



MINERVA LABS

Urinary Tract Infection (UTI) Panel

Empowering Precision Healthcare with
Advanced UTI Diagnostics



 **CAP**
ACCREDITED ✓
COLLEGE of AMERICAN PATHOLOGISTS



Clinical
Laboratory
Improvements
Amendments

Minerva Labs

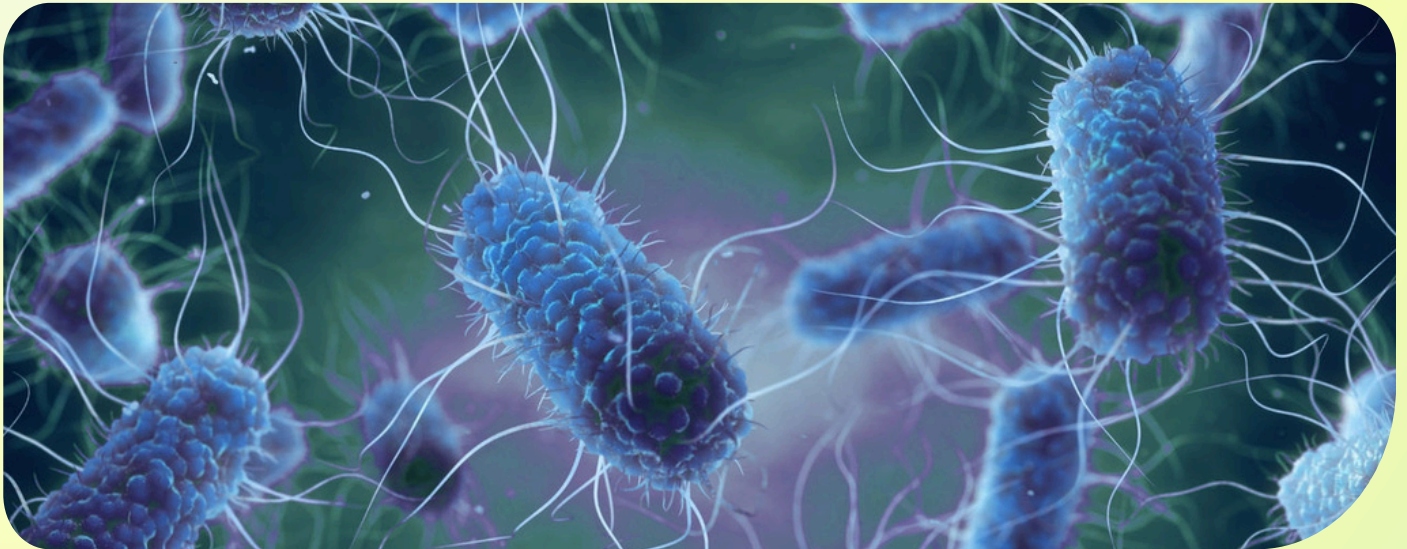
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Introduction to UTI

(Urinary Tract Infection)

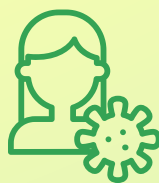


Urinary Tract Infections (UTIs) are one of the most common bacterial infections globally, significantly affecting women's health. While **Escherichia coli** accounts for most cases, other bacteria and fungi also play critical roles, especially in complicated infections.

Key Facts:



UTIs affect approximately **150 million people** worldwide each year.



Over **50% of women** experience at least one UTI in their lifetime.



UTIs lead to over **10 million doctor visits** annually in the U.S.

Characteristics and Diagnosis

Characteristics of UTIs

Symptoms include:



Painful or burning urination (dysuria)



Frequent urination with small output.



Lower abdominal pain or pressure.



Cloudy, foul-smelling, or bloody urine.



Fever and chills, indicative of kidney involvement.

Diagnosis of UTIs:

Traditional Diagnostic	PCR-Based Diagnostics (Offered by Minerva Labs)
Detects pathogens but requires 48–72 hours.	<ul style="list-style-type: none">• Detects bacterial and fungal pathogens with superior speed and accuracy.• Identifies antibiotic resistance markers for personalized treatment.

Associated Diseases

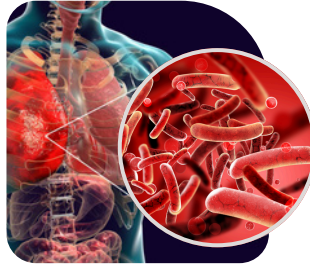
UTIs can lead to severe health complications if untreated, including:

Bacterial Infections:



Escherichia coli:

Causes 90% of uncomplicated UTIs.



Klebsiella pneumoniae:

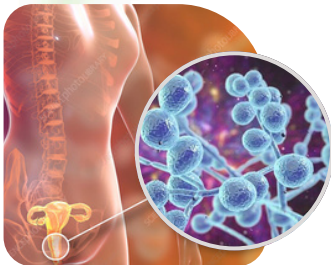
Associated with hospital-acquired infections.



Proteus mirabilis:

Known for causing kidney stones.

Fungal Infections:



Candida albicans:

Common in immunocompromised individuals or catheter users.

Interesting Facts



UTIs are the **second most common** type of infection worldwide.



Recurrence occurs in up to **30% of cases** within six months.



Women are **30 times** more likely to develop UTIs than men.

UTI Testing at Minerva Labs



Pathogens Detected

Bacteria:



Escherichia coli

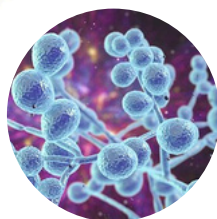


Klebsiella pneumoniae

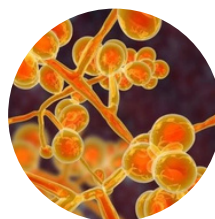


Proteus mirabilis

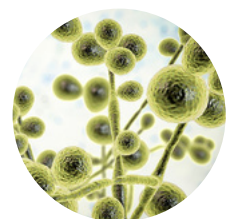
Fungi:



Candida albicans



Candida auris



Candida glabrata

Resistance Genes Detected

- Methicillin/Oxacillin (MRSA)
- Beta-Lactamases (ESBLs, KPC, NDM)
- Fluoroquinolone and Trimethoprim resistance

Measures After Positive Reports

Steps to Take:



Step 1

Start appropriate antibiotic therapy based on **susceptibility results**.



Step 2

Educate patients about hydration and hygiene practices.



Step 3

Schedule follow-ups to **monitor recovery** and prevent recurrence.



Why Choose Minerva Labs for UTI Diagnostics?



Rapid Results:
Delivered within **24-48 hours**.



Resistance Marker Detection: Guides clinicians in effective antibiotic selection.



Comprehensive Pathogen Coverage:
Includes bacterial and fungal pathogens.



Accreditation:
CAP-certified and CLIA-accredited for the highest quality standards.

Antibiotic Stewardship Program



Minerva Labs' Commitment to Responsible Antibiotic Use:

We help clinicians make informed treatment decisions, reducing the risk of antibiotic resistance and improving patient outcomes.

Program Highlights



Detection of resistance genes to guide precise antibiotic use.



Evidence-based recommendations for personalized treatment.



Collaboration with healthcare providers for optimal care delivery.

Benefits



Reduces recurrence and resistance.



Supports efficient and effective treatments.



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Why Minerva Labs?

- ✓ **CAP-certified, CLIA-accredited and COLA accredited** laboratory.
- ✓ **Unmatched accuracy** and rapid results.
- ✓ **Comprehensive reports** tailored to clinicians' needs.

Contact Information:

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