

What do serum Free Light Chain results mean?

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Interpretation

FLC levels and ratio NORMAL – **No**
monoclonal FLCs detected

FLC ratio **HIGH** - Monoclonal

Kappa FLCs

(? Possible Myeloma, MGUS, NHL, AL
amyloidosis, CLL)

FLC ratio **LOW** - Monoclonal

Lambda FLCs

(? Possible Myeloma, MGUS, NHL, AL
amyloidosis, CLL)

FLC Ratio NORMAL – **No**

monoclonal FLCs detected

(Potential causes of \uparrow sFLC:
Infection, Inflammation, Autoimmune,
Renal Impairment)

- Serum free light chains (sFLC), serum marker; equivalent to BJP (NG35)
- sFLC ratio ≤ 0.01 or ≥ 100 : Myeloma related event (MRE), requiring urgent referral
- Abnormal sFLC ratio in MGUS indicates higher progression risk
- sFLC ratio ≤ 0.125 or ≥ 8 in smouldering/asymptomatic myeloma: \uparrow progression risk

sFLC Ratio	Action
≥ 100 or ≤ 0.01	Meets criteria for symptomatic myeloma <u>Urgent referral to Haematology</u>
>10 or <0.1	Abnormal serum free light chain ratio. Suggest referral and/or discussion with Haematology
0.1 – 0.2 or 5 – 10	Mildly abnormal serum free light chain ratio. ?Possible Light Chain only MGUS, amyloidosis or other light chain disorder. Suggest discuss with Haematology
0.2 – 0.25 or 1.66 – 5	Likely minor abnormality of sFLC. If normal serum electrophoresis, likely causes may include inflammation or impaired renal function. Suggest repeat analysis in 3 – 6 months and consider 24hr urine Bence Jones protein
For impaired renal function: sFLC Ratio reference range is 0.37 to 3.10	

Note: different sFLC assay results can not be compared

Abnormal Serum Immunoglobulins?

