

Rheumatoid factor measurement - continuing problems 70 years after discovery.

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ABSTRACT

There have been long-standing unpublished differences in rheumatoid factor (RF) results, based on the Royal College of Pathologists of Australasia external quality assurance program. This study compared RF results between two commonly used commercial instruments. Serum samples were exchanged between a laboratory using a Beckman Immage immunonephelometer and another using a Roche Modular immunoturbidimeter. The World Health Organization (WHO) reference standard for RF (W1066) was then used to compare the two methods. The Roche immunoturbidimeter appears to have superior sensitivity. Furthermore, there is significant bias between the two instruments as levels of RF increase. Results from the WHO RF reference preparation correlated most closely with the results from the Roche immunoturbidimeter. Standardization for RF measurement is not optimal and has not been achieved between these two commonly used instruments. This may have clinical implications for patient management.

To read more go to: <http://www.ncbi.nlm.nih.gov/pubmed/21455659>