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

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. ⁸

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 TNFα inhibitors. Clinicians have to be aware of when they start treatment. ⁹

Figure 1: Increasing probability for Rheumatoid Arthritis
EliA™ RF – sensitivity and specificity

■ Excellent performance

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<tr>
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<th>EliA™ RF IgM</th>
<th>EliA™ RF IgA</th>
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<tbody>
<tr>
<td>Sensitivity (n=278)</td>
<td>58.0 %</td>
<td>49.0 %</td>
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<tr>
<td>Specificity (n=278)</td>
<td>91.6 %</td>
<td>92.7 %</td>
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<tr>
<td>Positive LR* (n=278)</td>
<td>6.9</td>
<td>6.7</td>
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*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.

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
■ EliA™ RF IgA Well
■ EliA™ CCP Well

For general reagents please see Phadia Autoimmunity Product Catalog.

References

4 Jönsson T et al. Elevation of only one rheumatoid factor isotype is not associated with increased prevalence of rheumatoid arthritis: a population based study. Scand J Rheumatol 2000; 29: 190-1
5 Jaskowski et al. Relationship Between Rheumatoid Factor Isotypes and IgG Anti-Cyclic Citrullinated Peptide Antibodies. J Rheumatol 2010; 37: 1582-8
6 Nishimura K et al. The battle between anti-cyclic citrullinated peptide and rheumatoid factor tests - a winner at last? Ann Intern Med 2007,146: 797-808