MEBEVERINE METABOLISM

1.0 Introduction

WADA wishes to draw the attention of the Laboratories to the following observations and instructions on the analysis and reporting of para-hydroxy-amphetamine (p-OH-A).

The metabolism of Mebeverine, a non-prohibited, antispasmodic substance used for the treatment of irritable bowel disease (IBD), indicates that it can metabolize into p-OH-A, which also constitutes a Metabolite of other Prohibited Substances, including but not limited to Amphetamine, Selegiline and Famprofazone.

In addition to p-OH-A, it has been shown that mebeverine can also metabolize into the specific Metabolites i) Mebeverine Alcohol, ii) Mebeverine Acid and iii) Desmethyl Mebeverine Acid (Figure 1) [1,2].

![Metabolism of Mebeverine](image)

Figure 1. Metabolism of Mebeverine (adapted from Kraemer, Bickeboeller-Friedrich and Maurer, [1] Moskaleva et al., [3] and Kristinsson, Snorradóttir, and Jóhannsson [4]).

2.0 Reporting Requirements

Before reporting an Adverse Analytical Finding (AAF) based on the detection of p-OH-A, the Laboratory shall confirm the absence of additional mebeverine specific Metabolites (Mebeverine acid and desmethyl mebeverine acid) to exclude mebeverine as the primary source of p-OH-A.

[Comment: The mebeverine parent compound is not detected in urine, and its acidic Metabolites (veratric acid, vanillic acid, isovanillic acid and protocatechuic acid) are not specific because they can be originated from the ingestion of certain food [1].]
### 3.0 References


