MEMO



To: Doctors Lab Nursing Home Staff: Resident Physicians, DONs and Personal Nurses
From: Doctors Lab Senior Laboratory Staff
Date: April 18, 2023
Re: Update: Urinalysis+Catalase Reflex to UTI-ID by PCR

Enhanced Urinalysis Reflex to UTI-ID by PCR

In order to improve the Negative Predictive Value of our **Urinalysis Reflex to UTI-ID by PCR Panel**, we have added the Catalase test to strengthen our final determination of calling a urine "negative" and therefore would not reflex it to a UTI-ID by PCR. This was done to minimize the number of "Negative-Not Detected" urines being reflexed for UTI-ID by PCR analysis.

By the addition of the Catalase to our Reflex to our UA Reflex Panel we have significantly improved our Negative Predictive Value of a potential UTI to nearly 100% and therefore we can more confidently rule out the reflex to a UTI-ID by PCR analysis.

Catalase is found in both WBCs and Bacteria. The best Positive Predictive Value of a potential UTI that would indicate a reflex to a UTI-ID by PCR is the presence of both WBCs (pyuria) and Bacteria (bacteriuria). Normal, clean urine has no significant Catalase activity.

A UTI-ID by PCR will be reflexively ordered when 1 or more of the following triggers occurs:

1. Clarity-Cloudy (very)2. Blood-Positive3. Nitrite-Positive4. Leukocyte Esterase-Positive5. Catalase-Positive

Ordering Instructions:

- Order the Urinalysis+Catalase <u>w/ Reflex to UTI-ID by PCR panel</u>
- If a UTI by C&S is desired, please write "Do Not Perform UTI-PCR in the Comments Box