

"Improving Detection of Endogenous Anabolic Steroids misuse by measuring endogenous Sulfate metabolites 2 (IDEASS 2)"

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Project Overview

The detection of EAS abuse is currently performed using the steroid profile, however improvements are needed to prolong detection times (DTs). Results of a previous WADA project (17D09RV) demonstrated that ratios between some sulfate metabolites significantly prolonged the DTs of oral T administration in Caucasian volunteers with respect to T/E ratio. Some of the ratios were elevated up to the last sample collected several days later. Steroid sulfates have not been evaluated comprehensively in Asian population after oral T administration. And dermal administration has not been evaluated in Caucasian or Asian populations.

The objective of the present project is to continue the evaluation of sulfate metabolites to prolong the detectability of T misuse. The research will be focused in the following specific objectives:

- To verify the usefulness of sulfate markers in urine in Asian population after oral T administration.
- To verify the usefulness of sulfate markers in urine in Asian and Caucasian populations after dermal T administration.
- To identify androstenediol sulfate 1, which was one of the most useful markers identified in the previous study.
- To develop an initial testing procedure to quantify the relevant steroid sulfates in urine on a routine basis.