

Overview

Useful For

Assessing compliance

Monitoring for appropriate therapeutic level

Assessing oxazepam toxicity

Method Name

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

NY State Available

Yes

Specimen

Specimen Type

Serum Red

Specimen Required

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

Collection Instructions: Centrifuge and aliquot serum into a plastic vial.

Specimen Minimum Volume

0.3 mL

Reject Due To

Gross hemolysis	OK
Gross lipemia	OK
Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum Red	Refrigerated (preferred)	28 days	

	Ambient	28 days	
	Frozen	28 days	

Clinical & Interpretive

Clinical Information

Oxazepam is US Food and Drug Administration-approved for the management of anxiety disorders and is used to relieve anxiety, including that caused by alcohol withdrawal (symptoms may develop in people who stop drinking alcohol after drinking large amounts for an extended time). Oxazepam is in a class of medications called benzodiazepines. It works by slowing activity in the brain to allow for relaxation.

Oxazepam is metabolized by glucuronidation and has an intermediate half-life (approximately 4-16 hours) compared to other benzodiazepines. Common adverse effects include dizziness, headaches, somnolence and vertigo.

Reference Values

Therapeutic concentrations
Oxazepam: 200-1500 ng/mL

Cutoff concentrations by liquid chromatography tandem mass spectrometry:
Oxazepam: 10 ng/mL

Interpretation

Suggested therapeutic serum concentrations have been reported for oxazepam between 200 and 1500 ng/mL.

Cautions

No significant cautionary statements

Clinical Reference

1. Langman LJ, Bechtel LK, Holstege CP. Clinical toxicology. In: Rifai N, Chiu RWK, Young I, Burnham CAD, Wittwer CT, eds. Tietz Textbook of Laboratory Medicine. 7th ed. Elsevier; 2023:chap 43
2. Hiemke C, Bergemann N, Clement HW, et al. Consensus guidelines for therapeutic drug monitoring in neuropsychopharmacology: Update 2017. Pharmacopsychiatry. 2018;51(1-02):9-62
3. Baselt RC. Disposition of Toxic Drugs and Chemical in Man. 12th ed. Biomedical Publications; 2020

Performance

Method Description

The internal standard mixture containing chlordiazepoxide-d5, diazepam-d5, nordiazepam-d5, oxazepam-d5, and temazepam-d5 is added to serum samples, mixed and centrifuged. The supernatant is diluted and injected on a liquid chromatography tandem mass spectrometer.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Monday, Wednesday

Report Available

3 to 7 days

Specimen Retention Time

14 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Superior Drive

Fees & Codes

Fees

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

Test Classification

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

80299

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
OXAZS	Oxazepam, S	3886-9

Result ID	Test Result Name	Result LOINC® Value
623016	Oxazepam	3886-9