## **Antibiotic Stewardship**

- •Each year in the US, 2 million people acquire serious bacterial infections that are resistant to one or more prescribed antibiotics, and at least 23,000 people die as a direct result of these antibiotic-resistant infections.
- •An estimated 55% of antibiotic prescriptions for Infections are unnecessary.
- •The misuse of antibiotics costs the US healthcare system over \$20 billion each year.

#### **Implications of Antibiotic Resistance**

- •Increases mortality and morbidity from untreatable diseases.
- •Increases risk of global spread of pathogens.
- •Results in longer, more frequent hospital stays.
- •Limits drug options at a time when pharmaceutical companies are developing fewer new antimicrobials.
- •Increases cost of research for new drugs.

#### Who We Are

#### **About Us**

Lab Genomics, LLC, was cultivated with the ideal in mind of providing state of the art molecular genetic testing with the end goal of the best quality of life possible for the patient.

Our goal is to provide cutting edge diagnoses giving physicians and patients the best tools and education for health care decisions. Ultimately having physicians and patients proactive in maintaining one's health.

#### **Questions? Contact Us**



#### LAB GENOMICS, LLC

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# Test (UPX) Rapid Molecular Diagnostic Test



This assay detects presence of microbial DNA from pathogens that can cause UTIs

Provides antibiotic treatment recommendations

Covered by Medicare and most insurances



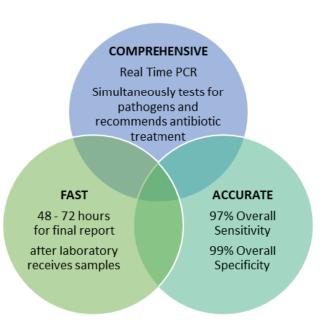
### **Uropathogen Microbial DNA** with Antibiotic Resistance

Physicians receive an easy to read "Detected" or "Not Detected" result for each pathogen

Urinary Pathogen with Guidance - UPX

# 1. Molecular Diagnostic Results A baumann C albicans AmpC resistance (ampC) AmpC resistance (ACT/MIR) AmpC resistance (DHA) Carbapenem resistance (blaOXA-48) Extended-Spectrum-Betalactamase (CTX-Migroup 9

#### Comprehensive, Accurate, and **Fast Results**



# **Urinary Pathogen Test** with Antibiotic Resistance (UPX)

#### **Quick Facts**

- In United States alone annually, UTI infection results in more than 10 million visits to ambulatory care physicians.
- UTI also accounts for a substantial number of antibiotic prescriptions.

#### Traditional culture based technology has limitations:

Subjectivity Long time to report High negative value

#### Benefits of PCR technology offers: Reduce time to results

Accuracy Precise

 This further facilitates actionable results with list of antibiotics to resolve the infection, regardless of number of etiologic agents.

#### **Overlapping Signs and Symptoms:**

- Experiencing recurrent UTI
- Intestinal cystitis
- Pyelonephritis
- Men with UTI
- Men with Prostate Infection
- Pregnant women

55 or older

regimens Immunosuppressed

Past urinary culture results

were contaminated

• On chronic pain care

- Diabetic

## **18 Urinary Pathogens**

#### **Bacterial Targets**

Acinetobacter baumannii Candida albicans Citrobacter freundii **Enterobacter aerogenes** Enterobacter cloacae Enterococcus faecalis Enterococcus faecium Escherichia coli Klebsiella oxytoca Klebsiella pneumoniae Morganella morganii **Proteus mirabilis Proteus vulgaris** Providencia stuartii Pseudomonas aeruginosa Staphylococcus saprophyticus Streptococcus agalactiae Staphylococus aureus

> 18 Urinary Pathogen Detection along with 19 Antibiotic Resistance Targets are reported on the UPX test. Microbial DNA detected and beta lactamase resistance