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Exploring boldione metabolism by LC-MS/MS

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Abstract

Anabolic androgenic steroids (AAS) are the most detected substances in doping control analysis. AAS misuse is commonly performed by the identification of the parent drug and/or their metabolites in urine. For this reason, metabolic studies in doping control analysis are compulsory in order to determine which metabolite has to be included in the screening methods. The best marker is not always the most abundant metabolite but also the metabolite which could be detected for longest period of time.
Boldione is an AAS which is transformed to boldenone into the body. For this reason, the detection of the main boldenone metabolites is normally used in the screening of boldione misuse.
In this work, a study of the metabolism of boldione has been performed by liquid chromatography-tandem mass spectrometry (LC-MS/MS). Methods for the detection of phase I and phase II metabolites have been developed. Several boldione metabolites have been detected. Metabolites that could improve the retrospectivity for the detection of boldione administration have been studied.

For the comlete paper, please refer to:

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