The Clinical Laboratory at Providence Saint Joseph Medical Center will no longer confirm urine bilirubins that are positive by dipstick urinalysis as of December 7, 2012.

Bayer Diagnostics, the sole vendor, is unable to provide the Ictotest tablets needed to perform this confirmation. The Ictotest is used to differentiate between truly positive and falsely positive urine bilirubin results. The following comment will be attached to urine bilirubin results: “Urine bilirubin may be falsely positive due to interfering substances and/or abnormal urine color. If indicated, request a serum bilirubin.”

A review of urine bilirubin testing at a large local County hospital found that approximately 10% of urines submitted for urinalysis were positive for bilirubin by dipstick analysis. Most of these were falsely positive as only 1 in 6 positive dipstick bilirubins was confirmed positive by the Ictotest.

Direct (conjugated) bilirubin is excreted in urine. Unconjugated and delta bilirubin are tightly bound to albumin and not excreted in the urine. In the above study, the sensitivity of a confirmed urine bilirubin for detecting patients with an elevated direct serum bilirubin was only about 20%.

It is important to remember than urine bilirubin testing by dipstick analysis is a very nonspecific test; the majority of positives are false positives. However, bilirubinuria may be an early sign of liver disease and its clearance from the urine may be an early sign of recovery. If clinically indicated, request serum or plasma direct and/or total bilirubin.

If you have any questions or comments regarding these changes do not hesitate to contact Gary Nunez, CLS, Clinical Specialist (818-847-6002); Vivian Chantakrivat, CLS, Laboratory Manager, (818-847-6078); or Kathleen Makarewicz, M.D. (818-847-6053).