



Autoridade Antidopagem de Portugal

Tampering of urine samples with proteases - first cases worldwide -

Autoridade Antidopagem de Portugal (ADoP), the Portuguese National Anti-Doping Organization, was notified today by the World Anti-Doping Agency (WADA) about the sanction of two years of ineligibility period applied by the Court of Arbitration of Sport (CAS) to the rider João Cabreira under the Article 8.º, n.º 1 (Tampering of doping Control Samples) of the Portuguese Anti-Doping Law, the Article 15.º, n.º 5 of the UCI's Doping Control Regulations and the Article 2.5 of the World Anti-Doping Code.

This case follows a search performed by the *Direcção Central de Investigação e da Criminalidade Económica e Financeira* of the Portuguese *Polícia Judiciária*, in cooperation with CNAD (former Portuguese NADO), last 19th May 2008. This search targeted athletes, directors and installations of one of the high level professional cycling teams of northern Portugal, resulting in the apprehension of substances, medicaments, material used in blood transfusions and other medical instruments, all indicating the practice of doping violations, according to a press release by that Police, dated 20th May 2008.

Identical decision had already been issued by the Jurisdictional Board of the Portuguese Cycling Federation on 9th March 2009 to the rider Rogério Baptista, also for tampering with proteases.

Suspicious about the use of proteases for tampering of doping control urine samples existed for some years, but had never been possible to confirm such a case worldwide. The confirmation of these cases was made possible through a strategy of cooperation between CNAD, the *Polícia Judiciária*, the *Laboratorio del Control de Dopage* from Madrid, the Anti-Doping Laboratory from Cologne, the Portuguese Cycling Federation and the World Anti-Doping Agency.

Proteases are enzymes that are capable of destroying proteins. The erythropoietin (EPO), a substance that is illicitly used specially in endurance sports, is a glycoprotein and therefore



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can be destroyed by the introduction of proteases in the athlete's urine, preventing the detection of that substance in the urine.

The riders concerned in this case were not at home when the search began and therefore they were notified by phone by the *Policia Judiciaria* to present themselves. They were then subjected to an Out of Competition doping control for the detection of EPO, performed by one of the CNAD's Doping Control Officers. As such, the athletes were not under observation from the CNAD's Doping Control Officer between the moment when they were notified to present themselves by the *Policia Judiciaria* until they arrived at the place where the control took place. These cases started when the *Laboratorio del Control de Dopage* from Madrid, where the samples had been sent in refrigerated conditions for EPO detection, issued two analytical reports stating that it was impossible to detect EPO because the urine seemed to contain some substance that destroyed the recombinant EPO, preventing the detection. CNAD decided then to send the remaining urine samples in frozen conditions (-20°C) to the Cologne's Anti-Doping Laboratory, the only anti-doping laboratory worldwide that had the capability to perform the detection of proteases. This laboratory detected the presence of the proteases *Bacillolysin* in the samples, using the protein electrophoresis (SDS PAGE) method together with LC/MS/MS. This laboratory also demonstrated that the urine samples immediately destroyed two proteins that were introduced in it (myoglobin and growth hormone). This method was developed by the Cologne Anti-Doping Laboratory which was funded by the Ministry of the Interior of Germany.

ADoP wishes to emphasize the cooperation of all entities that collaborated in the confirmation of this case and also the support granted by the World Anti-Doping Agency regarding the scientific and legal aspects of the cases.

ADoP wishes also to recognize the fine work developed by the Portuguese Cycling Federation in the fight against doping in this sport in Portugal.

Autoridade Antidopagem de Portugal, Lisbon 19th April 2010.