

ABORATORIES

TEST CHANGE

Cyclosporine A, 2-Hour Post Dose (C2) by Tandem Mass Spectrometry 0058902, C2CYA

Specimen Requirements:

Patient Preparation: Two hour post-dose level 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: <u>1-2 days</u>

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, 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

Effective Date: November 13, 2023

cyclosporine metabolites.

CPT Codes: 80158

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

Interpretive Data:

Cyclosporine A levels in specimens drawn 2 hours post-dose may estimate the AUC better than trough specimens. 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),



Effective Date: November 13, 2023

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. A suggested target range for renal transplant is 800-1700 ng/mL. A suggested target range for liver transplant is 600-1000 ng/mL. The higher ranges represent concentrations immediately post-transplant and the lower ranges represent concentrations during the maintenance phase.

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: