



Main Pain Management Drugs in Urine

Compounds: Over 50 Pain Management Drugs



For Free Consultation,
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SPE EXTRACTION METHOD:

Panthera Deluxe 30 mg/1 cc SPE cartridge
 (catalog # SYPA6030-01)

HPLC METHOD:

Column:	Orochem Gazelle C18 UHPLC column 2.1 x 50 mm, 1.7 μ m
Catalog Number:	G17BQ-931
Mobile Phase:	A: 20 mM NH ₄ OH, 0.1% formic acid in water B: 0.1 % formic acid in methanol
Gradient:	Initial 30% B then gradient to 40% B at 0.5 min, to 60% B at 2.5 min, to 85% B at 4.0 min, hold until 4.7 min, then switch to 95% B at 4.71 min, hold until 5.6 min, then switch to 30% B at 5.61 min and hold until 7.0 min
Flow rate:	0.3 mL/min
Injection volume:	10 μ L
Column Temperature:	40 °C
SMRM Detection:	API 4500

Condition:

1 mL of methanol, followed by 1 mL of water



Load:

Load hydrolyzed urine samples
 (0.1 mL of urine mixed with 0.2 mL master mix including buffer and β -glucuronidase and IS)



Wash:

1 mL water, followed by 1 mL of 5% methanol



Elute:

1 mL of methanol



Evaporate & Reconstitute:

100 μ L of 5% methanol

Mass Transitions			Results
Name	Q1	Q3	Recovery%
Amphetamine	136.0 136.0	91 119.1	81.1
Norketamine	224.0 224.0	179.0 125.0	74.2
MDMA	194.1 194.1	105.1 163.1	100.5
Methamphetamine	150.1 150.1	91.1 119.1	92.5
Ketamine	238.1 238.1	125.1 207.1	89.3

Mass Transitions			Results
Name	Q1	Q3	Recovery%
Nordiazepam	271.0 271.0	165.1 140.0	102.4
Oxazepam	286.7 286.7	241.1 269.1	104.2
Temazepine	301.0 301.0	255.1 177.0	100.2
Lorazepam	321.1 321.1	257.0 229.1	102.2
α -Hydroxyalprazolam	325.0 325.0	297.1 216.1	102.4
α -Hydroxymidazolam	342.1 342.1	203.0 168.1	101.1

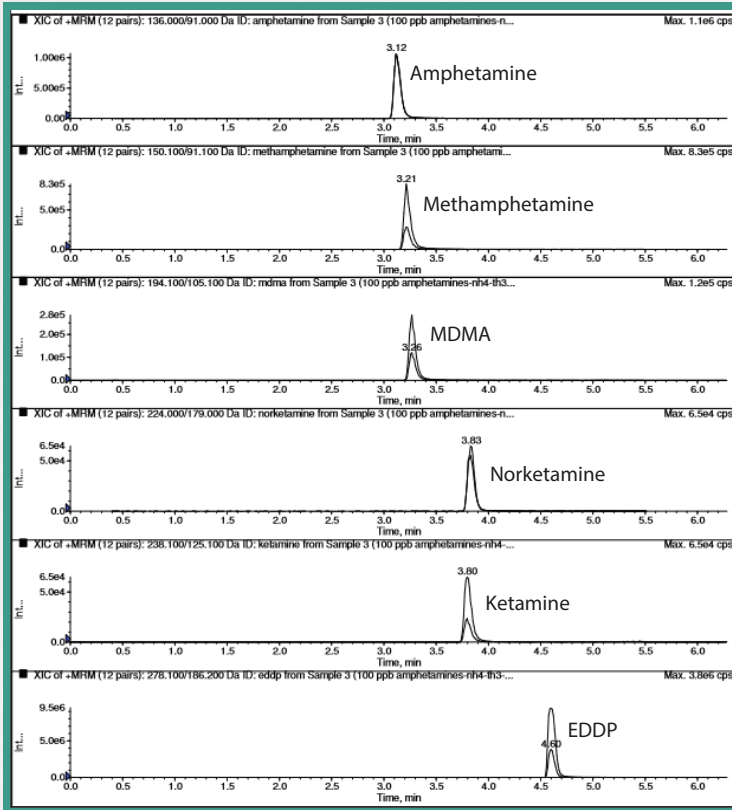
Mass Transitions			Results
Name	Q1	Q3	Recovery%
Hydromorphone	286.1 286.1	185.0 157.1	94.1
Morphine	286.1 286.1	152.1 165.1	95.8
Norhydrocodone	286.2 286.2	199.1 171.0	95.4
Codeine	300.0 300.0	165.1 153.1	91.5
Hydrocodone	300.1 300.1	199.1 128.1	98.8
oxymorphone	302.1 302.1	227.1 198.2	93.2
noroxycodone	302.1 302.1	187.2 227.1	90.9
oxycodone	316.1 316.1	241.1 256.1	97.6
6-MAM	328.1 328.1	165.1 211.1	94.7

Mass Transitions			Results
Name	Q1	Q3	Recovery%
Norfentanyl	233.0 233.0	84.1 150.2	116.9
Norbuprenorphine	414.2 414.2	165.2 115.1	100.8
Meperidine	248.0 248.0	220.1 174.2	104.3
O-Desmethyltramadol	250.1 250.1	58.1 77	115.6
Normeperidine	234.0 234.0	160.1 56.1	108.9
Methadone	310.1 310.1	265.1 105.1	95.1
Methadone	302.1 302.1	187.2 227.1	90.9
EDDP	278.1 278.1	186.2 234.1	111.8
Tapentadol	222.1 222.1	107.1 121.1	108.8
Fentanyl	337.1 337.1	188.2 132.1	113.5
N-Desmethyltapentadol	208.1 208.1	107 121.1	91.8
Buprenorphine	468.1 468.1	414.3 396.3	113.2

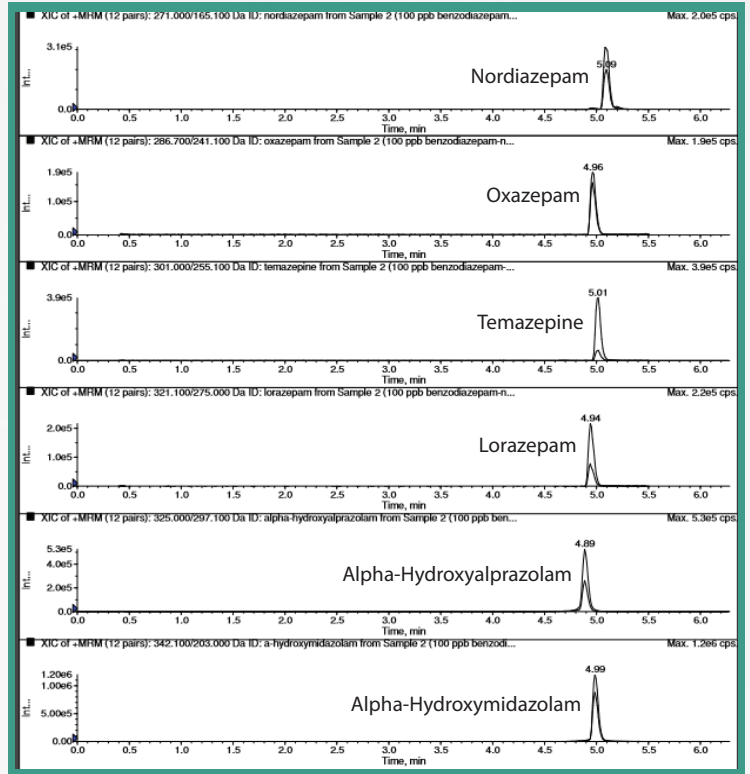
Mass Transitions			Results
Name	Q1	Q3	Recovery%
Zolpidem	308.1 308.1	235.1 263.1	100.1
PCP	244.1 244.1	159.2 86.1	115
Meprobamate	219.1 160.1	158.1 83.1	91.2
Benzoylcegonine	290.1 290.1	168.1 105	96.1
Carisoprodol	261.0 261.0	97.1 176.2	91
Cotinine	177.1 177.1	80 98.1	91.3

Separation of Main drugs panel by Gazelle C18 UHPLC- MS/ MS

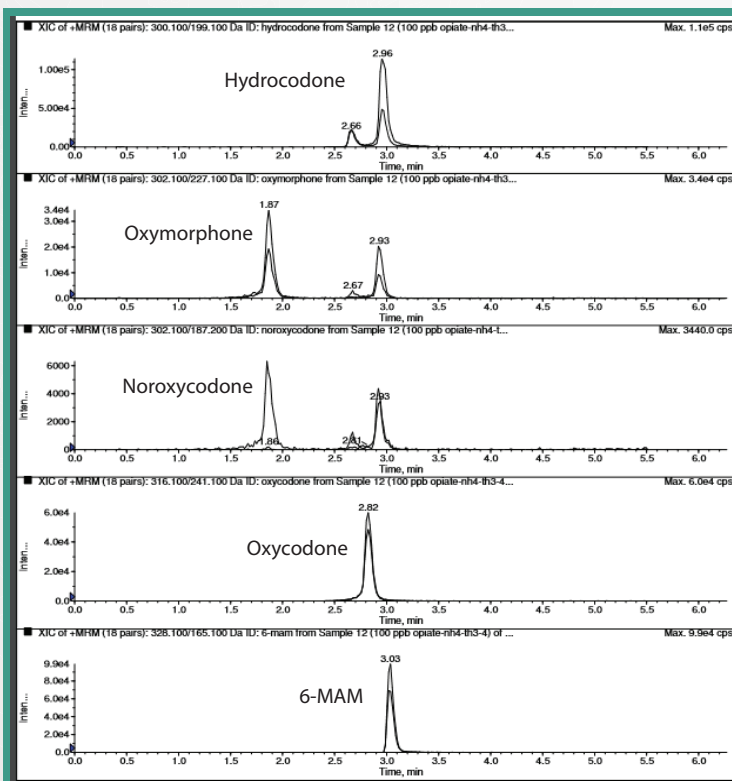
Amphetamine-Gazelle



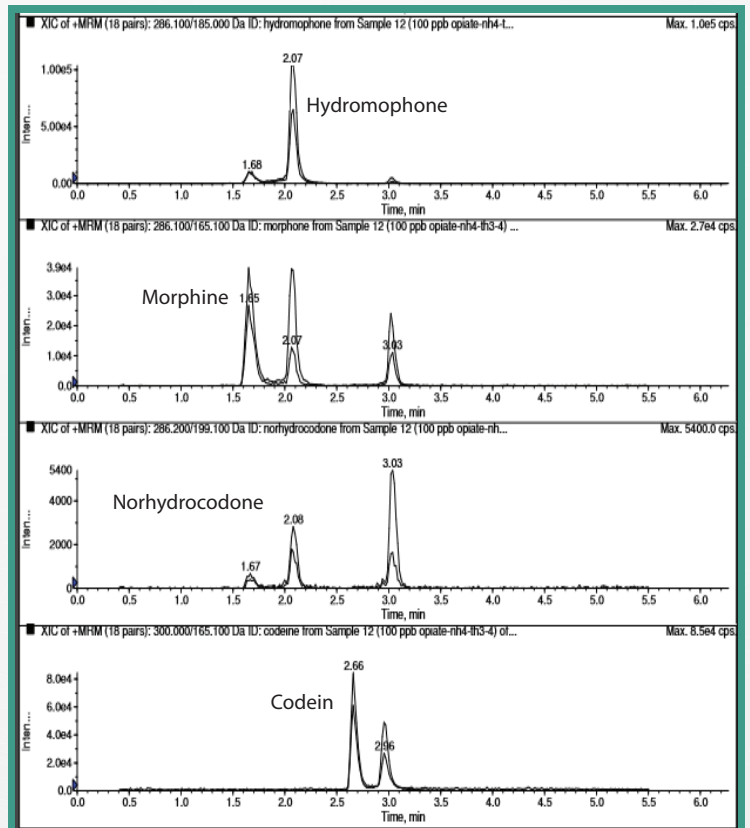
Benzodiazepam-Gazelle



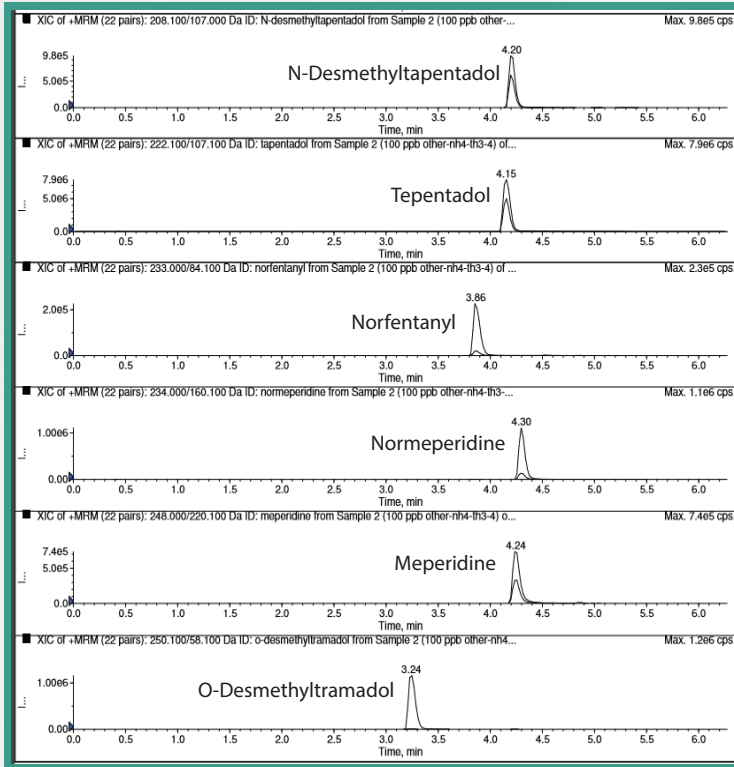
Opiates-Gazelle



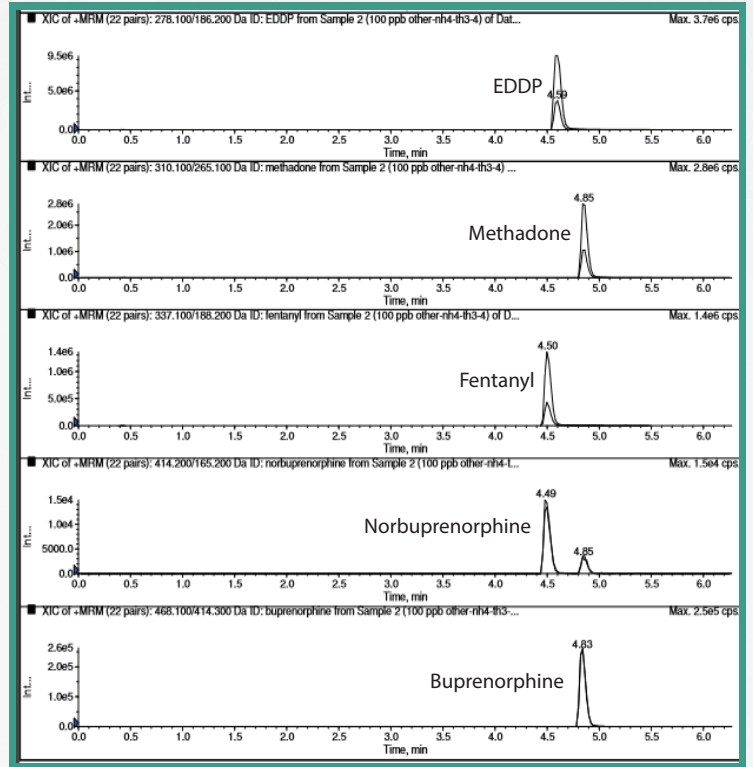
Opiates-Gazelle



Opiates-Gazelle



Opiates-Gazelle



Recreation Drugs-Gazelle

