



MEMORANDUM #156

TO: UNCHCS Attending Physicians, Faculty Physicians, Housestaff, Nursing Coordinators, Department Heads and Supervisors

FROM: *NKS* Nichole Korpi-Steiner, PhD, Director, Special Chemistry Laboratory

ST Sascha A. Tuchman, MD, MHS, Director, Multiple Myeloma and Amyloidosis Program

MHM Martha H. McGee, Director, McLendon Clinical Laboratories

HC Herbert C. Whinna, MD, PhD, Medical Director, McLendon Clinical Laboratories

SUBJECT: Serum Free Light Chain Testing

DATE: November 5, 2019

Serum free kappa and free lambda light chain testing will be performed using new lots of reagents effective October 25, 2019 and November 8, 2019, respectively. There is essentially one vendor for the required reagents for this assay and there is often significant lot-to-lot variability in the reagents. The Special Chemistry Lab's capacity to manage this inter-lot quality is limited, although we do sequester these reagents for approximately 6-12 months in order to minimize the variability as much as possible.

During this transition, the ordering procedure in EPIC will remain the same, as will the specimen type.

Impact on patient free kappa and lambda testing:

- Reference ranges will not change.
- Patient free kappa and free lambda values ≥ 100 mg/dL may have higher values (mean bias approximately 15%) compared with previously reported UNC results though this is patient-dependent and variable.

Recommendation for Healthcare Providers:

- Due to lot-to-lot variability in reagents for serum free light chain testing, consider re-baselining patient serum free kappa and free lambda light chain test values with interpretation in the clinical context.

If you have any questions related to these changes, please contact the Special Chemistry Laboratory at 984-974-1415 or Dr. Korpi-Steiner at 984-974-1498.