

Laboratory News

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Changes to Urine Culture Reporting

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Effective March 20, Marshfield Labs will make several changes to the urine culture available in our system. These changes will: a) lower the interpretive cut points for which uropathogens are worked up in adults other than women of child bearing age; b) add more interpretive commentary to the culture report.

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Current Testing Options

There are currently three options for urine culture in our system:

1. Urine Culture – with Susceptibilities
The standard diagnostic test for acute cystitis, and for assessing other urological abnormalities.
2. Culture, Urine – Urology Workup This test features a higher level of workup than the standard urine culture. It is intended for patients with serious urological abnormalities managed by urology or are scheduled for certain urological procedures, or both.

3. Urinalysis with Culture if Indicated With this test, every specimen receives a complete urinalysis. Specimens meeting criteria both predictive of UTI and without skin contamination (i.e. greater than 10 leukocytes/high power field AND less than 10 SECs per high power field respectively) will proceed to the standard urine culture (#1, above).

Modifications to Workup and Reporting

These urine culture choices will not change. However, there will be several modifications made to the workup and reporting of the standard urine culture. A summary of these changes are as follows:

1. Level of significance. The cut point for working up 1-2 uropathogens in adults other than women of childbearing age will be lowered one range, from greater than or equal to 100k CFU/mL to 50-100k CFU/mL. This change will both improve sensitivity & negative predictive value and lower specificity & positive predictive values.

The cut points for pediatric patients and women of childbearing age will remain unchanged at greater than 50k & greater than 1k CFU/mL respectively.

2. Reporting commentary will be updated to better assist the clinician with the interpretation of results. A summary of these changes are as follows:
 - a. "Organism(s) present with a low colony count. The significance of this count should be correlated with clinical signs and symptoms. No further work will be performed." This comment will be used when there are 1-2 uropathogens present below the relevant cut point.
 - b. "Growth of additional organism(s) in lower quantity suggests a contaminated specimen." This comment will appear when 1-2 organisms have been reported, but a lesser amount of skin and/or urogenital flora suggestive of a contaminated specimen is present.
 - c. "This organism is not typically considered a uropathogen. Significance should be correlated with clinical signs and symptoms. No further work will be performed." This comment applies to cultures that have 1-2 organisms above the applicable cut point but are not considered a uropathogen.
 - d. "The presence of mixed microbiota can be due to contamination at the time of specimen collection." This comment is applied when the culture consists solely of a mix of skin and/or urogenital flora.

When choosing a urine culture in the ambulatory setting the antimicrobial stewardship program highly recommends Urinalysis with Culture if Indicated. (See also [Diagnostic and Treatment Guidelines](#), Outpatient Treatment, Urinary Tract Infection.)

Cerner Instructions

To find these tests in the Add Orders view in PowerChart, search "culture". (See appendix A).

P ZZTEST, AMANDA - Add Order

ZZTEST, AMANDA **FIN:57345...** **DOB:10/8/2003** **Language:En...** **Sex:Female** **MRN:3023583**
Allergies: No Known Medicat... **Dose Wt:** **Age:19 years** **Code Status:** **Isolation:**
PCP:Test, Med Student Cerner **Clinical Wt:** **Advance Directives:** **HealthLife: No** **Loc:MFD RAD US**
Clinic[Visit Dt:1/31/2023 11:54:43 CSTDisch Dt:1/31/2023 23:... **Research:** **Consulting:** **Attending:**

Diagnoses & Problems

Diagnosis (Problem) being Addressed this Visit

+ Add Convert Display: All

IMO

Annotated Display Code

Problems

+ Add Convert No Chronic Problems

Display: All

IMO

Annotated Display Name of Problem

Enter name to create sequence:

Search: Contains Advanced Options Type: Ambulat

Folder: Search within: All

Acid Fast Bacilli Culture w/ Stain	Culturelle Health and Wellness Vegetaria...
Aerobic Culture w/Sensitivity w/GS	Culturelle Pro-well 3-in-1 oral capsule
AF Culture/Genetic Test (CULAF)	Dermatophyte Culture
AFB Culture w/ Stain	Fibroblast Culture
allogeneic cultured keratinocytes and d...	Fibroblast Culture for Genetic Test (CUL...
Amniotic Fluid Culture/Genetic Test (CU...	Fungus Culture
Anaerobe Culture	Helicobacter pylori Culture (HELIS)
Blood Culture	lactobacillus rhamnosus GG (Culturelle)
Candida Culture	Legionella Culture (LEGI)
Cornea scraping diagnostic smear &/cu...	MRSA Screen Culture
Culture Acid Fast Bacilli w/ Stain	MRSA/MSSA Only Culture
Culture Blood	Mycobacteria Culture Refer ID+Susc (TB...
Culture for Yeast	Mycobacterial Culture
Culture Fungus	Mycobacterial Culture, Blood only (CTB...
Culture Placenta	Post HPC Culture Day 2
Culture, Aerobic - with Susceptibiliti...	Post HPC Culture Day 3
Culture, Group A Strep Only	Post HPC Culture Day 4
Culture, Group B Strep, Female	Pre HPC Culture Day 2
Culture, Strep, Throat Only	Pre HPC Culture Day 3
Culture, TB w/ Stain	Pre HPC Culture Day 4
Culture, Urine-Urology Workup	Staphylococcus Culture
Culture, Urine - with Susceptibilities	Strep, Throat Culture Only
Culture, Yersinia only	Urinalysis with Culture if Indicated
Culture,Staphylococcus Screen	Urinalysis with Culture if Indicated
Culturelle Advanced Immune Defense o...	Urine Culture - with Susceptibilities
Culturelle Baby Grow + Thrive oral liquid	
Culturelle Digestive Health Extra Strengt...	
Culturelle Digestive Health oral tablet, c...	
Culturelle for Kids Hospital Pack oral po...	
Culturelle for Kids oral powder for recon...	
Culturelle for Kids oral tablet, chewable	
Culturelle Gentle-Go Formula Kids oral ...	
Culturelle Health and Wellness oral caps...	

Definitions

- CFU: colony forming units (generally correlating with individual bacterial or yeast cells)
- SEC: squamous epithelial cells
- Uropathogens

Gram negative rods

Staphylococcus aureus

Aerococcus sanguincola

Staphylococcus saprophyticus

Aerococcus urinae

Staphylococcus lugdunensis

Enterococcus spp.

Staphylococcus intermedius group

Beta-hemolytic streptococcus

Staphylococcus schleiferi

Streptococcus pneumoniae

Yeasts

Questions

Calls to the microbiology lab (ext. 16141) to discuss culture workup or results are always welcome.