Bronson LabWire

Laboratory News and Analysis for Clinicians March 2026

Test Update:

Revision to Serum Free Light Chain Reference Range and Methodology

Effective 04/07/2026, the reference ranges will change for Serum Free Light Chain testing in conjunction with new methodology using the Binding Site Optilite analyzer. The new ranges for Free Kappa, Free Lambda and the Free Kappa/Lambda Ratio are as follows:

Component	Old Reference Range	New Reference Range
Free Kappa	3.30 - 19.40 mg/L	6.10 – 40.20 mg/L
Free Lambda	5.71 - 26.30 mg/L	6.70 – 34.60 mg/L
Free Kappa/Lambda Ratio	0.26 – 1.65 – Resulted with comment stating: "Up to 3.1 for patients with renal insufficiency or polyclonal hypergammopathy."	0.57 – 2.45 - Resulted with: "Please note: Reference range for ratio may be elevated for patients with renal insufficiency and hypergammaglobulinemia."

Supported by the Hematology and Oncology providers, reference range changes are being made based on retrospective review of Bronson Hospital System serum free light chain results from 2025 alongside studies performed at Mayo Clinic, University of Michigan, and an international study (iSTOPMM).

New reference range changes were also implemented by Mayo Clinic in February 2026 in order to ensure accurate interpretation and to reduce clinically meaningful misclassifications. Mayo Clinic's study also used Binding Site Freelite reagents on the Optilite analyzer and included 489 patients (51% female, 49% male) between the ages of 30 to 88 years. The Mayo Clinic reference intervals compare closely with the iSTOPMM study which was derived from tens of thousands of participants and supported the need for revised serum free light chain ratio reference ranges.