MEBEVERINE METABOLISM

The World Anti-Doping Agency wishes to draw the attention of the Laboratories to the following remarks and instructions on the analysis and reporting of p-hydroxy-amphetamine (p-OH-A).

At its meeting held on March 5-6, 2012, the WADA Laboratory Expert Group (LabEG) evaluated information on the metabolism of mebeverine, a non-prohibited, antispasmodic substance used for the treatment of irritable bowel disease (IBD). The literature available on the metabolism of this substance indicates that it can metabolize into p-OH-A, which also constitutes a Metabolite of the Prohibited Substances amphetamine, selegiline and famprofazone.

In order to avoid the incorrect reporting of an Adverse Analytical Finding on a Sample containing mebeverine-derived p-OH-A, WADA recommends that when p-OH-A is detected in a Sample, the Laboratory looks for the detection of additional mebeverine-specific Metabolites (the parent drug is not detected in urine).

In addition to p-OH-A, it has been shown that mebeverine can also metabolize into i) p-methoxy-ethylamphetamine (PMEA), ii) p-OH-ethylamphetamine (p-OH-EA) and iii) p-methoxy-amphetamine (PMA) [Kraemer et al, Drug Metab Dispos (2000) 28: 339; Zaitsu et al, Forensic Sci Int (2008) 177: 77].

Should you have any further questions, please do not hesitate to contact the WADA Science Department.