

# MEMORANDUM

To: All Regional Medical Laboratory, Inc. (RML) Clients

From: Regional Medical Laboratory, Inc.  
Patti Loykasek, HTL, QICH (ASCP), Immunology Manager  
Dr. Caitlin Schein, MD

Date: 6/26/2017

**Subject: Serum Protein Electrophoresis Analyzer**

Regional Medical Laboratory (RML) is pleased to announce an update to the Serum Protein Electrophoresis analyzer. Previously with this order, (PEP AN), serum free light chain analysis and serum protein electrophoresis were run on all patient samples, with reflex to serum immunofixation as indicated by pathologist findings. However, serum free light chain analysis is frequently abnormal in patients with renal failure, autoimmune disease, and/or polyclonal hypergammaglobulinemia without evidence of a paraprotein, leading to a high false-positive rate for these patients.

Moving forward, serum protein electrophoresis will be performed on all patient samples as the first step in the algorithm, with reflex to serum immunofixation and/or serum free light chain analysis as indicated by pathologist findings. Serum free light chain analysis will be added for all patients with a newly detected paraprotein and in those patients who have a history of a previously detected paraprotein if it is not detectable by electrophoresis on the current study.

Serum free light chain analysis, serum protein electrophoresis, and serum immunofixation will also continue to be available to order separately if desired. In the rare patient, whose paraprotein is only detectable in serum by a markedly elevated serum free light chain, continued monitoring may best be accomplished by serial evaluation of the serum free light chain. Evaluation of urine immunofixation may also be valuable in these patients.

TEST NAME	MNEMONIC	TEST CODE
Protein Electrophoresis with Interpretation	PEP AN	5004425
Immunofixation Serum with Interpretation	S IMMUNO	3960845
Light Chains, Free with Ratio, (Kappa/Lambda) Serum with Interpretation	FREE LIGHT	4275001
Protein Electrophoresis-Serum (without reflex testing) with Interpretation	PEP NO AN	5002125



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If you have any questions or concerns about this testing, please contact Dr. Caitlin Schein  
918-744-2553 or Patti Loykasek 918-744-3117.