

CHANGES TO SERUM AND URINE PROTEIN ELECTROPHORESIS TESTS

On Wednesday, October 13, 2021, TriCore Reference Laboratories is updating the test ordering and result reporting for serum and urine protein electrophoresis tests. The current tests that are being discontinued and the new test panels as well as the components of the new panels are described below:

Discontinued Test Code	Discontinued Test Name
SPE	Protein Electrophoresis, Serum
IFES	Immunofixation Electrophoresis, Serum
U24PE	Protein Electrophoresis, Urine, 24-hour
URPE	Protein Electrophoresis, Urine, Random
U24IFE	Immunofixation Electrophoresis, Urine

New Test Code	New Test Name	Test Components	Ordering Recommendation
SPESC	Monoclonal Protein Screen, Serum	Serum Protein Electrophoresis Serum Immunotyping Electrophoresis* Kappa and Lambda Free Light Chains with Ratio	Aids in the diagnosis of monoclonal gammopathies. The inclusion of serum free light chains eliminates the need for urine protein electrophoresis as part of initial screening.
SPEMM	Monoclonal Protein Monitoring, Serum	Serum Protein Electrophoresis Serum Immunotyping Electrophoresis (reflex)**	Aids in the monitoring of patients with established monoclonal gammopathies.
URPER	Protein Electrophoresis with Reflex to Isotype, Urine, Random	Urine Protein Electrophoresis Urine Immunofixation Electrophoresis **	Aids in the diagnosis and monitoring of monoclonal gammopathies using a random urine specimen. Urine protein electrophoresis alone is not considered an adequate screening test for monoclonal gammopathies. For screening, order Monoclonal Protein Screen, Serum (SPESC).
UPE24	Protein Electrophoresis with Isotype, Urine, 24-Hour	Urine Protein Electrophoresis Urine Immunofixation Electrophoresis*	Aids in the diagnosis and monitoring of monoclonal gammopathies using a 24-hour urine specimen. Urine protein electrophoresis alone is not considered an adequate screening test for monoclonal gammopathies. For screening, order Monoclonal Protein Screen, Serum (SPESC).

*Immunotyping/immunofixation electrophoresis is always performed.

**Immunotyping/immunofixation electrophoresis is a reflexive test performed when indicated based on medical director review of serum protein electrophoresis.

FAQs

WHY WILL IMMUNOTYPING/IMMUNOFIXATION ELECTROPHORESIS NO LONGER BE A SEPARATELY ORDERABLE TEST?

Immunotyping/immunofixation electrophoresis is only interpretable in conjunction with protein electrophoresis testing. If not always performed as part of a panel, it will be performed based on medical director review of serum protein electrophoresis.

WHAT IS THE GENERAL TESTING STRATEGY FOR DIAGNOSING A MONOCLONAL GAMMOPATHY?

The International Myeloma Working Group and National Comprehensive Cancer Network recommend a panel that includes:

- Serum protein electrophoresis
- Serum immunofixation
- Serum free light chains

This is accomplished using TriCore test code SPESC, “Monoclonal Protein Screen, Serum.” Urine studies might be required for diagnosis of light chain amyloidosis. Bone marrow aspiration and biopsy are also recommended to detect quantitative and/or qualitative abnormalities of bone marrow plasma cells.

WHICH TESTS ARE AVAILABLE TO MONITOR PLASMA CELL DYSCRASIAS?

Quantitative monoclonal protein tests are used to monitor response to therapy and disease progression. Quantitative tests include:

- Serum protein electrophoresis
- Serum free light chains
- Urine protein electrophoresis

This is accomplished using TriCore test code SPEMM, “Monoclonal Protein Monitoring, Serum” with serum free light chains (TriCore test code KPLM) and urine protein electrophoresis (TriCore test codes URPER or UPE24) ordered as clinically indicated.