

Accepted Manuscript

Title: Multi-residue analysis of sedative drugs in human plasma by ultra-high performance liquid chromatography tandem mass spectrometry

Authors: Liqun Zhang, Pinggu Wu, Quan Jin, Zhengyan Hu, Junlin Wang



PII: S1570-0232(17)31020-6
DOI: <https://doi.org/10.1016/j.jchromb.2017.11.035>
Reference: CHROMB 20932

To appear in: *Journal of Chromatography B*

Received date: 6-6-2017
Revised date: 11-10-2017
Accepted date: 27-11-2017

Please cite this article as: Liqun Zhang, Pinggu Wu, Quan Jin, Zhengyan Hu, Junlin Wang, Multi-residue analysis of sedative drugs in human plasma by ultra-high performance liquid chromatography tandem mass spectrometry, *Journal of Chromatography B* <https://doi.org/10.1016/j.jchromb.2017.11.035>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Multi-residue analysis of sedative drugs in human plasma by ultra-high performance liquid chromatography tandem mass spectrometry

Liqun Zhang^a Pinggu Wu^{b,*} Quan Jin^a Zhengyan Hu^b Junlin Wang^b

^a Center for Disease Control and Prevention of Hangzhou, Hangzhou 310021, P. R. China

^b Center for Disease Control and Prevention of Zhejiang Province, Hangzhou 310009, P. R. China

Email Address: pgwu@cdc.zj.cn;

Tel: +86-571-8711- 5276; Fax: +86-571-8711- 5263

Highlights

- Multi-group of tranquillizers in plasma were simultaneously detected by LC-MS/MS.
- The method was validated to be sensitive, precise and robust.
- It has been tested and validated for quick analysis of poisoning of tranquillizers.

Abstract

Background: Sedative drugs are often used for the treatment of depression, anxiety and insomnia and they are involved in many forensic cases. This work established a method for the simultaneous determination of multi-groups of sedative drugs (benzodiazepines, barbitals, phenothiazines, tricyclic antidepressant and butyrophenone) in human plasma for forensic analysis. A large number of sedative drugs with forensic interest can be analyzed in a short time with lower limits of quantification by combination of SPE extraction and ultra performance liquid chromatography-tandem mass spectrometry.

Download English Version:

<https://daneshyari.com/en/article/7615556>

Download Persian Version:

<https://daneshyari.com/article/7615556>

[Daneshyari.com](https://daneshyari.com)