MAYO CLINIC LABORATORIES

# Test Definition: ADMPU

Addiction Medicine Profile with Reflex, 22 Drug Classes, High Resolution Mass Spectrometry and Immunoassay Screen, Random, Urine

## Overview

### Useful For

Detecting drug use involving stimulants, barbiturate, benzodiazepines, cocaine, opioids, tetrahydrocannabinol, alcohol, and nicotine

This test is **not intended** for use in employment-related testing.

### Profile Information

| Test Id | Reporting Name | Available Separately | Always Performed |
|---|---|---|---|
| LPCM | List Patient's Current Medications | No | Yes |
| ADULT | Adulterants Survey, U | Yes | Yes |
| PNRCH | Drug Immunoassay Panel, U | No | Yes |
| TOPSU | Targeted Opioid Screen, U | Yes, (Order TOSU) | Yes |
| TABSU | Targeted Benzodiazepine Screen, U | Yes, (Order TBSU) | Yes |
| TSTIM | Targeted Stimulant Screen, U | Yes, (Order TSPU) | Yes |
| ETGSR | Ethyl Glucuronide Scrn w/Reflex, U | No | Yes |
| NICOU | Nicotine and Metabolites, U | Yes | Yes |

### Reflex Tests

| Test Id | Reporting Name | Available Separately | Always Performed |
|---|---|---|---|
| COKEU | Cocaine and metabolite Conf, U | Yes | No |
| BARBU | Barbiturates Confirmation, U | Yes | No |
| THCU | Carboxy-THC Confirmation, U | Yes | No |
| ETGC | Ethyl Glucuronide Confirmation, U | Yes | No |

### Testing Algorithm

Testing begins with an adulterant survey. If the sample is found to be adulterated, testing will end, and the remaining tests will be canceled.

If the specimen is normal or only diluted, remaining testing will continue.

Immunoassay screening tests for drugs of abuse including barbiturates, cocaine, tetrahydrocannabinol, and ethyl glucuronide.

If the immunoassay screen is positive, confirmation with quantification of positives for barbiturates, cocaine and metabolites, tetrahydrocannabinol metabolite, and ethyl glucuronide/ethyl sulfate will be performed at an additional charge.

### Special Instructions

- Clinical Toxicology CPT Code Client Guidance

### Method Name

ADULT: Spectrophotometry (SP)
PNRCH: Immunoassay followed by Gas Chromatography Mass Spectrometry (GC-MS) or Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) as needed
TOPSU, TABSU, TSTIM: Liquid Chromatography High Resolution Accurate Mass Tandem Mass Spectrometry (LC-HRAM-MS/MS)
ETGSR: Enzyme-Linked Immunosorbent Assay (ELISA) followed by Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) as needed
NICOU: Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)

### NY State Available

Yes

## Specimen

### Specimen Type

Urine

### Ordering Guidance

This test does not screen for drug classes other than those listed in Reference Values.

### Specimen Required

**Supplies:** Urine Container, 60 mL (T313)
**Collection Container/Tube:** Plastic urine container

**Submission Container/Tube:** Plastic, 60-mL urine container
**Specimen Volume:** 30 mL
**Collection Instructions:**
1. Collect a random urine specimen.
2. Submit 30 mL in 1 plastic bottle.
3. No preservative.
**Additional Information:**
1. No specimen substitutions.
2. Submitting less than 30 mL may compromise the ability to perform all necessary testing.
3. STAT requests are **not accepted** for this test.

### Forms

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:
-Therapeutics Test Request (T831)
-Kidney Transplant Test Request

### Specimen Minimum Volume

20 mL

### Reject Due To

| | |
|---|---|
| Hemolysis | Reject |
| Icterus | Reject |

### Specimen Stability Information

| Specimen Type | Temperature | Time | Special Container |
|---|---|---|---|
| Urine | Refrigerated (preferred) | 14 days | |
| | Frozen | 14 days | |

## Clinical & Interpretive

### Clinical Information

This test uses screening techniques that involve immunoassay testing and high-resolution accurate mass spectrometry screening for drugs by class. All positive immunoassay screening results are confirmed by gas chromatography mass spectrometry (GC-MS) or liquid chromatography tandem mass spectrometry (LC-MS/MS), and quantitated, before a positive result is reported.

The following drugs/drug classes are tested by immunoassay and confirmed by GC-MS:
-Barbiturates
-Cocaine

The following drugs/drug classes are tested by immunoassay and confirmed by LC-MS/MS:
-Carboxy-tetrahydrocannabinol
-Ethyl glucuronide

The targeted opioid, benzodiazepine, and stimulant screen portions are performed using liquid chromatography high resolution accurate mass tandem mass spectrometry (LC-HRAM-MS/MS) and are completed for all opioids, benzodiazepines, and stimulants.

Opioids are a large class of medications commonly used to relieve acute and chronic pain or help manage opioid abuse and dependence. Medications that fall into this class include buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, oxymorphone, tapentadol, tramadol, and others. Opioids work by binding to the opioid receptors that are found in the brain, spinal cord, gastrointestinal tract, and other organs. Common side effects for opioids include drowsiness, confusion, nausea, constipation, and, in severe cases, respiratory depression. These are dose dependant and vary with tolerance. These medications can also produce physical and psychological dependence and have a high risk for abuse and diversion, which is one of the main reasons many professional practice guidelines recommend compliance testing in patients prescribed these medications.

Opioids are readily absorbed from the gastrointestinal tract, nasal mucosa, lungs, and after subcutaneous or intermuscular injection. Opioids are primarily excreted from the kidney in both free and conjugated forms. This assay does not hydrolyze the urine sample and looks for both parent drugs and metabolites (including glucuronide forms). The detection window for most opioids in urine is approximately 1 to 3 days with longer detection times for some compounds (ie, methadone).

Benzodiazepines represent a large family of medications used to treat a wide range of disorders from anxiety to seizures and are also used in pain management. With a high risk for abuse and diversion, professional practice guidelines recommend compliance monitoring for these medications using urine drug tests. However, traditional benzodiazepine immunoassays suffer from a lack of cross-reactivity with all the benzodiazepines, so many compliant patients taking either clonazepam (Klonopin) or lorazepam (Ativan) may screen negative by immunoassay but are positive when confirmatory testing is done. The new targeted benzodiazepine screening test provides a more sensitive and specific test to check for compliance to all the commonly prescribed benzodiazepines and looks for both parent drugs and metabolites in the urine.

Stimulants are sympathomimetic amines that stimulate the central nervous system activity and, in part, suppress the appetite. Amphetamine and methamphetamine are also prescription drugs used in the treatment of narcolepsy and attention-deficit disorder/attention-deficit hyperactivity disorder (ADHD). Methylphenidate is another stimulant used to treat ADHD. Phentermine is indicated for the management of obesity. All other amphetamines (eg, methylenedioxymethamphetamine: MDMA) are Drug Enforcement Administration-scheduled Class I compounds. Due to their stimulant effects, the drugs are commonly sold illicitly and abused. Physiological symptoms associated with very high amounts of ingested amphetamine or methamphetamine include elevated blood pressure, dilated pupils, hyperthermia, convulsions, and acute amphetamine psychosis.

Ethyl glucuronide is a direct metabolite of ethanol that is formed by enzymatic conjugation of ethanol with glucuronic acid. Alcohol in urine is normally detected for only a few hours, whereas ethyl glucuronide can be detected in the urine for 1 to 3 days. This procedure uses immunoassay reagents that are designed to produce a negative result when no drugs are present in a natural (eg, unadulterated) specimen of urine; the assay is designed to have a high true-negative rate. Like all immunoassays, it can have a false-positive rate due to cross-reactivity with natural chemicals and drugs other than those they were designed to detect. The immunoassay also has a false-negative rate to the antibody's ability to cross-react with different drugs in the class for which it is being screened.

Tobacco use is the leading cause of death in the United States. Nicotine, coadministered in tobacco products such as cigarettes, pipe, cigar, or chew is an addicting substance that causes individuals to continue use of tobacco despite concerted efforts to quit. Nicotine stimulates dopamine release and increases dopamine concentration in the nucleus accumbens, a mechanism that is thought to be the basis for addiction for drugs of abuse.

Nicotine is rapidly metabolized in the liver to cotinine, exhibiting an elimination half-life of 2 hours. Cotinine exhibits an apparent elimination half-life of approximately 15 to 19 hours. Patients using tobacco products excrete nicotine in urine in the concentration range of 1000 to 5000 ng/mL. Cotinine accumulates in urine in proportion to dose and hepatic metabolism, which is genetically determined; most tobacco users excrete cotinine in the range of 1000 to 8000 ng/mL. Urine concentrations of nicotine and metabolites in these ranges indicate the subject is using tobacco or is receiving high-dose nicotine patch therapy.

In addition to nicotine and metabolites, tobacco products also contain other alkaloids that can serve as unique markers of tobacco use. Two such markers are anabasine and nornicotine. Anabasine is present in tobacco products but not nicotine replacement therapies. Nornicotine is present as an alkaloid in tobacco products and as a metabolite of nicotine. The presence of anabasine greater than 10 ng/mL or nornicotine greater than 30 ng/mL in urine indicates current tobacco use irrespective of whether the subject is on nicotine replacement therapy. The presence of nornicotine without anabasine is consistent with use of nicotine replacement products. Heavy tobacco users who abstain from tobacco for 2 weeks exhibit urine nicotine values below 30 ng/mL, cotinine values below 50 ng/mL, anabasine levels below 2 ng/mL, and nornicotine levels below 2 ng/mL.

Passive exposure to tobacco smoke can cause accumulation of nicotine metabolites in nontobacco users. Urine cotinine has been observed to accumulate up to 20 ng/mL from passive exposure. Neither anabasine nor nornicotine accumulates from passive exposure.

Tobacco users engaged in programs to abstain from tobacco require support in the form of counseling, pharmacotherapy, and continuous encouragement. Occasionally, counselors may elect to monitor abstinence by biochemical measurement of nicotine and metabolites in a random urine specimen to verify abstinence. If results of biologic testing indicate the patient is actively using a tobacco product during therapy, additional counseling or intervention may be appropriate.

Quantification of urine nicotine and metabolites while a patient is actively using a tobacco product is useful to define the concentrations that a patient achieves through self-administration of tobacco. Nicotine replacement dose can then be tailored to achieve the same concentrations early in treatment to assure adequate nicotine replacement so the patient

may avoid the strong craving they may experience early in the withdrawal phase. This can be confirmed by measurement of urine nicotine and metabolite concentrations at steady state (2-3 days after replacement therapy is started). Once the patient is stabilized on the dose necessary to achieve complete replacement and responding well to therapy, the replacement dose can be slowly tapered to achieve complete withdrawal.

This test is intended to be used in a setting where the test results can be used to make a definitive diagnosis.

## Reference Values

ADULTERANT SURVEY:
Cutoff concentrations
Oxidants: 200 mg/L
Nitrites: 500 mg/L

DRUG IMMUNOASSAY PANEL:
Negative

Screening cutoff concentrations:
Barbiturates: 200 ng/mL
Cocaine (benzoylecgonine-cocaine metabolite): 150 ng/mL
Tetrahydrocannabinol carboxylic acid: 50 ng/mL

This report is intended for use in clinical monitoring or management of patients. It is not intended for use in employment-related testing.

TARGETED OPIOID SCREEN:
Not detected
Positive results are reported with qualitative "Present"

Cutoff concentrations:
Codeine: 25 ng/mL
Codeine-6-beta-glucuronide: 100 ng/mL
Morphine: 25 ng/mL
Morphine-6-beta-glucuronide: 100 ng/mL
6-monoacetylmorphine: 25 ng/mL
Hydrocodone: 25 ng/mL
Norhydrocodone: 25 ng/mL
Dihydrocodeine: 25 ng/mL
Hydromorphone: 25 ng/mL
Hydromorphone-3-beta-glucuronide: 100 ng/mL
Oxycodone: 25 ng/mL
Noroxycodone: 25 ng/mL
Oxymorphone: 25 ng/mL

Oxymorphone-3-beta-glucuronide: 100 ng/mL
Noroxymorphone: 25 ng/mL
Fentanyl: 2 ng/mL
Norfentanyl: 2 ng/mL
Meperidine: 25 ng/mL
Normeperidine: 25 ng/mL
Naloxone: 25 ng/mL
Naloxone-3-beta-glucuronide: 100 ng/mL
Methadone: 25 ng/mL
2-Ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine (EDDP): 25 ng/mL
Propoxyphene: 25 ng/mL
Norpropoxyphene: 25 ng/mL
Tramadol: 25 ng/mL
O-desmethyltramadol: 25 ng/mL
Tapentadol: 25 ng/mL
N-desmethyltapentadol: 50 ng/mL
Tapentadol-beta-glucuronide: 100 ng/mL
Buprenorphine: 5 ng/mL
Norbuprenorphine: 5 ng/mL
Norbuprenorphine glucuronide: 20 ng/mL

TARGETED BENZODIAZEPINE SCREEN:
Not detected
Positive results are reported with qualitative "Present"

Cutoff concentrations:
Alprazolam: 10 ng/mL
Alpha-hydroxyalprazolam: 10 ng/mL
Alpha-hydroxyalprazolam glucuronide: 50 ng/mL
Chlordiazepoxide: 10 ng/mL
Clobazam: 10 ng/mL
N-desmethylclobazam: 200 ng/mL
Clonazepam: 10 ng/mL
7-Aminoclonazepam: 10 ng/mL
Diazepam: 10 ng/mL
Nordiazepam: 10 ng/mL
Flunitrazepam: 10 ng/mL
7-Aminoflunitrazepam: 10 ng/mL
Flurazepam: 10 ng/mL
2-Hydroxy ethyl flurazepam: 10 ng/mL
Lorazepam: 10 ng/mL
Lorazepam glucuronide: 50 ng/mL

Midazolam: 10 ng/mL
Alpha-hydroxymidazolam: 10 ng/mL
Oxazepam: 10 ng/mL
Oxazepam glucuronide: 50 ng/mL
Prazepam: 10 ng/mL
Temazepam: 10 ng/mL
Temazepam glucuronide: 50 ng/mL
Triazolam: 10 ng/mL
Alpha-hydroxytriazolam: 10 ng/mL
Zolpidem: 10 ng/mL
Zolpidem phenyl-4-carboxylic acid: 10 ng/mL

TARGETED STIMULANT SCREEN:
Not detected
Positive results are reported with qualitative "Present"

Cutoff concentrations:
Methamphetamine: 100 ng/mL
Amphetamine: 100 ng/mL
3,4-Methylenedioxymethamphetamine (MDMA): 100 ng/mL
3,4-Methylenedioxy-N-ethylamphetamine (MDEA): 100 ng/mL
3,4-Methylenedioxyamphetamine (MDA): 100 ng/mL
Ephedrine: 100 ng/mL
Pseudoephedrine: 100 ng/mL
Phentermine: 100 ng/mL
Phencyclidine (PCP): 20 ng/mL
Methylphenidate: 20 ng/mL
Ritalinic acid: 100 ng/mL

ETHYL GLUCURONIDE SCREEN:
Negative

Screening cutoff concentration:
Ethyl glucuronide: 500 ng/mL

NICOTINE AND METABOLITES:
Non-tobacco user with no passive exposure:
Nicotine: <5.0 ng/mL
Cotinine: <5.0 ng/mL
Anabasine: <2.0 ng/mL
Nornicotine: <2.0 ng/mL

## Interpretation

A positive result derived by this testing indicates that the patient has used one of the drugs detected by these techniques in the recent past.

For information about drug testing, including estimated detection times and Result Interpretations, see Addiction rehabilitation monitoring on MayoClinicLabs.com.

## Cautions

Care should be taken when interpreting results since there are many factors (eg, fluid intake and other biologic factors) that may influence a urine test result. It is possible that substances other than those investigated in the specificity study may interfere with the test and cause false-positive or negative results.

Knowledge of time elapsed between last dose and specimen collection is important for interpretation of test results.

## Clinical Reference

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2. Bruntman LL, ed. Goodman and Gilman's: The Pharmacological Basis of Therapeutics. 11th ed. McGraw-Hill Book Company; 2006
3. 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
4. Gutstein HB, Akil H. Opioid analgesics. In. Brunton LL, Lazo JS, Parker KL, eds: Goodman and Gilman's: The Pharmacological Basis of Therapeutics. 11th ed. McGraw-Hill Companies; 2006
5. Rovine T, Ferrero CL, American Pain Society: Chronic Pain in America: Roadblocks to Relief. Roper Starch Worldwide, Inc; 1999. Updated 2001. Accessed November 6, 2026. Available at http://accurateclinic.com/wp-content/uploads/2016/04/Chronic-Pain-In-America-Roadblocks-To-Relief-1999.pdf
6. Magnani B, Kwong T. Urine drug testing for pain management. Clin Lab Med. 2012;32(32):379-390
7. Jannetto PJ, Bratanow NC, Clark WA, et al. Executive summary: American Association of Clinical Chemistry Laboratory Medicine Practice Guideline-using clinical laboratory tests to monitor drug therapy in pain management patients. J Appl Lab Med. 2018;2(4):489-526
8. McMillin GA, Marin SJ, Johnson-Davis KL, Lawlor BG, Strathmann FG. A hybrid approach to urine drug testing using high-resolution mass spectrometry and select immunoassays. Am J Clin Pathol. 2015;143(2):234-240
9. Cone EJ, Caplan YH, Black DL, Robert T, Moser F. Urine drug testing of chronic pain patients: licit and illicit drug patterns. J Anal Toxicol. 2008;32(8):530-543
10. American Society of Addiction Medicine Consensus Statement. Appropriate Use of Drug Testing in Clinical Addiction Medicine. American Society of Addiction Medicine; 2017. Accessed November 6, 2026. Available at www.asam.org/docs/default-source/quality-science/the-asam-appropriate-use-of-drug-testing-in-clinical-addiction-medicine-full-document.pdf

## Performance

## Method Description

Adulterant:
All results are measured using spectrophotometry at wavelengths specified by the reagent manufacturer. The use of a refractometer may also be used in the specific gravity measurement.(Package inserts: Specimen Validity Test Creatinine. Roche Diagnostics; V 3.0, 05/2023; Specimen Validity Test Nitrite. Roche Diagnostics; 05/2022, Specimen Validity Test Oxidant. Roche Diagnostics; 05/2022; Specimen Validity Test pH Roche Diagnostics; 05/2022, Specimen Validity Test Specific Gravity. Roche Diagnostics; 08/2022)

Drug Panel:
The barbiturate, cocaine metabolite, and tetrahydrocannabinol metabolite assays are based on the kinetic interaction of microparticles in a solution as measured by changes in light transmission. In the absence of sample drug, soluble drug conjugates bind to antibody-bound microparticles, causing the formation of particle aggregates. As the aggregation reaction proceeds in the absence of sample drug, the absorbance increases. When a urine sample contains the drug in question, this drug competes with the drug derivative conjugate for microparticle-bound antibody. Antibody bound to sample drug is no longer available to promote particle aggregation, and subsequent particle lattice formation is inhibited. The presence of sample drug diminishes the increasing absorbance in proportion to the concentration of drug in the sample. Sample drug content is determined relative to the value obtained for a known cutoff concentration of drug.(Package inserts: BARB. Roche Diagnostics; 04/2024; THC2. Roche Diagnostics; 06/2024; COC2. Roche Diagnostics; 04/2024)

Targeted Screening Panels for opioids, benzodiazepines, and stimulants:
The urine sample is diluted with internal standard and clinical laboratory reagent water and then analyzed by liquid chromatography tandem mass spectrometry(LC-MS/MS) using a high resolution-accurate mass orbitrap detector.(Unpublished Mayo method)

Ethyl Glucuronide Screen:
This assay is a homogeneous enzyme-linked immunosorbent assay . The assay is semiquantitative. It is based on competition between free drug in the urine sample and a drug labeled with the enzyme glucose-6-phosphate dehydrogenase for a fixed amount of specific antibody binding sites. Active enzyme converts nicotinamide adenine dinucleotide (NAD[+]) to NADH, which results in an absorbance change that can be measured spectrophotometrically at 340 nm.(Package insert: ETG. Immunalysis; 03/2019)

Nicotine and Metabolites:
Nicotine and metabolites are extracted from urine by solid-phase extraction techniques. The extract eluate is quantified by high-performance liquid chromatography tandem mass spectrometry.(Moyer TP, Charlson JR, Enger RJ, et al. Simultaneous analysis of nicotine, nicotine metabolites, and tobacco alkaloids in serum or urine by tandem mass spectrometry, with clinically relevant metabolic profiles. Clin Chem. 2002;48[9]:1460-1471; Oh J, Park MS, Chun MR, et al. A simple and high-throughput LC-MS/MS method for simultaneous measurement of nicotine, cotinine, 3-OH cotinine, nornicotine, and anabasine in urine and its application in the general Korean population. J Anal Toxicol. 2022:46[1]:25-36. doi:10.1093/jat/bkaa177)

## PDF Report

No

### Day(s) Performed
Monday through Saturday

### Report Available
2 to 5 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
80307
G0482 (appropriate to use when 0-3 reflexes are required)
G0483 (appropriate to use when 4 reflexes are required)
80347 (if appropriate for select payers)
80364 (if appropriate for select payers)
80326 (if appropriate for select payers)
80323 (if appropriate for select payers)
Clinical Toxicology CPT Code Client Guidance

### LOINC® Information

| Test ID | Test Order Name | Order LOINC® Value |
|---|---|---|
| ADMPU | Addiction Med Profile,22,HRMS/IA, U | 12286-1 |

| Result ID | Test Result Name | Result LOINC® Value |
|---|---|---|

| | | |
|---|---|---|
| 20606 | Creatinine, U | 2161-8 |
| 22312 | Specific Gravity | 5810-7 |
| 23509 | pH | 2756-5 |
| 23511 | Oxidants | 58714-7 |
| 23510 | Nitrites | 32710-6 |
| 30914 | Comment | 48767-8 |
| 82510 | Nicotine | 3854-7 |
| 21321 | Cotinine | 10366-3 |
| 21324 | Nornicotine | 33917-6 |
| 21323 | Anabasine | 33915-0 |
| 42323 | Codeine | 19411-8 |
| 42324 | Codeine-6-beta-glucuronide | 89310-7 |
| 42325 | Morphine | 19597-4 |
| 42326 | Morphine-6-beta-glucuronide | 89308-1 |
| 42327 | 6-monoacetylmorphine | 19321-9 |
| 42328 | Hydrocodone | 19482-9 |
| 42329 | Norhydrocodone | 89304-0 |
| 42330 | Dihydrocodeine | 19446-4 |
| 42331 | Hydromorphone | 19486-0 |
| 42332 | Hydromorphone-3-beta-glucuronide | 89309-9 |
| 42333 | Oxycodone | 19642-8 |
| 42334 | Noroxycodone | 89303-2 |
| 42335 | Oxymorphone | 19646-9 |
| 42336 | Oxymorphone-3-beta-glucuronide | 89301-6 |
| 42337 | Noroxymorphone | 89302-4 |
| 42338 | Fentanyl | 59673-4 |
| 42339 | Norfentanyl | 43199-9 |
| 42340 | Meperidine | 19532-1 |
| 42341 | Normeperidine | 27920-8 |
| 42342 | Naloxone | 42618-9 |
| 42343 | Naloxone-3-beta-glucuronide | 89307-3 |
| 42344 | Methadone | 19550-3 |
| 42345 | EDDP | 93495-0 |
| 42346 | Propoxyphene | 19429-0 |
| 42347 | Norpropoxyphene | 19632-9 |
| 42348 | Tramadol | 19710-3 |
| 42349 | O-desmethyltramadol | 86453-8 |
| 42350 | Tapentadol | 72485-6 |
| 42351 | N-desmethyltapentadol | 89306-5 |
| 42352 | Tapentadol-beta-glucuronide | 89300-8 |

| | | |
|---|---|---|
| 42353 | Buprenorphine | 93494-3 |
| 42354 | Norbuprenorphine | 82371-6 |
| 42355 | Norbuprenorphine glucuronide | 89305-7 |
| 65059 | Opioid Interpretation | 69050-3 |
| 2574 | Barbiturates | 70155-7 |
| 21652 | Cocaine | 19359-9 |
| 2664 | Tetrahydrocannabinol | 19415-9 |
| 604871 | Alprazolam | 94116-1 |
| 604867 | Alpha-Hydroxyalprazolam | 19325-0 |
| 604891 | Alpha-Hydroxyalprazolam Glucuronide | 94115-3 |
| 604872 | Chlordiazepoxide | 19385-4 |
| 604889 | Clobazam | 94114-6 |
| 604890 | N-Desmethylclobazam | 94113-8 |
| 604873 | Clonazepam | 19399-5 |
| 604267 | 7-aminoclonazepam | 94112-0 |
| 604874 | Diazepam | 19443-1 |
| 604880 | Nordiazepam | 19624-6 |
| 604875 | Flunitrazepam | 19466-2 |
| 604866 | 7-aminoflunitrazepam | 94111-2 |
| 604876 | Flurazepam | 19474-6 |
| 604868 | 2-Hydroxy Ethyl Flurazepam | 94110-4 |
| 604877 | Lorazepam | 19520-6 |
| 604878 | Lorazepam Glucuronide | 94109-6 |
| 604879 | Midazolam | 19585-9 |
| 604869 | Alpha-Hydroxy Midazolam | 94108-8 |
| 604881 | Oxazepam | 19638-6 |
| 604882 | Oxazepam Glucuronide | 94107-0 |
| 604883 | Prazepam | 19678-2 |
| 604884 | Temazepam | 19698-0 |
| 604885 | Temazepam Glucuronide | 94106-2 |
| 604886 | Triazolam | 19714-5 |
| 604870 | Alpha-Hydroxy Triazolam | 94105-4 |
| 604887 | Zolpidem | 94104-7 |
| 604888 | Zolpidem Phenyl-4-Carboxylic acid | 94103-9 |
| 604949 | Benzodiazepine Interpretation | 69050-3 |
| LPCM | List Patient's Current Medications | 66423-5 |
| 610273 | Methamphetamine | 19554-5 |
| 610274 | Amphetamine | 19343-3 |
| 610275 | 3,4-methylenedioxymethamphetami | 19568-5 |

| | | |
|---|---|---|
| | ne (MDMA) | |
| 610276 | 3,4-methylenedioxy-N-ethylamphetamine (MDEA) | 59844-1 |
| 610277 | 3,4-methylenedioxyamphetamine (MDA) | 19565-1 |
| 610278 | Ephedrine | 99108-3 |
| 610279 | Pseudoephedrine | 99109-1 |
| 610280 | Phentermine | 19674-1 |
| 610281 | Phencyclidine (PCP) | 19659-2 |
| 610282 | Methylphenidate | 19577-6 |
| 610283 | Ritalinic acid | 99110-9 |
| 610284 | Stimulant Interpretation | 54247-2 |
| 616033 | Ethyl Glucuronide Screen, U | 58375-7 |