Accepted Manuscript

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PII: S0165-9936(15)30132-1
DOI: http://dx.doi.org/doi: 10.1016/j.trac.2015.12.019
Reference: TRAC 14668

To appear in: *Trends in Analytical Chemistry*

Please cite this article as: Herbert Oberacher, Kathrin Arnhard, Current status of non-targeted liquid chromatography-tandem mass spectrometry in forensic toxicology, *Trends in Analytical Chemistry* (2016), http://dx.doi.org/doi: 10.1016/j.trac.2015.12.019.

Current status of non-targeted liquid chromatography-tandem mass spectrometry in forensic toxicology

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Highlights

- Non-targeted LC/MS/MS in forensic toxicological analysis
- Principles of non-targeted data acquisition strategies
- Principles of compound identification
- Performance of tandem mass spectral libraries
- Summary of available guidelines

A core task of any forensic toxicology lab is providing comprehensive information on the chemical composition of evidence. This mission can only be accomplished by combining efficient detection techniques with reliable identification procedures. A competent approach for the sensitive detection of a large variety of potentially toxic compounds is liquid chromatography/tandem mass spectrometry (LC/MS/MS). The