ANDARINE - FLUTAMIDE

1.0 Introduction

WADA wishes to draw the attention of the Laboratories to the following observations and instructions on the analysis and reporting of SARM S4 (Andarine) Metabolites O-dephenylandarine and O-dephenylandarine glucuronide.

The andarine Metabolites O-dephenylandarine and of O-dephenylandarine glucuronide may also be present in a Sample as a Metabolite of the anti-androgen Flutamide (Drogenil®, Eulexin®, Euflex®, Flutamin®, Flugere®), used primarily in the treatment of prostate cancer [1]. Since flutamide is not a Prohibited Substance in sports, the Laboratories shall not report an Adverse Analytical Finding (AAF) for andarine based on the monitoring of O-dephenylandarine [2].

![Figure 1. Proposed metabolic pathway of flutamide and andarine (adapted from Perrenoud et al. [1]).](image)

2.0 Analysis and Reporting Requirements

Report the result as an AAF for andarine only when the presence of andarine (parent compound), and/or its glucuronic acid conjugate, and/or its deacetylated and/or hydroxylated Metabolites, and/or its bishydroxylated product [2] are confirmed in the Sample (regardless of the presence of flutamide and/or its Metabolite 2-hydroxyflutamide);

[Comment: Laboratories shall not report an AAF for andarine based only on the presence of O-dephenylandarine.]

3.0 References
