



Arbitration CAS 2009/A/1752 Vadim Devyatovskiy v. International Olympic Committee (IOC) & CAS 2009/A/1753 Ivan Tsikhan v. IOC, award of 10 June 2010

Panel: Mr John Faylor (USA), President; Mr Yves Fortier QC, CC (Canada); Prof. Ulrich Haas (Germany)

Athletics (hammer throw)

Doping (testosterone)

Substantial change regarding the allocation of the burden of proof in the IOC ADR 2008

Resolution of conflicts on the basis of the tempus regit actum and contra preferentem principles

Interruption of the automated testing procedure and transparency of the testing process

Refusal to disclose validation studies and consequences on the burden of proof of the athletes

Strict observation of the mandatory safeguards and strict liability for doping offences

- 1. The allocation of the burden of proof and the standard of proof to be applied have essential significance in doping cases. In its adoption of the IOC ADR 2008, the IOC chose to deviate from the language of Art. 3.2.1 of the WADC 2003. It amended the language of previously governing Art. 3.2.1 in order to reverse the burden of proof from the IOC to the athlete to show that the departure from the ISL could have reasonably caused the Adverse Analytical Finding. Accordingly, in addition to being charged with the burden of showing that a departure from the ISL has occurred as required under the WADC 2003, the athlete is now forced to bear the burden of proof to establish that the departure had not only occurred, but also that it had reasonably caused the Adverse Analytical Finding. This is a substantial change from the burden of proving the mere fact of a departure from the ISL.**
- 2. The WADC 2003 and the IOC ADR 2008 do not foresee how the conflict in the contradictory wording of their provisions is to be resolved. The doctrine that an accused party can be tried and sanctioned only under the laws which governed at the time the offending act was committed, the exception being the principle of *lex mitior*, is a fundamental principle of law which is accepted by the majority of national jurisdictions, including Switzerland. Contradictions in the applicable rules must be interpreted *contra proferentem*, i.e., to the detriment of the promulgator of the conflicting or contradictory provision. This view is supported by international judicial practice.**
- 3. The purpose of the relevant procedural safeguards set down in the ISL and the Technical Documents is (1) to heighten caution and care in the movements of the analysts while conducting the analysis and (2) to provide the athlete the documentary basis upon which he can ensure the correctness and accuracy of the testing procedure. If a Technical Document provides that, with regard to aliquots, the Laboratory Internal Chain of Custody should record all movement from preparation through analysis, the interruption of the automated testing procedure of the instrument for the purpose of**

manually exchanging aliquot fractions in a given slot of the auto-sampler constitutes a “movement” which needs to be recorded in the appropriate document. This directive is obviously intended to provide a procedural safeguard ensuring the accountability and control of the run. By “cutting and pasting”, by manually re-constructing the original Sequence List in such a manner that its deviation from the original would not be noticed, the laboratory analyst violates a fundamental safeguard which ensures transparency to the testing process and its authenticity.

4. Although a laboratory must be given certain discretion in the disclosure of its validation studies required for accreditation by WADA, in case where the athletes have focused their request for information upon a specific item of reference and the laboratory chose not to furnish the specific information requested, it cannot place the athletes at a procedural disadvantage in bearing their burden of proof, where the evidence requested is critical to their defence and the laboratory remains in exclusive control of its disclosure.
5. Doping is an offence which requires the application of strict rules. If an athlete is to be sanctioned solely on the basis of the provable presence of a prohibited substance in his body, it is his or her fundamental right to know that the Testing Authority, including the WADA-accredited laboratory working with it, has strictly observed the mandatory safeguards. Strict application of the rules is the *quid pro quo* for the imposition of a regime of strict liability for doping offenses.

Vadim Devyatovskiy (“Mr Devyatovskiy”), born on 20 March 1977, is a Belarusian hammer thrower. He finished fourth at the 2004 XXVIII Olympiad in Athens and won the Silver Medal in the IAAF World Championship in 2005. Mr Devyatovskiy was sanctioned for a doping offense at the 2000 XXVII Olympiad in Sydney and declared ineligible for a period of two years.

Ivan Tsikhan, (“Mr Tsikhan” and, together with Mr Devyatovskiy, “the Appellants” or the “Athletes”), born on 24 July 1976, is likewise a Belarusian hammer thrower. Mr. Tsikhan won the silver medal at the 2004 XXVIII Olympiad in Athens.

The International Olympic Committee (“the Respondent” or IOC) is the international sports organization which, in particular, organizes, promotes, coordinates and monitors the Olympic Games. It is a Swiss private law association with its corporate seat in Lausanne, Switzerland.

Subject Matter of this Appeal: The Decision of the IOC Disciplinary Commission of 11 December 2009

The Appellants took part in the Men's Hammer Throw Competition at the Summer Games of the XXIX Olympiad in Beijing, 2008. On 17 August 2008, both Athletes competed in the Men's Hammer Throw Final. Mr Devyatovskiy placed 2nd and Mr Tsikhan placed 3rd.

Following a doping control performed immediately after the competition, the Beijing National Laboratory, a WADA-accredited laboratory responsible for the analysis of the samples (the "Beijing Laboratory" or "Laboratory"), reported that both Athletes had tested positive for testosterone.

The Documentation Package containing the analytical report of the Beijing Laboratory analysis of Mr Devyatovskiy's A sample recorded the presence of exogenous testosterone with a T/E ratio of 8.1 (+/- 1.5). The analysis report on Mr Tsikhan's A sample also recorded the presence of exogenous testosterone with a T/E ratio of 7.8 (+/- 1.5). The WADA authorised T/E ratio is 4.1.

On the basis of these analytical results, the IOC President informed the Athletes of their right to request the analysis of the B sample and to request a hearing before the IOC Disciplinary Commission and to submit a defense in writing.

Upon request of the Appellants, the B samples were opened and analyzed on 24 August 2008 by the Beijing Laboratory in the presence of their representatives.

The analytical report of the Beijing Laboratory's analysis of Mr Devyatovskiy's B sample confirmed the presence of exogenous testosterone with a T/E ratio of 8.0 (+/- 0.5), whereas the report on Mr Tsikhan's B sample also indicated the presence of exogenous testosterone but with a T/E ratio of 6.7 (+/- 0.4).

Following notification of the analytical results, Mr Devyatovskiy filed a written submission with the IOC Disciplinary Commission on 30 August 2008; Mr Tsikhan filed his submission on 31 August 2008.

The Athletes contested having used any prohibited substance and notably stressed that they had been tested regularly in past years and had never tested positive. Mr Devyatovskiy stated, in addition, that he had a naturally high level of testosterone.

At the hearings before the IOC Disciplinary Commission, which were held separately for each Athlete on 21 September 2008, both Athletes confirmed the content of their written submissions and asked to be granted a deadline to review the Documentation Packages relating to the B samples. Their request was granted by the IOC Disciplinary Commission and the Athletes filed a second written submission on 17 October 2008, raising arguments focused on the validity of the analyses conducted by the Beijing Laboratory.

The IOC Disciplinary Commission reviewed the arguments raised by the Athletes and concluded that no departure from the WADA International Standards for Laboratory (ISL) had been established by the Athletes and that the Athletes had committed an anti-doping rule violation by reason of the presence of the prohibited substance testosterone in their bodies at a T/E ratio above the WADA T/E ratio threshold of 4.1, with GC/C/IRMS measurement results consistent with the administration, and therefore exogenous origin, of such substance.

In a decision dated 11 December 2008 (together with the other decision mentioned below the “Decisions”), the IOC Disciplinary Commission held that:

- I. *The athlete Vadim Devyatovskiy, Belarus, Athletics:*
 - (i) *is disqualified from the Men’s Hammer Throw event, where he had placed second;*
 - (ii) *shall have his medal and diploma in the above-noted event withdrawn;*
 - (iii) *subject to ratification by the IOC Executive Board, is permanently ineligible for all future Olympic Games in any capacity;*
- II. *The IAAF is requested to modify the results of the above-mentioned event accordingly and to consider any further action within its own competence.*
- III. *The NOC of Belarus is ordered to return to the IOC, as soon as possible, the diploma and the medal awarded to the Athlete in relation to the above-noted event.*
- IV. *This decision shall enter into force immediately”.*

In a decision issued the same day, the IOC Disciplinary Commission held with regard to Ms Tsikhan that:

- I. *The athlete Ivan Tsikhan, Belarus, Athletics:*
 - (i) *is disqualified from the Men’s Hammer Throw event, where he had placed third;*
 - (ii) *shall have his medal and diploma in the above-noted event withdrawn;*
- II. *The IAAF is requested to modify the results of the above-mentioned event accordingly and to consider any further action within its own competence.*
- III. *The NOC of Belarus is ordered to return to the IOC, as soon as possible, the diploma and the medal awarded to the Athlete in relation to the above-noted event.*
- IV. *This decision shall enter into force immediately”.*

Summary of the Parties’ Submissions and their Respective Requests for Relief

A. The Appellants’ Statements of Appeal

The Decisions were communicated to the Appellants on the date of their pronouncement, 11 December 2008. The Appellants filed their respective Statements of Appeal on 31 December 2008,

i.e., within the 21 day deadline required by Art. 12.5 of the IOC's Anti-Doping Rules applicable to the Games of the XXIX Olympiad, Beijing 2008 ("IOC ADR 2008").

Each of the Appellants requested that their respective appeals be joined on the grounds that both were filed against IOC Decisions having similar subject matters and requiring "*the same evidence and authority*". This motion was granted with the approval of the Respondent by letter of the CAS Court Office dated 12 January 2009. In the same letter, the time limit for filing the Appeal Brief was extended until 19 February 2009.

B. Procedural Issues Prior to the Filing of the Appellant's Appeal Brief

On 11 February 2009, the Appellants filed a "Request for Further Information" explaining that they had instructed independent experts to review their respective analytical reports and the Documentation Packages. Arguing that their experts required the disclosure of additional information from the IOC, the Appellants cited a list of specific information requests and the documents relevant to this requested information. The Appellants requested again an extension of the deadline for submission of their Appeal Brief until March 27, 2009.

On 17 February 2009, the Respondent objected to the Appellants' "Request for Further Information" asserting that the request did not comply with article R51 of the Code of Sports-related Arbitration ("the CAS Code") and that any request for evidentiary measures should be raised in their Appeal Brief. The Respondent submitted that it could not "*give evidence or factual issues which are not under its own direct control*". The Respondent also objected to any further extension of the deadline granted to the Appellants to file their Appeal Brief.

On 18 February 2009, the President of the Panel dismissed the Appellants' "Request for Further Information" and requested them to include their catalogue of questions and issues in their Appeal Brief. The Appellants were advised to call the Beijing Laboratory as witness at the hearing. With the Respondent's agreement, the President of the Panel extended the deadline for filing the Appeal Brief until 27 February 2009.

On 20 February 2009, the Appellants appealed to the Panel to reconsider their rejected "Request for Further Information". In their letter, the Appellants further claimed that pursuant to article R44.3 of the CAS Code, their request could be granted by the President of the Panel at any time and that it was necessary for them to obtain the requested information prior to filing their Appeal Brief.

The Appellants further inquired about the possibility of communicating directly with the Beijing Laboratory without the IOC's prior consent. As the information requested was, in their view, essential to prepare their Appeal Brief, they re-asserted their request and invoked their right to a fair hearing which, they argued, would be undermined if their request were to be denied.

On 13 February 2009, the Appellants requested the extension of the deadline for filing the Appeal Brief until 6 March 2009 or 27 March 2009 depending on the final decision of the President of the Panel regarding their “Request for Further Information”.

On 25 February 2009, the President of the Panel rejected the Appellants’ request for reconsideration. The deadline for filing the Appeal Brief was, however, extended until 6 March 2009 on the grounds that the reported illness of one of the Appellants prevented Appellants’ counsel from completing the submission.

The Appellants filed their Appeal Brief within the extended deadline of 6 March 2009.

C. *The Appellants’ Appeal Brief dated 6 March 2009*

The Appellants allege that the IOC Disciplinary Commission was wrong to hold that the IOC had established to the requisite standard of comfortable satisfaction under the IOC ADR 2008 that there was the presence of testosterone in each Athlete’s body (a) at a T/E ratio threshold above 4.1; and (b) with GC/C/IRMS results demonstrating exogenous origin.

The reasons stated in refutation of the Decisions were the following:

- (a) The Athletes provided and will continue to provide evidence that they did not deliberately or inadvertently ingest testosterone, or any substance that might have contained it or its metabolites.
- (b) The Beijing Laboratory analysis was flawed by *“fatal defects during T/E analysis”*:
 - (i) The entire T/E analytical procedure in respect of each Athlete’s B Sample was undertaken by the same Laboratory analyst who was also *“heavily involved”* in the analysis of each Athlete’s A Sample. This constituted a violation of WADA International Standard for Laboratories para. 5.2.4.3.2.2¹ (the “Different Analyst ISL”) which in itself is sufficient to render void the results of the tests but in any event means that the B Sample cannot be held to have confirmed the A Sample as is mandatory under ISL 5.2.4.3.2.9 (the “B Confirmation ISL”), meaning that the Athletes’ samples must inevitably be considered negative.
 - (ii) In addition, the Laboratory included no positive or negative Quality Control samples within the confirmation run of the T/E analyses of both A and B samples in violation of ISL 5.4.7.3 (the “Quality Control ISL”). Without these Quality Control checks, the results cannot be considered reliable.
- (c) There were also a number of fatal defects during the CG/C/IRMS analysis:
 - (i) The same two analysts, Messrs WJ and WZ, performed GC-C-IRMS analytical procedures on the A and B samples of both Athletes in violation of the Different Analyst ISL, which in itself is sufficient to render void the results of the IRMS tests,

¹ All future references to the International Standard for Laboratories (ISL) are to Version 5.0 which became effective as of 1 January 2008.

but in any event means that the B Sample cannot be held to have confirmed the A Sample as is mandatory under the B Confirmation ISL

- (ii) The Information and documents in relation to GC/C/IRMS analysis in the Documentation Package for each Athlete are so (i) incomplete and, in parts, incomprehensible, and (ii) indicative of fatal human error and/or equipment malfunction that:
 - (A) the results of the GC/C/IRMS analysis are invalid; and that
 - (B) another analyst could not (in the absence of the analyst who conducted the procedure) evaluate how the testing had been performed and cannot interpret the data. This is in breach of ISL 5.2.6.1.
- (iii) The failings also amount to breaches of further significant ISLs.
- (d) Each ISL ensures that justice is not only done, but that it is seen to be done. There is a very good reason why the ISLs exist, and they cannot simply be treated as if they did not. If a sports governing body is to impose strict liability consequent on an adverse analytical finding, the *quid pro quo* is that the validity and transparency of the adverse analytical finding are unimpeachable.
- (e) In the present case, these failings individually or cumulatively meant that there was and is an insufficient basis to conclude in relation to either Athlete that (a) either Athlete had a T/E ratio threshold above 4.1; or that (b) the testosterone was of exogenous origin.
- (f) No attempt was made by the IOC before the IOC Disciplinary Commission, or has since been made, to adduce any curative evidence from any of the analysts involved at the Beijing Laboratory.
- (g) Consequently, the IOC failed and continues to fail to discharge the burden upon it under Art. 3.1 of the IOC ADR 2008.
- (h) Further and in any event under Article 3.2.1 of the IOC ADR 2008:

“WADA accredited laboratories are presumed to have conducted Sample analysis ... in accordance with the International Standards for Laboratories. The Athlete may rebut this presumption by establishing that a departure from the International Standards occurred, which could reasonably have caused the Adverse Analytical Finding.

If the Athlete refutes the preceding presumption by showing that a departure from the International Standard occurred, which could reasonably have caused the Adverse Analytical Finding, the IOC shall have the burden to establish that such departure did not cause the Adverse Analytical Finding”.
- (i) As to this, the Athletes contend firstly that Art. 3.2.1 of the IOC ADR 2008 is satisfied on the facts there:
 - (i) The Athletes have established (on the balance of probability) not only that the departures from ISL occurred, but also that those departures *“could reasonably have caused the adverse analytical findings”*.
 - (ii) The IOC has not discharged the burden on it (whether to the degree of comfortable satisfaction as required, or on the balance of probabilities, or at all) of showing *“that the departures from the ISL did not cause the adverse analytical findings”*.

- (j) Secondly, and apart from the above, the Athletes contend that Art. 3.2.1 of the IOC ADR 2008 is invalid as inconsistent with, alternatively falls to be construed so as not to comply with, the World Anti-Doping Code (the “WADC”) in force at the time. Under Art. 3.2.1 of the 2003 WADC:

“Wada accredited laboratories are presumed to have conducted Sample analysis ... in accordance with the International Standards for Laboratories. The Athlete may rebut this presumption by establishing that a departure from the International Standards occurred.

If the Athlete rebuts the preceding presumption by showing that a departure from the International Standards occurred, the IOC shall have the burden to establish that such departure did not cause the Adverse Analytical Finding”.

In this context, the Appellants assert the following:

- (i) The IOC was compelled to comply with the WADC from time to time in force, under Article 44 of the Olympic Charter and by virtue of it being a Signatory to the Code.
 - (ii) The IOC ADR 2008 are governed by the WADC from time to time in force (IOC ADR 2008 Article 16.1) and fall to be construed in accordance with the WADC in force (IOC ADR 2008 Art. 16.5).
 - (iii) The WADC 2003 was in force at all times up until 31 December 2008, and was in force at the time of the Beijing Games.
 - (iv) Art. 3.2.1 of the WADC 2003 is a mandatory provision which must be adopted without change, under the Introduction and Art. 20.1.1 of the WADC 2003.
 - (v) That the provisions of the WADC 2003 were applicable to the 2008 version of the ISL is recognised in the ISL itself at para. 2.0.
 - (vi) In the IOC ADR 2008, the IOC unlawfully and prematurely anticipated a change in the WADC 2009 that did not come into effect until 1 January 2009.
 - (vii) Accordingly, the IOC is unable to rely on IOC ADR 2008 Art. 3.2.1, and is constrained to abide by Art. 3.2.1 of the WADC 2003. Alternatively, IOC ADR 2008 falls to be construed so as to be consistent with Art. 3.2.1 of the WADC 2003, on the basis that the establishment of a departure from an ISL is the establishment of a departure that “*could reasonably have caused the adverse analytical finding*”.
 - (viii) Consequently, on either basis, all that the Athletes have to establish on the law properly understood is that there was a departure from the ISL, and the burden is then on the IOC to establish that the departure did not cause the adverse analytical findings, which it has not attempted to do, does not attempt to do and cannot do.
- (k) Thirdly, the change in the burden of proof is unlawful because it imposes a disproportionate and unjustified restriction on an athlete in the context of proceedings determining his civil rights and obligations in respect of his livelihood, contrary to the right to a fair trial under Art. 6 of the European Convention on Human Rights, the competition and free movement rules of the European Union as explained in *Meca Medina*, and the general principles of law that pervade Swiss law.

- (l) It is disproportionate and unlawful that the athlete should have to do any more than to establish a departure from the ISL in order to switch the burden onto the IOC to establish that the departure did not cause the adverse analytical finding.

The Appellants therefore request the following relief from CAS:

- (a) The Decisions of the IOC Disciplinary Commission dated 11 December 2008 in relation to Mr Tsikhan be dismissed and that:
 - (i) His result be reinstated in the Men's Hammer Throw event; and
 - (ii) His medal and his diploma in the above-noted event be reinstated.
- (b) The Decision of the IOC Disciplinary Commission dated 11 December 2008 in relation to Mr Devyatovskiy be dismissed and that:
 - (i) His result be reinstated in the Men's Hammer Throw event;
 - (ii) His medal and his diploma in the above-noted event be reinstated; and
 - (iii) He remains eligible to participate in all future Olympic Games in any capacity.

Stating in their Appeal Brief that *"this case involves extremely complex issues"* and that *"it would therefore be of great benefit if the parties were able to dispose of some of those issues before the hearing"*, the Appellants requested that CAS order the IOC to answer its "Requests for Further Information" which was attached to the Brief as an appendix.

D. Procedural Issues Prior to Respondent's Filing of Its Answer Brief.

Arguing that it needed to *"seek advice from experts in order to answer the numerous technical arguments developed by the Appellants in their brief"*, the Respondent requested on 6 April 2009 an extension of the deadline to file its Answer until 15 May 2009.

On 9 April 2009, the Appellants objected to this extension request and requested, conversely, that the Panel decide on their Request for Further Information as contained in their Appeal Brief. The Appellants further requested that a second round of submissions pursuant to article R56 of the CAS Code be granted.

On 15 April 2009, the President of the Panel granted the Respondent's request for an extension of the deadline to file its Answer until 15 May 2009.

On 8 May 2009, the Panel confirmed to the Parties that a hearing would be held at CAS Headquarters in Lausanne on 13 July 2009 at which the Parties were to appear together with their witnesses.

The Respondent then requested on 14 May 2009 a further extension of the Answer deadline until 8 June 2009. After consideration of the request, the President of the Panel granted the requested extension over the Appellants' objection.

On 8 June 2009, the Respondent filed its Answer within the extended deadline.

E. The Respondent's Answer dated 8 June 2009

The Respondent takes the position that the Laboratory's analyses are clear and an endogenous production of testosterone can be excluded. It has been shown that the testosterone found in the bodily samples of the Athletes was of exogenous origin as the T/E ratios were more or less twice as high as the authorized threshold.

The Appellants have not tried to provide "*plausible explanations for the adverse analytical findings*". They focus on some alleged departures from the ISLs and raise "*technical issues in a desperate attempt to show that the analyses performed by the WADA-accredited Laboratory in Beijing are not valid and that technical failures could have caused the adverse analytical findings*".

Citing the expert opinion of Prof. Wilhelm Schänzer, a highly recognized expert in IRMS analysis, the Respondent submits that (i) the IRMS analyses conducted by the WADA-accredited Laboratory in Beijing have confirmed the presence of exogenous steroids in the bodily samples of the Appellants and (ii) that no violation of the ISL has occurred.

Summarizing Prof. Schänzer's conclusions, the Respondent states:

- (a) The alleged "Different Analyst ISL" Violation. The Respondent does not deny that the Laboratory analyst has participated in both the A and B sample analyses. However, he had no access to the open aliquot of the A samples and only took part in the technical parts of the A sample analyses. In other words, the Analyst did not perform parts of the analytical procedures when both A and B samples (or aliquots) were open and accessible.

The Respondent distinguishes the present case from the *L.* case² and the *Jenkins* case³ by pointing out that these were earlier cases decided under ISL 5.2.4.3.2.2 of the previous version 4.0 of the ISL.

Finally, the Respondent points out that the rule of ISL 5.2.4.3.2.2, version 6.0, which is in force since 1 January 2009 has become much simpler as it only states that: "*The "B" Sample confirmation shall be performed in the same Laboratory as the "A" Sample confirmation*". The "Different Analyst ISL" has therefore been eliminated.

With regard to the presence of the same two analysts at both the A and B sample GC-C-IRMS analyses, the Respondent states that "*they have only been involved in the technical part of the analyses*".

- (b) The alleged "Quality Control ISL" Violation. Citing ISL 5.4.7.3, the Respondent states that "*the use of positive control and negative control is not mandatory; it is only a recommendation. The "should" formula has deliberately been chosen instead of the "shall" formula*".

² CAS 2006/A/1119 Union Cycliste Internationale (USI) v. L.

³ AAA No. 30 190 00199 07 USADA v. Latash Jenkins.

- (c) The alleged incomplete IRMS Documentation. Appellants' allegations are, in the view of the Respondent, unfounded. Prof. Schänzer has shown in his expert opinion that the uncertainty of the IRMS analysis is covered by the limit of 3 per mill and must not be presented in the Documentation Packages. As long as the laboratory is WADA-accredited, its methods are presumed to be reliable.

With regard to the alleged significant variances in the isotopic values between the A and B analyses, the Respondent cites Dr. Schänzer's opinion. The adverse analytical finding is not based on the absolute isotope value, but rather on the differences of isotope values of testosterone and the endogenous reference substance pregnanediol. The differences were stable within an acceptable range for reporting an adverse analytical finding.

With regard to the Appellant's challenge to art. 3.2.1 of the IOC ADR 2008, the Respondent argues that the latter provision "*is compliant with the 2003 WADC*". "*Since there is no departure from the ISL, this issue is irrelevant*".

The Respondent requests that the appeals of the Appellants be dismissed and that they be ordered to pay the Respondent's costs and expenses.

F. *Proceedings following Submission of the Respondent's Answer*

On 17 June 2009, following submission of the Respondent's Answer, the Appellants re-submitted their "Request for Further Information" of 6 March 2009 together with an Addendum to their request pointing out that "*it is critical to a fair hearing*" that they be provided with the requested information.

On 26 June 2009, the Panel requested the Beijing Laboratory to answer the Appellants' information requests by 10 July 2009 and to have the members of the Beijing Laboratory personnel who were involved in the laboratory analysis present personally at the hearing, at least by way of tele- or video-conference.

In the same letter, the Panel informed the Parties that, due to the Appellants' informational request and in compliance with the request of the Parties, the hearing scheduled for 13 July 2009 was cancelled and that another date would be proposed.

On 9 July 2009, the Beijing Laboratory sent a reply to the questions raised in the Appellants' "Request for Further Information" and "Addendum to the Request for Further Information". This was immediately forwarded to the Appellants. The Panel proposed a new hearing date of 26 August 2009.

On 13 July 2009, the Appellants responded to the Beijing Laboratory's reply, arguing *inter alia* that "*the answers provided to the Request for Further Information either do not answer the original question at all or are so vague that they have no meaning at all*".

In consequence, Appellants requested further information and evidentiary measures and proposed an information meeting in the Beijing Laboratory. The Appellants thereupon submitted follow-up and complementary observations on the Beijing Laboratory's reply on 17 July 2009.

On 21 July 2009, the Respondent objected to the Appellants' proposal to arrange a direct meeting with the Beijing Laboratory. It claimed further that the Appellants should not be permitted to request further evidentiary measures combined with a new flow of submissions and requested that each party be granted a last possibility to submit final observations or to file additional exhibits to the CAS Panel.

On 23 July 2009, the Panel denied the Appellants' requests contained in their letters dated 13 July and 17 July 2009 and submitted to the Parties a consolidated "Schedule of Documentation and Information Production" (the "Schedule of Documentation") drafted by the Panel. The Parties were called upon to complete the Schedule with the information requested within specified deadlines. This document was filed in completed form by the Appellants on 6 August 2009. The Respondent filed its completed Schedule on 28 August 2009.

On 28 September 2009, the Parties were informed that a hearing of the dispute would be held on 4/5 December 2009 in Lausanne.

On 7 October 2009, the Panel informed the Parties that it wished to appoint an independent expert. It further requested the Respondent to provide CAS and the Appellants with an index, in English, of the Beijing Laboratory's Standard Operating Procedures (the "SOPs") to enable the Appellants to select from the index those elements of information from the SOPs which were relevant to the questions they had posed to the Laboratory and which were contained in the Schedule of Documentation.

In the same letter, the Panel specifically requested from the Respondent further clarification from the Laboratory relating to its response in the Schedule of Documents regarding the failing correspondence between the Sequence File and the Sample Report Sheets.

In the same advice to the Parties, the Panel requested further submissions from the Parties regarding the challenged validity of Article 3.2.1 of the IOC ADR 2008 and its compliance with Article 3.2.1 of the WADC 2003. The Panel requested that the Parties submit written witness statements and informed them that they would not be authorised to submit further submissions save for the requested clarification of Article 3.2.1 of the IOC ADR 2008.

On 15 October 2009, the Appellants objected to the fact that the experts proposed by the Panel as independent expert witnesses were all WADA-accredited laboratory directors. They challenged the independence of these experts in light of the fact that the Beijing Laboratory was itself a WADA-accredited laboratory.

The Appellants, from their side, requested the appointment of an expert witness who was unaffiliated with and independent of WADA. They noted further that it was their understanding that the Respondent was responsible for the appearance of the Beijing Laboratory personnel and required

particularly the presence of four of them at the hearing. In a separate letter dated 19 October 2009, the Appellants stressed again that handwriting inconsistencies had been observed in the laboratory reports contained in the Documentation Packages.

On 23 October 2009, the Respondent designated its preference as independent expert from among the suggested WADA-accredited laboratories. The Appellants expressed again their reservations with regard to these proposed candidates in a letter dated 26 October 2009.

The Respondent requested further in its letter of 23 October 2009 that the hearing previously scheduled by the Panel with the consent of the Parties on 4/5 December 2009 be postponed. It further requested that the Panel (i) grant a reasonable deadline to the Parties for the filing of their final submissions (ii) dismiss all requests filed by the Appellants and (iii) establish a precise schedule and agenda for the hearing which would indicate how the Panel would conduct the hearing and would determine the specific issues to be addressed by the Parties.

Based on the information provided on 23 October 2009 by the Respondent, the Appellants requested on 27 October 2009 the disclosure of Section YYB-104 from the SOPs of the Beijing Laboratory.

The Appellants requested on 29 October 2009 that the Parties be granted the opportunity to file full written submissions prior to the hearing. They requested permission of the Panel to discuss fully the IRMS procedure and its results if the right to file full written submissions were not granted. They agreed on the postponement of the hearing requested by the Respondent and eventually submitted a timetable in anticipation of the hearing.

On 30 October 2009, the Panel informed the Parties notably that:

- (a) It had designated Prof. De Ceaurriz as independent expert.
- (b) The Appellants were free to call non-WADA accredited directors as witnesses at the hearing.
- (c) It wished to have members of the Beijing Laboratory who were involved with the laboratory analysis of the Appellants' samples present at the hearing. The Panel specifically requested the personal presence of at least one high-ranking official of the Beijing Laboratory at the hearing in Lausanne who would be knowledgeable and able to testify regarding the comprehensive testing procedure of the Beijing Laboratory.
- (d) It requested the Respondent to submit the relevant parts of the Beijing Laboratory's SOPs in English, which the Panel deemed necessary in order to explain the Test Reports and the Laboratory Documentation Packages.
- (e) It requested further information from the Beijing Laboratory regarding issues raised in the Schedule of Documentation, among them, the manual integration of peaks, the effect of co-elusion on the analysis results, missing sample report sheets, issues involving the challenged repeatability of test values, the forensic handwriting and document completion.

- (f) It considered it to be unnecessary for the Parties to submit a final round of briefs prior to the hearing, but stated that it would consider allowing the submission of closing briefs within a period of two or three weeks following the hearing.

On 3 November 2009, the Respondent confirmed that it would ask the Beijing Laboratory to provide the requested information, but stressed that it might encounter difficulties gathering this information and to ensure the presence of the Beijing Laboratory's representatives, arguing that the Beijing Laboratory was totally independent from the Respondent.

On 4 November 2009, the Appellants sent two letters to the Panel together with exhibits. They requested the appointment of Mr Garle as independent expert and stated that they were ready to organise the participation of four analysts involved in the Appellants' testing procedures in order to finalise and sign affidavits in Beijing.

On 6 November 2009, the Panel communicated the finally agreed timetable in view of the hearing now scheduled to be held in Lausanne from 25 to 27 January 2010. It confirmed that the costs related to the hearing of the four analysts of the Beijing Laboratory whose presence was requested by the Appellants would be borne by the Appellants. The Appellants agreed furthermore to arrange for the presence of an interpreter whose costs would be borne by them.

The Panel confirmed in this correspondence with the Parties that it required the presence of a knowledgeable official of the Beijing Laboratory at the hearing in order for him/her to testify in respect of the testing procedure of the Laboratory on the A and B samples.

On 10 November 2009, the Panel informed the Parties regarding the procedure for the signing of the affidavits by the Beijing Laboratory's analysts.

On 19 November 2009, the Panel ruled on the Respondent's objections and the Appellants' rebuttal regarding the affidavits drafted by the Appellants.

On 27 November 2009, the Appellants responded to the Respondent's isolated submissions in relation to Article 3.2.1 of the IOC ADR 2008 filed previously, providing the Panel with a number of authorities to support their submissions.

On 29 November 2009, the Appellants restated their objection to the appointment of the independent expert witnesses nominated by the Panel and requested that the Panel appoint either Dr Danaceau from the Utah Laboratory or Professor Anthony W Butch from the UCLA Laboratory.

On 3 December 2009, the Panel officially appointed Professor Anthony W Butch from the UCLA Laboratory as independent expert.

The Appellants filed a series of affidavits from the analysts of the Beijing Laboratory on 17 December 2009.

The Respondent explained on 22 December 2009, that the Beijing Laboratory was unwilling to disclose section YYB-104 of its SOPs for the alleged reason that they contained “*highly sensitive and confidential information and that its disclosure could lead to unfair competition issues*”. The Beijing Laboratory was ready to provide these SOPs only to the members of the Panel and to the exclusion of the Appellants.

The Respondent confirmed in the same correspondence that, according to the Beijing Laboratory, all data related to manual integration of peaks had already been provided. It provided information on the co-eluted peaks and the delta values. Additional documents were filed with respect to the A Sample IRMS results and the Respondent stated that no more documentation would be provided with respect to the issue of reproducibility.

On 23 December 2009, the Appellants requested that the Panel order that unless the SOPs were disclosed by 1 January 2010, adverse inferences should be drawn from such non-disclosure. They further requested an extension to file their experts’ witness statements and noted that, in their view, the timeline for them to file their IRMS submission, as requested by the Panel, be postponed.

The Respondents filed the expert witness statements of Prof. William Schaenzer and Dr. Martial Saugy on 23 December 2009.

On 30 December 2009, the Panel rejected the Beijing Laboratory’s proposal that access and disclosure to the requested excerpts of its SOP be limited exclusively to the members of the Panel. The Panel took the position that the concealment of the SOPs from the Appellants would violate fundamental principles of procedural law and noted that the Beijing Laboratory’s objections regarding confidentiality should have been raised at a much earlier stage.

The Panel held that the submission of the relevant sections of the SOPs was necessary in order to assist in explaining the Test Report and the Laboratory Documentation Packages, the Panel granted the Respondent a final deadline until 6 January 2010 for submission of the requested excerpts, with the warning that non-observance of this deadline would result in the exclusion of the SOPs if the Laboratory were to submit them at a later date. The Panel also explicitly stated to the Respondent that it would “*take these facts and circumstances into consideration in rendering its decision following the hearing*”.

In the same correspondence, the Panel requested the Appellants to file their IRMS submission without the prior input of the relevant SOPs from the Laboratory and their witness statements by no later than 15 January 2010.

On the same day, the Respondent informed the Panel that it had sent a letter to the Beijing Laboratory requesting the missing information. The Respondent stressed that it had undertaken everything it could to support the Appellants’ and the Panel’s requests to the Beijing Laboratory, but that it could do no more because the Beijing Laboratory was totally independent of the IOC.

On 4 January 2010, the IOC stated to CAS, pointing out *inter alia* that it would oppose the application of “*common law procedural methods*”, arguing that Swiss law should apply to the procedure at the hearing.

The Respondent confirmed that the Beijing Laboratory had accepted the principle of disclosure of its SOPs, provided that all persons having access to them confirm in writing that they would treat the document as confidential. The Respondent confirmed as well that Dr Wu from the Beijing Laboratory would attend the hearing per tele- or video-conference, but that it would be left for the Appellants to organise his travel to Lausanne, if they still required that he attend in person.

On 6 January 2010, the Panel extended the Appellants' deadline to submit their IRMS submission and witness statements until 15 January 2010. In turn, a deadline was granted to the Respondent to reply to the IRMS submission by 21 January 2010.

The Panel further resolved that the Appellants should be allowed to file any addendums to their IRMS submissions and witness statements following their analysis of the requested parts of the SOPs or to comment on them at the hearing. The Panel finally reserved the right to request from the Parties the submission of summary briefs following the closing of the hearing.

On 6 January 2010, the Respondent submitted a copy of the excerpts from the SOPs, section YYB-104 (b). YYB-104 (a) was not submitted from the requested (and promised) YYB-104. The Respondent explained in their submission that Dr Wu of the Beijing Laboratory considered these excerpts as covering the entire method for detection of steroids and other substances.

On 8 January 2010, the Appellants responded that the Beijing Laboratory and the Respondent had not complied with the order of the Panel issued on 30 October 2009. Quoting from their letter of 30 October 2009 in which they explicitly requested both parts (a) and (b) of SOP YYB-104. The Appellants stated as follows:

"The Appellants note that section YYB-104 (b) spans just 18 pages ..., which we understand, is unusually brief for an SOP on isotope analysis. Conversely, we understand that is likely to be because the Beijing Laboratory's procedures in relation to generic issues such as sample handling, operation of the auto-samplers and operation of Gas Chromatograms are dealt with at section (a) ("Steroid and other medicine testing method") and not repeated at section (b) ("Isotope testing method"). Please note that these generic procedures are equally applicable to both GC-MS and GC-C-IRMS and are key in understanding the difference between how the Beijing Laboratory should have performed IRMS analysis as compared to how it did perform IRMS analysis".

In this letter, the Appellants protested the Beijing Laboratory's refusal and requested that the Panel draw "adverse inferences" from the non-disclosure. The Appellants stated the following:

"The section of the SOPs disclosed [YYB-104 (b)] does not address central issues of procedure such as sample handling, the operation of the auto-samplers, etc. As predicted in our letter dated 28 October 2009, these are generic issues common to both MS and IRMS, likely to be dealt with at section (a) ("Steroid and other medicine testing method") and not at section (b) ("Isotope testing method")"

[Bracketed language inserted by the Panel].

On 8 January 2010, both parties filed signed copies of the Order of Procedure. On the same day, the Appellants confirmed that they did no longer require the personal appearance of Dr Wu at the hearing.

On 14 January 2010, the Panel submitted to Prof. Butch, the independent expert witness, a summary of the technical issues of the case.

On 15 January 2010, the Respondent, in reaction to the letter of the Appellant of 8 January 2010, stressed that it had no control over the Beijing Laboratory which was subject to Chinese law. It invited the Panel or the Appellants to request the assistance of the Swiss civil courts in obtaining documents subject to the courts of foreign jurisdictions as provided under Article 184 of the Swiss Private International Law, and opposed any suggestion that its conduct had harmed the Appellants.

In the same correspondence, the Respondent confirmed that it did not consider it necessary that Dr Wu attend the hearing.

The Appellants filed their IRMS submissions on 18 January 2010. On the same day, the Respondent argued that it had been denied its right to a fair trial for having received additional submissions from the Appellants past the set deadline of 15 January 2010, which prevented it from properly preparing the hearing. On 19 January 2010, the Appellants objected to the Respondent's assertions regarding the late filing of their IRMS submissions.

Based on the Parties' last exchange of letters and the Respondent's objection to admission of the Appellant's belated IRMS filing, the Panel decided on 19 January 2010 that "*the Appellants' IRMS Submissions, the Second Expert Report and the Witness Statements for Mr Paul Scott and Mr Iher Nekrashevich are inadmissible as they were filed outside of the deadline of 15 January 2010 agreed in the Order of Procedure dated 6 January 2010*". In the meantime, the Panel informed the Respondent that any subsequent submission of section YYB-104 (a) of the SOPs would be declared inadmissible.

On 20 January 2010, the Appellants requested that the Panel issue a further order ruling that the IRMS submission be admitted, arguing that the circumstances of the preparation of these submissions as well as the fact that the filing was late by 18 minutes, allowed the Panel to permit a reinstatement of the time limit. The Appellants referred notably to article 29 of the Swiss Constitution, general principles of Swiss procedural law, as well as to article R32 of the CAS Code. In a separate letter, the Appellants invoked their right to be heard, explaining in detail the background and nature of their IRMS submission.

On the same day, 20 January 2010, the Respondent objected to the admission of the witness statements of Dr Laurent Rivier and Dr Vivian James, both of which were received prior to the expiration of the 15 January 2010 deadline, for the reason that they quoted large excerpts of the Second Expert Report which had been declared inadmissible by the Panel. The Appellants replied immediately and asked the Panel to reject the Respondent's objection.

On 21 January 2010, the Panel denied the Appellants' request for reconsideration of its decision dated 19 January 2010 and their request for a retroactive extension of the deadline for filing the IRMS submissions and the witness statements of Paul Scott and Ihar Nekrashevich. However, the Panel confirmed that the witnesses Scott and Nekrashevich would be allowed to provide testimony at the hearing. The Panel declared the witness statements of Laurant Rivier and Vivian James, together with

their enclosures, both of which were submitted within the deadline of 19 January 2010 to be admissible. The extension of this deadline from 15 January 2010 had been requested by the Appellants due to the late filing of information from the Beijing Laboratory. The request was granted by the Panel on 12 January 2010.

The Panel declared the witness statements of Laurent Rivier and Vivian James admissible, together with the excerpts from the Second Expert Report, which likewise had been received within the 15 January deadline. Eventually, the Panel ordered the Parties to arrange to have Dr Wu available to testify by telephone link. The Respondent was granted a deadline until 22 January 2010 midday to file its observations on the Appellants' latest submissions.

Per separate letter and in accordance with the specific request of the Respondent, the Panel then provided the Parties with a list of the main issues on which it wished to hear the Parties and the experts during the hearing.

The main issues were stated by the Panel as follows:

1. The completeness of the Documentation Packages
2. The Sample Identity: The alleged "mismatch" between the entries in the Sequence File and the Sample Reports.
3. The Reproducibility: The variances between the isotopic values of the A and B Samples.
4. The Quality Control: Did the positive quality control performed by the Laboratory fail in the A sample IRMS analysis.
5. The Validation: Did a validation study exist for the IRMS analysis?

On 21 January 2010, the Respondent informed the Panel that it considered the decision to admit excerpts from the 2nd Expert Report to be in gross violation of article 182 par. 3 of the Swiss Private International Law which provides that an arbitral tribunal must ensure equal treatment of the parties and their right to be heard in adversarial proceedings.

G. The Hearing on January 25 – 27, 2010

A three-day hearing was held in Lausanne, Switzerland, between 25 – 27 January 2010.

Appearing at the hearing were the Appellants, personally, and their interpreter, Mr Milan Polpovic. The accompanying expert witnesses for the Appellants were Dr Ihar Nekrashevich, Dr Laurent Rivier and Dr Paul Scott. Prof Antonio Rigozzi appeared as Swiss co-counsel for the Appellants.

The Respondent was represented by Mr Howard Stupp, IOC Director of Legal Affairs, Mr André Sabbah, IOC Legal Counsel and the IOC Medical Director, Mr Patrick Schamasch. The accompanying expert witnesses for the Respondent were Dr Martial Saugy and Prof. Dr Wilhelm Schänzer.

Prof. Anthony Butch appeared as the Panel's appointed independent expert witness.

At the outset of the hearing, the Parties agreed that a conference of the experts would take place on the 2nd day of the hearing, namely on 26 January 2010. Neither the Panel nor the Parties nor their respective legal counsel would attend this conference. The purpose of the conference would be to determine whether the expert witnesses could agree on the resolution of the technical issues in dispute and, if not, to isolate those issues which remained in contention. The conference would be moderated by Prof Butch.

The Respondent explained why it could not compel Dr Wu from the Beijing Laboratory to testify before the Panel, claiming that the Respondent had no authority over Dr Wu. The Beijing Laboratory was not part of the IOC. The Beijing Laboratory was created and staffed by the Beijing Organizing Committee, BOCOG, and not by the Respondent.

The Respondent asserted that it was the responsibility of the Appellants to act in order to obtain further information from the Beijing Laboratory. The Appellants rebutted these statements, arguing that it was the responsibility of the IOC to establish that the demonstrated "departures" from the ISL did not cause the Adverse Analytical Finding.

Following this discussion, the Respondent confirmed that it would make a last try to obtain Prof Wu's participation in the hearing per teleconferencing on the following day, 26 January 2010.

The Respondent emphasized that it considered the present proceedings to be governed by "Swiss procedural law" and not by English law.

With reference to the witness statement of Dr Oliver Rabin submitted by the Respondent as a proof of the accreditation of the Beijing Laboratory, the Appellants confirmed that they did not object to it being part of the file and that they did not, in fact, question the accreditation of the Beijing Laboratory.

The Appellants argued that, if the validation study which formed the basis of the Laboratory's accreditation had been produced, it would show that the validation method prescribed with respect to certain aspects of the Appellants' sample analysis was incorrectly applied.

The Respondent replied to the Appellants' opening statements by stressing that the bottom line of this case was whether Adverse Analytical Findings could withstand scrutiny before the Panel. It claimed that no violation of the ISL had occurred and that the results were thus valid. In the Respondent's view, their experts would confirm this result.

On the afternoon of the first day of the hearing, Prof Butch listed for the Panel, the Parties, their legal representatives and their expert-witnesses, what he considered to be the major issues requiring resolution. He identified these issues as follows:

1. The Sequence File. What was injected and why?
2. The Quality Controls (QC). What was deemed to be a Quality Control?

3. The Variability / Reproducibility of the A sample testing for the IRMS. Information on the instruments used for the A and B testing was expected.
4. T/E analysis: Clarification was needed on the T/E ratios and the laboratory staff which performed the analysis of the samples.
5. The validation study

After having received confirmation from the Parties as to the points which required clarification, Prof Butch forwarded a list of questions per advance e-mail to Dr Wu of the Beijing laboratory to enable him to prepare his testimony in advance on the following day of the hearing.

On the 2nd day of the hearing on 26 January 2010, the Panel heard the testimony of Professor Moutian Wu, the Director of the Beijing National Laboratory. During the testimony, questions were also asked to the Laboratory analyst.

Dr Wu disclosed at the beginning of his testimony that he was no longer Director of the Beijing Laboratory since March 2009. He confirmed that he had received the list of questions from Prof. Butch and explained that he would be assisted by the Beijing Laboratory's current Deputy Director, the specialist within the Beijing Laboratory for T/E ratios, the isotope research manager and an interpreter.

On the 2nd day of the hearing, Prof. Butch proceeded with his questions from the e-mail of the previous day. These were answered by Prof Wu and his colleagues. Prof. Schänzer, Dr. Saugy and Mr. Scott, in addition to the Panel, then proceeded to ask questions directly to Dr Wu and his colleagues. The relevant parts of the testimony are quoted in section 5 D. et seq. of this Award.

During the course of Dr Wu's testimony, Dr. Saugy asked Dr Wu the following question:

Dr Saugy: Dr. Wu, you know that in the WADA International Standard, in the Technical Documents, there is a recommendation to look for previous values of the same athletes. Do you know that?

Dr Wu: Yes, I know the Technical Document.

Dr Saugy: Yes, can you confirm that you received information regarding the previous T/E ratios for these two athletes during the games?

Dr Wu: No, I did not receive any information about the athletes.

Counsel for the Appellants immediately objected to the above question on the grounds that it "constituted a wholly new line of argument, a completely different basis for the justification of the results". Counsel for the Appellants continued:

"It is simply not open to the IOC to raise an entirely new approach based on entirely new evidence, we haven't heard anything of this before, and it is not open and that is a matter of Swiss procedural law, not a matter of English procedural law".

The President of the Panel responded that the objection would be noted and that a ruling would be made in due course. Testimony from the Beijing Laboratory was then ended for a lunch pause.

Upon resumption of the hearing following lunch, each of the parties was given the opportunity to state their positions with regard to the issue of the Appellants' historical T/E values.

Counsel for the Appellants protested that he had learned just a few minutes before that Dr Saugy had attempted, during the expert witness conference following the lunch break, to introduce a document to the experts reflecting the historical T/E ratios of the Appellants.

Counsel for the Respondent vehemently stated that he had no prior knowledge of such an attempt and objected to any *"insinuation that the IOC might have tried something"*. Counsel for the Respondent protested the fairness of the ruling which excluded this evidence, emphasizing that Dr. Saugy was not permitted by the Panel to *"explain the circumstances"* and *"reserved all rights on behalf of the IOC"*.

The Panel announced its ruling not to allow the admission of the historical T/E ratios of the Appellants on the grounds that such evidence represented *"an element of the case which could have been brought up much, much earlier in the proceedings"*. Introduction of such evidence violated art. R56 of the CAS Code.

Prof. Butch then summarised the results of the experts' discussion:

"I think there was agreement that the T/E ratio quality control is no longer an issue. Both sides have agreed to that. Both sides also agreed that there was a validation study performed although there is some issue about the inference from not having any data from that validation study, but both sides agree clearly that the validation study was performed when this procedure was determined to be fit for a purpose and the third item that was agreed upon was that the analysis of the A and the B sample by the same person was not in conflict in that the same operator had closed vials in the B and the A samples. But there is some potential interpretation in the ISL that we couldn't deal with. I am checking with my notes and as I understood the summary to be that although the analyst had open access on the B sample, he did not have open access on the A sample but he did carry out the science on the A sample, so he was involved in the A sample".

With regard to the "still open" issues, Prof. Butch summarized them as follows:

"Points still open involve the Sequence File for the A sample analysis for IRMS, there was some issue with the concentration differences between the A as well as on the re-injection. We discussed that earlier with Dr Wu and his group that there was a re-injection and there were differences in concentration between the A bottle and the B bottle for the same athlete that still remain open and require some discussion. Important to that is we are still not clear on the exact volume of urine that was used in the A sample analysis versus the B sample analysis. If you recall earlier in the morning when we talked with Dr Wu we were trying to get that information out of him. It's my opinion that there were differences, but I am not certain. It looks like it from the documentation package, it looks like there was a two time six for the A and a three time six for the B which would imply that there are volume differences. Why is this important? This becomes important when we start discussions about the different concentrations between the A and the B bottle".

On the third day of the hearing, namely 27 January 2010, the Appellants and the Respondent delivered their closing statements and confirmed the factual background and the legal arguments made in their previous written submissions in respect of the testimony of the Beijing Laboratory and the expert witnesses.

As to procedural matters, the Respondent confirmed that it would accept Mr Scott's witness statement which had been excluded from the file on the basis of the Panel's ruling of 18 January 2009.

Following the Parties' closing statements, the Panel informed the Parties that the Beijing Laboratory would be granted until 2 February 2010 to respond to the Panel's additional information request brought up during the hearing of the previous day when it questioned the Laboratory witnesses.

The Parties were requested to submit final briefs summarizing their previous submissions based on the results of the hearing and on any evidence that the Beijing Laboratory would produce within the said deadline. The Parties requested a period of 4 weeks within which to submit their closing briefs. The Panel also requested the Parties to submit to CAS a statement regarding the costs they incurred in conducting the procedure.

Each one of the Athletes was given the opportunity to make final statements after which the hearing was closed.

On 2 February 2010, Dr Wu forwarded the Beijing Laboratory's responses to the questions raised by the Panel concerning the nature of the positive controls performed on the Athletes' samples, but did not provide the internal documentation for re-injection of sample 08H18037-5 requested by the Panel and agreed by the Laboratory.

The Parties filed their concluding briefs within the deadline set by the Panel, namely 26 February 2010, together with their costs' schedules.

H. The Parties' Post-Hearing Summaries

(1) The Appellants' Post-Hearing Brief dated 26 February 2010

The Appellants repeated their pleadings that the flaws outlined throughout their appeal remained undisturbed because the Respondent either failed to or simply could not provide any substantive explanation for these flaws or why they arose in the first instance. The Respondent had made no attempt to show that the departures from ISL did not cause the Adverse Analytical Findings.

In terms of burden and standard of proof, the Appellants submitted that their Appeal must succeed for the following reasons:

- (a) There is a range of flaws in the analysis any one of which renders the analysis unreliable and thus incapable of establishing any offence. The IOC has failed to discharge its burden

of proof because the results “*are simply insufficiently reliable to lead the Panel to have comfortable satisfaction that an anti-doping rule violation has occurred*”.

- (b) The departures from the ISLs are so fundamental that one can never answer the question of whether the departure could reasonably or did or did not cause the adverse findings under Article 3.2.1. The results are inadmissible because the Laboratory “*violated certain mandatory procedural safeguards intended to preserve essential protections afforded to athletes*”.
- (c) The Appellants cannot be required to establish that the departure “*could reasonably have caused*” the adverse analytical finding, because the provisions of Art. 3.2.1 of the IOC ADR 2008 cannot legally be applied. But even if it were to apply, “*the IOC has not shown, has not attempted to show and cannot show that the departures from the ISL did not cause the adverse analytical findings*”.

The Appellants maintain that the T/E analyses violated the “Different Analyst” rule in ISL 5.2.4.3.2.2 and must therefore be set aside because the entire T/E analysis of each Appellant’s B sample was undertaken by the same analyst who was also involved in the T/E analysis of their A sample.

The Appellants continue to contend that the IRMS analyses must be set aside for any one of the following departures:

- (a) The analytical results attributed to the Appellants cannot be deemed to fall within any laboratory’s acceptable range of reproducibility, in violation of ISL 5.4.4.2.
- (b) The Beijing Laboratory confirmed that it does in fact have validation studies for its IRMS method, despite having previously suggested that it did not have the relevant validation studies. The Appellants submit that (1) the validation studies would likely reveal that, by the Beijing laboratory’s own standards, the IRMS results attributed to the Appellants are not reproducible; and (2) the Panel is compelled to draw adverse inferences from such non-disclosure.
- (c) The Beijing Laboratory’s approach to quality control was flawed. First, the positive quality control for the A sample analysis failed. The A sample analysis should have been nullified further under ISL 5.2.4.3.1.4 and in accordance with typical standard operating procedure. Second, the Beijing Laboratory failed to analyse positive controls during the B sample analysis, contrary to its own SOP.
- (d) The Beijing Laboratory lost control and accountability of the appellants’ samples during the IRMS analysis, to the extent that it is impossible to determine which IRMS results were or were not correctly attributed to the Appellants. First, the A sample sequence “*was a disaster*”. Second, some A sample fractions attributed to each athlete do not appear to come from the same source as the equivalent B sample fractions.

The Appellants submit further that:

- (a) The Panel is compelled to draw adverse inferences in respect of the non-disclosure of the two sample report sheets for Mr. Devyatovskiy’s B sample testosterone fraction

containing his testosterone delta values. The Adverse Analytical Finding against Mr. Devyatovskiy must thus be set aside.

- (b) Two of Mr. Tsikhan's B sample testosterone peak heights fell outside the Beijing laboratory's acceptable range for analysis. The AAF against Mr. Tsikhan must thus be set aside as well.

Finally, the Appellants claim that the Panel cannot feel "comfortably satisfied" that an anti-doping rule violation has occurred only for the fact that the documents which form the basis of the evidence against the Appellants "*have proved themselves to be incomplete, untrustworthy and, in parts, incomprehensible*". This incomplete information equates to a departure from ISL 5.2.6.1 and it requires the Panel to draw adverse inferences in respect of those documents that the Respondent has still not disclosed despite the orders of CAS.

With respect to the right of the Panel to draw adverse inferences, the Appellants stress that it is not disputed that the Panel can order the production of documents in a party's "*custody or under its control*" (art. R57 and R44.3 of the Code). The Panel issued several production orders and the Respondent did not comply with a number of them. With reference to the relevant authorities, the Appellants argue further that it is generally accepted, including under "Swiss arbitration law" that arbitral tribunals may draw adverse inferences, even if most arbitration laws and rules do not contain any explicit provision to that effect. Those general principles of arbitration law were crystallized in the International Bar Association's Rules on the Taking of Evidence in International Commercial Arbitration.

The Appellants argue that the IOC Executive Board was in charge of the anti-doping policy at the Games. The IOC, they aver, is the entity bearing ultimate responsibility for the anti-doping program. From the point of view of the Appellants, both the BOCOG and the Beijing laboratory are agents of the IOC with respect to the anti-doping policy.

Based on the foregoing, the Appellants claim that the Panel is authorised to draw adverse inferences in case of non compliance with a production order by the IOC and its agent, the Beijing laboratory.

- (2) The Respondent's Closing Brief dated 26 February 2010

The position of the Respondent may be summarized as follows.

The Beijing Laboratory is WADA-accredited. Considering that WADA procedures and processes for accreditation are strict and that the Beijing Laboratory performed more than 4,500 controls resulting in 9 adverse analytical findings, this lends authority to its findings.

The Appellants compete in the same sport and discipline; they are nationals of the same country, Belarus. Although they do not live in the same place and train separately, both have admitted to using the services of the same physicians, Dr. Konon and Dr Drinevskiy. This supports the case against the Appellants.

The Respondent accuses the Appellants of “*ruthless aggressiveness, false accusations and misleading insinuations directed by the Appellants at the Beijing Laboratory*”. These served the fabrication “*of a huge curtain of smoke and aim to distract the panel from the only real issue at hand, i.e., whether the Appellants committed anti-doping violations*”. The Appellants “*have been totally unable to bring one ounce of evidence that the Appellants did not commit anti-doping violations*”.

In the view of the Respondent, the Appellants have “*mounted and orchestrated a monstrous case*” and “*have acted as if they were proceeding in front of some British civil or criminal court, entirely overlooking that this case is a disciplinary case in front of the CAS and has to be conducted in accordance with Swiss law*”.

Based on the knowledge and practical experience of the Respondent’s experts, Prof. Schänzer and Dr. Saugy, with regard to IRMS testing, it was proven that the Beijing Laboratory worked professionally and that no departures from the ISL occurred. The Appellants’ expert, Dr Scott admitted himself actually that the T/E ratio of the Athletes was too high.

Notwithstanding the Appellants’ claim, the bottom line, after the hearing, is that:

- (a) No departure from the International Standards for Laboratories (ISL) was established and even if a departure had occurred, it could not reasonably have caused an adverse analytical finding.
- (b) There is thus absolutely no evidence that the results are not valid, on the contrary, their validity was confirmed.
- (c) In both Appellants’ cases, an anti-doping rule violation has been established to the comfortable satisfaction of the Panel.

As to procedural issues, the Respondent stressed that the procedural rights of the Athletes, as provided under the IOC ADR 2008 were respected.

As to the various flaws mentioned by the Appellants, the Respondent submits that:

- (a) The Appellants do not allege that the information included in their respective Documentation Packages is not compliant with the ISL or with the WADA Technical Documents.
- (b) Thanks to the assistance of the Beijing Laboratory, the Appellants had access to additional documents usually not disclosed to athletes, pursuant to the IOC ADR 2008 and the Technical Document TD2003LDOC.
- (c) The Respondent has no authority over the Beijing Laboratory. It should further be noted that such evidentiary proceeding as the one applied in the present CAS procedure is not provided for under the CAS Code or under Swiss law. The requested documents, such as the SOPs are not to be provided under the IOC ADR 2008 and the Technical Document TD2003LDOC, which applies here. Those documents are only needed within the WADA and ISO accreditation processes. They are of no help to determine if a departure from the ISL occurred in a specific case. This is the reason why the anti-doping rules do not grant the athletes the right to access such documents, which are highly confidential.

- (d) The documents, which include the SOPs filed by the Beijing Laboratory, address nevertheless the issues raised by the Appellants as to the linearity, the manual integration, the co-elution of the IRMS chemical preparation and the IRMS results.

During the hearing, Dr Wu confirmed that the Beijing laboratory had checked the steroid profile of the Appellants before reporting adverse analytical findings, as suggested by the Technical Document TD2004EAAS.

The Respondent claims that if the Appellants were not satisfied with the documents disclosed by the Beijing Laboratory, they could have requested the assistance of the State Courts, pursuant to article 184 of the Swiss Private International Law Statute. Art. 9.4 of the IBA Rules of Evidence, invoked by the Appellant, is not applicable in that case as the documents were held by a third party, namely the Beijing laboratory, which is not under the direct control of the Respondent.

At the close of the conference of experts on the 2nd day of the hearing, only three issues were still in dispute:

- (a) The difference of concentrations between the A and B samples: IRMS is not a quantitative method. The sole purpose of IRMS testing is to determine delta values. In that respect, the differences of concentrations are irrelevant.
- (b) The reproducibility of the isotopic values: there are some variations within the isotopic values reported by the Beijing Laboratory, which the Respondent explains by the possible use of two different instruments for the A and B sample analyses, which was confirmed by Dr Wu. However, the T/E ratio and the delta values were beyond the threshold set in the Technical Document TD2004EAAS. The difference between pregnanediol and 5 β -androstenediol was also greater than 3 and the steroid profile of the athletes was checked. All these results and controls prove the validity of the Adverse Analytical Findings.
- (c) The positive quality control for the A sample in the IRMS analysis: this control is not crucial and it cannot result in a “false positive”.

The Respondent then claims that the involvement of the Laboratory analyst is no longer an issue as he was not part of the “wet chemistry” (i.e. when the aliquots are open). ISL 5.2.4.3.2.2 was therefore not violated. Moreover, the IRMS analysis proves that the ratio of testosterone (detected in the T/E analysis), which was too high, cannot be explained by an alleged systematical error of an analyst, but rather by an administration of exogenous testosterone. Had the analyst made an error, the IRMS analysis would not have confirmed the abnormal result.

The Respondent finally submits that the Appellants failed to overturn the expert opinions of Prof Schänzer, Dr Saugy and Dr Ayotte. As a result, they must be sanctioned for their anti-doping rule violations and their appeal should be dismissed. Any other decision would severely weaken the fight against doping.

Based on all the above, the Respondent requested in its Answer that the appeals filed by the Appellants be dismissed and that the Appellants be ordered to pay the Respondent’s costs and expenses arising

out of the arbitration procedure in an amount to be determined by the CAS Panel but which should not be less than CHF 20,000.-.

LAW

CAS Jurisdiction

1. The jurisdiction of the Court of Arbitration for Sport (CAS) rests on Article 59 of the Olympic Charter in force as from 7 July 2007 and the IOC ADR 2008.
2. Article 12.2.1 of the IOC ADR 2008 reads as follows:
“12.2.1 In all cases arising from the Olympic Games, the decision may be appealed exclusively to the Court of Arbitration for Sport (“CAS”) in accordance with the provisions applicable before such court”.
3. The Appellants accepted the jurisdiction of CAS by signing the declarations described in Byelaw to Rule 45 of the Olympic Charter:
“I also agree that any dispute arising on the occasion of or in connection with my participation in the Olympic Games shall be submitted exclusively to the Court of Arbitration for Sport, in accordance with the Code of Sports-Related Arbitration (Rule 59)”.
4. Notwithstanding the above, the Appellants have confirmed their acceptance of CAS jurisdiction in the Order of Procedure executed by them on 6 January 2010. The IOC confirmed its acceptance of the Order of Procedure on the same date.

Procedural issues

- A. Timeliness of the Appeal, the Appeal Brief and Respondent’s Answer*
5. The Appellants filed their Statements of Appeal on 31 December 2008 within the 21-day deadline following receipt of the decisions from the IOC Disciplinary Committee on 11 December 2008. The Appeals were, therefore, filed within the prescribed deadlines.
 6. The prescribed deadline applicable to the submission of the Appeal Brief, namely ten (10) days following the filing of the Statement of Appeal (art. R51 of the CAS Code), was extended twice at the request of the Appellants. The Appeal Brief was finally submitted within the extended deadline on 6 March 2009.
 7. In reaction to the volume and complexity of the scientific issues raised by the Appellants in the Appeal Brief, the Respondent also requested and was granted two extensions of the deadline

prescribed in art. R55 of the CAS Code for the submission of its Answer. The Respondent's Answer was received by CAS within the 2nd deadline on 8 June 2009.

B. *The Scheduling of the Hearing*

8. On 14 May 2009, the Panel set a date for the hearing on 13 July 2009. At the request of the Parties, this date was cancelled and tentatively re-set for 26 August 2009, only to be postponed again at the request of the Parties. On 28 September 2009, the Panel informed the Parties that the hearing would take place on 4/5 December 2009. On 23 October 2009, the Respondent requested the postponement of the hearing date. On 6 November 2009, after consultation with the Parties, the Panel set a new hearing date of 25-27 January 2010.

C. *Pre-Hearing Procedural Rulings*

9. During the extended two month period between the filing of their Statement of Appeal and the receipt of the Appeal Brief, the Appellants filed several "Requests for Further Information" with the CAS Court Office. These were rejected by the Panel pursuant to art. R56 in conjunction with art. R44.3 of the CAS Code. The Appellants were informed that their requests for information were to be incorporated in their Appeal Brief.
10. The Appellants' various "Requests for Further Information" were partially granted following the receipt of the Respondent's Answer on 8 June 2009. Requests for information were issued by the Panel to the Beijing Laboratory and information was provided by the Beijing Laboratory during the remaining months of 2009 and in the early weeks of January 2010 prior to the commencement of the hearing on 25 January 2010. These requests and submissions were numerous and the submissions were, at times, voluminous.
11. In this regard, the Panel wishes to point out that, in its letter to the Parties dated 30 December 2009, the Panel specifically reminded the Respondent with regard to the Beijing Laboratory's refusal to provide section YYB-104 (a) of its Standard Operating Procedures ("SOPs") of the clear provision of ISL 5.3.7.3.2:

"The Laboratory Director shall interact with the Testing Authority with respect to specific timing, report information, or other support needs. These interactions should include, but are not limited to, the following:

Communicating with the Testing Authority concerning any significant question of testing needs or any unusual circumstance in the testing process (including delays in reporting);

...

Providing complete and timely explanations to the Testing Authority when requested or when there is a potential for misunderstanding the Test Report or Laboratory Documentation Package;

...".

12. With regard to the withheld section YYB-104 (a) of the Laboratory's SOP, the Panel further instructed the Respondent as follows:
"If the relevant excerpts of the SOPs are not received by the CAS by 6 January 2010, the Respondent will be barred from submitting the SOPs at any later date. The Panel will thereupon instruct the Appellants to submit their isolated IRMS Submission and their witness statements by no later than 15 January 2010, taking into consideration that submission of the requested SOPs has been withheld by the Beijing National Anti-Doping Laboratory. The Panel will then take these facts and circumstances into consideration in rendering its decision following the hearing".
13. Although having originally agreed to comply with the Panel's request of 30 October 2009, the Beijing Laboratory continued to withhold the requested section YYB-104 (a) and (b) of its SOPs until 6 January 2010 at which time, it provided only section YYB-104 (b), although the Panel had requested submission of both sections YYB-104 (a) and YYB-104 (b).
14. By letter of 18 January 2010, the Respondent challenged the timeliness of particular submissions from the Appellant, the deadline for which was set at 2400 hours (GMT) on 15 January 2010. The documents challenged were the witness statements of Dr Nekrashevich and Dr Paul Scott, the Appellants' isolated IRMS submission and certain appendices.
15. By letter of 19 January 2010, the President of the Panel informed the parties that, based on information received from the CAS Court Office confirming the delayed receipt of the Respondent's submissions and exhibits on 16 January 2010, the Panel ruled to disallow Appellant's IRMS Submission, the Second Expert Report and the Witness Statements from Mr Scott and Mr Nekrashevich.
16. In the same letter, the President of the Panel informed the parties that the Beijing Laboratory had not submitted section sub-section YYB-104 (a) of its SOPs within the deadline of 6 January 2010 as requested by the Panel in its letter of 30 December 2010. The Respondent was likewise informed that any subsequent submission of sub-section YYB-104 (a) would be declared inadmissible.

Applicable Law

A. Applicable Law to the Arbitration Procedure

17. The present arbitration is governed by Chapter 12 of the Federal Statute on Private International Law (PIL). The CAS maintains its registered seat pursuant to art. R28 of the CAS Code in Lausanne, Switzerland. Neither of the Appellants maintains his domicile or his habitual residence in Switzerland as set out in Art. 176 PIL.
18. Pursuant to Art. 182 (1) PIL, the Parties may, either directly or by reference to existing and agreed rules of arbitration, determine the rules applicable to the arbitral procedure. By referring the dispute to CAS, the parties have, pursuant to art. R27 (1) of the CAS Code, accepted the

application of the CAS Code to this arbitral procedure. In the event of a gap or lacuna in the applicable procedural rules, Art. 182 (2) PIL provides that, absent an agreement of the parties to the contrary, “*the Arbitral Tribunal shall determine [the procedure] to the extent necessary, either directly or by reference to a statute or rules of arbitration*”.

B. *Applicable Law to the Merits*

a) The IOC ADR 2008

19. In signing of the Order of Procedure referred to above, the Parties expressly agreed as follows:

“In accordance with Article R58 of the Code [the Code of Sport-Related Arbitration], the Panel shall decide the dispute according to the applicable regulations and the rules of law chosen by the parties or, in the absence of such a choice, according to the law of the country in which the federation, association or sports-related body which has issued the challenged decision is domiciled or according to the rules of law, the application of which the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision”.

20. To be eligible for participation in the Olympic Games, the Appellants undertook to comply with the Olympic Charter as well as the rules of their International Federation (here: the IAAF). Article 41 of the Olympic Charter mandates that competitors, coaches, trainers and other team officials “*must notably respect and comply in all aspects with the World Anti-Doping Code*”.

21. Specifically, each of the Appellants signed a declaration, the language of which is set out in the Section 6 of the Bye-Law to Rule 45 of the Olympic Charter. “*I agree to comply with the World Anti-Doping Code and with the IOC Code of Ethics*”.

22. The acceptance of the WADC by the IOC is evidenced in the Preamble of the IOC ADR 2008. There it is stated already in the 2nd paragraph:

“The Olympic Charter reflects the importance that the IOC places on the fight against doping in sport and its support for the World Anti-Doping Code (the Code) which was accepted by the IOC upon the occasion of its 115th Session in Prague in July 2003”.

23. Article 16.1 and Article 16.5 of the IOC ADR 2008 further defines the applicable law, any amendments and the interpretation of the IOC’s anti-doping rules, all of which were binding upon the Appellants and the IOC as follows:

“These Rules are governed by the Olympic Charter, by the Code and by Swiss law”.

24. Accordingly, the IOC ADR 2008 represents the incorporation of the World Anti-Doping Code into the central regulatory framework constituting the IOC Anti-Doping Program. It is binding upon both the IOC and the Appellants and constitutes “*the applicable regulations and the rules of law chosen by the parties*” referred to in Art. R58 of the CAS Code cited above.

- b) The International Standard for Laboratories (ISL) and the Technical Documents
25. The ISL was first adopted by WADA in June 2003. The version of the ISL governing during the XXIX Olympiad is Version 5.0. It was approved by the WADA Executive Committee on 14 November 2007 and became effective as of 1 January 2008. It governed the laboratory accreditation and testing procedures of the Beijing Laboratory during the XXIX Olympiad.
26. The Introduction to the WADC 2003 states that “*adherence to the International Standards is mandatory for compliance with the Code*”. As a WADA-accredited laboratory the Beijing Laboratory was bound by the comprehensive rules and standards regarding sample handling and sample analysis set out in the ISL.
27. The Preamble of the IOC ADR 2008 establishes that its provisions “*are complemented by other IOC documents and WADA International Standards addressed throughout the Rules*”. Of relevance in the case at hand are Technical Documents WADA TD2004EAAS (Reporting and Evaluation Guidance for Testosterone, Epitestosterone, T/E Ratio and other Endogenous Steroids), WADA TD2003LDOC (Laboratory Documentation Packages) and WADA TD2003LCOC (Laboratory Internal Chain of Custody).
28. With regard to the production of forensically valid results, ISL Version 5.0 describes in Article 1.1 its purpose as follows:
- “The main purpose of the International Standard for Laboratories (ISL) is to ensure laboratory production of valid test results and evidentiary data and to achieve uniform and harmonized results and reporting from all accredited Doping Control Laboratories”.*

Rules Applicable to Presumptions or Burdens and Standards of Proof

- A. *The presumption of compliance inherent in adherence to the ISL*
29. Of central importance to the adjudication of this dispute is the production of valid test results and evidentiary data. Because the supervision and verification of test results poses a highly complex and scientific task, the authors of the ISL created the presumption that, if the laboratory can prove diligent compliance with the procedures set out in the ISL, it will be assumed, and the laboratory will be relieved of its burden to prove, that those procedures were conducted properly.
30. Article 1.0 of the ISL Version 5.0 states as follows:
- “Compliance with an International Standard (as opposed to another alternative standard, practice or procedure) shall be sufficient to conclude that the procedures covered by the International Standard were performed properly”.*
31. The use of presumptions within a set of rules can, however, pose the risk of false and unfair results for anyone who is forced to incur sanctions under those rules. Rules of rebuttal must exist to permit the challenge of the presumption in the event of provable non-observance of

the rules. In this case, the effect of rebutting the presumption will be to re-impose the burden of proof on the Anti-Doping Organization, which, in the case at hand, is the IOC.

32. The rules governing presumptions or burdens and standards of proof are found in Art. 3.2.1 of the IOC ADR 2008, the version of the IOC Anti-Doping Rules governing at the time of the XXIX Olympiad.

B. *Article 3.2.1 of the IOC ADR 2008 and the Applicable Burden of Proof*

33. The allocation of the burden of proof and the standard of proof to be applied have essential significance in the case at hand. In this regard, the Parties disagree on the application of Article 3.2.1 of the IOC ADR 2008. The relevant provisions of Articles 3.1 and 3.2 read as follows:

“3.1 Burdens and Standards of Proof

*The **IOC** shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether the **IOC** has established an anti-doping rule violation to the comfortable satisfaction of the hearing body bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond reasonable doubt. Where these **Rules** place the burden of proof upon the **Athlete** or other **Person** alleged to have committed an anti-doping rule violation to rebut a presumption or establish specific facts or circumstances, the proof shall be by a balance of probability.*

3.2 Methods of Establishing Facts and Presumptions

Facts related to anti-doping rule violations may be established by any reliable means, including admissions. The following rules of proof shall be applicable in doping cases:

- 3.2.1 **WADA**-accredited laboratories are presumed to have conducted **Sample** analysis and custodial procedures in accordance with the **International Standard for Laboratories**. The **Athlete** may rebut this presumption by establishing that a departure from the **International Standard** occurred which could reasonably have caused the **Adverse Analytical Finding**.*

*If the **Athlete** rebuts the preceding presumption by showing that a departure from the **International Standard** occurred which could reasonably have caused the **Adverse Analytical Finding**, then the **IOC** shall have the burden to establish that such departure did not cause the **Adverse Analytical Finding**.*

- 3.2.2 Departures from the **International Standard for Testing** which did not cause an **Adverse Analytical Finding** or other anti-doping rule violation shall not invalidate such results. If the **Athlete** establishes that departures from the **International Standard** occurred during **Testing** then the **IOC** shall have the burden to establish that such departures did not cause the **Adverse Analytical Finding** or the factual basis for the anti-doping rule violation”.*

[Terms written in bold represent defined terms in the IOC ADR 2008].

C. *Conflict between Art. 3.2.1 of the IOC ADR 2008 and Art. 3.2.1 of the WADC 2003*

34. With regard to WADC 2003, the presumption that sample analysis and custodial procedures in the laboratory have been conducted in accordance with the ISL and the rules of rebuttal which permit the athlete to “rebut the presumption” are set out in Article 3.2.1 of the WADC 2003:

*“3.2.1 WADA-accredited laboratories are presumed to have conducted **Sample** analysis and custodial procedures in accordance with the **International Standard** for laboratory analysis. The Athlete may rebut this presumption by establishing that a departure from the International Standard occurred.*

*If the Athlete rebuts the preceding presumption by showing that a departure from the **International Standard** occurred, then the **Anti-Doping Organization** shall have the burden to establish that such departure did not cause the Adverse Analytical Finding”.*

35. Article 3.2.2 of the WADC 2003 provides the following rule in the event of a departure from the ISL:

*“3.2.2 Departures from the **International Standard for Testing**⁴ which did not cause an **Adverse Analytical Finding** or other anti-doping rule violation shall not invalidate such results. If the **Athlete** establishes that departures from the **International Standard** occurred during **Testing** then the Anti-Doping Organization shall have the burden to establish that such departures did not cause the **Adverse Analytical Finding** or the factual basis for the anti-doping violation”.*

36. In its adoption of the IOC ADR 2008, the IOC chose to deviate from the language of Art. 3.2.1 of the WADC 2003. It amended the language of previously governing Art. 3.2.1 of IOC ADR 2006, which tracked the wording of the WADC 2003, to reverse the burden of proof from the IOC to the athlete to show that the departure from the ISL could have reasonably caused the Adverse Analytical Finding. The changes can be identified as follows (changes underlined by the Panel):

*“3.2.1 WADA-accredited laboratories are presumed to have conducted **Sample** analysis and custodial procedures in accordance with the **International Standard for Laboratories**. The Athlete may rebut this presumption by establishing that a departure from the **International Standard** occurred, which could reasonably have caused the **Adverse Analytical Finding**.”*

⁴ The wording “*International Standard for Testing*” as printed in the official text of both the WADC 2003 and the IOC ADR 2008 is not to be confused with the “International Standard for Testing” which, like the International Standard for Laboratories, represents a separate and coherent body of rules which govern the entire laboratory testing procedure and sample analysis. Each of these terms, “International Standard” and “Testing” is separately defined in Appendix 1 (Definitions) of each set of rules. „*International Standard*” means: “A standard adopted by WADA in support of the Code”. The definition encompasses both the International Standard for Laboratories and also the International Standard for Testing. The term “*Testing*” which is separated from the likewise italicized term “*International Standard*” by the non-italicized word “for” means “The parts of the *Doping Control* process involving test distribution planning, *Sample* collection, *Sample* handling, and *Sample* transport to the laboratory”. The term “Doping Control” is defined in the Definitions as “The Process including test distribution planning, Sample collection and handling, laboratory analysis, results management, hearing s and appeals”.

*If the Athlete rebuts the preceding presumption by showing that a departure from the **International Standard** occurred which could reasonably have caused the **Adverse Analytical Finding**, then the IOC shall have the burden to establish that such departure did not cause the **Adverse Analytical Finding**".*

[Terms written in bold represent defined terms in the IOC ADR 2008].

37. The provisions of Art. 3.2.2 of the IOC ADR 2008 remained unchanged from the language of Art. 3.2.2 WADC 2003 quoted above in marg. no. 35.
38. On the basis of the amended wording of the IOC ADR 2008, the Panel concludes that, in addition to being charged with the burden of showing that a departure from the ISL has occurred as required under the WADC 2003, the athlete is now forced to bear the burden of proof to establish that the departure had not only occurred, but also that it had reasonably caused the Adverse Analytical Finding. This is a substantial change from the burden of proving the mere fact of a departure from the ISL. As before, the IOC bears the burden of disproving reasonable causality.
39. By amending the language of Article 3.2.1 in IOC ADR 2008, the IOC anticipated the incorporation of an identically-worded amendment to the WADC 2009 which would take effect as of 1 January 2009. The language of amended Art. 3.2.1 of WADC 2009 in comparison with WADC 2003 reads as follows:
- "3.2.1 WADA-accredited laboratories are presumed to have conducted **Sample** analysis and custodial procedures in accordance with the **International Standard** for Laboratories. The **Athlete** or other **Person** may rebut this presumption by establishing that a departure from the **International Standard** for Laboratories occurred which could reasonably have caused the **Adverse Analytical Finding**.*
- If the **Athlete** or other **Person** rebuts the preceding presumption by showing that a departure from the **International Standard** for Laboratories occurred which could reasonably have caused the **Adverse Analytical Finding**, then the **Anti-Doping Organization** shall have the burden to establish that such departure did not cause the **Adverse Analytical Finding**".*
40. The problem for the Olympic competitor under the amended language of Art. 3.2.1 of the IOC ADR 2008 is the obvious reversal of the burden of proof and the conflict in which the reversal places him under Art. 3.2.1 of the WADC 2003. Article 45 of the Olympic Charter and the wording of his declaration obligated him "to comply with the World Anti-Doping Code and with the IOC Code of Ethics". The World Anti-Doping Code referred to here is obviously the currently governing WADC, namely the WADC 2003 which remained in force until 1 January 2009.
41. If the conflict is not clearly readable in Art. 45 of the Olympic Charter, it becomes startlingly visible in other contradictory provisions of the IOC ADR 2008. Art. 16.1 and Art. 16.5 of the IOC ADR 2008 read as follows:
- "16.1 These **Rules** are governed by the Olympic Charter, by the **Code** and by Swiss law.*

- 16.5 *These **Rules** have been adopted pursuant to the applicable provisions of the **Code** and shall be interpreted in a manner that is consistent with applicable provisions of the **Code**. The comments annotating various provisions of the **Code** may, where applicable, assist in the understanding and interpretation of these **Rules***".
42. The officially italicized term "Rules" as used in Article 16.1 above is defined in Appendix 1 (Definitions) of the IOC ADR 2008 as "*the International Olympic Committee Anti-Doping Rules applicable to the Olympic Games*". That is clearly the IOC ADR 2008 adopted by the IOC on 07 May 2008 having full force and effect during the XXIX Olympiad. It contains the amended language of Articles 3.2.1 and 3.2.2 quoted above in marg. no. 36.
43. The italicized term "Code" is defined in the Appendix 1 Definitions of the IOC ADR 2008 as "*the World Anti-Doping Code in force at the time of the Olympic Games*". The World Anti-Doping Code in force at the time of the XXIX Olympiad was not, however, the WADC 2009 containing the amended language, but rather the WADC 2003 and, with it, Version 5.0 of ISL 2008. The fact of the conflict is re-confirmed by the interpretation rule contained in Art. 16.5 (... "*shall be interpreted in a manner that is consistent with applicable provisions of the Code*").
44. The significant reversal of the athlete's burden of proof contained in Art. 3.2.1 of IOC ADR 2008 constitutes a "substantive" change from Art. 3.2.1 of WADC 2003, not to overlook the fact that Art. 16.5 of IOC ADR 2008 refers expressly (and confusingly) to the annotated comments of the "Code" (in its still governing 2003 version), and states that these comments "*may, where applicable, assist in the understanding and interpretation of these "Rules"*".
45. The language of that annotated comment to the Introduction to Part One is identical in both the 2003 and 2009 versions of the Code:
- "It is critical for purposes of harmonization that all Signatories base their decisions on the same list of anti-doping rule violations, the same burdens of proof and impose the same Consequences for the same anti-doping rule violations. These rules must be the same whether a hearing takes place before an International Federation, at the national level or before the Court of Arbitration for Sport.*
- [Underlining by the Panel].
46. It is difficult to see how an athlete or any other person for that matter can harmonize the above comment and its mandate to apply Art. 3.2.1 of the WADC 2003 with the athlete's expanded burden of proof in Art. 3.2.1 of the IOC ADR 2008.
47. Moreover, the Respondent's decision to "anticipate" the change in the burden of proof contained WADC 2009 by incorporating it in IOC ADR 2008 stands in direct conflict with Art. 23.6.4 of the WADC 2009 which the IOC adopted together with other Signatories at the Third World Congress on Doping in Sport on 17 November 2007. That provision reads as follows:
- "Signatories shall modify their rules to incorporate the 2009 Code on or before January 1, 2009, to take effect on January 1, 2009".*
- [Underlining by the Panel].

48. Lastly, Art. 25.1 of WADC 2009 provides: “*The 2009 Code shall apply in full after January 1, 2009 (the “Effective Date”)*”.

D. Resolution of the Conflict

49. Neither the WADC 2003 nor the IOC ADR 2008 provides a clue as to how this conflict in the contradictory wording of the provisions is to be resolved. The Introduction to Part One of the WADC 2003 states expressly that, among other Articles, Article 3 (Proof of Doping) must be incorporated into the rules of the Anti-Doping Organization “*without substantive changes*”⁵.

50. In its submission to the Panel dated 13 November 2009 on the issue of Art. 3.2.1 of the IOC ADR 2008, the IOC took the following position:

“The fact that article 3.2.1 IOC ADR [2008] is not identical to the wording of the 2003 [WADA] Code does not mean that it does not comply with or conflicts with the content of the 2003 Code; on the contrary, the wording of the IOC ADR [2008] contributes to avoid any doubt as to the scope of the applicable norm”.

[Brackets inserted by the Panel].

51. The Panel does not concur with the above position of the Respondent. The Respondent expressly concedes in its submission that it “*does not challenge that article 16.1 ADR mentions that the IOC ADR are governed by the 2003 Code*”. In the same submission, the Respondent also accepts that Art. 16.5 IOC ADR 2008 “*implements a specific rule of interpretation: the IOC ADR shall be interpreted in a manner that is consistent with the 2003 Code*”.

52. The Respondent’s position becomes, however, all the more problematic when the following statement in Pt. 22 of its submission is made:

“However, the Respondent submits that since the wording of the 3.2.1 rule is clear, it does not require any interpretation. In that specific respect, any reference to the 2003 Code is irrelevant. Moreover, the 2003 Code (as well as the Olympic Charter or the Swiss law) may only be applicable as a subsidiary norm, i.e., if the IOC ADR contain a gap or a lacuna. As to the proof of doping, article 3 IOC ADR does not contain any lacuna. Therefore, there is absolutely no reason that article 3.2.1 of the 2003 Code could be applied directly instead of the clear rule of article 3.2.1 IOC ADR”.

53. The Respondent appears to take the position that the WADC 2003 serves as a “fall-back” or applies subsidiarily wherever or whenever the IOC ADR 2008 contains a gap or lacuna. This interpretation does not follow, however, from the wording of the IOC ADR 2008 nor has the Respondent submitted any general principles of Swiss law in support of its position.

⁵ Permitted are “*necessary, non-substantive editing changes to the language in order to refer to the organization’s name, sport, section numbers, etc.*”.

54. Having said that, this Panel is left with the finding that the two provisions which the Respondent declares to be applicable in a subsidiary relationship must be deemed, to the contrary, to be contradictory with one another.
55. The Panel finds no support in the position of the Respondent that Swiss law can or would confirm the application of Art. 3.2.1 of the IOC ADR 2008 in an interpretive dispute involving the Art. 25.2 of the WADC 2009 in the case at hand. The doctrine that an accused party can be tried and sanctioned only under the laws which governed at the time the offending act was committed, the exception being the principle of *lex mitior*, is a fundamental principle of law which is accepted by the majority of national jurisdictions, including Switzerland.
56. It is the Panel's view that contradictions in the applicable rules must be interpreted *contra proferentem*, i.e., to the detriment of the promulgator of the conflicting or contradictory provision. This view is supported by international judicial practice. Unidroit Principles on International Commercial Contracts 2004 provide in Art. 4.6:
"If contract terms supplied by one party are unclear, an interpretation against that party is preferred".
57. The IOC cannot seriously dispute that the amended wording of the burden of proof rule in Art. 3.2.1 of the IOC ADR 2008 represents a material change from the governing rule of Article 3.2.1 of the WADC 2003. Moreover, the shift in the burden represents a step in the direction of disharmony and disunity for any athlete who comes into conflict with the IOC ADR 2008 during the XXIX Olympiad. The conflict exposes the athlete to the application of differing sets of rules regarding the burden of proof when his or her national or international federations initiates subsequent proceedings following the IOC's adjudication of the violation.
58. Accordingly, the Panel will apply Art. 3.2.1 of the WADC 2003 which places upon the Appellants the duty to show, on the balance of probability, that a departure from the International Standard for Laboratories occurred.

Sample Analysis Procedure

A. Background to GC/MS and IRMS Laboratory Analysis

59. Testosterone is an anabolic steroid which can be produced naturally in the athlete's body (endogenously) or can be administered from a source outside of the athlete's body (exogenously). Endogenous levels of testosterone can differ according to the physiological or pathological condition of the athlete's body. Hence, it is not always easy to determine whether the steroid in question has come from an outside source.
60. When a prohibited substance such as testosterone is found in a urine sample from an athlete, it will be reported as an "Adverse Analytical Finding" (AAF) when the concentration of the testosterone so deviates from the range of values normally found in humans that it is unlikely

to be consistent with normal endogenous production. This requires additional confirmatory testing.

61. As provided in WADA Technical Document TD2004EAAS, it has been proven that the exogenous administration of urinary steroids alters one or more of the parameters of the athlete's urinary steroid profile.

“Elevated levels of urinary metabolites which are part of the “steroid profile”, e.g. testosterone, epitestosterone, dihydrotestosterone, androsterone, etiocholanolone, DHEA as well as other specific metabolites are not consistent with normal endogenous production and result from the intake of these steroids. Increased ratios of specific pairs of steroid metabolites are also indicative of the administration of these endogenous steroids”.

62. One indication of the exogenous source of testosterone is an elevated Testosterone/Epitestosterone (T/E) ratio which is measured by Gas Chromatography Mass Spectrometry (GC/MS).

63. When the laboratory has reported after GC/MS analysis a Testosterone/Epitestosterone (T/E) ratio which exceeds the ratio of four (4) to one (1), the WADA 2008 Prohibited List requires that the exogenous source of the steroid be confirmed by another “reliable analytical method” such as Isotope Ratio Mass Spectrometry (IRMS).

64. IRMS analysis will be used to determine the $^{13}\text{C}/^{12}\text{C}$ value of the sample and is expressed in delta units per mil (‰). This value will be measured and compared to that of an endogenous reference steroid in the urine sample from another metabolic pathway that is not affected by the external administration of endogenous steroids or their precursors. This serves to define the basal $^{13}\text{C}/^{12}\text{C}$ ratio of the person.

65. Depending upon the nature of the endogenous steroid suspected to have been administered, the metabolites analysed could be testosterone, epitestosterone, androsterone, etiocholanolone, androstanediol. The urinary reference steroid used in the IRMS analysis of the Appellants' sample was pregnanediol (PD). The Athletes were tested for testosterone.

66. The results of the IRMS analysis will be reported as consistent with the administration of a steroid when the $^{13}\text{C}/^{12}\text{C}$ ratio measured for the metabolite(s) differs significantly, i.e., by 3 delta units or more from that of the urinary reference steroid chosen. Such a value is referred to as the “delta-delta” or “ $\Delta\delta$ ” value.

67. WADA Technical Document TD2004EAAS points out the following “actions” which should be requested by the Testing Authority in agreement with the laboratory:

- *The results of the IRMS analysis and/or of the steroid profile measured by GC/MS shall be used to draw conclusions as to whether a doping violation may have been committed. If the IRMS study does not readily indicate exogenous administration, the result should be reported as “inconclusive” and if necessary further longitudinal studies performed.*

- *When available, the athlete's previous tests on record at the Testing Authority⁶ should be accessed and the corresponding steroid profile data requested from the relevant laboratory. These results should be examined and considered together with the existing evidence (longitudinal study).*
- *If, for any reason, an IRMS analysis cannot be carried out satisfactorily (e.g. insufficient volume of urine, amount of analyte too low to enable a valid measurement) or the examination of previous test results raises suspicions due to unstable profile values, up to three further unannounced tests should be carried out, preferably within a three months period following the report of the suspicious analytical result. There should be a minimum total of three results, other than the abnormal Sample, of either past or post data. A Sample in which the elevated parameter is again measured is to be analysed by IRMS as described above. In difficult cases longer monitoring may be required.*

B) *The IOC Decisions and the Scope of the Panel's Review*

68. In the IOC Disciplinary Commission's decision of 11 December 2008, against which the Appellants have filed their appeal to CAS, both Appellants were sanctioned for violation of Art. 21 of the IOC ADR (i.e., presence of a prohibited substance). Furthermore, in the decision reference is made to the analytical report of the Appellant Tsikhan's A sample in which GC/MSD analysis measured the presence of exogenous testosterone at a T/E ratio of 7.8 (+/- 1.5) above the WADA T/E threshold of 4:1.
69. The GC/C/IRMS measurement result for Mr. Tsikhan's A sample proved to be consistent with the administration of such substance. The B sample analysis confirmed the A Sample finding with the analytical report stating a T/E ratio of 6.7 (+/- 0.4) and an IRMS measurement result consistent with the administration of exogenous testosterone. The difference in delta values between PD and testosterone was found to be more than 3.1.
70. With regard to the Appellant Devyatovskiy, the analytical report stated a T/E ratio of 8.1 (+/- 1.5) above the WADA T/E threshold of 4:1 with a GC/C/IRMS measurement result which was likewise consistent with the administration of exogenous testosterone. The B sample values stated a T/E ratio of 8.0 (+/- 0.5).
71. Under art. R57 of the CAS Code, the Panel has full power to review the facts and the law with regard to the IOC Disciplinary Commission's Decisions. The Panel may issue a new decision which replaces the decision challenged or annul the decision and refer the case back to the previous instance.

⁶ Defined in the ISL 2008 as the "IOC, WADA, IF, National Sport Organization, National Anti-Doping Organization, National Olympic Committee, Major Event Organization, or other authority defined by the Code responsible for Sample Testing either In-Competition or Out-of-Competition and or for management of test results".

C) *The Appellants Challenge to the IOC Decisions*

72. The Appellants have challenged the analytical results on the grounds that, in the course of analytical testing which involved sample handling, analysis and reporting, the Beijing Laboratory committed grievous “departures” from the rules and standards laid down in the ISL which ultimately rendered the findings unreliable and unreproducible. They assert that the IOC has “made no attempt to show that the departures from the ISL did not cause the adverse analytical findings”.
73. The Appellants point out that documentable adherence to the rules and standards laid down in the ISL is the pre-requisite for the presumption set forth in Art. 3.2.1 of the IOC ADR 2008. A WADA-accredited laboratory such as the Beijing Laboratory must conduct sample analysis and custodial procedures in accordance with the International Standard for Laboratories in order to justify the burden of strict liability and the severe penalties which are imposed by the IOC ADR 2008 on an athlete.
74. The IOC contends that the analytical testing performed by the Beijing Laboratory and confirmed by the experts, Prof. Schänzer and Dr. Saugy, clearly support the adverse analytical findings: the T/E ratios of both athletes were far above the ratio of 4:1. Hence, the IRMS analysis confirmed the presence of exogenous testosterone.
75. During the months leading up to the 3-day hearing on 25-27 January 2010, the Appellants have requested comprehensive and detailed information regarding the analytical testing of their A and B samples performed by the Beijing Laboratory. These requests culminated in the proposal of the Panel that the Appellants’ questions and the IOC’s answers be reduced to a “Schedule of Document and Information Production”.
76. This compilation was largely completed on 26 August 2009. Additional information was provided by the Beijing Laboratory upon request of the Panel during the remaining months leading up to the hearing.
77. In the organisation of the extensive and scientifically complex subject matter of this dispute, the Panel requested that the Parties focus their attention and argumentation on the central issues which the Panel deemed to be critical for its decision. These issues were notified to the Parties and, selectively, to the Beijing Laboratory prior to the hearing as follows:
- (a) Lack of Reproducibility: Alleged differences and random shifts in the absolute isotope values between the Appellant’s A and B samples. Are the movements in the delta values and the delta-delta values of the analyzed samples to be deemed “random” across all aspects of the assay?
 - (b) Control and Accountability for Sample Identity: The alleged “mismatch” between the entries in the Sequence File for the two A samples and the Sample Report Sheets. Has the Sequence File submitted with the Doc Paks by the Beijing Laboratory been altered?
 - (c) Quality Control: ISL 5.4.7.2 provides that quality control tests must be conducted to monitor analytical performance. Did the positive quality control tests operated by the

Beijing National Laboratory fail in the A sample IRMS analysis, as alleged by the Appellants? Were these positive control tests re-applied in the testing of the B Samples?

- (d) Completeness of Documentation: To what extent is required documentation missing which is critical to the interpretation of the analysis results such as data from the Laboratory's validation studies, Standards of Procedure (SOPs) and Sample Report Sheets showing manual integration of peak values?
- (e) Violation of the "Different Analyst" Rule: What role did the Laboratory's assigned analyst play in the analysis of the A and B sample for the T/E ratio?

D) *The Panel's Findings with regard to the Alleged Departures from the ISL*

- 78. In the following paragraph, the Panel wishes to address each of the above issues on the basis of the Appellant's Appeal Brief, the Respondent's Answer to the Appeal, the Parties various submissions in preparation for the hearing, the Schedule of Documents and Information Production, the written statements and testimony of the expert witnesses, and the post-hearing summary statements of the Parties.
- 79. In confirmation of its WADA accreditation and capability to conduct the testing prescribed by the IOC ADR 2008, both of which had been challenged by the Appellants, the Respondent submitted on the 1st day of the hearing a statement dated 21 January 2010 of Dr. Olivier Rabin, WADA Science Director, which confirmed the following:

"I hereby confirm that the National Anti-Doping Laboratory China Anti-Doping Agency (the "Beijing Laboratory") is WADA-accredited since January 1st, 2004, the date of entry into force of the World Anti-Doping Code and of the related International Standard for Laboratories (ISL). This means that this laboratory fully complies with the international standard "ISO/IWEC 17025" and with the WADA International Standards for laboratories.

In particular, this laboratory has the ability to reliably conduct analyses pursuant to the method known as Gas Chromatography Combustion Isotope Ratio Mass Spectrometry ("GC-C-IRMS"). The Laboratory is ISO17025 accredited in that respect.

In accordance with the WADA International Standards for Laboratories, the Beijing Laboratory has been regularly assessed pursuant to the WADA External Quality Assessment Scheme ("EQAS") since the delivery of the WADA accreditation.

The WADA EQAS has not included, up to recently, formal EQAS samples specifically designated for the GC/C/IRMS methodology; however, several past EQAS samples provide ancillary evidence of the Laboratory's GC/C/IRMS capability. Since 2006, the Beijing Laboratory has analyzed 6 blind EQAS samples with the GC/C/IRMS method and has always reported satisfactory results.

Based on WADA's evaluations, which are made on a regular basis to assess the accreditation maintenance, the Beijing Laboratory achieved satisfactory results. Its accreditation has never been suspended or revoked.

In consideration of the above, I confirm that the Beijing Laboratory has always reported results in line with WADA expectations including for GC-C-IRMS and WADA has never noticed any failure of this laboratory in that respect”.

- a) Lack of Reproducibility of the IRMS Analysis and its Meaning for the Validity of the entire Sample Analysis
80. Based on the WADA-accreditation described above, there is a presumption that the Beijing Laboratory has developed, has validated and is able to document its methods for detection of Prohibited Substances. This presumption is conditional upon the Laboratory’s adherence to the ISL.
81. With regard to the reproducibility of the Laboratory’s sample analysis results in testing for “Threshold Substances” such as the endogenous steroid testosterone, ISL 5.4.4.2.2 states as follows:
“Robustness. The method shall be determined to produce similar results with respect to minor variations in analytical conditions. Those conditions that are critical to reproducible results shall be controlled”.
82. In layman’s terms, robustness means that the method (here: the IRMS method) must be capable of providing the reliable repetition of the results at different times and with different operators performing the assay, i.e., the range of sample analyses to be conducted on the aliquot samples.
83. In the case at hand, and as described above, the T/E ratio established in the “A” sample analysis of Mr. Devyatovskiy and Mr. Tsikhan’s specimens must be repeatable upon the testing of the “B” sample. The urine has the same origin. The same repeatability must also prevail upon conducting the IRMS analysis. The Laboratory confirmed for both Athletes in their Documentation Packages that *“there was not any deviation from routine procedures during the quantification of the T/E ratio for his urine sample”.*
84. With regard to Mr. Devyatovskiy’s “A” and “B” sample analysis, it was determined by the Laboratory that the T/E ratio on the “A” sample was 8.1 (± 1.5). The “B” sample T/E ratio was quantified at 8.0 (± 0.5).
85. With regard to Mr. Tsikhan, the “A” sample showed a T/E ratio of 7.8 (± 1.5). The T/E ratio of his “B” sample was measured at 6.7 (± 0.4).
86. As is evident from the above, the T/E ratios for testosterone established for both Athletes during the GC/MS Screening Procedure exceeded the permissible T/E ratio of 4.0 prescribed in WADA Technical Document TD2004EAAS. Both samples were therefore assigned for confirmation of the exogenous administration of the testosterone by IRMS analysis. In both cases, the Laboratory’s GC/C/IRMS measurement results were stated in the Documentation Packages to be *“consistent with the administration of testosterone and/or a related substance”.*

87. It is undisputed by the Parties that the respective delta (δ) values and delta-delta ($\Delta\delta$) values of their respective A and B samples established in the IRMS analysis were the following:

| Urine Sample Tsikhan (1846127) | | | | | |
|--------------------------------------------|----------------------|-----------------|---------------------|-----------------|----------------------|
| IRMS (all values in ‰) | | | | | |
| | A sample | A sample | Difference | B sample | B sample |
| <u>T + Metabolites</u> | $\Delta\delta$ Value | δ Value | $B\delta - A\delta$ | δ Value | $\Delta\delta$ Value |
| Androsterone | 2.93 | -26.02 | 1.60 | -24.42 | 1.76 |
| Etiocholanolone | 2.61 | -25.70 | 1.24 | -24.46 | 1.80 |
| 5- β -androstanediol | 3.34 | -26.43 | -0.42 | -26.85 | 4.19 |
| Testosterone | 6.16 | -29.25 | -0.21 | -29.46 | 6.80 |
| <u>ERC</u> | | | | | |
| Pregnanediol | | -23.09 | 0.43 | -22.66 | |
| Urine Sample Devyatovskiy (1846297) | | | | | |
| IRMS (all values in ‰) | | | | | |
| | A sample | A sample | Difference | B sample | B sample |
| <u>T + Metabolites</u> | $\Delta\delta$ Value | δ Value | $B\delta - A\delta$ | δ Value | $\Delta\delta$ Value |
| Androsterone | 0.19 | -25.04 | 0.16 | -24.88 | 2.02 |
| Etiocholanolone | 0.62 | -25.47 | 0.37 | -25.10 | 2.24 |
| 5- β -androstanediol | 3.71 | -28.56 | 2.32 | -26.24 | 3.38 |
| Testosterone | 4.63 | -29.48 | 1.55 | -27.93 | 5.07 |
| <u>ERC</u> | | | | | |
| Pregnanediol | | -24.85 | 1.99 | -22.86 | |

88. The delta values shown above are measured absolute isotopic values for steroids in the A and B samples. Delta values are determined for the endogenously produced steroids androsterone, etiocholanolone, 5-beta-androstanediol, testosterone and the reference standard pregnanediol (PD). Delta-delta ($\Delta\delta$) values are obtained by subtracting the compound absolute isotope value (δ Value) for androsterone, etiocholanolone, 5- β -androstanediol and testosterone from the value obtained for PD. The isotope value for PD in an individual is not altered by the exogenous administration of testosterone, thus enabling PD to act as a baseline.

aa) The Position of the Appellants:

89. The Appellants submit that the analytical results attributed to their specimens cannot be deemed to fall within any laboratory's acceptable range of reproducibility in violation of ISL 5.4.4.2.1.
90. In the view of the Appellants, a review of the IRMS analysis results shows that the delta (δ) values for the analytes measured in the Appellants' A and B samples are neither consistent nor do they show evidence of symmetry in drift or direction. There exist "*vast differences*" between each Appellant's A and B sample absolute and relative delta (or isotopic) values.
91. The Appellants point out that each of their aliquot fractions were treated to exactly the same analytical process and yet the delta values of some analytes have increased while several others have decreased, all by varying degrees.
92. In their view, this lack of reproducibility "*could reasonably have caused the Adverse Analytical Finding*" since the "*results do not appear repeatable. A further analysis of the samples by the Beijing Laboratory could well have yielded altogether different results*".

bb) The Position of the Respondent:

93. The Respondent agrees that variations within the isotopic values reported by the Beijing Laboratory were present. These were, in their view, due to the use of two different instruments for conducting the IRMS analysis and the behaviour of the steroids in the combustion furnace of the instruments. However, the T/E ratios and the delta values were consistent in that they remained beyond the threshold set in the TD2004EAAS.
94. Relying on the expert opinion of Prof. Schänzer dated 26 May 2009 in support of their position, the Respondent asserts that "*the decision of the adverse analytical finding was not based on the absolute isotope value, but on the differences of isotope values of testosterone to the endogenous reference substance pregnanediol and this difference was stable within an acceptable range for reporting an adverse analytical finding*".

cc) The Results of the Evidence adduced by the Panel:

95. The Appellants' and the Respondent's expert witnesses confirmed both in their witness statements and in their oral testimony that variations in the delta values between the A and B samples of Mr. Tsikhan for the steroids androsterone and etiocholanolone of 1.60 (-24.42 - -26.02) and 1.24 (-24.46 - -25.70), respectively, were present. In addition, the delta value between the A and B samples of Mr Devyatovskiy for 5- β -androstenediol was 2.32.
96. When questioned by Prof. Butch during the telephonic link to the Beijing Laboratory during the 2nd day of the hearing, Dr Moutian Wu, Director of the Beijing Laboratory during the XXIX

Olympiad, speaking through an interpreter (Ms. Li), explained the variability in the delta values as follows:

Prof. Butch: Can you explain why there is considerable variability in the delta-delta values for the A and B sample analysis?

Ms. Li: There is considerable variability because we were using different instruments in testing the A sample and B sample. I believe the difference of the instruments caused part of the variability.

Prof. Butch: What do you believe caused the other part?

Ms. Li: All the other standards are really tracking. Different elements were effecting on the analysis result.

Prof. Butch: Could you please repeat that.

Ms. Li: Yes. As like the other standards are really [inaudible], different elements might be effecting on the analysis result which may be reflecting some differences of variability.

Prof. Butch: Can you provide examples of what you are referring to?

Ms. Li: O.K. For example in the samples injected consecutively, the data values will slightly change due to the time of the frequency of the reactor used.

97. Following the testimony of the Laboratory personnel, the expert witnesses conferred among themselves prior to the opening of the afternoon session in order to discuss and evaluate the results of the Laboratory testimony and to seek consensus on the open technical issues.

98. Upon resuming the hearing in the afternoon (without the Beijing Laboratory), the expert witnesses for both of the Parties presented their conclusions and entered into a discussion together with the Panel in an attempt to better understand the still open scientific issues.

99. With regard to the variability in the absolute isotopic values of the metabolites tested, namely androsterone, etiocholanolone, 5- β -androstenediol, testosterone and the internal standard, pregnanediol, Prof. Butch summarized the facts as follows and posed the following question to Mr. Scott, the chief expert witness appointed by the Appellants:

Prof. Butch: And if I can summarize this: we were looking at differences for the A [sample] in one athlete, it was for the A andro[rosterone] 2.9 and for the B it was 1.8. which is a difference of 1.1. For the etio[cholanolone], it was 2.6 in the A and 1.8 in the B, which is a difference of 0.8. For the 5- β -androstenediol, it was 3.3 and 4.2, which is a difference of 0.9 and for the testosterone, 6.2 and 6.8 which is 0.6. That was in the one athlete. In the second athlete, the andro difference was 1.8, the etio difference was 1.6, the 5- β negative 0.3 and testosterone was 0.5. I'm taking that you're concerned about these differences because the uncertainty of the assay are plus or minus 1. So, you would then be concerned about any of these differences in the A and the B that exceed 1?

Mr. Scott: Well, at least that. I'm concerned about reproducibility. This is the difference here you're talking about of course in the delta-delta difference between the analyte and the p-diol [Pregnanediol]. You know, when you measure the delta value, which, frankly is the value which is actually

measured, not as simply a linear calculation post measurement, you actually get even more extreme and non-reproducible, non-bias, in other words, they don't move in the same direction, values for each of the five analytes, and they change in different ways, for different athletes and they change in different ways, you know, depending on the analyte within a single athlete.

Prof. Butch: This question was posed to the Beijing lab earlier, just to refresh everybody's memory. We asked them to explain the variability to us and their answer was: the variability was because of different instruments. And then I said, you feel that accounts for all the variability? And they said, no, only part. And then I went further and said, what other part could cause the variability? And they said, other elements. And I said, could you please give me an example and they commented and said, possibly the furnace, the combustion furnace as an example. So that was their response earlier today, when we had the Beijing Laboratory on the phone.

Panel: Dr. Schänzer, would you like to comment?

Dr. Schänzer: The answer from them is quite clear because there is no identification of a clear systematical fault, yes, which can explain the differences. In general, the second instrument, or the B instrument shows concerning the so-called internal standard a difference of .43%. I calculated this, so this means there is a difference in the instrument and steroids are in general influenced more than [inaudible]. Nevertheless, the difference for the decision is made on the testosterone and the p-diol [Pregnanediol]. And this difference in the delta values between the A and B sample are less than 1%. The difference in the androsterone and pregnanediol is, I think, too high and this means that this value for androsterone cannot be used if it would have been a positive case, yes ...

Mr. Scott: We agree that the analysis of the internal standard shows a slight bias of approximately 0.3 or 0.4. I think I had calculated 3, he calculated 4, something close as to the delta-delta values, going from one instrument to the next. But differing instruments could explain a shift, a systematic shift of approximately the amount that we've observed, about .3 or .4, fine. But we don't have a systematic shift. We have an unsystematic shift. Sometimes the same analyte, depending on the athlete, goes up. Sometimes it goes down. It doesn't go up or down by .3 or .4 where it has, or even where it's gone up or down by .1. I have not complained. I've highlighted only those instances where it's really quite high, 1.5, 1.9, 1.8, stuff like that. The other thing that is of great concern, of course, again, since we're talking about a difference in instruments being the principal explanation and whether it's the instrument or the combustion apparatus, it's all one instrument. So, if the combustion apparatus is causing problems, it's the difference in the combustion apparatus, it will cause the same problem for all the analytes. It does not randomly throw analytes up by a negative 2 in one case and even on others and down, you know, less negative, on another case. If there's a bias, there's a bias. And that can be explained. But we don't have a bias here, other than the one that both Dr. Schänzer and I agree with a small .3, .4 bias, between the two instruments. So, that is my concern that I don't think you can simply say, oh, we measured all these things, we have an assay validated to properly, reproducibly, measure all these things. Several of them are no good, but one happened to work out. So, let's only look at that. Let's not consider what the other ones' failing actually mean to the entirety of the assay. That would be my position here.

Prof. Butch: I have a question for Dr. Schänzer and Dr. Saugy in regard to the comments that Mr. Scott made. With the differences that one would see, let's see, for instance, with the combustion furnace,

is the statement that he made correct that, if you are seeing differences that all steroids would behave in the same way? Or would you see differences depending upon the steroid because not all steroids are the same. Just like we know [inaudible]. It behaves very differently in the combustion furnace than let's say a steroid. So I would just like your thoughts on this issue.

Dr. Saugy: I can say we have no data showing clearly that when you have a bias because of that item, in that case we have a different instrument, we may have other things and we absolutely do not know if it will be a shift which is equivalent for all the steroids.

Prof. Butch: So, you're saying it is not predictable.

Dr. Saugy: Let's say, we don't have data showing that this is predictable.

Dr. Schänzer: In general, I think there's something which depends also on the instrument and the oxidation chamber, yes. And I know, and I have the data not with me. I have to, to summarize this, that some steroids are different in their behaviour in the oxidation chamber. If the oxidation chamber, the oxidation isn't at a critical point, then you find some differences, yes. I have the opinion that the B analysis instrument was running in a condition which was in some way, it fit maybe their standard procedure whatever it is, but I think it was in a way that there is an influence in the values, depletion, and so on, which we cannot actually clearly explain. That is what I think, it's not actually explainable.

Mr. Scott: I would say that I completely agree with that. I, think we have something going on here ...

Dr. Schänzer: Yes but, but the negative samples are clearly negative with this instrumentation, yes? And the positive as an A sample gives the same result for pregnanediol ... that is what I have to decide.

Dr. Saugy: Would it be possible for the Beijing Laboratory to declare it negative on this basis? No, because they have to follow WADA technical documents. And this is clearly established that when you have a steroid which is presenting a delta value higher than 3 . . . and to my point of view there are still some question marks regarding the conditions, but, but nevertheless, I think regarding testosterone and pregnanediol, the comparison is clear. The delta-delta is still clear.

Mr. Scott: I think as to the comment of what the WADA technical document may or may not require, in terms of reporting this positive or not positive, I don't have a comment other than to say, if the WADA technical document requires you to report unreliable data as nonetheless positive, because it happens to have an A and B that are both, -- although not reproducible --, both technically adverse, I would have a great deal of concern with a laboratory that simply blindly followed that technical document rather than use its own, you know, reasoned analysis to decide that, well, this may be technically positive, as we saw frankly in other analyses in other cases which we won't go into here unless, your're familiar, . . . , you know, these people are not robots and the directors are not robots. You need to apply some reason and if you have a concern for the validity, the reproducibility of the data, the mere fact that one happens to be over 3 or 4 is not a reason to go forward with the positive test in my opinion.

100. From the viewpoint of the Panel, this exchange between the opposing expert witnesses is revealing in that it impressively demonstrates the speculative nature of the experts' explanations for these uncontested variances. What was the cause?

101. Prof. Schänzer opined that *“there’s something which depends also on the instrument and the oxidation chamber”*. He stated that studies existed regarding the phenomenon, but he did not have the data with him. In the view of the Panel, if steroids react differently *“in their behaviour in the oxidation chamber”*, as he conjectured, then this is a relevant issue which did not just arise in the course of the hearing. This had been an important issue referred to by the Appellants since the filing of the Appeal Brief in March 2009 and the Panel is disappointed that the Respondent and its witnesses could not have provided more information on this point.
102. The Panel has noted Dr. Saugy’s comment that WADA-accredited laboratories must *“follow WADA technical documents”*. In his view, when it *“is clearly established that when you have a steroid which is presenting a delta value higher than 3”*, an Adverse Analytical Finding must be reported.
103. The Panel notes, however, that if the results of the assay move at random and in unexplained directions, the reliability of the entire test can be questioned and the test should be repeated. ISL 5.2.4.3.2.8 provides in this regard:
- “The Laboratory shall have a policy to define those circumstances when Confirmation Procedure for the “B” Sample may be repeated (e.g. batch quality control failure) and the first test result shall be nullified. Each repeat confirmation should be performed on a new Aliquot of the “B” Sample and new controls”*.
104. In addition, in the course of this open discussion, it became clear to the Panel that the Parties’ expert witnesses were divided on the interpretation of the variances in the delta values and delta-delta values measured for the metabolites. The Appellants’ experts took the position that, on the basis of these variances, the entire analysis of the assay had failed. The Respondent took a more selective view which the Appellant’s expert, Mr Scott, referred to as *“cherry-picking”*.
105. The Respondent’s experts, Prof. Schänzer and Dr. Saugy, although admitting the presence of the variances, emphasized the coherence and symmetry of the delta values established for testosterone in the urine sample of Mr. Tsikhan. This difference in his delta values for testosterone was measured at 0.43‰. Mr. Devyatovskiy’s difference in delta values for testosterone, on the other hand, at 1.55‰ was left to interpretation.
106. Prof. Schänzer qualified his evaluation as follows:
- “My opinion is that the first sample [Mr. Tsikhan] is a clear case, yes, and that the second case [Mr. Devyatovskiy] is above the limit, yes, which you have to use, it’s borderline. And that is the case where I, in general, look to the steroid profile to come to a general conclusion. So this is my view how I would handle such a case”*.
107. In the following exchange between Prof. Schänzer, Dr. Saugy and the Panel, distinctions were drawn between the IRMS results for Mr. Tsikhan and Mr Devyatovskiy’s samples, all of them against the background of certain unexplainable variances in the values for the other metabolites:

Panel: You said earlier it [the value established for Mr. Devyatovskiy] was critical.

Prof. Schänzer: I think it is borderline and then I would like to try to get all the information. I would not use, I would produce it on a stand-alone technique and to the second [case], I would go into the steroid profile to have this additional information. This is what I do normally in my laboratory. Or maybe I try to find out what is the reason for such differences for the androsterone and etio differences, for the pregnanediol it is not such a big problem. But in general, it is near the cut-off level, yes, 1‰ or .5‰, so that it is when I go, in general, in the direction to have additional information, if this is available. And this is available.

Prof. Butch: Am I understanding this correctly: Dr. Schänzer is referring to the one case ending in 27 [Mr. Tsikhan] where the delta-delta [value] for testosterone is 6.2 in the A and 6.8 in the B analysis. He is saying that's considerably higher in the cut-off of 4. But he is comfortable with that case. If my interpretation is correct. Whereas in the other case ending in 97 [Mr. Devyatovskiy], it is not quite as high. The difference of 4.6 in the A and at 5.1 in the B. I think that is the distinction he is making because one is considerably higher, more depleted.

Dr. Saugy: What I am saying is that, in my point of view, this is not a coincidence [the variance of 0.43 observed in Mr. Tsikhan's testosterone value]. I don't want to go too much into the steroid profile which is also in all anti-doping authorities. They are going to see in the steroid profile. This is in the normal rules of anti-doping and that we are fighting against doping. So it means that was the idea and we discussed that in the conference of experts this morning and everybody agreed. Now speaking about the results. We are not speaking about the results of testosterone and pregnanediol, but we have also a very strong indication by looking to the 5- β -androstanediol which is very close to the acceptable differences in the delta-delta values in order to give it as an adverse analytical finding. So this is why I am saying that from my point of view whatever differences we have between the A and the B samples for the androsterone, in my point of view, we have, besides, the criteria fulfilled for releasing a scientific finding. This is other strong evidence in these results that this is not a coincidence.

Panel: And my further question would be what you're just saying is that to a certain extent you are interpreting this, this data? It is not at least, as you say, in one set of data, it is not obvious, but you have to do some thing on the data.

Dr. Saugy: Well, the release, the adverse analytical finding was done based on the delta-delta value fulfilling the criteria of positivity. But you look to the other ones and especially in that case, as Professor Schänzer was saying, to the 5- β -androstanediol which is one of the key elements also in the interpretation. We have to do interpretation, but this is scientific interpretation. In that case, you are very close even in the B sample. We are clearly above the limit you should produce in order to release that scientific finding.

Panel: So if I see correctly on certain of these values, even if there is a variation from one to another, you say that you conclude also from the absolute figure of the data measured that this could also be another element of interpretation for the ...

Dr. Saugy: Well, I am not speaking about the absolute figure. Here I am speaking about the other delta-delta value for another compound. And in that case for example we have the difference of something in the B sample. I see one of the samples here, this is 4.2 [the delta-delta value for Mr. Tsikhan's B sample 5- β -androstanediol] of difference in the delta-delta value. So this could be taken into account as such to prove if there is an application of exogenous steroids

already. So this is not an absolute figure. This is additional evidence with the same criteria of use for defining an adverse scientific finding.

Prof. Butch: If I am understanding this correctly, you are saying that the numbers in front of you, the numbers for each of the steroid metabolites, have to be looked at in the total because they are depending upon what the athletes took, whether it is a low dose or a high dose, is going to effect which of the metabolites are going to be above the cut-off or close to the cut-off. So that's the interpretation you are referring to?

Dr. Saugy: Let's say, our duty is not to describe exactly what type of doping we are in the presence of. But of course we are looking to the other metabolites in order to have supporting evidence of the results which are clearly showing the differences in delta-delta value that there is application of exogenous steroids. So the other data and, in that case, clearly the 5- β -androstanediol is supporting evidence or a supporting additional information in answer to your question, "Do you think it could be a coincidence" [that the testosterone and pregnanediol values show a difference of 0.43‰ in the testosterone sample of Mr. Tsikhan].

[In the exchange above, all bracketed language has been inserted by the Panel in order to enhance understandability].

108. At the conclusion of the above exchange, the President of the Panel asked the expert witnesses whether the Technical Documents provide any guidance in the evaluation of variances in the delta and delta-delta values of steroid metabolites subject to IRMS analysis. The experts confirmed collectively that no such guidance existed in the Technical Documents.

109. Mr. Scott summarized the essence of the conflict between the position of the Appellants who argue that the nature and scope of the variances decide the question of the reliability of the data derived from the assay, on the one hand, and the position of the Respondent who asserts that selective evaluation of values is possible, on the other.

Mr. Scott: I simply want to clarify, I think that, from my perspective, we are just not talking about variances, we are talking about unexplainable, unacceptable variances and that when we have a threshold you have to put context to it and ultimately what it comes down to is that when you cannot rely upon, when you cannot trust that the values you've getting from the instrument are accurate, because they are failing to reproduce the data, even if all of them are above the threshold, the values are not useable.

dd) The conclusions of the Panel

-- Do the variances measured between the Athletes' "A" and "B" sample IRMS analysis constitute a "departure" from the ILS?

110. The question which the Panel must ultimately answer under WADC 2003 is whether the Appellants have succeeded in establishing on the "balance of probability" that the Beijing Laboratory departed from the ISLs in its performance of the IRMS analysis. If the Appellants meet this burden, the Respondent is charged with the task of proving to the "comfortable satisfaction" of the Panel that the departure did not cause the Adverse Analytical Finding.

111. With regard to reproducibility of the Confirmation Procedure, ISL 5.4.4.1 cites under the term “robustness” the requirement that the “method”, meaning in the instant case the IRMS method, “*shall be determined to produce similar results with respect to minor variations in analytical conditions*”. The method must further allow for “*the reliable repetition of the results at different times and with different operators performing the assay*”.
112. It was the shared opinion of all the expert witnesses, including the independent expert witness, Prof. Butch, that, at the very least, the difference in delta values measured for androsterone (1.60) in Mr. Tsikhan’s A and B sample IRMS tests was irregular, worthy of concern and, in the words of Prof. Schänzer, “*should be improved in the future*”. The Respondent’s experts presented the further opinion during their testimony that the variability observed for the 5- β -androstenediol values was minimal and tended to confirm the exogenous source of the testosterone and could not, in every case, be deemed to be unusual.
113. The issue confronting the Panel, however, is to determine whether the variability alleged by the Appellants, which occurred not only in the androsterone value, but also in the other steroid metabolites, some with and some without countervailing biases, constitutes a departure from the reproducibility requirement contained in the ISL.
114. On this issue, the results of the evidence are the following: neither the ISL nor the technical documents provide help. The Appellants presumed that relevant information on the operation of the IRMS instrument could be found in the Beijing Laboratory’s SOP, in particular, in section YYB-104 (a) which deals with generic procedures regarding gas chromatogram operation. This information could, in their view, also address IRMS operation.
115. Despite the Panel’s specific request to the Beijing Laboratory to produce section YYB-104 (a), it chose not to do so, although it did provide section (b) of that section. Without further explanation other than its experts’ testimony, the Respondent categorically denies that the variability observed in the Athletes’ B sample IRMS analysis constitutes “departures”. Dr. Saugy preferred not even to use the word “inconsistencies” to describe them. In his view, the evaluation of the test results for the B sample analysis must be “taken together”, i.e., the values measured for other metabolites, for example, the value for 5- β -androstenediol which exceed the value determined for pregnenediol by more than 3 tended to confirm the presence of exogenous testosterone.
116. Prof. Schänzer could have found himself in the same dilemma as the Panel when he conjectured that the B analysis was running in a condition which “*we cannot actually clearly explain*”, and that “*it fit maybe their [the Laboratory’s] standard procedure whatever it is*”. Based on the foregoing, it is the view of the Panel that the likelihood that the same values would be achieved for all of the analyzed metabolites if the test were to be repeated is open to question.
117. Considering the above factors, – the speculative nature of the explanations provided for the variability, the lack of relevant guidance in the Technical Documents and the reluctance of the

Laboratory to disclose relevant sections of its SOPs –, the Panel concludes that, on the balance of probability, several of the values measured in each of the Athlete’s IRMS analysis do indeed fall outside of the Laboratory’s acceptable range, whatever that range may be.

- Has the Respondent satisfied its burden of proof in claiming that the variability observed lies within an acceptable range for each of the Athletes?
118. Having met the standard of proof for establishing the “departure”, the Panel now turns to the burden of proof to be assumed by the Respondent. The latter must prove to the “comfortable satisfaction” of the Panel pursuant to Art. 3.1.2 of WADC 2003 that the “departure”, here the “variances” observed in the values for each of the Athletes did not cause the Adverse Analytical Finding. Are these variances “random”, are the allegedly stable values mere “coincidences”.
119. ISL 5.2.4.3.1.9 could apply to the case at hand, if the variability observed constitutes a “circumstance” which places the confirmation of the “A” sample results into question.
- “If the “B” Sample confirmation does not provide analytical findings that confirm the “A” Sample result, the Sample shall be considered negative and the Testing Authority, WADA and the International Federation notified of the new analytical finding”.*
120. The first task of the Panel is to determine whether, for each of the Athletes, the IRMS “B” sample confirmation confirms the “A” sample result. In this regard, the Panel wishes to underscore that its three members are not scientists. They must rely on the scientific opinions expressed by the experienced and respected expert witnesses before them. The Technical Documents provide no assistance.
121. If the Beijing Laboratory disposes over rules and guidelines relating to the evaluation of variances between the “A” sample and the “B” sample, in particular, if relevant information is contained in YYB-104 (a) of its SOPs, it has not produced that information. In view of the speculative nature of the Appellants’ assumption that relevant information may possibly be found in that section, the Panel does not wish to negatively infer that the Laboratory is intentionally withholding relevant information. It prefers to assume that such information does not exist.
122. After substantial consideration within the Panel regarding the evidence and testimony provided by the expert witnesses, the Panel has arrived at the conclusion that the IRMS “B” sample analysis with the observed variability in the values of the steroid metabolites tested, at times admittedly significant, are not of a scope and degree which justify the nullification of the entire test as requested by the Appellants.
123. Stated differently, the Panel is not willing to declare that the variances observed nullify all of the results obtained for the Athletes during the IRMS Confirmation Procedure. The testosterone findings established by the Laboratory will, therefore, selectively be permitted to stand and will be evaluated accordingly.

124. In making its decision, the Panel points to the fact that the nature of the IRMS analysis, in comparison with the GS/MS measurement of the T/E ratio, is not primarily a quantitative procedure. It is rather, as discussed and agreed among the experts during the hearing, a qualitative procedure used to determine whether the testosterone measured in the urine is of exogenous origin.
125. In further support of this view, the Panel wishes to cite the following facts and circumstances:
- The delta values measured for 5- β -androstanediol and testosterone in each of the Athlete's "A" and "B" samples may indeed appear to have different biases, Mr. Tsikhan's values being negative, Mr. Devyatovskiy's being positive.
 - In the case of Mr. Tsikhan, however, the delta values measured for these metabolites (-0.42 for 5- β -androstanediol, 0.21 for testosterone and 0.43 for pregnanediol) lie well within the Laboratory's +/- 1.0 uncertainty factor. They are not significant.
 - The delta values with significant variability have shifted, however, in the same direction: the androsterone (a difference of 1.60 for the "B" sample delta value of -24.42) and etiocholanolone (a difference of 1.24 for the "B" sample delta value of -24.46) are less negative than the A sample delta values, but move in the same direction.
 - When examining the delta values for Mr. Devyatovskiy, on the other hand, again one sees even fewer negative delta values for the "B" sample (testosterone, 5- β -androstanediol, pregnanediol). The variability for the other compounds is not significant.
126. In summary, when considering the uncertainty factor, the different metabolites can be considered as shifting together to less negative delta values in each of the Athlete's "B" sample analysis when compared with the "A" sample result. What could be the explanation for these differences?
127. The Panel notes that Dr. Wu, Prof. Schänzer and Dr. Saugy explained the variability by the fact that the Beijing Laboratory used two different IRMS instruments in conducting the "A" and "B" sample analyses. They also referred to the different behaviour of steroid metabolites in the different combustion oven of the "B" sample IRMS instrument. Prof. Schänzer referred to scientific studies regarding this phenomenon, but did not have the study with him. Even if not articulated in detail and in scientific terms, the plausibility of these explanations by experienced and respected experts cannot be discounted.
128. Based on the above findings, the Panel, after extensive consideration and discussion, is comfortably satisfied that the IRMS "B" sample results are reproducible to the extent that they confirm, more qualitatively than quantitatively, the exogenous origin of the testosterone.
- The Application of this Result to the established T/E ratios of the respective Athletes.
129. The Application of this Result to the established T/E ratios of the respective Athletes.

130. With regard to Mr. Tsikhan, the Panel concludes that, unless other departures from the ISL require a different conclusion, an Adverse Analytical Finding cannot fail on the grounds that the IRMS “B” sample analysis did not confirm the “A” sample finding. In the view of the Panel, the “B” sample confirmation has succeeded.
131. In making this decision, the Panel has considered the following factors:
- The shifts to significantly less negative delta values for Mr. Tsikhan’s B sample androsterone and etiocholanolone, while substantially exceeding the uncertainty factor of +/- 1.0, appear to run in the same direction. This does not indicate that the shifts are “random”. The causes submitted by the Respondent’s experts to explain the variability, namely the fact of the different IRMS instruments and the behaviour of the steroids in the combustion furnaces of these instruments, provide a plausible explanation.
 - The delta values measured for Mr. Tsikhan’s testosterone and 5- β -androstenediol, show relative stability in the A and B samples. They lie well within the Laboratory’s expanded uncertainty factor, despite the fact that different IRMS instruments were used.
 - Both Prof. Schänzer and Dr. Saugy stated that the delta-delta value measured for Mr. Tsikhan’s “B” sample 5- β -androstenediol remained within the acceptable range to consider it as supporting evidence for the exogenous origin of the testosterone.
132. With regard to Mr. Devyatovskiy, the Panel takes a different view. Professor Schänzer confirmed at several times in his testimony that he deemed the delta values measured for Mr. Devyatovskiy’s testosterone levels, namely 4.63‰ in the “A” sample and 5.07‰ in the “B” sample, to be “borderline”, given the significant variability between values. He would not have released these values as positive without further investigation into the Athlete’s steroid profile.
133. When examining the delta values for Mr. Devyatovskiy, one sees fewer negative values for the B sample (testosterone, 5- β -androstenediol and pregnanediol); however the significant differences in the delta values for these steroids (1.55, 2.32 and 1.99, respectively) place the reproducibility of these values and their delta-delta values into question.
134. As a consequence of the “borderline” character of the IRMS results, the risk that the T/E ratio cannot be confirmed in the case of Mr. Devyatovskiy is significant. In light of this consequence, Prof. Schänzer would have resorted to Mr. Devyatovskiy’s historical T/E ratios which, as Dr. Wu recognized, were never provided to the Beijing Laboratory.
- The Panel’s decision not to admit the steroid profiles of the Athletes as additional evidence.
135. WADA Technical Document TD2004EAAS points out the “actions” to be taken by the Testing Authority in coordination with the laboratory in the event “*the IRMS study does not readily indicate exogenous administration*”:

- *The results of the IRMS analysis and/or of the steroid profile measured by GC/MS shall be used to draw conclusions as to whether a doping violation may have been committed. If the IRMS study does not readily indicate exogenous administration, the result should be reported as “inconclusive” and if necessary further longitudinal studies performed.*
 - *When available, the athlete’s previous tests on record at the Testing Authority⁷ should be accessed and the corresponding steroid profile data requested from the relevant laboratory. These results should be examined and considered together with the existing evidence (longitudinal study).*
 - *If, for any reason, an IRMS analysis cannot be carried out satisfactorily (e.g. insufficient volume of urine, amount of analyte too low to enable a valid measurement) or the examination of previous test results raises suspicions due to unstable profile values, up to three further unannounced tests should be carried out, preferably within a three months period following the report of the suspicious analytical result. There should be a minimum total of three results, other than the abnormal Sample, of either past or post data. A Sample in which the elevated parameter is again measured is to be analysed by IRMS as described above. In difficult cases longer monitoring may be required.*
136. As the audio protocol of Dr. Wu’s testimony before the Panel clearly records, Dr. Wu could not confirm that “previous T/E ratio values for these two athletes” were reviewed during the test procedure. In response to Dr. Saugy’s question, Dr Wu stated: “I did not receive any information about the athletes”. The question therefore arises whether the Testing Authority, the Respondent, properly supervised and managed the testing procedure in the case at hand.
137. Dr. Wu’s very clear statement on the morning of 26 January 2010 in response to Dr Saugy’s question contradicts the submission of the Respondent on page 11 of its Post-Hearing Brief of 26 February 2010. The Respondent claims the following:
- “Since Prof. Wu confirmed during his testimony that the steroid profile of the athletes were checked by Prof. Ayotte before reporting adverse analytical results, Dr. Saugy, during the “private” experts’ conference (in the beginning of the afternoon of the second day of the hearing), introduced some documents illustrating the steroid profile of the athletes. Dr. Saugy acted in good faith, as a scientist looking for the truth and not as a lawyer. The Respondent repeats that it did not know that Dr. Saugy was willing to provide the experts with new data. It was not the intention of the Respondent to file a steroid profile of the Appellants before reporting adverse analytical findings, as requested by the WADA technical Document. The answer of Dr. Wu was positive. This answer is sufficient for the Respondent since it implies the steroid profiles of the athletes confirmed the adverse analytical findings”.*
138. The Panel wishes to underscore that the Respondent is mistaken in its allegation. The word protocol which took place between Dr. Wu and Dr. Saugy is given [in] the “Facts” portion of this award. Dr. Wu stated exactly the opposite of what the Respondent alleges he said in its Post-Hearing Brief.

⁷ Defined in the ISL 2008 as the “IOC, WADA, IF, National Sport Organization, National Anti-Doping Organization, National Olympic Committee, Major Event Organization, or other authority defined by the Code responsible for Sample Testing either In-Competition or Out-of-Competition and or for management of test results”.

139. If the steroid profiles of the Athletes have relevance in the case at hand, as both Prof. Schänzer and Dr Saugy asserted during their testimony, then the Panel must conclude that these profiles either were not requested by the Laboratory during the laboratory analysis or they were not offered to the Laboratory by the Testing Authority. To quote Dr. Wu again: *“I did not receive any information about the athletes”*.
140. At no time during the prolonged term of these proceedings did the Respondent refer to the historical steroid profiles of the Athletes, neither in its Answer of 8 June 2010, nor in any of its subsequent submissions to the CAS in the 7 month period following its Answer. It was for this reason and no other that the Panel ruled during the hearing, after giving each of the parties opportunity to state their views, not to admit this evidence in the record.
141. The Panel wishes to point out that Art. R56 in conjunction with art. R44.3 of the CAS Code has played a significant role throughout these extensive proceedings. The Panel applied these rules rigorously in dealing with the Appellant’s requests for additional evidence both prior to the submission of the Appeal Brief on 6 March 2010 and following submission of the Respondent’s Answer on 8 June 2010.
142. The determining evidence document in these proceedings has been the information gathered from the Parties under the “Schedule of Documents and Information Production”. The information requests and questions posed by the Appellant were not answered in all points by the Respondent until the submission of section YYB-104 (b) of its SOP on 6 January 2010.
143. In its letter of 23 June 2009 to the Parties containing instructions regarding the purpose and conclusiveness of the “Schedule of Documents”, the Panel ordered the following:
“No further evidentiary requests from the Appellants will be allowed by the Panel following the submission of the Schedule ...”.
144. In its letter to the Parties dated 7 October 2009, the Panel cited the remaining submissions and open questions from the Schedule of Documents which were to be completed by the Parties and informed them as follows:
“The parties are informed that all other previous requests of the parties for the taking of evidence are herewith rejected.
145. In response thereto, the Respondent quoted art. R56 of the CAS Code in its letter dated 23 October 2009 and stated as follows.
“The IOC stresses that the laboratory documentation packages relating to the samples provided are sufficient to determine if the analyses have been conducted properly. Nevertheless, the Respondent has already accepted to provide the Panel with more documents than in any other doping cases”.
146. On the afternoon of the 2nd day of the hearing, after hearing the positions of both Parties, the Panel announced its ruling not to admit information relating to the historical T/E ratios of the

Appellants. The grounds cited by the President of the Panel were based on the delayed introduction of this evidence. Such evidence represented in his words

“An element of the case which could have been brought in much, much earlier in the proceedings”.

147. If the examination of steroid profiles is “standard practice”, especially in a case considered by Prof. Schänzer to be “borderline”, and if the alleged steroid profiles support the sanctioning of the Athletes as the Respondent and its expert witnesses assert, it is completely unexplainable why there is no mention of, or reference to, the steroid profiles in the written expert opinions submitted by the Respondent together with its Appeal Brief on 8 June 2009 or in their respective witness statements submitted to the Panel prior to the hearing in January 2010.
 148. The Appellants objected vehemently to the Respondent’s requested admission of the steroid profiles on the grounds that the admission at such late date and with no preparation would constitute a form of “trial by ambush”.
 149. To have admitted this evidence against the objection of the Appellants after providing an additional deadline for them to respond would have re-opened the evidentiary phase of the procedure which had been defined and limited by the Schedule of Documents, it would have extended the term of these already protracted proceedings for an additional undefined period and possibly required the scheduling of a new hearing in order to provide examination of expert witnesses.
 150. In its letter to the Parties of 6 January 2010, the Panel announced to the Parties that
“It reserves the right to request from the parties the submission of summary briefs within a specified deadline following the conclusion of the hearing”.
 151. The Panel exercised this right at the end of the hearing and requested the Parties to submit summary briefs not exceeding 30 pages. The President of the Panel stated the close of the hearing:
“It is self-understood that there is not to be any new evidence or any new argumentation introduced into these briefs. What they are intended to be is a résumé of the results of this hearing, a compendium”.
- b) Control and Accountability for Sample Identity:
152. The Sequence File contained in the Appellants’ Documentation Packages records the identity and location in which the vials containing the aliquot fractions of each of the athlete’s sample are placed on a tray, so-called “the auto-sampler”, prior to entry into the IRMS instrument. The auto-sampler contains 150 positions. “Populations” of vials for more than one athlete can therefore be placed in the slots of the auto-sampler for a particular “run” or “launch” of the sequence.

153. The placement of the vials on the auto-sampler is a manual procedure performed by the laboratory analyst. The vials are labelled with laboratory identification numbers and each vial is sealed with a metal cap bearing a rubber septum. A syringe mounted on the auto-sampler will pierce the rubber septum and draw up fluid for injection into the GC column of the IRMS instrument for isotopic analysis.
154. Contemporaneous with the loading of the vials on the auto-sampler, the IRMS instrument generates a Sequence File which records identity and location of each vial, the nature of the test to be performed, etc.
155. The Sequence File cannot be changed once the automated analysis program or run has been launched. The software permits the Sequence File to be altered only prior to the start of analysis. To alter the list otherwise, the run would have to be stopped and a new Sequence File would have to be created for the interrupted run. As each individual sample on the list is processed, the results of the analysis are printed out on a sample report sheet, ("Sample Report Sheet").
156. The Sample Report Sheets display the results of each of the tests performed on each of the vials. The identification data regarding the vial registered on Sample Report Sheet must correspond to the identification data stated in the Sequence File. The two documents, the Sequence File and the Sample Report Sheet, are therefore linked with each other.
157. It is therefore critical that the identity and location of the vials on the auto-sampler be accurately entered into the software controlling the IRMS instrument, particularly if samples belonging to more than one athlete are placed on to the auto-sampler.

aa) The Position of the Appellants

158. Already in the 1st Expert Report filed by the Appellants together with their Appeal Brief on 6 March 2009, the Appellants claimed a *"lack of any correspondence whatsoever between the A sample IRMS Sequence File and the Sample Report Sheets"*. The Appellants requested information to account for the discrepancies.
159. The IOC provided an explanation three months after this request, on 9 July 2009, when it disclosed that the Sequence File contained in the Documentation Packages represented a compilation of several Sequence Files, the original sequence launch having been interrupted to undertake changes in the positioning of the vials in the slots.
160. The Appellants describe the reconstructed file, as an *"amalgamation of a number of separate sequences that were analysed"*. This "Reconstructed Sequence File", in their view, was an *"artificial document"* in the sense that the sequence reported by the Laboratory never took place. *"The sequence was never launched as it was reported"*.

bb) The Respondent's Position

161. In response to the Appellants' question as to why this "Reconstructed Sequence File" and not the original Sequence File was produced and disclosed in the Documentation Packages, the Respondent stated on 28 August 2009, for the first time, in the "Schedule of Documents and Information Production" the following:

"The time recorded and signed in [the] Testing form of IRMS is for the whole batch, in which much more samples were injected. But the Doc Pack and "Injection Time" included only the injection of relevant samples. The times of injection were also recorded at the suffix of the data files in analytical results. The row number in "analytical result" is only recorded injections. But the row number in the "sequence of injection" in, for example, page 160 for the sample A1846297 is only the series number for the combined sequence table provided in Doc. Pack. Therefore the row number is not meaningful".

cc) The Conclusion of the Panel

162. The Panel does not consider the response of the Respondent to provide an adequate explanation as to why the Beijing Laboratory included a re-constructed Sequence File, best described as a "cut and paste" document which does not reflect the actual sequence of the isotopic testing in the Documentation Packages. The fact that the disclosure of the true nature of the artificial Sequence List took three months and even then remained unexplained is troubling in the eyes of the Panel. The fact of the artificial Sequence File should have been disclosed in the Documentation Packages.
163. In the view of the Panel, there can be no question that the interruption of the pre-programmed sequence for testing in order to (manually) alter the positioning of the vials in their respective slots poses the risk that the results obtained for one sample will be incorrectly attributed to another sample. The presence of this risk was confirmed by the independent expert witness, Prof. Butch, although Prof. Butch did not feel that the Laboratory lost control in the present case.
164. This risk is compounded when, as first revealed on 28 August 2009, the Laboratory disclosed that the analyses reported on the Sequence File were part of a wider batch "*in which much more samples were injected*". During the questioning of Dr Wu, it was established that, in the tested sequence, the vials containing the sample of at least one other athlete, in addition to the Appellants', was tested.
165. The expert witnesses for the Appellants describe a specific instance in which the laboratory analyst removed a vial containing a reference standard from auto-sampler position 3 during the course of a running sequence and then loaded aliquot fraction 08H18037-11A into that same auto-sampler position. Aliquot fraction 08H18037-11A was analyzed just once before being removed and replaced (also in auto-sampler position 3) by aliquot fraction 08H18033-2.

166. Dr. Scott, expert witness for the Appellants, attempted to shed more light on the precautions taken by the Laboratory to minimize the risk of losing control over the samples in his questioning of Dr. Wu. Dr. Scott referred to another discrepancy in the Sequence File. The exchange between Dr. Wu and Dr. Scott during the teleconference on the 2nd day of the hearing resulted in the following:

Mr. Scott: Referring to rows 38 and 39, can you explain why you have the same sample 08H18037-5 appearing first in the auto-sampler vial position (6) and then next the same sample in the same run appearing in auto-sampler vial (7)?

Ms. Li: I really cannot recall the detail.

167. A few minutes later, Mr. Scott posed the following question:

Mr. Scott: The question is simply, I would like to have explained the discrepancy between identifier 2 on the Sample Report Sheet and the corresponding Identifier 2 on the Sequence File.

Ms. Li: Do you want to make a comparison or do you find any differences?

Mr. Scott: Yes, they are different and I would like, hopefully, the analyst to explain why that is so.

168. Dr. Wu was unable to explain the incident and was asked by Mr Scott to provide additional information. Accordingly, Dr Wu was reminded by the President of the Panel at the conclusion of the testimony that

"... the analyst was also supposed to get back to us on the sample 08H18037-5, row 38 on the consolidated sequence file regarding the injection of this sample and the same information recorded on the that Sample Report Sheet".

169. Although Dr. Wu agreed *"to ask my colleague to check this report"*, no subsequent clarification was received within the deadline of 2 February 2010 set by the Panel, although the Laboratory did provide other information unrelated to this occurrence which was requested by the Panel during the hearing.

170. The Panel is troubled by the incomplete explanation of why the Laboratory chose to alter the Sequence File for inclusion in the Documentation Packages. Moreover, the Panel notes with concern that the Laboratory did not disclose the missing Sample Report Sheet for aliquot fraction 08H18037-11A until 28 August 2009. This Sample Report Sheet should have been enclosed with the Documentation Package.

171. ISL 5.2.6.1 and ISL 5.2.6.3 require the following:

*5.2.6.1 The Laboratory shall have documented procedures to ensure that it maintains a coordinated record related to each **Sample** analyzed. In the case of an **Adverse Analytical Finding** or **Atypical Finding**, the record shall include the data necessary to support the conclusions reported. In general, the record should be such that in the absence of the analyst, another competent analyst could evaluate what tests had been performed and interpret the data.*

5.2.6.2 *Significant variance from the written procedure shall be documented as part of the record (e.g., memorandum for the record).*

172. In further articulation of the Laboratory's duty to document its procedures, WADA Technical Document TD2003LDOC sets out the information to be contained in the Documentation Packages for both the A and B samples. In addition to mandating the creation and updating of the "Confirmation Aliquot Laboratory Internal Chain of Custody" documentation, TD 2003LDOC specifically requires "*documentation of any deviations from the written confirmation procedures, if any*".
173. It cannot be contested that the Sequence File of an IRMS run represents the written record of the IRMS aliquot analysis to be undertaken. In the view of the Panel, the interruption of the "run" after it has been launched for the purpose of manually removing and inserting a different aliquot sample in a pre-programmed location on the auto-sampler constitutes a deviation from "*the written confirmation procedure*".
174. This deviation should have been recorded by the laboratory analyst in either the individual or batch Aliquot Laboratory Internal Chain of Custody document in compliance with the rules set down in WADA Technical Document TD 2003LCOC. Pursuant thereto, with regard to aliquots, the Laboratory Internal Chain of Custody "*should record all movement from preparation through analysis*".
175. In this regard, Prof. Butch posed the following questions to Dr. Wu and received through his interpreter the following answers:
- Prof. Butch: The first question that we asked you [in the written list of questions sent to the Laboratory on the previous day]: Please explain the loading and unloading of A samples described in Beijing Lab Document 6. When the samples were unloaded were they verified for correct position and sample description?*
- Ms. Li: Let me translate in Chinese. The vials were labelled with unique numbers and all the vials were held [inaudible] in holes with each of the holes numbered uniquely and the vials with numbers were placed in holes of the plate according to the numbers. So each of them was placed according to their connections between the code on the vials and the holes of the plate so there is no way to confuse them.*
- Prof. Butch: But how about when the samples were unloaded? Were the identifiers on the vials double checked as well as the position in the tray?*
- Ms. Li: They were checked.*
- Prof. Butch: Is this documented somewhere in your internal documents?*
- Ms. Li: No, it is not documented.*
176. The Panel takes the view that the interruption of the automated testing procedure of the instrument for the purpose of manually exchanging aliquot fractions in a given slot of the auto-sampler constituted a "movement" which should have been recorded in the appropriate

document. This directive is obviously intended to provide a procedural safeguard ensuring the accountability and control of the run.

177. If an interruption of the automated testing sequence reflected in the pre-launch Sequence File became necessary, the manual exchange of vials in the designated slot of the auto-sampler should have been documented. TD 2003LCOC provided the relevant guideline for documenting the movement:

“Any forensic corrections that need to be made to the document should be done with a single line through and the change should be initialled and dated by the individual making the change. No white out or erasure that obliterates the original entry is acceptable”.

178. By “cutting and pasting”, by manually re-constructing the original Sequence List in such a manner that its deviation from the original would not be noticed, the laboratory analyst violated a fundamental safeguard which ensures transparency to the testing process and its authenticity.
179. If the vials containing the aliquot fractions must be re-located in the auto-sampler for any reason, the risk of incorrectly attributing the test results to a different athlete is obvious. The Panel wishes to note, however, that although the movement of vials containing the aliquot fractions of Mr. Tsikhan’s sample during the testing process required clarification, the Panel has no evidence or indication that Mr. Tsikhan’s vials may have been confused, misplaced or lost. In fact, if the laboratory had lost control over the samples, the results of the analysis of the samples attributed to Mr. Tsikhan would have been completely inconsistent, which in fact they are not (see *supra* no. 87).
180. The purpose of the relevant procedural safeguards set down in the ISL and the Technical Documents is (1) to heighten caution and care in the movements of the analysts while conducting the analysis and (2) to provide the athlete the documentary basis upon which he can ensure the correctness and accuracy of the testing procedure.
181. When the Appellants observed inconsistencies in the record of the Sequence File, they requested an explanation from the Respondent and the Laboratory. After three months, they learned that what they had originally assumed to be an authentic, unaltered Sequence File was, in fact, a “Reconstructed Sequence List”. To date, they have not received the requested explanation as to why the Sequence File was “cut and pasted”. They have also not received the authentic Sequence File(s).
182. In the absence of such information, the Panel is forced to ask whether the missing documentation of the exchange could lie in the fact that the Laboratory conducted more than 300 analytical tests within the two week period of the XXIX Olympiad. Inexorably, the answer to this question anticipates its answer: the possibility that the analyst may not have had the time to record the substitution of the vials.
183. In light of the above, the Panel takes the view that the failure of the Laboratory to properly record the “mid-stream” interruption and changes made in the sequencing of the vials for IRMS

analysis constituted a “departure” from the ISL within the meaning of Art. 3.2.1 of the IOC ADR 2008.

c) Quality Control

184. ISL 5.4.7.3 sets out the range of quality control activities which the Beijing Laboratory was to undertake for the purpose of monitoring analytical performance of the IRMS method. Quality control measures confirm that the IRMS instrument is accurately measuring and correctly identifying the target analytes. ISL 5.4.7.3 states as follows:

“5.4.7.3 Analytical performance shall be monitored by operating quality control schemes appropriate to the type and frequency of testing performed by the laboratory. The range of quality control activities should include:

- *Positive and negative controls analyzed in the same analytical run as the Presumptive Adverse Analytical Finding Sample;*
- *The use of deuterated or other internal standards or standard addition;*
- *Comparison of mass spectra or ion ratios for selected ion monitoring (SIM) to a Reference Material or Reference Collection Sample analyzed in the same analytical run;*
- *Confirmation of the “A” and “B” Split Samples;*
- *For Threshold Substances, quality control charts referring to appropriate control limits depending on the analytical method employed (e.g., $\pm 10\%$ of the target value; $\pm 3SD$) should be used;*
- *The quality control procedures shall be documented by the Laboratory”.*

185. The Beijing Laboratory chose to use both internal standards and positive and negative urine samples as quality controls for the IRMS analyses. The latter are analyzed at the same time and under identical conditions in the same IRMS instrument and during the same sequence run as the aliquot fractions of the athlete samples to be tested.

aa) The Position of the Appellants

186. The Appellants have pointed out that ISL 5.2.4.3.1.4 requires that, if it is determined that the measuring and identifying processes for the analysis are not correctly functioning, the test results should be nullified and the procedure then reported:

5.2.4.3.1.4 The Laboratory shall have a policy to define those circumstances where the Confirmation Procedure for an “A” Sample may be repeated (e.g., batch quality control failure) and the first test result shall be nullified. Each repeat confirmation shall be documented and be completed on a new Aliquot of the “A” Sample.

187. The Appellants have alleged, and Dr. Wu implicitly confirmed during his testimony before the Panel, that the positive sample control, although being listed in the Sequence File, failed during the A sample analysis.

bb) The Respondent's Position

188. The Respondent takes the position that the Laboratory performed the negative quality controls properly. This is a key issue since, as stated by Prof. Schänzer, the negative quality controls are crucial because if they are conducted properly, this avoids the risk of a "false positive".
189. The Respondent concedes that the positive quality control failed. In the view of the Respondent, however, the positive quality control is "*not crucial*". In the case at hand, it is undisputed, according to the Respondent, that the Laboratory performed a positive quality control using standards. The Respondent points out that "*the use of positive standards is fully compliant with the ISL*".

cc) The Evidence Adduced during the Hearing

190. When asked by Prof. Butch why the Sequence File submitted as BL-6 in the submission of 28 August 2009 lists a positive control, Dr. Wu referred to his laboratory colleague sitting with him. As this colleague could not answer the question, Dr. Wu responded that "*I cannot provide additional information*".
191. For this reason, Dr. Wu referred to a "mixture of standards" comprising a C-25 *n*-alkane and the standards androsterone, eticholanolone, 11-ketoetiocholanolone, testosterone and 11 δ -hydroxyandrosterone (the "an, etio, 11k, T, 11OH-standard") used in substitution for the positive control.
192. When questioned by Prof. Butch as to why the Sample Report did not identify pregnanediol as the positive control, Prof. Wu responded: "*We only report data or numbers which are relevant to the positive result*".
193. When asked by Prof. Butch whether he was saying that "*the only steroid important to the positive control would then be the testosterone*", Prof. Wu responded through Ms Li: "*We did not report this information in our final documents package or in our final report*".
194. In response thereto, Prof. Butch asked Dr. Wu whether, on the basis of his answer, he "*did not consider the positive control to be truly a positive control*" to which Dr. Wu responded: "*We do not do that because we consider the standard as a comparison*".
195. The failure of the positive control during the IRMS testing was subsequently explained by Dr. Wu in his e-mail of 2 February to the CAS Court Office in further response to specific questions from Prof. Butch during the hearing. In providing the Sample Report Sheets for the (failed) positive control, Dr. Wu stated as follows:

- 1) *As you can see from the attachment, which is being sent to you with this e-mail, Androsterone (page 5, delta value = -30.57‰), Etiocholonalone (page 5 delta value = -30.931‰) and 11-OH-Androsterone (page 1, delta value 22.078‰) in the positive control were quite well but 5 α -/5- β -Androstenediol, PD and Testosterone were not good peak as we discussed during the CAS hearing though the delta value of testosterone (page 2) retention time 1302s, peak high 134mV) was 31.504pm.*
- 2) *The positive controls were excretion study urine with oral administration of Androstenedione from normal healthy Chinese volunteer.*
- 3) *We did hope that positive control for Testosterone could be used as additional reference. But, in fact, the positive control for Testosterone this time did not show enough high signal, even though the positive controls of Testosterone and 11-OH-Androsterone showed well the delta-delta value over the WADA criteria.*
- 4) *The identical procedure for positive control was used as for normal urine sample.*

dd) Conclusions of the Panel

196. Based on the above, the Panel has concluded that the Beijing Laboratory did not, at the time of the analysis, properly document the quality control procedures, in particular, the failure of the positive control and the use of the internal standards, in accordance with ISL 5.4.7.3. To this extent, the Panel concludes that a “departure” from the ISL has occurred.
197. However, the Panel has noted the opinion of the Respondent’s expert witness which has been confirmed by the independent expert, Prof. Butch. ISL 5.4.7.3 cites a range of quality control activities for monitoring analytical performance, including the internal (reference) standards. The latter may be used in substitution for a positive control.
198. In the view of the Panel, WADA requirements with regard to the implementation of quality controls have been met and, even if documentation is missing in the Documentation Packages, the Panel holds that the Respondent has satisfied its burden of proof under Art. 3.2.1 of IOC ADR 2008.

d) Completeness of Documentation

199. The documentation of the analysis procedure performed on the sample is an essential source of information for an athlete if he is to defend his case. Therefore, the ISL and the WADA Technical Document for Laboratory Documentation Packages clarify what kind of material shall be produced and provided by a laboratory to support the finding of an Adverse Analytical Finding.

aa) The Position of the Appellants:

200. The Appellants take that view that data from the IRMS validation study for the Beijing Laboratory was requested, but not provided. If provided, such data would have revealed that the variability in results obtained by IRMS analysis far exceeded what was established during validation. Appellants also point to their request for section YYB-104 (a) of the Laboratory's SOP in connection with the clarification of the variability.
201. The Appellants further claim that the Beijing Laboratory's A sample analysis quality control test failed entirely. The analytical results deriving from the Confirmation Procedure should, as a consequence, not have been considered. The Procedure should have been repeated in accordance with ISL 5.2.4.3.1.4. In the view of the Appellants, *"no laboratory's SOP would permit those results to stand since it would defeat the very object of quality control"*. The Appellants requested the relevant SOPs, but did not receive them.
202. The Panel notes, however, that the Appellants have corrected the allegation made in their Closing Submission that the Beijing Laboratory failed to disclose two Sample Report Sheets containing the delta values for the testosterone peaks calculated automatically. The submitted Sample Reports in question were disclosed at a different location in the Laboratory's file.
203. The Appellants have criticized the Laboratory's refusal to provide their validation studies and requested excerpts from their Standards of Procedure. Specifically, they have claimed that the Beijing Laboratory violated its own SOPs in not running a positive quality control.
- The Beijing Laboratory repeatedly failed to provide (1) Section YYB-104 (a) of its SOP; and (2) the an, etio, 11k, T, 11OH-std standard analysed on 20 August 2008, the Appellants respectfully submit that the Panel is compelled to draw adverse inferences to the effect that the Laboratory's SOP would require it to nullify the A sample run further to the failure of the positive controls.*

bb) The Respondent's Position:

204. The Respondent emphasizes that the Laboratory has complied with all of the Appellants' documentation requirements. Appellants *"do not allege that the information included in their respective documentation package is not compliant with the ISL or with the WADA Technical Documents"*.
205. The Respondent points out that the Laboratory's Standard Operating Procedures are *"highly confidential documents, which are only relevant within the WADA accreditation process"*. The Beijing Laboratory accepted to disclose the relevant section of its SOPs relating to *"the standard testing methods for steroids and some other medications"*.

cc) The Conclusions of the Panel:

206. WADA Technical Document TD2003LDOC sets out the required content of the Laboratory Documentation Packages, but also limits the scope of what documents must be included in the Packages:

“... the Laboratory is not required to support an Adverse Analytical Finding by producing standard operating procedures, general quality management documents (e.g., ISO compliance documents) or any other document not specifically required below”.

207. A literal interpretation of this provision could be understood as giving the Laboratory justification for refusing to disclose relevant information from its SOPs or its validation studies in order to clarify certain issues raised by the athlete.

208. In making this observation, however, attention must also be given to the Laboratory’s obligations under ISL 5.3.7.3:

5.3.7.3 Ensuring responsiveness to Testing Authority

5.3.7.3.1 The Laboratory Director shall be familiar with the Testing Authority rules and the Prohibited List.

5.3.7.3.2 The Laboratory Director shall interact with the Testing Authority with respect to specific timing, report information, or other support needs. These interactions should include, but are not limited to, the following:

- *Communicating with the Testing Authority concerning any significant question of testing needs or any unusual circumstance in the testing process (including delays in reporting);*
- *...*
- *Providing complete and timely explanations to the Testing Authority when requested or when there is a potential for misunderstanding the Test Report or Laboratory Documentation Package;*
- *Providing evidence and/or expert testimony on any test result or report produced by the Laboratory as required in administrative, arbitration, or legal proceedings;*
- *...”*

[Underlining represents defined terms in the official Version 5.0 of ISL 2008].

209. In its letter to the parties dated 30 October 2009, the Panel requested from the Respondent the submission of section YYB-104 of the Laboratory’s SOPs in compliance with the Appellants’ request for information concerning alleged deficiencies in the Laboratory’s quality control and handling procedures. The Panel set a deadline for submission of the information on 13 November 2009.

210. Specifically, the Appellants had requested in a letter to the CAS Court Office dated 27 October 2009 that the Laboratory be ordered to submit Section YYB-104 of their SOPs. This was comprised of two sub-sections: sub-section (a), approximately 253 pages, containing

information relating to “generic issues” such as sample handling, operation of the auto-sampler and operation of gas chromatograms and sub-section (b), comprising approx. 18 pages, containing information relating to the “isotope testing method”.

211. In making its request to the Respondent for Section YYB-104, the Panel emphasized to the Respondent that it “*considered the submission of the relevant parts of the SOP in these proceedings to be necessary in order to assist in explaining the Test Report and the Laboratory Documentation Package*”. The Panel cited ISL 5.3.7.3.2 and TD2003LDOC.

212. By letter dated 22 December 2009, following several requests for postponement of the submission deadline, the Respondent finally informed the Panel that it had been notified by the Beijing Laboratory that the requested document contains some “*highly sensitive and confidential information and that its disclosure could lead to unfair competition issue*”.

213. The Respondent stated that the Beijing Laboratory had advised “*that it would only be willing to disclose the requested excerpts of the SOP on condition that it receives from CAS the assurance that the requested document be provided only to the three members of the Panel, to the exclusion of any other persons*”.

214. In response hereto, the Appellants again restated their request for a specific section of the Laboratory’s SOPs in their letter of 23 December 2009:

The Appellants respectfully request that the Panel orders that unless the selected sections of the SOPs are disclosed by 1 January 2010, adverse inferences will be drawn from the non-disclosure in the Appellants’ favour. Conversely, the Appellants wish to emphasize that they are happy to sign any confidentiality agreement the Beijing Laboratory wishes them to sign in order to effect the disclosure of the relevant sections of the SOPs.

215. In its letter to the Respondent of 30 December 2009, the CAS Court Office reminded the Respondent that the Laboratory could have raised its confidentiality demand already at a much earlier phase of the proceedings and extended the deadline for the submission of section YYB-104 until 6 January 2010. It also expressly recited again the provision of ISL 5.3.7.3.1 to the Respondent in this letter.

216. On 6 January 2010, the CAS Court Office received from the Respondent only sub-section (b) of YYB 104 of the Laboratory’s SOPs. Sub-section (a) of YYB-104 was refused by the Laboratory on the grounds that

“Our YYB-104 is the whole method for detection of steroids and some other substances with different instrument, such as GC/MSD and IRMS etc. IRMS is only a part of it. The major part is for normal GC/MSD analysis, which is not directly related IRMS. From page 620-638 is the SOP for IRMS that has been sent to you”.

217. In protesting the arbitrary nature of the Laboratory’s selection of the SOPs and the fact that the information submitted contained predominantly listings of analytical equipment, chemicals and suppliers, the Appellants stated again:

“The section of the SOPs disclosed does not address central issues of the procedure such as sample handling, the operation of the auto-samplers, etc. As predicted in our letter dated 28 October 2009, these are generic issues common to both MS and IRMS, likely to be dealt with at section (a) (“Steroid and other medicine testing method”) and not at section b(b) (“Isotope testing method”).”

218. The Panel has noted that the SOP for running quality controls was not provided by the Laboratory, but the SOP which was provided (Testing Method S/N: YYB-104) indicates on page 6 that results for quality control samples are required for reporting positive cases, but does not stipulate what the quality control must be.
219. The Panel recognizes that the Laboratory in the case at hand must be given certain discretion in the disclosure of its validation studies required for accreditation by WADA and with regard to its SOPs. As Prof. Butch pointed out, the SOPs comprise, in many cases, voluminous ring books of technical information. Furthermore, the Panel has noted the Beijing Laboratory’s reference to confidentiality and competition issues which may indeed be controlling factors.
220. In the case at hand, however, the Appellants have focused their request for information upon a specific item of reference in the Laboratory’s SOPs. Following this request, the Laboratory chose not to furnish the specific information requested, including section YYB-104 (a) of the Laboratory’s SOPs, specific information relating to the isotopic analysis of a designated sample and the reconstruction of the Sequence File.
221. In consequence of the Laboratory’s refusal, the Panel holds that it cannot place the Appellants at a procedural disadvantage in bearing their burden of proof, where the evidence requested is critical to their defence and the laboratory remains in exclusive control of its disclosure.

e) Violation of the “Different Analyst” Rule

222. Version 5.0 ISL 5.3.4.3.2.2, the “Different Analysts Rule”, the version governing laboratory accreditation and operating standards during the XXIX Olympiad, provides as follows:

“The “B” Sample confirmation shall be performed in the same Laboratory as the “A” Sample confirmation. A different analyst(s) shall perform those parts of the “B” analytical procedure during which the Sample or Aliquot is open and accessible. Analyst(s) involved in the analysis of the “A” Sample may participate in an activity that does not involve direct interaction with the open Sample Aliquot. For example, the same individual(s) that performed the “A” analysis may perform the instrumental performance checks and analysis, transfer sealed vials, move sealed tubes containing Samples, complete paperwork, transfer vials to and from auto-samplers, enter sequence data and verify results”.

aa) The Position of the Appellants:

223. The Appellants take the view that, based on ordinary canons of legal interpretation, the sample analyses of both Athletes must be annulled because the Laboratory analyst performed the entire

“B” sample analysis of their samples after performing major portions of the technical and instrumental functions of the “A” sample test. During the “B” sample, he interacted directly with the open sample aliquot (the “wet chemistry”) of the test.

224. The Appellants submit that ISL 5.2.4.3.2.2 is a mandatory procedural safeguard, essential to maintain the integrity of analysis. Departure from it must therefore automatically invalidate the T/E analysis results. Breach of this ISL renders the results on the “B” sample inadmissible. Moreover, the Respondent has not attempted to and cannot establish that the departure did not cause the reported findings.

bb) The Respondent’s Position:

225. The Respondent argues that the purpose of ISL 5.2.4.3.2.2 is to prevent an analyst to repeat the same errors when handling open aliquots of the “A” and “B” samples. Therefore, this provision does not prohibit the same analyst to be involved in technical parts involving both samples.
226. The Respondent further submits that at the time the *Jenkins* case was rendered, “*an analyst involved in the A sample was not allowed to participate in the B sample analysis, with no exception*”. Such rule no longer exists. Therefore, the *Jenkins* case is distinguishable from the instant case.
227. The Respondent further asserts that “*the IRMS analysis, which is a completely different kind of testing from the T/E analysis, confirmed that the reaction of testosterone was too high because exogenous testosterone was administered to the Appellants*”. The IRMS analysis is proof that the ratio of testosterone (detected in the T/E analysis), which was too high, cannot be explained by an alleged systematic error of an analyst. Had the analyst made an error, “*the IRMS analysis would not have confirmed the abnormal result*”.

cc) The Evidence adduced at the Hearing:

228. The Panel has examined the Documentation Packages and has questioned the Laboratory analyst through an interpreter during the telephone conference with the Beijing Laboratory. The A Sample Documentation Packages for both Appellants reveal that Laboratory analyst was involved in significant portions of the GC/C/MS instrumental and sequence verification procedures. With regard to the chemical procedures, however, he is shown only on page 34, line 16, of the Packages to have conducted the “1 µL Injection into GC/MSD”.
229. This latter procedure, however, as agreed by the expert witnesses during the experts’ meeting, is a technical function which is performed on the sample while it is still contained in the vial which is sealed by the metal cap with a rubber septum. It does not qualify as an operative procedure performed on the “open or accessible” sample or aliquot.

230. On the other hand, the B sample Documentation Packages record that the Laboratory analyst performed the entire T/E analytical procedure stretching from the chemical preparation to the instrumental terms and the sequence verification. All of the experts agreed following their meeting that the analyst was indeed involved with the “wet chemistry” of the B sample analysis, i.e., he interacted with the open and accessible B sample. This fact remained undisputed by the IOC in its closing statement.

231. Indeed, the analyst was questioned by Professor Schänzer regarding the scope of his involvement with the T/E analysis during the telephonic interview of the Beijing Laboratory personnel on the 2nd day of the hearing. Speaking through the interpreter, Ms Li, the analyst testified as follows:

Prof. Schänzer: We would like to have your comment to question number four: What role did [the analyst] play in the analysis of [the] A and B samples from the T/E ratio. Did he handle the open vials for both A and B samples.

Ms. Li: For the A sample, I think not to have participated in any chemical preparation, but did only the instrument adjustment and the injection data proceeding. And for the B sample, I was in charge of everything, including the chemical preparation, instrument adjustment and injection.

dd) The Conclusions of the Panel

232. In accord with previous CAS rulings on earlier versions of the “Different Analyst” Rule⁸, the Panel applies a strict interpretation of the above rule. Any analyst involved in the “A” sample analysis, regardless of whether the activity of that analyst does or does not involve direct interaction with the open or accessible sample or aliquot, may not be involved in any activity with regard to the “B” sample analysis which involves direct interaction with the open or accessible “B” sample or aliquot.

233. On the basis of the evidence adduced, the Panel concludes that the analyst was involved in that phase of the T/E analysis of the B samples referred to by the expert witnesses as the “wet chemistry”, meaning the analyst’s involvement with open and accessible aliquots of the B sample T/E analysis. This occurred after he had been significantly involved in the non-chemical procedures of the A sample analysis.

234. The Respondent argues against this evidence in its Closing Submission by asserting that “based on the documentation provided by the Beijing Laboratory, the experts found that this analyst was only involved in the technical parts of the analysis. He was not part of the “wet chemistry” (i.e., when the aliquots are open)”.

235. This position contradicts the analyst’s own statements at the hearing (see above) and the conclusion of the expert witnesses as reported by Prof. Butch.

⁸ CAS 2006/A/1119; AAA 30 190 00199 07 USADA v. Latasha Jenkins.

236. The Respondent further asserts that the present case can be distinguished from past cases by reason of the fact that *Jenkins*⁹ was decided on a prior version of the ISL, which was no longer applicable during the Olympic Games in Beijing.

“At the time the Jenkins case was rendered, an analyst involved in the A sample was not allowed to participate in the B sample analysis, with no exception. Such rule no longer exists”.

237. Moreover, the Respondent alleges erroneously that, in the instant case, the IRMS analysis, as opposed to the GC/MS analysis, *“is a completely different kind of testing from the T/E analysis”*.

“The IRMS analysis is proof that the ratio of testosterone (detected in the T/E analysis), which was too high, cannot be explained by an alleged systematical error of an analyst, but rather by an administration of exogenous testosterone. Had the analyst made an error, the IRMS analysis would not have confirmed the abnormal result”.

238. The Panel does not follow the Respondent’s reasoning. The violation of ISL 5.3.4.3.2.2 took place on the T/E GC/MS analysis of the A and B samples.

239. Although the Respondent is correct in pointing out that the strictures of the former ISL 5.3.4.3.2.2 were modified in Version 5.0 of the ISL (2008), the Panel fails to see how the basic principle laid down in *Jenkins* does not apply in this case. The analyst violated the black-letter mandate of this ISL provision. Restrictions remain restrictions, even if modified. Unless and until ISL 5.2.4.3.2.2 in Version 5.0 which undisputedly applied during the XXIX Olympiad was eliminated as of 1 January 2009, WADA-accredited laboratories had no alternative but to adhere to and follow the standard as drafted.

240. In *Jenkins*, the Panel held:

“In view of the grave implications for athletes, such as Ms. Jenkins, who are held strictly to account for any transgression of applicable anti-doping rules, testing laboratories must also be held strictly to account for any non-compliance with those same rules. Failure to comply with the mandatory standard contained in ISL 5.2.4.3.2.2 cannot be viewed as a mere technicality. The strict liability regime which underpins the anti-doping system requires strict compliance with the anti-doping rules by every one involved in the administration of the anti-doping regime in order to preserve the integrity of fair and competitive sport”.

241. In the case at hand, where the allegation of instrument malfunction, loss of control over the samples and the failure of quality control procedures represent the core of the dispute, the Panel fails to see how the precautionary safeguards which justify ISL 5.2.4.3.2.2, namely the integrity of the laboratory analysis and the prevention of manipulation, can be relegated to the status of a mere “technical” significance.

242. In this regard, however, the Panel wishes to point out, similar to the facts in *Jenkins*, that it has no evidence or indication that the analyst who performed the “wet chemistry” of the Appellants’ tests engaged in any form of misconduct or manipulated the results of the testing procedure.

⁹ See *Jenkins*, *supra*.

Conclusion

243. The Panel has been charged with the task of deciding whether Mr Devyatovskiy and Mr Tsikhan violated Art. 2.1 of the IOC ADR 2008 by the presence of exogenous testosterone, a prohibited Threshold Substance, in their bodily specimens. The Athletes have denied the use of such a substance and defended their position by reference to departures from the sample analysis and custodial procedures of the Beijing Laboratory.
244. With regard to Mr Devyatovskij, the Panel has established a departure from ISL 5.4.4.2.2 deriving from the Laboratory's inability to produce reproducible results. The Respondent could not prove to the comfortable satisfaction of the Panel that the variability in his "B" sample IRMS results were reliable.
245. A different result was obtained for Mr Tsikhan. In his case, the Panel was persuaded to its comfortable satisfaction that the analytical results confirmed the exogenous source of the testosterone. In his case, however, the mere fact of an Adverse Analytical Finding does not permit the Respondent to rely solely on the Laboratory's positive analysis to discharge its burden of proof.
246. In the case of both Athletes, the Panel has established violations of the Laboratory's documentation and reporting requirements of ISL 5.2.6.1 and 5.2.6.3 in conjunction with WADA Technical Document TD2003LCOC, in addition to a violation of the "Different Analysts" rule set out in ISL 4.3.4.3.2.2.
247. The interruption of the automated testing procedure of the IRMS instrument for the purpose of manually exchanging aliquot fractions in a given slot of the auto-sampler constituted a "movement" which should have been properly documented. The use of a "reconstructed Sequence File" cannot satisfy the requirements of ISL 5.2.6.1. It constitutes an egregious "departure" from the ISL for which neither the Laboratory nor the Respondent was able to provide a plausible explanation.
248. The Beijing Laboratory has admitted that the Sequence File submitted with the Documentation Packages was not the authentic Sequence File which recorded the actual course of the test run. It was a "cut and paste" representation which concealed the interruptions of the instrument's initial automated testing program. The scope of the changes made to the positioning of the vials in the auto-sampler and the nature of those changes remain unknown.
249. Without this information, the transparency of the test analysis is denied to the Athletes. Verification of the test results is not possible. In the case at hand, transparency and verification of the testing process represent fundamental rights of the athlete.

250. The Laboratory analyst should not have performed activities on the open and accessible aliquot of the Athletes' B sample CG/MS analysis, although that same analyst had conducted substantial portions of the "closed vial" testing of the A sample. In so doing, the analyst clearly violated ISL 4.3.4.3.2.2. The Panel is well aware that the rule has now been eliminated under ISL 2009, but the Panel is bound to apply the rule which governed at the time of the violation.
251. In the view of the Panel, both of the above provisions of the ISL constitute mandatory procedural safeguards, the violation of which, independently of each other, justifies the annulment of the test results.
252. Doping is an offence which requires the application of strict rules. If an athlete is to be sanctioned solely on the basis of the provable presence of a prohibited substance in his body, it is his or her fundamental right to know that the Respondent, as the Testing Authority, including the WADA-accredited laboratory working with it, has strictly observed the mandatory safeguards.
253. Strict application of the rules is the *quid pro quo* for the imposition of a regime of strict liability for doping offenses. This fundamental rule which has formed the anchor for CAS rulings for more than two decades of anti-doping arbitrations was laid down eloquently in USA Shooting & Q./ International Shooting Union already in 1995:
- "The fight against doping is arduous, and it may require strict rules. But the rule-makers and the rule appliers must begin by being strict with themselves".*
254. The Panel wishes to emphasize that its decision should not be interpreted as an exoneration of the Athletes. The Panel is not declaring that the Appellants did not, prior to the competition, administer exogenous testosterone. The Panel is merely concluding that the Respondent has not been able to prove, to the comfortable satisfaction of the Panel, diligent adherence to the rules set out in the International Standard for Laboratories and the relevant Technical Documents.
255. On these grounds alone, the Panel has decided the difficult and complex subject matter of this dispute in favour of the Athletes.
256. All further reaching submissions and requests, even though not expressly mentioned in the award, have been taken into account by the Panel and are herewith rejected by the Panel.

The Court of Arbitration for Sport rules:

1. The appeals filed by Vadim Devyatovskiy and Ivan Tsikhan are upheld.
2. The Decisions of the IOC Disciplinary Commission dated 11 December 2008 regarding the Athletes Vadim Devyatovskiy and Ivan Tsikhan are set aside.
3. The medals and diplomas awarded to the Appellants are to be returned to them.
4. All other motions or prayers for relief are dismissed.

(...).