



Freelite™
Serum Free
Light Chain Assay

Nonsecretory Multiple Myeloma

Freelite serum free light chains can be identified in 82% of NSMM patients

Freelite enables sensitive quantification of serum free light chains for diagnosis and monitoring.



Freelite serum free light chains can be identified in 82% of NSMM patients.

Freelite enables sensitive quantification of serum free light chains for diagnosis and monitoring.

Accuracy of different diagnostic approaches for monoclonal proteins

Using data currently available¹⁻⁴, Table 1 shows the “pick up” rate for all Multiple Myelomas, AL amyloidosis, Light Chain Multiple Myelomas and Nonsecretory Multiple Myelomas using different combinations of screening tests.

Although the maximum number of Nonsecretory Multiple Myeloma patients were detected by **Freelite** alone, it can be seen that the optimal pick up rate for all paraproteins can be achieved using simply SPE or CZE and **Freelite**.

This screening strategy replaces the need for urine testing

Protocols	% of Paraproteins detected			
	*Myeloma	AL	LCMM	NSMM
SPE/CZE alone	90	50	45	0
SPE/CZE, serum IFE	95	70	75	0
SPE/CZE and UPE	95	75	90	0
SPE/CZE, UPE, serum and urine IFE	97	90	95	0
FLC alone	96	98	100	82
SPE/CZE and FLC	99	98	100	82
SPE/CZE, FLC and serum IFE	99	98	100	82

Table 1.

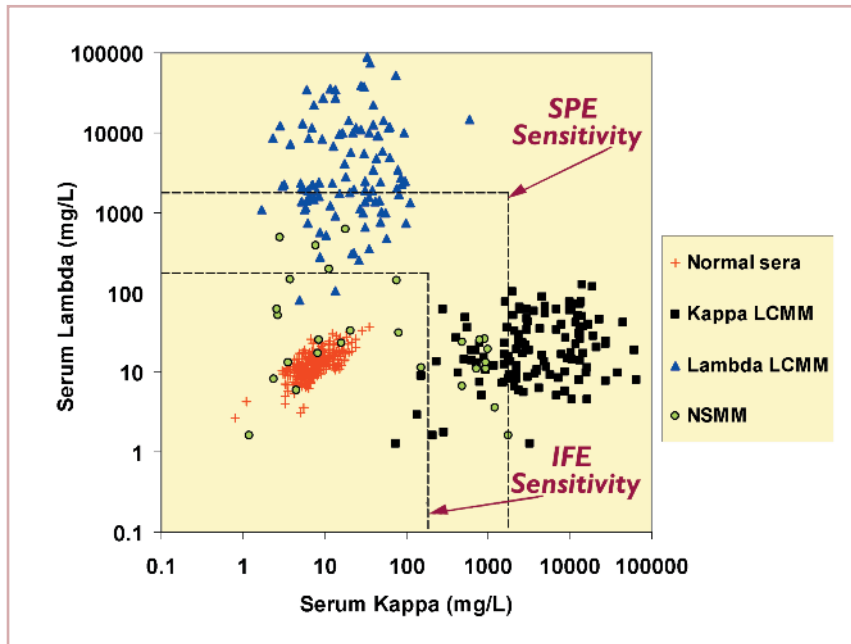
SPE: Serum Protein Electrophoresis, CZE: Capillary Zone Electrophoresis, IFE: Immunofixation Electrophoresis, FLC: Free Light Chains, LCMM: Light Chain Multiple Myeloma, NSMM: Nonsecretory Multiple Myeloma, AL: AL amyloidosis

*Myeloma is inclusive of samples from patients identified with Intact Immunoglobulin Multiple Myeloma, Light Chain Multiple Myeloma and Nonsecretory Multiple Myeloma.

Confidence

Freelite detected abnormal serum free light chains in 82% of patients previously classified as non-secretors by conventional methods.⁴

Using Serum Protein Electrophoresis and Immunofixation Electrophoresis 1-5% of all patients with Multiple Myeloma had previously been classified as non-secretors. Due to its higher sensitivity **Freelite** can help to detect and monitor these patients effectively.

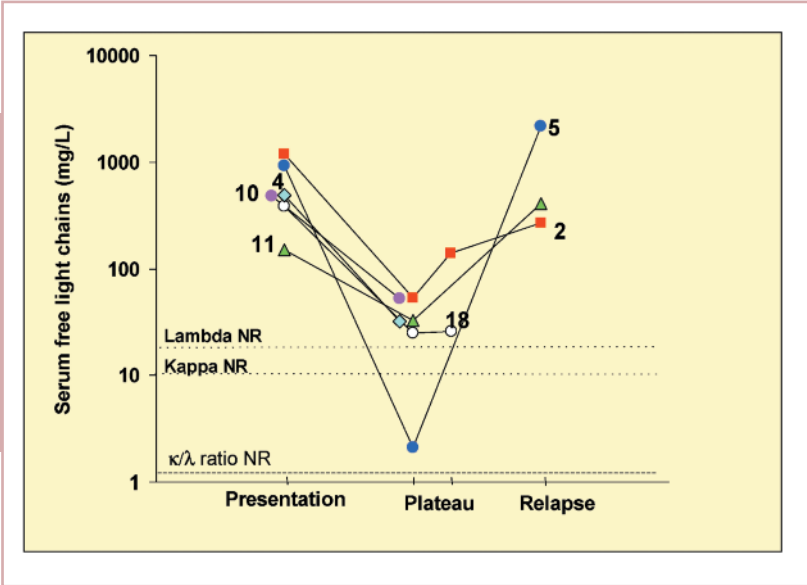


Serum free light chain concentrations in patients with Nonsecretory Multiple Myeloma (NSMM) compared with normal individuals and patients with Light Chain Multiple Myeloma (LCMM)¹.

Peace of mind

- **Freelite** can help you to evaluate the effectiveness of chemotherapy rapidly for your patients.
- Patients' exposure to chemotherapy may be minimised with benefit to the patient and to the cost of treatment.

Changes in serum free light chain concentrations and clinical status in 6 patients with Nonsecretory Multiple Myeloma.⁴ NR=Upper limit of normal range



- Most "Nonsecretory Multiple Myeloma" patients can now be monitored simply, using a serum sample.
- **Freelite** improves the precision of monitoring patients with NSMM compared to current methods.
- Monitor the majority of Nonsecretory Multiple Myeloma patients without compromise.
- The number of bone marrow biopsies for this group of patients can be reduced.
- Reduce patient anxiety with fewer bone marrow biopsies.

Freelite Analysis

Freelite assay time is less than 20 minutes, facilitating rapid clinical decisions.

All kits are FDA cleared for *in vitro* diagnostic use to aid in the diagnosis and monitoring of Multiple Myeloma, Lymphocytic neoplasms, Waldenstrom's macroglobulinaemia, AL amyloidosis, Light Chain Deposition Disease and connective tissue diseases such as Systemic Lupus Erythematosus.

Freelite is CE marked for many European countries, please contact us for the latest information.

Assays are available on a wide range of automated platforms, ensuring accuracy and reduced hands on time for analysis.

Ordering information

Analyser	Description	Pack	Code
Dade Behring BN™II	Freelite Kappa Kit	2 x 50 test	LK016.T
	Freelite Lambda Kit	2 x 50 test	LK018.T
Dade Behring BN ProSpec®	Freelite Kappa Kit	2 x 50 test	LK016.P
	Freelite Lambda Kit	2 x 50 test	LK018.P
Beckman Coulter IMMAGE®	Freelite Kappa Kit	2 x 50 test	LK016.IM
	Freelite Lambda Kit	2 x 50 test	LK018.IM
Roche Hitachi 911/912/917/P module	Freelite Kappa Kit	2 x 50 test	LK016.H
	Freelite Lambda Kit	2 x 50 test	LK018.H
Olympus AU400/640/2700/5400	Freelite Kappa Kit	2 x 50 test	LK016.AU
	Freelite Lambda Kit	2 x 50 test	LK018.AU

Protocols for other instruments are being developed so please contact us for the latest information.

References

1. Serum Free Light Chain Analysis. A.R. Bradwell 2004
2. Lachmann *et al.* Outcomes in systemic AL amyloidosis in relation to changes in concentration of circulating free immunoglobulin light chains following chemotherapy. *British Journal of Haematology* 2003; **122**: 78-84
3. Bradwell *et al.* Serum test for assessment of patients with Bence Jones myeloma. *Lancet* 2003; **361**:489-491
4. Drayson *et al.* Serum free light-chain measurements for identifying and monitoring patients with nonsecretory multiple myeloma. *Blood* 2001; **97**: 2900-2902

Freelite™ is a trademark of The Binding Site Ltd, Birmingham, UK. BN™II and BN ProSpec® are trademarks of Dade-Behring, Marburg, GmbH. IMMAGE® is a registered trademark of Beckman Instruments Inc, Brea, CA, USA. Olympus and AU are registered trademarks of Olympus Corporation, Tokyo, Japan.



Jan 2005
MKG238.E

THE BINDING SITE LIMITED
P.O. Box 11712
Birmingham
B14 4ZB
United Kingdom

Tel: +44 (0)121 436 1000
Fax: +44 (0)121 430 7061
info@bindingsite.co.uk
www.bindingsite.co.uk

THE BINDING SITE INC.
5889 Oberlin Drive
Suite 101, San Diego
CA 92121
United States of America

Tel: 858 453 9177
Fax: 858 453 9189
Toll Free: 1 800 633 4484
info@thebindingsite.com

THE BINDING SITE GmbH
Robert-Bosch-Str. 2A
D-68723 Schwetzingen
Germany

Tel: +49 (0)6202 9262 0
Fax: +49 (0)6202 9262 222
Bestell-Fax: +49 (0)6202 9262 111
office@bindingsite.de

THE BINDING SITE
Centre Atoll
14 rue des Glairaux
BP 226
38522 Saint Egrève
France

Tel: 04.38.02.19.19
Fax: 04.38.02.19.20
binding.site@wanadoo.fr