



Scientific Section
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**Selected Articles on the Analysis of
Drugs of Abuse in Biological Specimens
(July - December 2005)**

Papers from "Journal of Forensic Science" and "Journal of Analytical Toxicology" for 2005 will be included in a separate issue of the Selected Articles, to be distributed shortly.

AMPHETAMINES (AMPH)

LC-MS (GENRL)

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|--------------------|---|--------------------------------------|
| Fuh, M-R., et al. | Determination of amphetamine and methamphetamine in urine by solid phase extraction and ion-pair liquid chromatography-electrospray-tandem mass spectrometry. | Talanta, 68 (2006), 987-991. |
| Shima, N., et al.. | Direct determination of glucuronide and sulfate of p-hydroxymethamphetamine in methamphetamine users' urine. | J. Chromatogr. B, 830 (2006), 64-70. |

Gas Chromatography/Mass Spectrometry (GC-MS)

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| Ewald, A.H., et al.. | Studies on the metabolism and toxicological detection of the designer drug 4-methylthioamphetamine (4-MTA) in human urine using gas chromatography-mass spectrometry. | J. Chromatogr. B, 824 (2005), 123-131. |
| Martins, L., et al.. | Simultaneous enantioselective determination of amphetamine and congeners in hair specimens by negative chemical ionization gas chromatography-mass spectrometry. | J. Chromatogr. B, 825 (2005), 57-62. |

Benzodiazepines (BENZ)

LC-MS (GENRL)

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| Quintela, O., et al.. | Liquid chromatography-electrospray ionisation mass spectrometry for the determination of nine selected benzodiazepines in human plasma and oral fluid. | J. Chromatogr. B, 825 (2005), 63-71. |
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High Performance Liquid Chromatography (HPLC)

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| Rouini, T., et al.. | Simultaneous determination of clobazam and its major metabolite in human plasma by a rapid HPLC method. | J. Chromatogr. B, 823 (2005), 167-171. |
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Cannabis (CANNABIS)

LC-MS (GENRL)

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| Laloup, M., et al.. | Quantitative analysis of delta-9-tetrahydrocannabinol in preserved oral fluid by liquid chromatography-tandem mass | J. Chromatogr. A, 1082 (2005), 15-24. |
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Cocaine (COCAINE)

Gas Chromatography/Mass Spectrometry (GC-MS)

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| Bermejo, A.M., et | Solid-phase microextraction for the determination of cocaine and cocaethylene in human hair by gas chromatography-mass spectrometry (Review). | Forensic Sci. Int., 156 (2006), 118-123. |
| Cardona, P.S., et | Simultaneous analyses of cocaine, cocaethylene, and their possible metabolic and pyrolytic products. | Forensic Sci. Int., 157 (2006), 46-56. |
| Cognard, E., et al.. | Analysis of cocaine and three of its metabolites in hair by gas chromatography-mass spectrometry using ion-trap detection for CI/MS/MS. | J. Chromatogr. B, 825 (2005), 17-25. |

Drugs Not Under Int. Control (DNUC)

Gas Chromatography/Mass Spectrometry (GC-MS)

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|-----------------------|---|--------------------------------------|
| Peters, F.T., et al.. | Studies on the metabolism and toxicological detection of the new designer drug 4'-methyl-alpha-pyrrolidinobutyrophenone (MPBP) in rat urine using gas chromatography-mass spectrometry. | J. Chromatogr. B, 824 (2005), 81-91. |
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High Performance Liquid Chromatography (HPLC)

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| Gu, Y., et al.. | Improved HPLC method for the | J. Chromatogr. B, 821 |
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simultaneous determination of tramadol and O-desmethyltramadol in human plasma. (2005), 240-243.

Rouini, M-R., et al.. Development and validation of a rapid HPLC method for simultaneous determination of tramadol, and its two main metabolites in human plasma. J. Chromatogr. B, 830 (2006), 207-211.

Immunoassay (IA)

Yan, J., et al.. Development of an indirect competitive ELISA for the determination of Talanta, 67 (2005), 718-724.

Hallucinogens (HALL)

LC-MS (GENRL)

Johansen, S.S., et al.. Liquid chromatography-tandem mass spectrometry determination of LSD, ISO-LSD, and the main metabolite 2-oxo-3-hydroxy-LSD in forensic samples and application in a forensic J. Chromatogr. B, 825 (2005), 21-28.

Gas Chromatography/Mass Spectrometry (GC-MS)

Ishida, T., et al.. Sensitive determination of alpha-methyltryptamine (AMT) and 5-methoxy-N,N-diisopropyltryptamine (5MeO-DIPT) in whole blood and urine using gas chromatography-mass J. Chromatogr. B, 823 (2005), 47-52.

Miscellaneous (MISC)

General (GENRL)

Fucci, N., et al.. An evaluation of the Cozart® RapiScan system as an on-site screening tool for drugs of abuse in a non-conventional biological matrix: vitreous humor. Forensic Sci. Int., 156 (2006), 118-123.

Musshoff, F., et al.. Results of hair analyses for drugs of abuse and comparison with self-reports and urine tests. Forensic Sci. Int., 156 (2006), 118-123.

LC-MS (GENRL)

Miyaguchi, H., et A method for screening for various sedative-hypnotics in serum by liquid chromatography/single quadrupole Forensic Sci. Int., 157 (2006), 57-70.

mass spectrometry.

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|----------------------|---|--------------------------------------|
| Villain, M., et al.. | Screening method for benzodiazepines and hypnotics in hair at pg/mg level by liquid chromatography-mass spectrometry/mass spectrometry. | J. Chromatogr. B, 825 (2005), 72-78. |
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Opiates&Opioids (OPIATES)

Gas Chromatography/Mass Spectrometry (GC-MS)

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| Kudo, K., et al.. | Simple and sensitive determination of free and total morphine in human liver and kidney using gas chromatography-mass spectrometry. | J. Chromatogr. B, 830 (2006), 359-363. |
| Lewis, R.J., et al.. | Simultaneous analysis of thebaine, 6-MAM and six abused opiates in postmortem fluids and tissues using Zymark® automated solid-phase extraction and gas chromatography-mass spectrometry. | J. Chromatogr. B, 822 (2005), 137-145. |

High Performance Liquid Chromatography (HPLC)

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| Yazdi, A.S., et al.. | Surfactant enhanced liquid-phase microextraction of basic drugs of abuse in hair combined with high performance liquid chromatography. | J. Chromatogr. A, 1094 (2005), 1-8. |
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