

Notification Date: November 4, 2025 Effective Date: November 18, 2025

# Tramadol and Metabolite, Serum

Test ID: TRAMS

#### **Useful for:**

This test is useful to help determine compliance and/or to monitor adverse drug reactions or efficacy

#### Methods:

Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

#### **Reference Values:**

Tramadol:

Peak plasma levels following a single 100 mg oral dose: 230-380 ng/mL

Steady-state plasma levels following a 100 mg 4 times daily regimen: 420-770 ng/mL

### O-desmethyltramadol:

Peak plasma concentration following a single 100 mg oral dose: 35-75 ng/mL

Steady-state plasma concentration following a 100 mg 4 times daily regimen: 80-140 ng/mL

Cutoff concentrations by liquid chromatography tandem mass spectrometry:

Tramadol: 10 ng/mL

O-desmethyltramadol: 5.0 ng/mL

## **Specimen Requirements:**

**Supplies:** Sarstedt Aliquot Tube, 5 mL (T914)

**Collection Container/Tube:** Red top (Serum gel/SST are **not acceptable**)

Submission Container/Tube: Plastic vial

Specimen Volume: 1 mL Minimum Volume: 0.5 mL

**Collection Instructions:** Within 2 hours of collection, centrifuge and aliquot serum into a plastic vial.

## **Specimen Stability Information:**

Specimen Type	Temperature	Time
Serum Red	Refrigerated (preferred)	28 days
	Ambient	28 days
	Frozen	28 days

## **Cautions:**

Specimens collected in serum gel tubes are not acceptable because the drug can absorb on the gel and lead to falsely decreased concentrations.

**CPT Code:** 80299

Day(s) Performed: Wednesday Report Available: 3 to 9 days

## Note:

The following referral test code will become obsolete.

Test Name	Test ID	Referral Lab Code	Referral Lab
Tramadol and Metabolite, Serum/Plasma	ZW86	4531SP	NMS Labs

## Questions

Contact Brandon DeBoom, Laboratory Resource Coordinator at 800-533-1710.