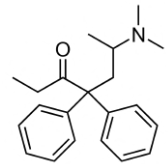




# Managing Methadone Treatment: Insight from Peak and Trough Levels



Methadone

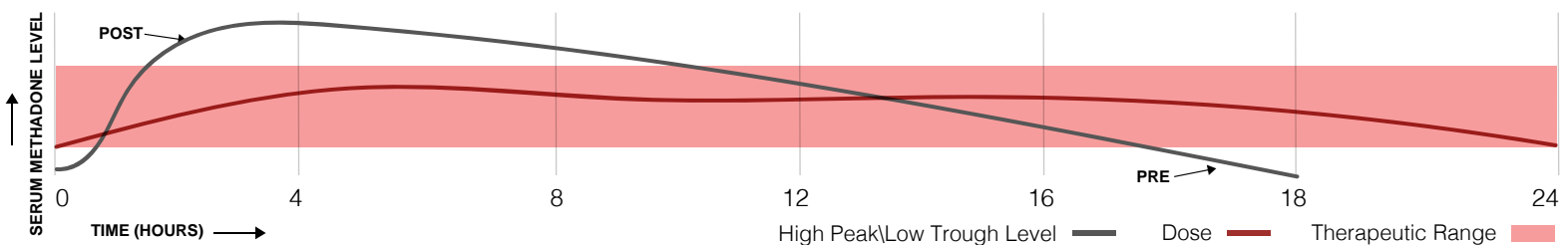
Blood testing for methadone provides a tool for prescribers to assess rapid and slow metabolizers, assisting to improve patient outcomes.

## TEST HIGHLIGHTS

### FACTS ABOUT PEAK & TROUGH

- Goal for best patient outcomes is steady blood levels over 24 hours.
- Individualized dosing is critical for best outcomes and measuring blood levels is clinically useful to assess rate-of-change ratio between peak and trough blood levels.
- It is suggested that peak methadone blood level should be more than twice the trough.
- Lab values provide objective data when managing challenging cases.
- Facility protocols may require peak and trough lab values for compliance and Ammon provides the solution.

Test Name	Comprehensive Methadone Blood Panel
Test Code	BL12
<b>TAT</b>	<b>24 - 48 Hours</b>
Specimen Requirements	Whole Blood (Lavender Top)
Custom Collection Instructions:	<p><b>Peak:</b> Methadone detection window in blood is between 15 to 45 minutes after oral administration with the peak levels occurring at 2.5 to 4 hours.</p> <p><b>Trough:</b> Detection limit=2.5 ng/mL. Test development and characteristics determined by Ammon Labs. Several parameters can affect methadone reference intervals. Due to individual differences in P450 enzyme systems, up to a 17-fold variation in methadone concentrations can be found in patients given the same dose.</p>
Storage Requirements	Room temperature is acceptable for shipping and/or short-term storage (three days).
Cut Off Level	Methadone 5ng/mL
Methodology	Liquid chromatography/tandem mass spectrometry
CPT Code	80358
Clinical Utility	Detect and measure Methadone



### SOURCES

<https://www.ncbi.nlm.nih.gov/pubmed/10391674> <https://www.intechopen.com/books/new-insights-into-toxicity-and-drug-testing/plasma-methadone-level-monitoring-in-methadone-maintenance-therapy-a-personalised-methadone-therapy> Beth F. Jung and Marcus M. Reidenberg, Interpretation of Opioid Levels: Comparison of Levels During Chronic Pain Therapy to Levels from Forensic Autopsies, Clinical Pharmacology & Therapeutics, 77, 4, (324-334), (2005). S. Verine Crettol, Jean-Jacques Dugon, Jacques Besson, Marina Croquette, Krokhar, Isabelle Gothuey, Robert Himmig, Martine Monnat, Hardy Hottmann, Pierre Baumann and Chin B. Eap, Methadone enantiomer plasma levels, CYP2B6, CYP2C19, and CYP2C9 genotypes, and response to treatment, Clinical Pharmacology & Therapeutics, 78, 6, (593-604), (2005).