

OUTCOMES OF THE CHINADA-WADA INTERNATIONAL SYMPOSIUM ON FOODSTUFF RESIDUES AND IMPACT ON ANTI-DOPING ANALYSIS IN SPORT

INTRODUCTION

On 17-18 October, CHINADA and WADA co-hosted a scientific symposium, attended by international and Chinese experts, to discuss the issue of interference of foodstuff residues with anti-doping analysis in the sport context. During the two-day symposium, experts exchanged their views on sanitary and anti-doping analytical risks associated to meat contamination, reviewed examples of real Adverse Analytical Findings cases related to meat contamination and proposed ways to progress on finding scientific and pragmatic solutions to address this problem.

Four areas to better address the current situation were identified:

SCIENTIFIC RESEARCH

- The enantiomeric approach, to establish the origin of clenbuterol in urine samples, should be further explored with:
 - Exchange of samples collected during the study conducted in China on clenbuterol-contaminated pork meat and the study in Mexico on contaminated beef to cross validate the results and facilitate a global review of the outcomes of the two studies (focusing on apparent differences in S/R ratios between animal species) .
 - The mathematical models in development by Rikilt, The Netherlands, to be applied to the analysis of the relationship between measured clenbuterol concentrations and the S/R ratio of enantiomers should be completed.
- Hair analysis for clenbuterol :
 - Design complementary international studies to validate the results on hair analysis of clenbuterol;
 - Derive from those hair studies a threshold/decision value to help distinguishing between meat contamination and pharmacological consumption of clenbuterol.
- Explore the identification of specific metabolites (human and/or animal-derived) allowing the distinction between meat contamination and pharmacological consumption of clenbuterol and assess whether specific excipients in clenbuterol drug formulations could help in the identification of pharmacological intake of clenbuterol.
- CHINADA and WADA should continue their support to these research activities.

RESULT MANAGEMENT

- Support the concept of cut-off value to facilitate the result management of clenbuterol cases. To be defined in collaboration with legal and scientific experts as well administrators of result management process.
- In general, administered doses of clenbuterol associated with the consumption of contaminated meat are unlikely to be associated with performance-enhancing effects. Concentrations of clenbuterol in urine after eating contaminated meat are generally lower than those achieved after administration of the drug formulations, although an area of overlap does exist at later points of drug excretion.
- Practical expertise of CHINADA (China) and CONADE (Mexico) should be sought to define pragmatic solutions for clenbuterol cases.

October 2017

- For other potential contaminants, such as boldenone, ractopamine, zeranol; and zilpaterol, scientific solutions were proposed to allow discrimination between meat contamination and pharmacological intake. Such solutions should be further explored and strengthened as needed to facilitate result management of those cases.

RISK REDUCTION

- Information on risk of meat contamination should be continued.
- Countries affected by meat contamination should continue their efforts, in particular sanitary measures, to reduce risks of exposure of the national and international athletic population.
- Athletes and Major Event Organizers to be further informed by anti-doping authorities on risks and risk reduction strategies.

COMMUNICATIONS

- Following the symposium, CHINADA and WADA ~~to~~ will make information related to this symposium available to the anti-doping and sport communities by publishing the presentations and the outcomes of the symposium.
- Communications and regular updates to the stakeholders on meat contamination issues should be maintained.