

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

Physician: Doctor, Example

Patient: Patient, Example

DOB: 5/1/1969
Gender: Female
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

Nicotine and Metabolites, Urine, Quantitative

ARUP test code 0092356

3-OH-Cotinine, Urn, Quant

>2000 ng/mL

Nicotine is metabolized to cotinine, and subsequently to 3-OH cotinine. After cessation from chronic and heavy use of nicotine containing products, 3-OH-cotinine may persist for weeks. Passive exposure and active use of nicotine cannot be discriminated definitely.

Anabasine, Urn, Quant

8 ng/mL

Anabasine is a minor alkaloid in the tobacco plant and is a biomarker of active tobacco use. However, anabasine is not specific because it can be detected in the urine of non-tobacco users.

Cotinine, Urn, Quant

1248 ng/mL

Cotinine is the major metabolite of nicotine and its presence can be detected up to 2 weeks post exposure to nicotine containing product. Passive exposure and active use of nicotine cannot be discriminated definitely. A cutoff of 100 ng/mL cotinine is frequently used for surgery qualification purposes.

Nicotine, Urn, Quant

454 ng/mL

Consistent with recent use or exposure to a nicotine-containing product. Although passive exposure and active use cannot be discriminated definitively, the urine nicotine concentration observed with active smokers is typically above 1000 ng/mL.

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

**INTERPRETIVE INFORMATION: Nicotine and Metabolites,
Urine, Quantitative**

Methodology: Quantitative Liquid Chromatography–Tandem Mass Spectrometry

Positive cutoff:
Nicotine 15 ng/mL
Cotinine 15 ng/mL
3-OH-Cotinine 50 ng/mL
Anabasine 5 ng/mL

For medical purposes only; not valid for forensic use.

This test is designed to evaluate recent use of nicotine-containing products. Passive and active exposure cannot be discriminated definitively, although a cutoff of 100 ng/mL cotinine is frequently used for surgery qualification purposes. For smoking cessation programs or compliance testing, the absence of expected drug(s) and/or drug metabolite(s) may indicate non-compliance, inappropriate timing of specimen collection relative to drug administration, poor drug absorption, diluted/adulterated urine, or limitations of testing. The concentration value must be greater than or equal to the cutoff to be reported as positive. Anabasine is included as a biomarker of tobacco use, versus nicotine replacement. Interpretive questions should be directed to the laboratory.

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.

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
3-OH-Cotinine, Urn, Quant	23-083-140416	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Anabasine, Urn, Quant	23-083-140416	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Cotinine, Urn, Quant	23-083-140416	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Nicotine, Urn, Quant	23-083-140416	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: