

Patient: [REDACTED]
 DOB: [REDACTED] Age: [REDACTED] Gender: [REDACTED]
 Patient Identifiers: [REDACTED]
 Visit Number (FIN): [REDACTED]

Client: [REDACTED]
 Physician: [REDACTED]

ARUP Test Code: 2009288
 Collection Date: 11/28/2016
 Received in lab: 11/29/2016
 Completion Date: 12/02/2016

Interpretive Summary

Inconsistent

One or more results are INCONSISTENT with supplied medications. Please see the interpretive consultation below for details.

Interpretive Consultation

DRUGS EXPECTED:
 METHADONE
 HYDROCODONE

CONSISTENT with medications provided:
 METHADONE: based on immunoassay detection
 HYDROCODONE: based on hydrocodone, norhydrocodone

INCONSISTENT with medications provided:
 Alpha-OH-Alprazolam

Interpretation depends on accuracy and completeness of patient medication information submitted by client.

Patient Results

	This Report*
Collection Date	11/28/2016 10:38:00 AM
Creatinine, Urine	351.4
Hydrocodone (cutoff 40 ng/mL)	Present
Norhydrocodone (cutoff 100 ng/mL)	Present
Methadone (cutoff 150 ng/mL)	Present
Alpha-OH-Alprazolam (cutoff 20 ng/mL)	Present
ARUP Accession	16-333-108803

* For details, see report on following page(s).



Patient: [REDACTED]
 ARUP Accession: 16-333-108803

Pain Management Drug Screen with Interpretation by High-Resolution Time-of-Flight Mass Spectrometry and Enzyme Immunoassay, Urine

Patient: [REDACTED] | Date of Birth: [REDACTED] | Gender: [REDACTED] | Physician: [REDACTED]
Patient Identifiers: [REDACTED] | Visit Number (FIN): [REDACTED]

Interpretive Comments

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 must be greater than or equal to the cutoff to be reported as present. If specific drug concentrations are required, contact the laboratory within two weeks of specimen collection to request quantification by a second analytical technique. Interpretive questions should be directed to the laboratory.

Results based on immunoassay detection that do not fit clinical expectations should be interpreted with caution. Confirmatory testing by mass spectrometry for immunoassay-based results is available at an additional fee within two weeks of specimen collection.

For medical purposes only; not valid for forensic use.

For further information, consult aruplab.com/pain.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement B: aruplab.com/CS



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Drug Analyte	Result	Cutoff	Notes
OPIATES, HIGH RES			
Codeine	Not Detected	40 ng/mL	
Morphine	Not Detected	20 ng/mL	also a metabolite of Codeine; may reflect poppy seed ingestion
6-acetylmorphine	Not Detected	20 ng/mL	heroin metabolite; morphine is expected
OXYCODONE-LIKE, HIGH RES			
Oxycodone	Not Detected	40 ng/mL	
--Noroxycodone	Not Detected	100 ng/mL	oxycodone metabolite
Oxymorphone	Not Detected	40 ng/mL	eg, Opana; also a metabolite of oxycodone
--Noroxymorphone	Not Detected	100 ng/mL	oxymorphone metabolite; naloxone metabolite (i.e., nornaloxone)
Hydrocodone	Present	40 ng/mL	also a minor metabolite of Codeine; possible impurity of oxycodone
--Norhydrocodone	Present	100 ng/mL	hydrocodone metabolite
Hydromorphone	Not Detected	40 ng/mL	eg, Dilaudid; also a metabolite of hydrocodone, and a minor metabolite of morphine
OPIOIDS, HIGH RES			
Buprenorphine	Not Detected	5 ng/mL	eg Suboxone, Subutex. Please note: detection of naloxone is not included
--Norbuprenorphine	Not Detected	20 ng/mL	buprenorphine metabolite
Fentanyl	Not Detected	2 ng/mL	
--Norfentanyl	Not Detected	2 ng/mL	fentanyl metabolite
Meperidine metabolite	Not Detected	50 ng/mL	normeperidine
Tapentadol	Not Detected	100 ng/mL	
--Tapentadol-o-sulfate	Not Detected	200 ng/mL	tapentadol metabolite
OPIOIDS, IMMUNOASSAY			
Methadone	Present	150 ng/mL	
Propoxyphene	Not Detected	300 ng/mL	
Tramadol	Not Detected	200 ng/mL	
AMPHETAMINE-LIKE, HIGH RES			
Amphetamine	Not Detected	100 ng/mL	eg, Vyvanse; also a metabolite of methamphetamine
Methamphetamine	Not Detected	400 ng/mL	d- and l- isomers are not distinguished by this test; may reflect Vicks inhaler, Desoxyn, Selegiline, or illicit source
MDMA - Ecstasy	Not Detected	200 ng/mL	
MDA	Not Detected	200 ng/mL	also a metabolite of MDMA and MDEA
MDEA - Eve	Not Detected	200 ng/mL	



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Drug Analyte	Result	Cutoff	Notes
Phentermine	Not Detected	100 ng/mL	
Methylphenidate	Not Detected	100 ng/mL	eg, Ritalin, Dexmethylphenidate, Focalin, Concerta
COCAINE, IMMUNOASSAY			
Benzoyllecgonine	Not Detected	150 ng/mL	cocaine metabolite
BENZODIAZEPINE-LIKE, HIGH RES			
Alprazolam	Not Detected	40 ng/mL	eg, Xanax
--Alpha-hydroxyalprazolam	Present	20 ng/mL	alprazolam metabolite
Clonazepam	Not Detected	20 ng/mL	eg, Klonopin
--7-aminoclonazepam	Not Detected	40 ng/mL	clonazepam metabolite
Diazepam	Not Detected	50 ng/mL	eg, Valium
Nordiazepam	Not Detected	50 ng/mL	metabolite of chlordiazepoxide (Librium), clorazepate (Tranxene), diazepam, halazepam (Alapryl), prazepam (Centrax) and others
Oxazepam	Not Detected	50 ng/mL	eg, Serax; also metabolite of nordiazepam and temazepam
Temazepam	Not Detected	50 ng/mL	eg, Restoril; also a metabolite of diazepam
Lorazepam	Not Detected	60 ng/mL	eg, Ativan
Midazolam	Not Detected	20 ng/mL	eg, Versed
Zolpidem	Not Detected	20 ng/mL	eg, Ambien
BARBITURATES, IMMUNOASSAY			
Barbiturates	Not Detected	200 ng/mL	detects amobarbital, butalbital, pentobarbital, phenobarbital, secobarbital, and others
OTHERS (IMMUNOASSAY OR SPECTROPHOTOMETRY)			
Ethyl glucuronide	Not Detected	500 ng/mL	ethanol metabolite
Marijuana metabolite	Not Detected	20 ng/mL	9-carboxy-tetrahydrocannabinol; does not distinguish between prescribed and illicit forms
PCP	Not Detected	25 ng/mL	phencyclidine
Carisoprodol	Not Detected	100 ng/mL	detects carisoprodol and meprobamate
Reference interval			
Creatinine value (mg/dL)	351.4	20.0 - 400.0 mg/dL	



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Additional Information

METHODOLOGIES USED

Qualitative enzyme immunoassay
Qualitative liquid chromatography-time of flight-mass spectrometry
Spectrophotometry

ABBREVIATIONS

HIGH RES - high resolution assay using LC-TOF/MS
MDA - 3,4-methylenedioxyamphetamine
MDEA - 3,4-methylenedioxy-N-ethylamphetamine
MDMA - 3,4-methylenedioxy-N-methylamphetamine



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