



# Rheumatoid Factor Reference Ranges Change

June 2007

On June 11, 2007, the reference ranges for rheumatoid factor (RF) will change from <40 IU/mL to <14 IU/mL. Legacy Laboratory Services is introducing a new latex-enhanced turbidimetric method, which will provide greater sensitivity and recovery of RF. The new method demonstrates:

- Improved precision
- Greater sensitivity and recovery at the lower detectable levels, 5.0 IU/mL versus 20 IU/mL
- Minimized susceptibility to interfering substances

**Increased sensitivity and recovery in new RF method.**

**NOTE:** In order to provide a consistent standard of care, physicians can order both the old test (RA QNT) and the new test (RA FACTOR) to compare results. The RNA QNT will be available through July 20, 2007 for this purpose.

RFs are antibodies directed against antigenic determinants on the Fc fragment of IgG. Higher levels of RF can aid in the diagnosis of rheumatoid arthritis (RA). The diagnostic specificity for RA is 95%.<sup>1</sup> RF is present in about 5% of the healthy population and 15-20% of the elderly with other chronic diseases. RF is also elevated in other autoimmune rheumatic diseases (*i.e.*, systemic lupus erythematosus) and in non-rheumatic conditions (*i.e.*, infections or chronic liver diseases) with variable frequencies.<sup>2</sup> Hence, RF has a diagnostic sensitivity that ranges from 26 to 90%.<sup>1</sup>

#### **FOR MORE INFORMATION, CONTACT:**

Danelle Beaudoin, PhD, Clinical Chemist at (503) 413-5024  
Marcia Schulmerich, MT(ASCP), NRCC at (503) 413-6910  
Jeannette Peck, MT(ASCP), NRCC at (503) 413-2869

TEST	COLLECTION GUIDELINES	REFERENCE VALUES
<b>Rheumatoid Factor (RF FACTOR)</b>	<b>Specimen:</b> 0.5 mL serum; refrigerate <b>Collection Container:</b> Gold top tubes (SST) <b>Stability:</b> Room temperature, 1 day; refrigerated, 8 days; and frozen, 3 months <b>Test Performed:</b> 7 days/week <b>Turnaround:</b> 24 hours <b>Method:</b> Latex-enhanced turbidimetry	Up to 14 mIU/mL

#### REFERENCES

1. Shmerling MD, RH, **Origin and utility of measurement of rheumatoid factors**, Up to Date® 2007, <http://www.utdol.com>, last edit, January 2, 2007, Webpage last reviewed, April 17, 2007.
2. Burtis CA, Ashwood ER and Bruns DE, editors, Textbook of Clinical Chemistry, 4<sup>th</sup> edition, Philadelphia, WB Saunders Co., 2006, pg 2003-2052.