

EliA™ RF IgM and EliA™ RF IgA

The perfect completion of anti-CCP in the diagnosis of Rheumatoid Arthritis

Testing with anti-CCP and RF is essential

- Latest guidelines for the classification of Rheumatoid Arthritis include serology with both rheumatoid factor and anti-CCP.¹
- 10 to 20 % of RA patients have RF but no anti-CCP.²
- The more RF isotypes are positive, the higher is the risk for Rheumatoid Arthritis.^{1,3,4,5}

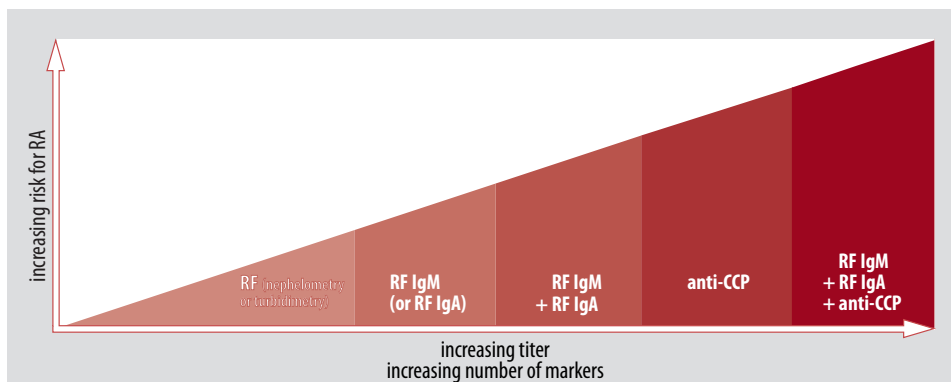


Figure 1: Increasing probability for Rheumatoid Arthritis

Increased diagnostic value with EliA™ RF IgM – a result to rely on

- RF IgM is more specific than a mixture of all RF IgM, IgA and IgG.^{6,7}
- Turbidimetry or nephelometry measure the less specific mixture of all isotypes.
- Higher specificity means higher positive predictive value, higher positive likelihood ratio and in the end a much better diagnostic value for the clinician.
- **RF positivity can be the deciding criterion for RA diagnosis – use for this diagnostic decision the test with highest specificity.⁶**

Increased prognostic value with EliA™ RF IgA – a marker for disease activity

- High titer of RF IgA is prognostic for a more severe disease outcome with erosive disease. Clinicians should consider a more aggressive treatment.⁸
- High titer of RF IgA indicates poor clinical response to TNF α inhibitors. Clinicians have to be aware of when they start treatment.⁹



EliA™ RF – sensitivity and specificity

■ Excellent performance

	EliA™ RF IgM	EliA™ RF IgA
Sensitivity	58.0 %	49.0 %
Specificity	91.6 %	92.7 %
positive LR*	6.9	6.7

* Positive LR (positive likelihood ratio) = sensitivity / 1-specificity
 A positive LR of 2 to 5 indicates an only limited clinical value, 5 to 10 is modest but substantial and above 10 is of high clinical importance.

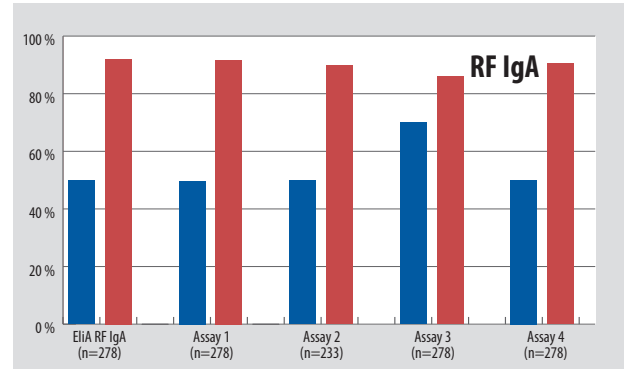
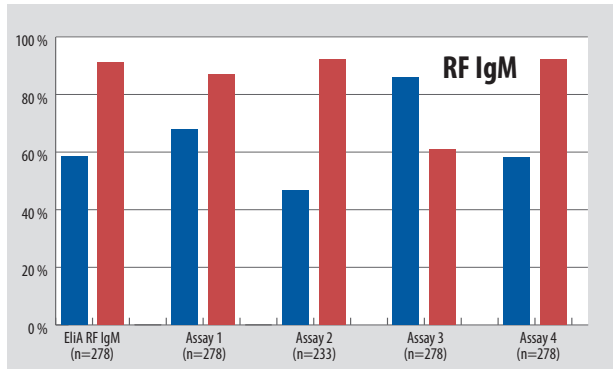


Figure 2 and 3: Sensitivity ■ and Specificity ■ of EliA™ RF IgM and EliA™ RF IgA and 4 other commercial ELISAs for RF IgM and RF IgA, respectively, in 100 RA patients and 178 disease controls. Sensitivity and specificity of RF tests are highly depending on the patients panel. In comparison with other commercial ELISAs it is evident that EliA™ RF IgM and EliA™ RF IgA have a very high specificity and a good sensitivity.

RF and anti-CCP on one instrument – fast and easy fully automated detection of RA

■ On the instruments Phadia 100, Phadia 250 or Phadia 2500, RF and anti-CCP can be measured from one and the same original serum tube in one run.

Ordering information

Products

■ EliA™ RF IgM Well

Article number

14-5600-01

Content

48 determinations

■ EliA™ RF IgA Well

14-5601-01

48 determinations

■ EliA™ CCP Well

14-5515-01

48 determinations

For general reagents please see Phadia Autoimmunity Product Catalog.

References

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- 5 Jaskowski et al. Relationship Between Rheumatoid Factor Isotypes and IgG Anti-Cyclic Citrullinated Peptide Antibodies. J Rheumatol 2010; 37: 1582-8
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- 7 Ates A et al. Effects of rheumatoid factor isotypes on disease activity and severity in patients with rheumatoid arthritis: a comparative study. Clin Rheumatol 2007; 26: 538-45
- 8 De Angelis V, Meroni PL. Rheumatoid Factor. In: Autoantibodies, 2nd edition 2007, eds: Shoenfeld, Gershwin, Meroni. Elsevier, Amsterdam, pp 755-62
- 9 Bobbio-Pallavicini F et al. High IgA rheumatoid factor levels are associated with poor clinical response to tumour necrosis factor alpha inhibitors in rheumatoid arthritis. Ann Rheum Dis 2007; 66: 302-7

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