

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB: 7/29/1989
Gender: Male
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

Carbamazepine Epoxide and Total

ARUP test code 0092211

Carbamazepine 10-11 Epoxide

2.3 ug/mL

INTERPRETIVE INFORMATION: Carbamazepine-10, 11-Epoxide

Carbamazepine-10, 11 Epoxide
Therapeutic Range: Not well established

Toxic: Greater than 15.0 ug/mL

Total Carbamazepine
Therapeutic Range: 4.0-12.0 ug/mL

Toxic: Greater than 15.0 ug/mL

The therapeutic range is based on serum pre-dose (trough) draw at steady-state concentration. The carbamazepine metabolite, Carbamazepine-10, 11-Epoxide, has anticonvulsant activity and a proposed therapeutic range of 0.4-4 ug/mL.

A rare, adverse drug reaction to carbamazepine therapy includes Stevens-Johnson syndrome or toxic epidermal necrolysis. Patients of Asian ancestry with the presence of the HLA-B*15:02 have an increased risk for this carbamazepine-induced, life-threatening reaction. Pharmacogenetic testing for HLA-B*15:02 is recommended prior to treatment for patients at risk of carbamazepine hypersensitivity. This information has been included in the FDA-approved label for carbamazepine (<https://www.accessdata.fda.gov/scripts/cder/daf/index.cfm?event=overview.process&varAppNo=016608>) and in the guideline from the Clinical Pharmacogenetics Implementation Consortium (<https://www.pharmgkb.org/guidelines>). [HLA-B*15:02 Genotyping, Carbamazepine Hypersensitivity, ARUP test code 2012049.]

A combination of therapeutic drug monitoring with HLA-B*15:02 pharmacogenetics genotyping may benefit patients at increased risk of developing carbamazepine-induced adverse events due to rare genotypes other than the HLA-B*15:02 variant allele.

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.

Carbamazepine, Total

5.3 ug/mL

(Ref Interval: 4.0-12.0)

H=High, L=Low, *=Abnormal, C=Critical

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Carbamazepine 10-11 Epoxide	23-018-108267	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Carbamazepine, Total	23-018-108267	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical

Unless otherwise indicated, testing performed at:

ARUP LABORATORIES | 800-522-2787 | aruplab.com
500 Chipeta Way, Salt Lake City, UT 84108-1221
Jonathan R. Genzen, MD, PhD, Laboratory Director

Patient: Patient, Example
ARUP Accession: 23-018-108267
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Page 2 of 2 | Printed: 1/31/2023 3:00:50 PM
4848