

TEST CHANGE

Cyclosporine A by Tandem Mass Spectrometry

0070035, CYA

Specimen Requirements:

Patient Preparation: ~~Pre-dose~~ **Pre-dose** (trough) levels should be drawn.

Collect: Lavender (EDTA) or pink (K2EDTA).

Specimen Preparation: Transport 1 mL whole blood. (Min: 0.25 mL)

Transport Temperature: Refrigerated.

Unacceptable Conditions: Serum or plasma. Specimens left at room temperature for longer than 24 hours. Clotted specimens.

Remarks:

Stability: Ambient: 24 hours; Refrigerated: 2 weeks; Frozen: 2 months

Methodology: Quantitative Liquid Chromatography-Tandem Mass Spectrometry

Performed: Sun-Sat

Reported: ~~1-2 days~~ **1-2 days**
~~Within 24 hours~~

Note: Cyclosporine (Sandimmune) whole blood concentrations can be measured by either chromatographic or immunoassay methodologies. These two methodologies are not directly interchangeable, and the measured cyclosporine whole blood concentration depends on the methodology used. Reference ranges may vary according to the specific immunoassay or HPLC-MS/MS test. Generally, immunoassays have been reported to have a positive bias relative to HPLC-MS/MS assays due to the detection of antibody cross-reactivity with cyclosporine metabolites.

CPT Codes: 80158

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

The general therapeutic range for cyclosporine A is 100-400 ng/mL. The optimal therapeutic range for a given patient may differ from this suggested range based on the indication for therapy, treatment phase (initiation or maintenance), use in combination with other drugs, time of specimen

collection relative to prior dose, type of transplanted organ, and/or the therapeutic approach of the transplant center.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.~~

Reference Interval:

Effective November 17, 2014

Cyclosporine A, Therapeutic Range	Therapeutic Range: 100-400 ng/mL
Kidney transplant (in combination with Everolimus)	1 month post-transplant: 100-200 ng/mL 2-3 months post-transplant: 75-150 ng/mL 4-5 months post-transplant: 50-100 ng/mL 6-12 months post-transplant: 25-50 ng/mL
Heart transplant	Up to 3 months post-transplant: 350-525 ng/mL 4 months and older post-transplant: 145-350 ng/mL
Liver transplant	290-525 ng/mL
Toxic value	Greater than 700 ng/mL