

**CPAL**Central Pennsylvania Alliance
Laboratory

Technical Bulletin

No. 48**August 4, 2004**

Method Change – Rheumatoid Factor

Starting date:

August 5, 2004.

Reason For Change:

Previously a manual flocculation tube procedure was used for rheumatoid factor and the results were reported in titers. This manual flocculation tube method is no longer available (See Memo on May 25, 2004). During the period from May 26, 2004 to August 3, 2004, the rheumatoid factor was done at Quest Diagnostics using a turbidimetric method and reported in IU/mL. Meanwhile, CPAL has evaluated four different methods for rheumatoid factor and decided to use Beckman Immage which uses rate nephelometry to minimize background interference. The results will be in IU/mL. There is no direct comparison between the Immage and the tube method, especially when RF is below 100 IU/mL.

Method Evaluation:

Results of 94 RF samples by the Beckman Immage were compared to Quest's results. In general, the Immage's results are 1.16 times higher than Quest's results. But, there is no correlation between the two methods for results less than 100 IU/mL. One hundred and ten samples with normal RF values (Quest's results) were used to verify the reference range. One hundred and nine samples (99%) had values less than 20 IU/mL. The other one had a low positive result with Immage. In addition, about 94% (47/50) donor serum samples had RF values less than 20 IU/mL.

Reference Range and Assay Performance:

Reference range is <20 IU/mL.

The sensitivity of the RF assay is 20 IU/mL.

The analytical measurement range is 20 -800 IU/mL.

The extended analytical range is 20 – 28800 IU/mL.(1)

Specimen:

Serum, 1 mL. Plasma samples (Lithium Heparin and Sodium Heparin) can be used. Tubes of blood are to be kept closed at all times and in a vertical position. It is recommended that the serum or plasma be physically separated from the cells within two hours of collection. If serum samples are not assayed within 8 hours, samples may be stored at +2°C to +8°C for up to 7 days.

References:

(1) Package insert. Rheumatoid Factor. Immage Chemistry Information Manual. March 2001.

Laboratory Contact:

Issued on: August 5, 2004

For question about this, and other, information, call Central Pennsylvania Laboratory at 1-888-480-1422

Lu Song, PhD, D(ABCC), Technical Director, 717-851-1422

2 of 2

1803 Mt. Rose Avenue

York, Pa. 17403

***Controlled Copy, Do Not Duplicate
Use Only***

l:\cpal\bulletin\...\025_EPREFERENCE.doc

For Internal