



LAB UPDATE

ST. VINCENT CARMEL HOSPITAL

BIOTIN INTERFERENCE-NEW CHEMISTRY INSTRUMENTATION

EFFECTIVE DATE: DECEMBER 3, 2019

Mid America Clinical Laboratories is implementing a new chemistry instrumentation across our network. With this change, a number of tests have the potential to be affected by Biotin interference **when performed within the Hospital Based Laboratory.**

Healthcare providers are encouraged to talk with their patients regarding the use of biotin supplements and the potential interference they can have in obtaining accurate lab work. **Interferences have been identified in 0.7% of the population with severe or chronic illness who are being treated with >1000mcg/day mega-doses of biotin.** Normal daily vitamins and supplements contain an average of 300mcg/dose and are thus well under the mega-dose interference range.

It is recommended that supplements be suspended 48-72 hours prior to lab work to minimize the potential of interference. However, those patients that receive biotin therapy intravenously can experience interference for longer periods of time depending on the dose and metabolism of the patient.

The following is a list of tests that are known to demonstrate at least a 10% bias due to biotin interference when patients are undergoing mega-dose therapy. Information regarding the biotin interference is included in the MACL Directory of Service order information.

ASSAYS EXPERIENCING FALSE DECREASE	
CKMB	TROPONIN-I
HCG	
ASSAYS EXPERIENCING FALSE INCREASE	
ESTRADIOL	PROGESTERONE

Additional details including dose information and references are located on our website at:

<http://www.maclonline.com/lab-updates/>

Testing of these assays is not affected on the instrumentation located at our Regional Laboratory. If a patient is receiving biotin therapy or patient results are suspected to be impacted by potential biotin interference, request routine testing to be completed at the Regional Laboratory.

If you have any questions, please contact:

Jenny Diruzza, Interim Laboratory Manager, St. Vincent Carmel Hospital – (317) 803-0702

Dianne Griffith, Director, Laboratory Operations, Mid America Clinical Laboratories – (317) 803-0460

Ryan McCarthy, M.D., Medical Director, St. Vincent Carmel Hospital – (317) 803-0440