix, AZ 85016 • Phone: (480) 570-5115 • CUP® • © 2012 Phi Life Sciences, LLC

Printed: 06/14/2012 10:00 AM
 Patient: John Smith
 Date: 06/14/2012
 Physician: Dr. John Smith
 Date: 06/14/2012
 Address: 1234 Main St.
 City: Phoenix, AZ 85016

1. About This Report

This is a UTI Assay, a rapid, molecular-based assay for the detection of urinary tract infections (UTIs) using a multiplexed PCR assay. The assay is designed to detect the presence of bacteria in the urine, which is a common cause of UTIs.

2. Molecular Diagnostic Results

Organism	CT	Relative Abundance
E. coli	18.5	High
Klebsiella pneumoniae	22.1	Medium
Staphylococcus aureus	25.3	Low
Pseudomonas aeruginosa	28.7	Low
Enterobacteriaceae	30.2	Low
Streptococcus	32.5	Low
Enterococcus	35.1	Low
Legionella	38.9	Low
Chlamydia	40.2	Low
Mycoplasma	42.5	Low
Ureaplasma	45.1	Low
Trichomonas	48.3	Low
Parvovirus	50.1	Low
Adenovirus	52.5	Low
Rotavirus	55.1	Low
Herpesvirus	58.3	Low
Poliovirus	60.1	Low
Measles virus	62.5	Low
Mumps virus	65.1	Low
Varicella-Zoster virus	68.3	Low
Human Immunodeficiency Virus (HIV)	70.1	Low
Human Papillomavirus (HPV)	72.5	Low
Epstein-Barr Virus (EBV)	75.1	Low
Cytomegalovirus (CMV)	78.3	Low
Toxoplasma gondii	80.1	Low
Cryptosporidium	82.5	Low
Isospora	85.1	Low
Cyclospora	88.3	Low
Microsporidia	90.1	Low
Giardia	92.5	Low
Trichinella	95.1	Low
Toxocara	98.3	Low
Strongyloides	100.1	Low

3. Antibiotic Treatment Options

The following table shows common treatment options for organisms assayed as present in this sample. The table is organized by organism, and the treatment options are listed in the right column. The table is organized by organism, and the treatment options are listed in the right column.

Organism	Treatment Options
E. coli	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Klebsiella pneumoniae	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Staphylococcus aureus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Pseudomonas aeruginosa	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Enterobacteriaceae	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Streptococcus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Enterococcus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Legionella	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Chlamydia	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Mycoplasma	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Ureaplasma	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Trichomonas	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Parvovirus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Adenovirus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Rotavirus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Herpesvirus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Poliovirus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Measles virus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Mumps virus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Varicella-Zoster virus	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Human Immunodeficiency Virus (HIV)	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Human Papillomavirus (HPV)	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Epstein-Barr Virus (EBV)	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Cytomegalovirus (CMV)	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Toxoplasma gondii	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Cryptosporidium	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Isospora	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Cyclospora	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Microsporidia	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Giardia	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Trichinella	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Toxocara	Amoxicillin, Ciprofloxacin, Nitrofurantoin
Strongyloides	Amoxicillin, Ciprofloxacin, Nitrofurantoin

SECTION 1: About This Report:

This is a molecular genetics based Assay with antibiotic recommendations based on the genetics.

SECTION 2: Molecular Diagnostic Results:

This is a list of the organisms tested with the positive results highlighted.

SECTION 3: Antibiotic Treatment Options

This table shows common treatment options for organisms assayed as present in this sample.

Organisms are listed in order of relative abundance:

- H**: over 100,000 colonies*
- M**: 10,000 - 100,000 colonies*
- L**: less than below 10,000 colonies*

*Colony counts are approximate.

Any positive or negative assayed resistance markers are shown in the far right column of the table.

T: indicates resistant organism, suggest different treatment option.

T: indicates a treatment option.

If more than one organism tested positive you may be able to select an antibiotic to more effectively treat several of the positive organisms detected.

SECTION 4: Microorganisms test by Phi Life Sciences:

This section demonstrates the targeted assays with cycle times. Generally the lower the CT value the more template present in the initial sample. This is reflected in the relative abundance ranking, H, M, L, indicated in Table 3.

UTI Diagnostic Report

Phi Life Sciences, LLC • 4155 N. 10th St. • Suite 200 • Phoenix, AZ 85016 • Phone: (480) 570-5115 • CUP® • © 2012 Phi Life Sciences, LLC

Printed: 06/14/2012 10:00 AM
 Patient: John Smith
 Date: 06/14/2012
 Physician: Dr. John Smith
 Date: 06/14/2012
 Address: 1234 Main St.
 City: Phoenix, AZ 85016

4. Microorganisms Tested by Phi Life Sciences, LLC

Organism	CT	Relative Abundance
E. coli	18.5	High
Klebsiella pneumoniae	22.1	Medium
Staphylococcus aureus	25.3	Low
Pseudomonas aeruginosa	28.7	Low
Enterobacteriaceae	30.2	Low
Streptococcus	32.5	Low
Enterococcus	35.1	Low
Legionella	38.9	Low
Chlamydia	40.2	Low
Mycoplasma	42.5	Low
Ureaplasma	45.1	Low
Trichomonas	48.3	Low
Parvovirus	50.1	Low
Adenovirus	52.5	Low
Rotavirus	55.1	Low
Herpesvirus	58.3	

CLINICAL ADVANTAGES

- All specimens are run in triplicate to ensure 100% accuracy.
- Molecular testing identifies pathogens 3-5 times faster than traditional testing methods.
- 24-48 hour turn-around for STAT testing.
- Identification of polymicrobial infections.
- Ensures the capturing of antibiotic resistant pathogens.
- Ensures proper antibiotic stewardship for medication management.

CLINICAL ADVANTAGES

- Local representation with immediate service delivery.
- Ability for home and in-clinic testing.
- Self-pay and hardship payment options available.
- Most insurance accepted, with no aggressive billing practices.
- Web portal reporting.
- Clinical support staff available including MD and Nursing.

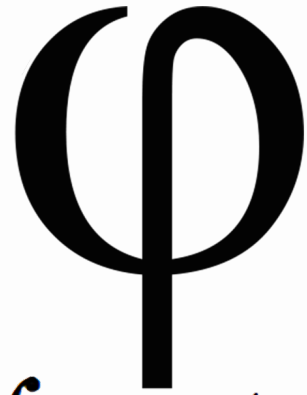
SUMMARY



- **Access to the Latest Molecular Technology**
- **Most comprehensive panels, designed with Clinically Significant Pathogens**
- **24-48 Hour Turnaround Time for STAT tests**
- **Easy to Interpret Reporting**
- **HIPAA Compliant Portal** – Cloud based, easy to use, EMR integration and interpretation guidance when requested.
- **Clinical Training** provided by MD, RN, and Genetic Counselor.

CONTACT US

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- Jay Singh
nyctestingservices@gmail.com
Cell: 607.761.9748



Phi Life Sciences

Precision Health Innovations

Thank you!

Call us at 888.576.5445
info@philifesciences.com



Contamination: van der Zee A, Roorda L, Bosman G, Ossewaarde JM (2016) Molecular Diagnosis of Urinary Tract Infections by Semi-Quantitative Detection of Uropathogens in a Routine Clinical Hospital Setting. PLoS ONE 11(3): e0150755.
doi:10.1371/journal.pone.0150755

Selectivity and Specificity: 99.9%

Collection Devices: Free catch urine or COPAN eSwab

Workflow: Print off order from EMR> label specimen with 2 identifiers>
> Put specimen and order into provided biohazard bag>
> Put biohazard bag in provided pre-labeled FedEx Pak>
> FedEx to Laboratory > Receive results.

