



Arbitration CAS 2013/A/3437 International Shooting Sport Federation (ISSF) v. World Anti-Doping Agency (WADA), award of 18 December 2014 (operative part of 4 August 2014)

Panel: Judge Conny Jörneklint (Sweden), President; Mr Alan John Sullivan QC (Australia); The Hon. Michael Beloff QC (United Kingdom)

Shooting sport

Doping (atenolol)

Non-participation in the proceedings and procedural fairness

Standing to be sued under Swiss law

Consequence of not identifying all proper respondents in an appeal to the CAS

Criteria for granting a TUE according to the WADA Code.

Defence based on materially similar cases

Right to sport

1. If, as a matter of form, a person is not a respondent but has been given proper notice of the appeal and a proper opportunity to participate in the appeal, such a person (or anyone else) cannot complain of any lack of procedural fairness if a deliberate choice is made not to participate.
2. Under Swiss law, the defending party has standing to be sued (“*légitimation passive*”) if it is personally obliged by the “disputed rights” at stake. In other words, a party has standing to be sued and thus may be summoned before CAS only if it has some stake in the dispute because something is sought against it.
3. As a general rule, the appellant is obliged to identify the proper respondent at the outset of the procedure. The consequence of not identifying all proper respondents is not that the appeal is wholly inadmissible but only that the CAS panel may decline to make any orders against a person who is a proper respondent but has not been joined or may limit the scope of its review to the orders sought against the party properly joined as a respondent.
4. All the four criteria enumerated in the WADA Code have to be fulfilled for the grant of a TUE. That is the impact of the words “in strict accordance”. Furthermore, the burden of establishing satisfaction of the four criteria rests on the athlete.
5. In CAS cases on appropriate sanctions for doping violations where the athlete prays in aid a defence of no fault or no significant fault she/he not infrequently invokes earlier cases as setting as benchmark. But in those cases CAS has constantly emphasised that the invocation is of no utility before it, unless the defendant and the alleged comparator are materially similar. The same philosophy is exemplified in the area of anti-discrimination law in all its modern variety.

6. **While all human rights instruments recognize that there is a right to life, none recognize that there is an equivalent right to sport.**

I. THE PARTIES

1. The International Shooting Sport Federation (ISSF or “the Appellant”) is the world governing body for the shooting sport. It has its seat in Munich, Germany.
2. The World Anti-Doping Agency (WADA or “the Respondent”) is a Swiss private law foundation with its seat in Lausanne, Switzerland and its headquarters in Montreal, Canada.

II. FACTUAL BACKGROUND

3. The circumstances stated below are a summary of the main relevant facts, as submitted by the Parties in their written pleadings or in the evidence offered during the course of the proceedings. Additional facts may be set out, where relevant, in connection with the legal discussion which follows.
4. The facts in this case are straightforward and are not substantially in dispute.
5. Nadine Ungerank, a 17-year old female shooter from Austria (“the Athlete”), underwent a compulsory medical examination for the squad members of the Austrian Shooting Sport Federation on 20 July 2010. This examination led to the Athlete being diagnosed with the genetic disorder of Long QT Syndrome (LQTS) Type 1. A LQTS diagnosis is made when a visible prolongation of the QT interval is shown on an electrocardiogram (EKG). After a genetic investigation, the Department of Clinical Genetics at the University of Amsterdam found mutations in two genes known to be associated with LQTS. This diagnosis was subsequently confirmed. Following this diagnosis the Athlete’s treating doctor, Dr. Schweigmann, prescribed her a treatment of Atenolol, a beta blocker, in order to minimize the risk of a cardiac arrest. Since March 2011, therefore, Ms Ungerank has been taking Atenolol in order to reduce the risk of a cardiac arrest.
6. According to Section P2. of the WADA 2013 Prohibited List, beta blockers, including Atenolol, are prohibited in and out-of-competition in shooting sport.
7. On 7 March 2011, the Athlete applied for a Therapeutic Use Exemption (TUE) from the Austrian National Anti-Doping Agency (NADA) for the use of Atenolol.
8. On 11 March 2011, the NADA granted the TUE request for the use of Atenolol at a dosage of 200 mg per day. The NADA TUE was originally valid until 11 March 2016.

9. On 27 February 2013, the Athlete competed in one of her ISSF Competitions: the European Shooting Confederation's 10 Meter Air Rifle Championship in Odense, Denmark, in which she won a gold medal. Her score of 208.5 was higher than the score of the winner of the (senior) women's Open 10m Air Rifle category which was 208.3. When the Athlete competed in the European Junior Championship 2012 in the 10 Meter Air Rifle category she placed 58th.
10. Immediately after the event, the Athlete underwent a doping control. Her urine sample was analysed by the Aker University WADA-accredited laboratory in Norway and yielded an adverse analytical finding of Atenolol.
11. The Athlete had, as noted above, been granted a TUE from NADA, but not from the ISSF as required by Article 4.4.4 of the ISSF Anti-Doping Rules in force at the time ("ISSF ADR").
12. As a result, the ISSF asserted an adverse analytical finding against the Athlete and instituted disciplinary procedures. In light of the exceptional circumstances of the case, and in accordance with Article 10.4 of the ISSF ADR, the Executive Committee of the ISSF on 5 July 2013 reduced the mandatory sanction for the Athlete's first anti-doping rule violation from 2 years to a 3-month period of ineligibility.
13. In accordance with Article 10.1 of the ISSF ADR, the Athlete also had to return her gold medal and to have her world record expunged. Although it had the right under the World Anti-Doping Code and the respective ISSF ADR, WADA did not challenge the decision of the ISSF Executive Committee before the Court of Arbitration for Sport (CAS).
14. On 25 July 2013, the Athlete's TUE from NADA for the use of 200 mg of Atenolol daily was withdrawn.
15. On 1 September 2013, the Athlete applied for a TUE for the use of 35 mg of Atenolol twice daily from the ISSF Therapeutic Use Exemption Committee ("ISSF TUEC") in accordance with the ISSF ADR.
16. The Appellant's TUEC was comprised of Dr. James Lally, Dr. Jean-Emmanuel Monneyron and Dr. Stefan Nolte. All three are qualified physicians who have participated and/or been involved with shooting sport for a long time.
17. On 12 September 2013, ISSF TUEC denied the Athlete's TUE request for Atenolol.
18. The ISSF TUEC found the following:

"The Athlete had to successfully demonstrate all four of the required ISTUE criteria in order for the Committee to grant a TUE, and if one of the four required criteria was missing, her request had to be denied;

The Athlete to some extent proved the first of the four criteria, i.e. that she would "experience a significant impairment to health if the Prohibited Substance or Prohibited Method were to be withheld in the course of treating an acute or chronic medical condition";

The Athlete failed to prove the second criterion of Article 4.1.b. ISTUE, i.e. that the “Therapeutic Use of the Prohibited Substance or Prohibited Method would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal health following treatment of a legitimate medical condition”, because she failed to counteract the ample medical and scientific evidence which shows that beta blockers enhance the performance of athletes in precision and accuracy sports;

As evidence that the beta blockers enhanced her performance, the Appellant’s TUEC also pointed to the fact that the Athlete finished first with a score that would have been a world record and that was higher than the winning score in the Senior Women’s event;

Thus, the Athlete’s TUE request had to be denied because she failed to satisfy the second criterion of the ISTUE;

Even though the Appellant’s TUEC did not have to address any of the other criteria, it found that the Athlete also failed to prove the third criterion, i.e. that “[t]here is no reasonable Therapeutic alternative to the Use of the otherwise Prohibited Substance or Prohibited Method”, because a few of the documents provided by the Athlete stated that there were other therapeutic options to treat the Athlete’s medical condition besides beta blockers”.

19. On 2 October 2013, as a result of the Appellant’s TUEC decision, the Athlete requested a review of the case by WADA.
20. On 29 November 2013, the WADA Therapeutic Use Exemption Committee (“WADA TUEC”) issued its decision (“the Decision”). It ruled that the decision rendered by ISSF TUEC of 12 September 2013 be reversed, the permission for the use of Atenolol 35 mg twice a day be granted and the TUE be valid immediately and be granted for a period of four years. The WADA TUEC was composed as follows: Dr Katarina Grimm, as President, and Professor Antonio Pelliccia, Professor Andrew Pipe and Professor Peter Schwartz as members. The reasons for the Decision were stated to be the following:

“Case-Specific Analysis of the criteria for granting a TUE as established in the ISTUE 4.1 a-d

a. The Athlete would experience a significant impairment to health if the Prohibited Substance were to be withheld in the course of treating an acute or chronic medical condition.

It is incontestable that the athlete would experience a highly significant Impairment to health - the risk of sudden cardiac death - were the beta-blocker to be withheld.

This statement is based on the following considerations:

1. Correct diagnosis

The athlete suffers from congenital long-QT syndrome (LQTS), a life-threatening cardiac arrhythmia syndrome characterized by disturbances of normal electrical activity in the heart. The medical file testifies to

the thorough and careful way in which her condition was investigated and has been managed. Following the electrocardiographic diagnosis, genetic examinations revealed an alteration of the KCNQ1-Gene which represents unequivocal proof of Type 1 LQTS and is the clinically relevant, disease-causing abnormality (Schwartz PJ, Crotti L, Insolla R, Long QT Syndrome: From Genetics to Management, Circ Arrhythm Electrophysiol, 2012 August 1; 5(4): 868-877). The clinical significance of the alteration in the SCN5A-Gene Indicative of Type 3 LQTS is uncertain.

2, Natural course of the disease

LQTS is a serious pathologic condition associated with the risk of ominous ventricular arrhythmias including torsade de point and ventricular fibrillation which may commonly result in Sudden Cardiac Death (SCD). Individuals with LQTS are at risk of SCD at any time, irrespective of their involvement in sport. The risk of sudden cardiac death for a LQTS patient who is not being treated is close to 12-13 % in the first 40 years of life. Therefore, it is essential that all patients diagnosed with LQTS, including those currently asymptomatic, are treated. Patients with the LQT1 genotype have been consistently reported to have a high frequency of arrhythmic events during activities that are associated with increased sympathetic activity and faster heart rates, such as vigorous exercise (Barsheshet A, Peterson DA, Moss AJ, et al, Genotype-Specific QT correction for heart rate and the risk of life threatening cardiac events in adolescents with the congenital Long-QT Syndrome, Heart Rhythm, 2011 August; 8(8): 1207-1213).

3. Correct therapy

Beta-blockers are the therapy of choice in LQTS. The recommended initial treatment is beta-blocker therapy, propranolol and nadolol recognized as the two most effective. (Chockalingam P, Crotti L, Girardengo G, et al, Not all beta-blockers are equal in the management of long QT syndrome types 1 and 2: higher recurrence of events under metoprolol, J Am Coll Cardiol, 2012 Nov 13;60(20):2092-9). Nevertheless, the choice of atenolol would most likely be considered as acceptable by many clinicians; this agent is less likely to induce non-cardiac side effects such as fatigue and mood changes.

In LQTS, the mechanism causing arrhythmias is "after-depolarization" which occurs more often in states of adrenergic stimulation. Therefore, the risk of ventricular tachyarrhythmias and sudden cardiac death in LQTS is greater during states of increased adrenergic tone (i.e., exercise, excitement). Beta-blockers reduce the sympathetic tone and attenuate the effects of adrenergic stimulation, effectively and substantially decreasing the risk of SCD in LQTS to about 1% (Schwartz PJ, Crotti L, Long QT and short QT syndromes. In: Zipes DP, Jalife I, editors, Cardiac Electrophysiology: from Cell to Bedside, 5th edition, Elsevier/ Saunders; Philadelphia: 2009, p. 731-744).

Based on current evidence, withholding beta-blockers in a patient with LQTS patient is unethical and irresponsible as it entails accepting the enhanced risk of SCD as a consequence, raising fundamental medico-legal concerns. No physician can be expected to assume responsibility for such a decision.

b. The Therapeutic Use of the Prohibited Substance would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal health following the treatment of a legitimate medical condition.
The ISSF decision states that the performance-enhancing effect of beta-blockers in accuracy sports were beyond doubt, referring exclusively to their cardiovascular effects as an explanation for this putative effect. No reference

to any scientific evidence supporting a performance-enhancing effect of beta-blockers in shooting are included in the ISSF decision. Upon additional request, a number of references were provided to WADA. The full-text articles of these references were reviewed by this panel with regard to the implications of their findings with regard to the use of beta-blockers in shooting (Gibbons D, Philipps M, The effect of acebutolol on tachycardia and performance during competition rifle shooting, Letter, Br J Clin Pharmacol, 1976;3:516-517; Siitonen L, Sonck T, Jänne J, Effect of beta-blockade on performance: use of beta-blockade in bowling and in shooting competitions, J Int Med Res. 1977;5(5): 359-36; S Jongers JJ et al, Effects of placebo and of small doses of a beta-blocker (oxprenolol) and ethyl alcohol on the precision of pistol shooting, Brux Med. 1978 Aug;58(8):395-9, French; Antal LC, Good CS, Effects of oxprenolol on pistol shooting under stress. Practitioner, 1980 Jul;224(1345): 755- 60; Kruse P et al, Beta-blockade used in precision sports: effect on pistol shooting performance, J Appl Physiol, 1986;61(2):417-420).

In conclusion, It must be noted that these few studies:

- are considerably dated (the first appeared in 1976), with the most recent publication being 27 years old;*
- were all published in low-impact journals;*
- comprise only small populations of from 6 to a maximum of 33 young, mostly male and without exception healthy shooters;*
- most often investigated oxprenolol, with one further study performed on acebutolol and one on metoprolol. None of the beta-blockers introduced for clinical use after 1977 were investigated. None of the studies was performed on atenolol, This is an important consideration since beta-blockers are a heterogeneous group of substances with considerably different pharmacologic properties between and among particular beta-blockers;*
- all used study designs involving administration of the beta-blocker 1-3 hours prior to the shooting test to ensure maximum plasma levels at that time, and none examined long-term use, creating a setting markedly different from therapeutic use. Effects can be expected to be very dissimilar with administration not immediately prior to shooting, and with chronic use (down-regulation of receptors has been reported, and thus certain impacts of beta-blocker therapy can be anticipated to be diminished);*
- produced conflicting results: two finding no other than a placebo effect for the performance with beta-blockers; one establishing a difference only for slow, but not for rapid shooting; and two claiming a significant improvement of performance with beta-blocker versus placebo use;*
- did not show any relationship between the cardiovascular effects of the beta-blockers and the shooting scores as is claimed in the ISSF decision to be the reason for improved performance;*
- all revealed a substantial number of participants whose shooting performance deteriorated while using beta-blockers, including the two studies reporting an overall improvement of performance. In one of the*

studies, those shooters who failed to improve their performance while taking the beta-blocker did not show any heart rate increase in competition (Siitonen L, Sonck T, Jänne J, Effect of beta-blockade on performance: use of beta-blockade in bowling and in shooting competitions, J Int Res 1977;5:359-66). This inter-individual variation in the reaction to beta-blockers found in these shooters was emphasized by Clarkson and Thompson in their review (Clarkson PM, Thompson HS, Drugs and Sports, Research findings and limitations, Sports Med. 1997 Dec; 24(6):366-384), who noted that there might be hyper-responders to beta-blockers in whom the heart rate response is so blunted as to impair performance and that some level of anxiety (as manifested by an increase in heart rate) is important for performance. The authors identified the need for further studies to assess these individual effects.

Consequently/ the current literature regarding the effect of beta-blockers in shooting has to be considered as insufficient to constitute any claim of general performance enhancement. Since the published data fail to establish clear scientific evidence of any distinct capacity of beta-blockers to enhance performance in shooting, there is no evidence-based justification for a categorical prohibition of these substances.

Given that there is no scientific evidence for a performance-enhancing effect of beta-blockers on shooting in general there is accordingly no evidence that there is a beneficial effect of atenolol on the shooting performance in this athlete.

c. There is no reasonable Therapeutic alternative to the Use of the otherwise Prohibited Substance.

There is no reasonable therapeutic alternative to the use of beta-blocker therapy in this athlete with LQTS. Alternative treatments used to treat LQTS in other patients are not medically justifiable or relevant in this instance.

There are three treatment options in the management of LQTS to prevent sudden cardiac arrest due to ventricular fibrillation, all of which have clearly defined indications: beta-blockers, Left Cardiac Sympathetic Denervation (LCSD) and an Implantable Cardioverter Defibrillator (ICD).

In the case of this asymptomatic athlete with no history of cardiac events, a large variability of absolute QT and corrected QT Intervals measured in serial 12-lead ECGs and a QTc interval never exceeding 0.48s, beta-blockers are the treatment of choice.

LCSD is indicated particularly in young patients with syncope despite beta-blocker therapy. This option is not medically justified in this case, apart from being only available in a few centres worldwide (Schwartz PJ, Practical issues in the management of the long QT syndrome; focus on diagnosis and therapy Swiss Med Wkly 2013;143:w13843).

An ICD is only indicated in cases in which repeated ECG's and 24-hour Holter ECG monitoring demonstrate consistent (not merely occasional) prolongation of the QTc interval above 0.50s. A QTc interval $\geq 0.50s$ is the threshold associated with a significantly higher incidence of arrhythmic complications and cardiac arrest. The implantation of an ICD cannot be justified in this asymptomatic athlete with modest QTc

interval prolongation who has never experienced syncope (Schwartz PJ, Pharmacological and non-pharmacological management of the congenital Long QT Syndrome: The Rationale, Pharmacol Ther. 2011 July; 131(1):171-177).

d. The necessity for the Use of the otherwise Prohibited Substance or Prohibited Method cannot be a consequence, wholly or in part, of the prior Use, without a TUE, of a substance or method which was prohibited at the time of Use.

There is no evidence whatsoever to suggest that the clinical condition requiring treatment has occurred as a consequence of the use of other prohibited substances or methods.

The cardiac manifestation of Long QT Syndrome requiring treatment originates in a congenital disease with well-documented mutations in different genes; in this case, two mutations have been identified in the athlete and one of them has been demonstrated in her father.

Comment:

The denial of a TUE despite the clear clinical indication for beta-blockers prevents this athlete from participating in one of the few sports in which she may safely compete. Such a decision would be based on a speculated, but entirely unproven, positive benefit of beta-blockers on shooting performance.

Decision

In light of these arguments, the WADA Therapeutic Use Exemption Committee renders the following decision:

- 1. The decision rendered by the ISSF TUEC dated 12 September 2013 is reversed.*
 - 2. Permission for the use of atenolol 35 mg twice daily is granted.*
 - 3. The TUE is valid immediately and is granted for a period of four years”.*
21. On 29 November 2013, the Appealed Decision was notified to ISSF.

III. PROCEEDINGS BEFORE THE COURT OF ARBITRATION FOR SPORT

22. On 18 December 2013, ISSF filed its statement of appeal with the CAS against the Appealed Decision, in accordance with Article R48 of the Code of Sports-related Arbitration (2013 edition - “the Code”). In the statement of appeal it mentioned as parties ISSF as Appellant and WADA as Respondent. In paragraph 9 of the statement of appeal it referred to the right for the Athlete to intervene and to the fact that it had sent a copy of the statement of appeal to the Athlete and requested that effect be given to R41.3 of the Code the Athlete be granted the opportunity to intervene as a party if she should wish to do so.

23. In the statement of appeal the prayers for relief were expressed in the following form:

- “1. to set aside the decision of WADA TUEC dated November 16, 2013 [later corrected to the right date, Panel’s remark] and
- a) to reject the TUE application made by Ms Ungerank;
 - b) alternatively, to refer the case back to WADA for another WADA TUEC Panel comprised of different members to consider Ms Ungerank’s application in correct accordance with the Prohibited List and the ISTUE;
2. to order the Respondent to pay the entire costs of the present arbitration, if any;
3. To order the Respondent to pay the entire costs for the Appellant’s legal representation and assistance as well as other costs incurred by the Appellant in connection with this arbitration”.

24. The Panel observes that ISSF in the hearing amended the prayers for relief by deleting everything in subparagraphs (a) and (b) of Prayer 1.

25. On 14 January 2014, pursuant to Article R51 of the CAS Code, ISSF filed its appeal brief. In its appeal brief, ISSF referred to the relief asked for in the statement of appeal.

26. On 27 December 2013, the Athlete wrote to CAS in German through her representative Dr Peter Lechner and expressed her wish to intervene in the procedure between ISSF and WADA. On 10 January 2014, the CAS Court Office answered Dr Peter Lechner, acknowledged the receipt of the letter of 27 December 2013 confirmed the expressed wish from the Athlete to intervene and requested that the Athlete should provide a translation of the letter into English within seven days from receipt of the CAS Office letter.

27. On 8 January 2014, WADA in a letter noted that the ISSF had directed its appeal against WADA only and that the Athlete had not been named as a Respondent in the CAS proceedings. WADA proceeded:

“With respect, WADA has great difficulty in understanding how this arbitration can proceed in any meaningful manner without the involvement of Ms Ungerank. Ms Ungerank is the person most obviously affected by the challenged decision and is explicitly named in such decision.

CAS Panels refuse to make rulings that “would directly affect the position of a third party in such a way without that party being able to present its position” (see paragraph 6.8 of CAS 2011/A/2551). Similarly, in the case of CAS 2011/A/2654, the Panel was not willing to grant prayers for relief in circumstances where such prayers were directed against a third party who could have been (but was not) included as a respondent (see paragraph 15 et seq.).

The fact is that no appeal has been directed against Ms Ungerank within the relevant appeal deadline. She cannot now be compelled to participate in these proceedings. WADA notes the Appellant’s reference, at paragraph 4 of the Statement of Appeal, to R 41.3 of the Code of Sports-related Arbitration; however, this procedure would require Ms Ungerank to participate voluntarily. If Ms Ungerank chooses not to participate

in these proceedings as a party, WADA has some difficulty in envisaging how a CAS Panel could, even if it were to accept that the appeal was admissible in these circumstances, grant relief which negatively impacted upon Ms Ungerank (e.g. rejecting the TUE application).

WADA respectfully requests CAS to invite the Appellant to clarify its position with respect to the above”.

28. On 10 January 2014, the CAS Court Office informed the parties of the intervention of the Athlete and also of WADA’s observations regarding the ISSF’s failure to direct its appeal additionally against the Athlete. The parties were advised that it was obviously for an Appellant to designate the parties against whom it wishes to direct its appeal. The parties were informed that as soon as the Athlete’s letter had been provided in English the parties should be invited to comment on the issue raised by WADA.
29. On 14 January 2014, the Athlete through her representative Dr Peter Lechner informed the CAS that she withdraw her “entry explanation of 27 December 2013” since she as a student did not have any income but might be made liable for costs.
30. On 16 January 2014, the parties were informed of the Athlete’s withdrawal of her request for intervention and the ISSF were invited to comment on WADA’s observations of 8 January 2014.
31. On 21 January 2014, the ISSF commented on those observations as follows:

“1. Appeal against Ms Ungerank as Second Respondent

This Appeal is directed against a decision by the Respondent which overturned a decision of the Appellant. Numerous errors of law were committed by the Respondent’s TUE Committee in its decision-making process, in particular in interpreting the WADA Code and the 2013 Prohibited List (see Appeal Brief). The Respondent’s errors of law that are being appealed by the Appellant are at the heart of this dispute, These errors of law have nothing to do with Ms. Ungerank.

The Appellant did not add Ms. Ungerank as a Respondent in its Statement of Appeal, as it felt unnecessary to drag the young athlete into a court proceeding as Respondent. It is correct that Ms. Ungerank might be affected by the rights from the onset; the Appellant granted her the possibility to join the proceedings as Intervenor in accordance with Article 41.3 of the CAS Code.

Ms. Ungerank has now withdrawn her request to intervene. Yet, as the Respondent insists on compelling her to participate, the Appellant hereby directs its requests for relief mentioned in its Statement of Appeal also against Ms Ungerank as Second Respondent to the proceedings.

The Appellant kindly requests CAS to submit to Ms Ungerank a copy of the Appeal Brief filed on 14 January 2014 together with this letter, if CAS has not forwarded it yet to her.

The Appellant has the right to direct its Appeal against Ms. Ungerank in addition to the First Respondent.

There is no provision in the CAS Code which would hinder the Appellant to add additional Respondents after it filed its Appeal within the time-limit. The deadline to appeal the Respondent's decision according to Article 49 of the CAS Code has been met by the Appellant, as it appealed the Respondent's decision within such time-limit. Therefore, the Appeal has been filed in accordance to the CAS Code.

Additionally, Ms. Ungerank was invited to join the proceedings and although she decided firstly to do so, has now withdrawn her intervention. Hence, Ms. Ungerank has been aware of the Appeal from the moment it was filed.

2. Admissibility of the Appeal without Ms Ungerank as Second Respondent

The admissibility of the Appeal is not affected if the Panel was to find that the Appellant cannot add Ms. Ungerank as Second Respondent at this stage for the following reasons:

The appealed Decision is flawed because the Respondent's TUE Committee based its reasons on an erroneous application of the World Anti-Doping Program. The dispute at hand is a dispute between the Appellant and the Respondent about the interpretation of various elements of World Anti-Doping Program, in particular whether the Respondent's TUE Committee could qualify a substance as being not performance-enhancing in general although it is on the 2013 Prohibited List. The various errors of law committed by the Respondent's TUE Committee as outlined and specified in the Appellant's Appeal Brief are the grounds for this Appeal. These are directed against and related to the Respondent, not Ms. Ungerank.

Therefore, the Appeal did not have to involve Ms. Ungerank as a Respondent but rather as a possibly affected (interested) party seeking to preserve its own interest which would be to maintain the validity of her TUE. This understanding is confirmed by the CAS Code Commentary to Article 41 para. 2-4 as follows:

"The term "participation" used in Arts. R41.2-R41.4 is very broad and refers to different instances of participation by a third party: Firstly, such a third party may participate as a formal party to the proceedings, be it as creditor/claimant or debtor/respondent (participation as a formal party). Secondly, such a third party may be a participant directly or indirectly seeking to preserve its own interests or a party's interests, although not a creditor or debtor (participation as a non-party).

The CAS Code does not contain an exclusive list of the possible forms of participation and is open to various possibilities, including participation by a so-called ancillary party (or sideparty, Nebenpartei) and third-party-notice (Streitverkündung) if contemplated by the applicable law, as is the case under Swiss law. The Panel has significant discretion in determining "the status of the third party and its rights". This flexible provision enables the definition of a specific status that allows the best possible "integration" of the third party in the proceedings" (see Arbitration in Switzerland, The Practitioner's Guide, 2013, Chapter V Article 41 CAS Code para. 15, with additional references to CAS jurisprudence).

The Appeal was not directed against Ms. Ungerank as a Respondent because it is not her decision the Appellant is challenging. The dispute also does not pertain to a decision taken against Ms. Ungerank (in contrast to e.g. disciplinary cases). Hence, the best possible “integration” of Ms. Ungerank in this matter was, in fact, inviting her to intervene and participate as a third party seeking to preserve its own interests. If Ms. Ungerank would have wanted to participate as a (formal) party in the case, as she was given the opportunity to do so by the Appellant, she could have done so (see Article 41.3 CAS Code).

Further, the jurisprudence quoted by the Respondent is not relevant to the matter at hand. In CAS 2011/N2551 (see para. 6.8) the Panel found:

“Since the Panel on the basis of the code has no possibilities to make Trabzonspor a party to these proceedings ex officio, it has determined that it is precluded from taking a decision which would directly affect the situation of a third party in such a way without that party being able to present its position. In conclusion and in these circumstances the Panel is not satisfied that it could entertain Fenerbahce’s request for preliminary measures and the request is rejected” (emphasis added).

The Appellant invited Ms Ungerank to present her position as Intervenor. Ms. Ungerank firstly accepted the invitation, but then withdrew it. In sum, she was granted the right to be heard and was “able to present her position”, but she waived such right.

The other CAS case mentioned by the Respondent (CAS 2011/N2654) dealt with an appeal against a refused disciplinary measure against a third party which did not participate in the proceedings. In this case the Panel concluded the following (see CAS 2011/N2654 para 17):

“the Panel has determined that its scope of review is limited to a review of the Appealed Decision alone. In the event that, on the merits, it is determined to overturn the Appealed Decision, then this Panel would be unable to go further and issue an award that would have the effect of replacing Burkina Faso with Namibia at AFCON 2012”.

There, the Panel concluded that it could lift the decision (this is what the Appellant requests in the case at hand), but that it could not sanction the third party (this is not requested by the Appellant) without giving the third party the possibility to present its position (this possibility has been given to the Ms. Ungerank). CAS 2011/N2654 even confirms that the Panel can lift the appealed Decision without providing the athlete any right to be heard. Regardless, in the case at hand, Ms. Ungerank has expressly waived her right to be heard and to present further evidence in support of her TUE application.

Further, if CAS would lift the appealed decision, Ms. Ungerank would still be entitled to apply for a TUE before the Appellant’s TUE Committee in the future and to support her application with new evidence. In fact, the legal force of a CAS award would not hinder Ms. Ungerank’s right to re-apply for a TUE.

Additionally, the Panel has the option to annul the decision and refer the case back to the Respondent

(Article R57 CAS Code). Therefore, although Ms. Ungerank has already had two opportunities to present evidence in support of her TUE application before the Appellant and the Respondent, in the event that the matter is sent back for another WADA TUE Committee to decide upon, in accordance with article 10.8 of the ISTUE, Ms. Ungerank could be given an additional opportunity to submit further evidence in support of her TUE application.

Finally, in the Appellant's view Ms Ungerank has not done anything wrong. Certainly nothing which would qualify her as Respondent in a court proceeding. The flawed application of the Respondent's rules, which resulted in the Respondent's TUE Committee's decision, falls exclusively under the responsibility of the Respondent.

Nonetheless, the effect that a judgement to lift the appealed Decision would have on Ms. Ungerank has been acknowledged by the Appellant and continues to be acknowledged by the Appellant by inviting her again to formally join the proceedings should she wish to do so".

32. On 31 January 2014, the CAS Court Office invited WADA to comment on the request of the ISSF to file further comments in response and to inform the Office in particular whether it agreed to add the Athlete as a Respondent.
33. On 4 February 2014, WADA responded to the request and made the following observations:

"A. Introduction

1. *Ms Ungerank's application for a TUE was refused by the ISSF TUEC. As the TUE was refused, she requested that the WADA TUEC review her application, ultimately giving rise to the Decision now challenged by the ISSF before CAS.*
2. *The two applications were considered by committees comprised of medical doctors (non-lawyers) - affiliated to the TUE committees ("**TUEC**") of the sporting bodies concerned - in a non-adversarial context; in particular, there has been no oral hearing to date and no extensive legal submissions.*
3. *The right of appeal to the CAS against the Decision guarantees that the matter may ultimately be heard de novo by an external and independent judicial body.*
4. *It has been clear from the outset that the refusal of a TUE would effectively end Ms Ungerank's career as an elite, competitive shooter. It is not disputed between the parties that Ms Ungerank is required to take atenolol in order to reduce the risk of a life-threatening cardiac arrest. Ms Ungerank wrote in her review application to WADA that the refusal of the TUE "amounts to a ban on the pursuit of my sport since I cannot stop taking beta-blockers".*
5. *In the above circumstances, WADA considers it extraordinary that the ISSF (whether by omission, reasons of case strategy or otherwise) did not name Ms Ungerank as a respondent in these proceedings.*

B. Request to include Ms Ungerank as a Second Respondent

6. *It is evident that the Appellant cannot simply correct its omission (or change its decision) by adding a*

further respondent after its appeal deadline has elapsed. To the knowledge of the undersigned, there is no precedent for a third party, against its volition, being bound as a party to CAS arbitration proceedings after the appeal deadline has elapsed.

7. *Notwithstanding the Appellant's contention that there "is no provision in the CAS Code which would hinder the Appellant to add additional Respondents after it filed its Appeal within the time-limit", R48 of the CAS Code quite clearly states that the Statement of Appeal must set out the name and full address of the Respondent(s).*
8. *Ms Ungerank was not listed as respondent by the ISSF. For the reasons set out in her letter to CAS dated 14 January 2014, she withdrew her voluntary application to become a party to the arbitration. Ms Ungerank will therefore not be a party to these proceedings.*

C. The Appellant's requests for relief negatively affect Ms Ungerank

9. *In both CAS cases referred to in WADA's letter dated 8 January 2014, the Panels were not prepared to take a decision which would directly affect a third party without that person being a party to the proceedings. That would be precisely the case here if the Panel were to grant the substantive relief which the Appellant has requested.*
10. *In its Statement of Appeal dated 18 December 2013, the Appellant requested the CAS inter alia to (i) "reject the TUE application made by Ms. Ungerank" or (ii) "to refer the case back to WADA for another WADA TUEC Panel comprised of different members to consider Ms. Ungerank's application in correct accordance with the Prohibited List and the ISTUE".*
11. *If Ms Ungerank's TUE application is rejected (see (i) above), she will de facto immediately lose her right to compete (see paragraph 4 above).*
12. *It is implicit in the alternative request for relief (see (ii) above) that the existing decision of the WADA TUEC is annulled by CAS. Indeed, pursuant to R57 CAS Code, the Panel may only "issue a new decision which replaces the decision challenged or annul the decision and refer the case back to the previous instance" (emphasis added). Upon annulment of the Decision, Ms Ungerank's existing TUE would be extinguished and she would immediately be prevented from competing.*
13. *The Appellant mentions in its letter dated 21 January 2014 that Ms Ungerank could, even if the CAS Panel annulled the Decision, make a fresh application to the ISSF TUEC. This suggestion misses the point; Ms Ungerank would still suffer harm by being prevented from competing throughout the entire application process. Moreover, the suggestion is also disingenuous since any renewed application to the ISSF would be bound to fail, regardless of its merits, as a result of article 4.4.5 of the ISSF ADR.*
14. *Therefore, both substantive requests for relief will cause significant and irreparable prejudice to Ms Ungerank and should not be considered by CAS in circumstances where she is not a respondent party to these proceedings with all the concomitant rights: for example, (i) the right to be notified of all correspondence and submissions, (ii) the right to jointly nominate an arbitrator, (iii) the right to file an*

Answer, (iv) the right to be represented by legal counsel, (v) the right to attend the entirety of the hearing and (vi) the right to make production requests.

D. The Appellant's attempts to distinguish this case from CAS case law

15. *The Appellant's attempts to distinguish the CAS case law from the case at hand are as unconvincing as its attempt to argue that it can continue to bind additional respondents to this case unilaterally.*
16. *WADA accepts that this is not a disciplinary matter stricto sensu. However this is a distinction without a difference; the consequences of this case for Ms Ungerank - the potential loss of the right to practice her sport - are no less serious.*
17. *The Appellant argues that CAS 20n/A/26S4 is authority for the proposition that the Panel may "lift" the Decision. This argument is based on a misunderstanding of the Panel's reasoning in that case:*
 - *The Namibian FA appealed to CAS against the decision of the Appeal Board of the African Football Confederation (CAF), for procedural reasons, not to entertain its complaint that the Burkina Faso FF had fielded an ineligible player in matches between the two countries during the qualifying stages of the 2012 Africa Cup of Nations.*
 - *The Namibian FA requested CAS to (i) set aside the decision of the CAF Appeal Board and ii) rule that Burkina Faso had forfeited the relevant matches and should therefore be replaced by Namibia in the final stages of the Africa Cup of Nations.*
 - *The Namibian FA did not include the Burkina Faso FF as a respondent in the CAS proceedings.*
 - *The CAS Panel was prepared to consider the request to set aside the decision of the CAF Appeal Board (even though it ultimately confirmed such decision) but would not consider the requests for relief to the extent that a third party (Burkina Faso FF) would be directly prejudiced. It held as follows (paragraph 17):*

"The Panel noted that it was ultimately the choice of the Appellant against whom it appealed, but by not including the Burkina Faso FF as a party, the Panel has determined that its scope of review is limited to a review of the Appealed Decision alone. In the event that, on the merits, it is determined to overturn the Appealed Decision, then this Panel would be unable to go further and issue an award that would have the effect of replacing Burkina Faso with Namibia at AFCON 2012".
 - *The point is that, even if the CAS Panel had set aside the decision of the CAF Appeal Board (and referred the matter back), Burkina Faso would not have been eliminated from competition or otherwise prejudiced as a result of the CAS decision. The only consequence would have been that the CAF Appeal Board would have been required to consider the merits of the Namibian complaint.*
 - *The case at hand is very different; both of the Appellant's substantive requests for relief would*

result in the immediate non-participation of Ms Ungerank (see above).

E. Waiver of “right to be heard”

18. *The Appellant argues at section 2 of its letter dated 21 January 2014 that Ms Ungerank has waived her right to be heard in these proceedings. More particularly, the Appellant considers that Ms Ungerank was “granted the right” to be heard as a party and has now waived that right.*
19. *The Appellant is presumably referring to the fact that it sent a copy of the Statement of Appeal to Ms Ungerank and drew her attention to R41.3 of the CAS Code.*
20. *Whereas the Appellant may have made Ms Ungerank aware of its appeal, it certainly did not “grant” her any right whatsoever. Ms Ungerank, like any other third party with a perceived interest in a CAS arbitration, may lodge an application under R41.3 of the CAS Code to become a party. However, she is certainly not under any obligation to do so.*
21. *Ms Ungerank, as a non-party, is not bound by these CAS proceedings and is not subject to the authority vested in the CAS Panel or the provisions of the CAS Code. Ms Ungerank has chosen not to become a party in these proceedings but she has not waived any right to be heard. It is far-fetched to suggest that Ms Ungerank has formally waived her rights by not availing herself of a universally available and entirely voluntary right within the CAS Code (i.e. R41.3).*

F. Conclusion

22. *The Appellant, for reasons WADA fails to understand, did not include Ms Ungerank as a respondent.*
 23. *The Appellant’s suggestion that this case is a matter of legal debate between WADA and ISSF and that the supposed errors of law “have nothing to do with Ms Ungerank” is difficult to understand. If these supposed errors of law are at the “heart of the dispute”, as the Appellant contends, they have (of should have had) everything to do with Ms Ungerank. In any event, it is fundamentally misplaced to exclude a would-be (or rather should-be) respondent on the basis of one or more unilaterally asserted submissions regarding the nature of the case.*
 24. *For the avoidance of doubt, neither WADA nor its counsel had any contact with Ms Ungerank with respect to her decision to participate (or not) in the CAS proceedings and can only accept the reasons she has given for withdrawing her application. In any event, the fact remains that she is not a party to the CAS proceedings.*
 25. *Both the Appellant’s requests for relief result in a de facto suspension of Ms Ungerank from competition. The harm caused would be both immediate and irreparable. WADA submits that the CAS Panel should not consider granting such relief in circumstances where Ms Ungerank, whose matter is before an external and independent judicial body for the first time, has not been included as a respondent party”.*
34. On 4 February 2014, the CAS Court Office acknowledged the receipt of the letter from WADA and noted that WADA objected to the addition of the Athlete as a party to the proceedings and advised that the issue would be decided by the Panel when constituted.

35. On 11 February 2014, pursuant to Article R55 of the CAS Code, WADA filed its answer. It requested the following relief:

- “1. WADA hereby respectfully requests CAS to rule that the appeal is inadmissible.*
- 2. On a subsidiary basis and only in the event that CAS holds that the appeal is admissible, WADA respectfully requests CAS to rule that the appeal is dismissed.*
- 3. In any event, WADA respectfully requests CAS to rule that:*
 - a) The Appellant should bear the entirety of the arbitration costs for these appeal proceedings; and*
 - b) The Appellant bears substantially all of the Respondent’s legal fees and other costs in connection with these proceedings”.*

36. In the issues of jurisdiction and admissibility WADA argued as follows:

- 1. “WADA does not contest the jurisdiction of CAS to hear this dispute pursuant to article 10.3 of the International Standard for Therapeutic Use Exemptions (“ISTUE”) and article 13.4 of the ISSF ADR.*
- 2. WADA also accepts that the Appellant lodged its Statement of Appeal with CAS within the 21 day deadline set out at article 13.6 ISSF ADR.*
- 3. However, the Appellant did not include Ms Ungerank as a respondent to these proceedings despite the fact that she would inevitably be negatively affected by the Appellant’s requests for relief. Indeed, Ms Ungerank is not merely in the position of a third party who may suffer the consequential effects of a decision principally directed at a party to the CAS arbitration (e.g. a third party football club which might stand to win or lose its place in a competition depending on the outcome of a CAS disciplinary procedure involving another club). The Decision is directed at Ms Ungerank; it is her (and only her) sporting career which is at stake.*
- 4. The relief sought by the Appellant would necessarily cause immediate, direct and irreparable harm to Ms Ungerank. To all intents and purposes, the substantive prayers for relief are sought against none other than Ms Ungerank.*
- 5. The Appellant did not direct its appeal against Ms Ungerank in circumstances where it could and should have done so. If the Appellant had directed its appeal against Ms Ungerank, she would have been bound by the arbitration and any resulting order (regardless of whether she had participated in it).*
- 6. In short, the Appellant has created a procedural setting in which it seeks relief against an individual who it failed, for no obvious reason, to bind to the arbitral process.*
- 7. The case of CAS 2008/ A/ 1602 is authority for the proposition that it is “the responsibility of the Appellant, who is represented by a professional lawyer, to identify the proper respondents*

at the outset of the procedure” and that CAS does not have the power to bind a third party to the arbitration. Although this case concerned the obligation on an appellant to direct an appeal against the entity which imposed the challenged sanction, the same principle must apply vis à vis the person who is the primary object of the challenged decision and who will be directly affected by the outcome of the appeal.

8. *In view of the foregoing, WADA considers that the Panel is prevented from granting the relief against Ms Ungerank as a non-party (see CAS 2011/A/2654 and CAS 2011/A/2551). WADA also refers to its detailed submissions with respect to this issue in its letters to CAS dated 8 January 2014 and 4 February 2014.*
 9. *WADA’s primary submission in these proceedings, therefore, is that the Appellant’s requests for relief set out at paragraph 1 (a) and (b) of page 5 of the Statement of the Appeal are inadmissible.*
 10. *For the avoidance of doubt, the submissions which follow in the legal discussion are made on a subsidiary basis only and shall not be considered as detracting from WADA’s primary submission”.*
37. On 13 February 2014, the CAS Court Office acknowledged receipt of the WADA’s answer and invited the parties to inform the Office whether or not the parties wished for a hearing or not. On 19 February 2014 ISSF requested that a hearing to be held. On the same day WADA stated that if the Panel considered a hearing to be necessary WADA would have no objection.

Constitution of the Panel

38. By letter dated 2 April 2014, the parties were advised that the Panel constituted to hear this appeal was constituted as follows: Mr Conny Jörneklint (President); Mr Alan John Sullivan QC and the Hon. Michael J. Beloff QC (Arbitrators). No party raised any objection to the constitution of the Panel.

Pre-hearing discussions

39. On 30 May 2014, the parties were informed that the Panel had decided to hold a hearing, which at first was scheduled for 10 and 11 July 2014, but later changed to 22 and 23 July 2014.
40. On 5 June 2014, ISSF noted in a letter that its request to add the Athlete as second respondent had not been submitted to the Athlete. The ISSF asked why the Athlete had not been given the opportunity to state her position on such request. As there is no clear provision in the Code regarding the addition of a respondent to a proceeding in progress, the ISSF did not see any reason why its submission should not be communicated to the Athlete. According to the ISSF, the Athlete should be given the opportunity to state her position on such a request, irrespective of whether or not the Panel were to find that the appeal was directed against her from the start, according to article R41.1 of the Code, or whether such request would be interpreted as a new request for Arbitration in accordance with article R38 of the Code. The

ISSF therefore requested that its letter of 21 January 2014 would be sent to the Athlete with an invitation to state her position as a precursor to her possible intervention.

41. On 5 January 2014, WADA – after having taken note of the ISSF letter of the same date – referred to the letter of 14 January 2014 from the Athlete where she had stated her decision not voluntarily to participate in the proceeding. WADA concluded that it is not possible to bind an additional respondent to proceedings after the expiry of the appeal deadline and referred both to article R48 of the Code and CAS Case 2007/A/1329 in which the Panel held as follows:

“In the Panel’s view, the Appellant’s attempt to shift the arbitration proceedings from the two initial Respondents to a new respondent must be construed, from a legal standpoint, as a filing of a new appeal altogether [...] The Panel is of the opinion that the Appellant’s summoning of FIFA as a new respondent could be admissible only if it had been made within the 21-day time limit provided by art. 61.1 of the FIFA Statutes.

In the Panel’s view, the above-mentioned provision [R48 of the Code, Panel’s note] is meant to help the appellants when they fail to provide some of the elements of their statement of appeal but is not meant to cure a major procedural mistake such as that of the Appellant’s”.

WADA, therefore, submitted that there was no need to ask the Athlete once more if she wanted to participate voluntarily since it was clear that she could no longer be bound to the proceedings whatever her response.

42. On 12 June 2014, the parties were informed of the Panel’s discussions on the matter of the Athlete’s putative involvement in the proceedings:

1. The Status of Ms Ungerank (“the Athlete”) in these proceedings

The Panel has taken note of the Appellant’s observations regarding its request to join the Athlete as a Respondent to these proceedings.

In this respect, the Panel holds that the inclusion of the Athlete as Respondent is not admissible at this stage. Article R48 of the Code requires that the name of the Respondent has to be contained in the statement of appeal while the Code provides no legal basis for a correction or substitution of a Respondent after the deadline for the filing of an appeal has elapsed (see also CAS 2007/A/1367 § 50).

Article R48 of the Code further provides that CAS shall even not proceed if one of the requirements is not fulfilled. Against this background and in view of the fact that the Athlete has indeed already declined to participate in these proceedings, the Panel finds that the Appellant’s submission of 21 January shall not be submitted to the Athlete.

2. Invitation of the Athlete to the hearing

Notwithstanding and without prejudice to the above, the Panel has decided to inform the Athlete of the hearing date, once fixed. The Panel also wishes to invite the Athlete to attend the hearing as an observer

subject to any qualified objections file by the parties.

43. Since no party objected to the proposal to invite the Athlete to the hearing (now fixed for 22 – 23 July 2014) as an observer she was duly so invited but in a letter of 16 July 2014 she informed CAS that she could not for reasons of lack of time attend the hearing.

Hearing

44. By letter dated 26 June 2014, the parties and their witnesses were called to appear at the hearing which was held on 22 and 23 July 2014 in Lausanne. The Panel was assisted at the hearing by Mr Christopher Singer, CAS Counsel.
45. At the hearing, the following witnesses were heard:
1. Ms Margit Malmer, Representative of the Austrian Shooting Federation (by telephone)
 2. Mr Christian Kramer, Representative of Tiroler Landesschützenbund (by telephone)
 3. Dr James Lally, Member of the ISSF TUEC (in person)
 4. Dr Jean-Emmanuel Monneyron, Member of the ISSF TUEC (in person)
 5. Professor Andrew Pipe, Chief of the Division of Preventing and Rehabilitation at the University of Ottawa Heart Institute and Professor in the Faculty of Medicine at the University of Ottawa (in person)
 6. Professor James I Hudson, Professor of Psychiatry at Harvard Medical School and Director of Biological Psychiatry Laboratory McLean Hospital (by telephone)
46. The President of the Panel invited each of the witnesses before giving evidence to tell the truth, subject to the sanctions of perjury.

Ms Margit Malmer

Ms Malmer confirmed that the results presented for the Athlete for the years 2009-2011 were accurate. In April 2010 she achieved a very good result for someone not yet 14 years old – normally only older athletes (17-18) achieve such good results. According to Ms Malmer the Athlete was “totally talented”. In May 2010 she achieved a really high level of 593 points in difficult conditions. Looking at the statistics for 2009 - 2011 the Athlete’s improvement was quite normal for her age and development. Her coaching had improved when a national coach took over from her father and she changed equipment, which is very important in shooting and ammunition. She changed school in 2010 to a special sports school, as required for a member of the National Team. She had also after her move to this new school started working with a mental coach (sports psychologist). Shooters improve much more quickly when they are young than they do when they get older. The Athlete has always been a very hard trainer.

She is not very tall (1.60 metres).

47. The statistics are comprehensive and show all competitions in which the Athlete competed in relevant years. Stress levels are higher when competing in international competition than in regional competitions. “You can see the rifle shaking”.
48. The requirements for a good shooter are the following:
 - (a) Concentration – total focus on the target;
 - (b) In pistol shooting you need muscles but not in rifle shooting;
 - (c) You should not be too tall;
 - (d) For women, the perfect build is smaller breasts but wider hips;
 - (e) It is best to start teaching shooters at a young age (14-15). The best age for juniors is 19-20, because they need competition and experience to mature;
 - (f) A good rifle (which costs from EUR 5,000 upward). Coaching and the work and relationship with the coach are very important. Shooters are the “most sensitive” people she has ever met;
 - (h) Lots of different factors influence top rating shooting;
 - (i) A good temperament – not too stressed, not too relaxed – is required;
 - (j) A little bit of luck is important, too.

Christian Kramer

49. The results for Katharina Neuwirth are accurate. Ms Neuwirth’s performance between the age of 12-16 is normal for a young shooter. Young people get physically stronger as they get older.
50. Factors which may have assisted the Athlete’s improvement in this case are that she was sent to the best sports school in Innsbruck and after that she had more time to focus on her sport. Once she became a part of the National Team, she had access to good trainers and better facilities. The Athlete is highly talented.
51. The best age for competition with an air rifle is between 25 and 35 years, but there have been Olympic champions who were only 18 years old.
52. It was the Athlete’s father who chose Katharina Neuwirth to compare with the Athlete.
53. Female shooters achieve a higher level earlier than male shooters. Senior shooters results are the same for men and women.

Dr James Lally

54. He is a former US Army sniper. He has not been an active participant in the sport of shooting, but has had a long involvement as an official/doctor. He has been on the ISSF TUEC since 2000 and the Chair since 2003.
55. Atenolol is more a beta 1 or heart directed beta blocker. This cuts down on the side effects for asthmatics. Beta blockers slow heart rate and reduce stress. The use of beta blockers will not affect every person in the same way.
56. The requirements for being a good shooter are:
 - (a) A high level of physical condition;
 - (b) Mental discipline – ability to handle stress and anxiety;
 - (c) A good support system – both coach and equipment are very important;
 - (d) Practice;
 - (e) Competitions at a high level so as to learn how to cope with the stress of competing against the best;
 - (f) Balance;
 - (g) Luck.
57. ISSF started to reconsider Article 4.4.5 ISSF ARD in 2013 and it started applying the new rule in spring 2013.
58. Someone in the USA with the same symptoms as the Athlete would have been considered asymptomatic and the Athlete would not even have been considered for any sort of treatment for her condition in the USA.
59. When considering the satisfaction of the criteria for a TUE according to Article 4.1 ISSF ARD, he found that the criterion in 4.1(a) is only partially satisfied in this case because the diagnosis was without symptoms and was a single reading. Concerning 4.1(c), he judged that there were reasonable alternative treatments. If there is a worry that beta blockers do not afford total protection there are the alternatives of ablation or implanting a defibrillator. In respect of 4.1(b) nothing was submitted by the Athlete to the ISSF. She could have worn a Holter monitor in different competitions on an “honour system” basis. There is also a laser device at the end of rifle which can be used to measure “wobble”.
60. He has seen the graphs given by the Athlete to WADA. In the period when she was not on Atenolol she was a new shooter and would have achieved some improvement in the normal course of events. He noted that in 2010 her highest score was 394 but in 2011 her median

score was 397.

61. Shooting is not a “spike” sport; it is a sustainment sport. Many things could contribute to the improvement of shooters. In this Athlete’s case, it is a huge improvement. Olympic medals have been won with lower scores than she has achieved as a very young athlete.
62. If the graph information had been provided to the ISSF TUEC it would have confirmed rather than undermined its decision. It is very hard to make any conclusion from comparison with the statistics of only one other athlete, Ms Neuwirth. It is necessary to look across a span of athletes to get a fair comparison. The scores on behalf of Ms Neuwirth in 2010 and 2011 are more even and show no real improvement. The scores are not as good as those of the Athlete even though Ms Neuwirth was much older and should be better.
63. The evidence concerning the Athlete and her development does not show that Atenolol has had no performance enhancing effect. If anything, the evidence is to the contrary effect, *i.e.* that she had some help from this medicament. To him, it is incomprehensible how WADA can defend the decision it made. The graph evidence made him more comfortable with the conclusion reached by the ISSF TUEC.
64. When confronted by medical reports pointing out that there is a 12-13% risk of sudden cardiac death in the case of LQTS and that beta blockers reduce that to 1% Dr Lally pointed to conclusion in geneticist’s report that *“the clinical relevance of this finding is unclear”*.
65. Dr Lally was confronted with the evidence from Professor Andrew Pipe (expert witness for WADA, see below) concerning objective evidence on ECG from the Athlete carried out before AMC report of 28 December 2010 which demonstrates that she has a long QT syndrome, that the ability to identify risk of sudden cardiac arrest for young athletes is critically important, that a vast majority of long QT syndromes are missed, that included on the WADA TUEC Panel were two world experts on ECG and that clinical features of channelopathies are asymptomatic. After noting this evidence from Professor Pipe, Dr Lally agreed that requirements of Rule 4.1(a) appear to be met and that ISSF concedes that those criteria are satisfied.
66. According to Professor Pipe, implanting a defibrillator would not be appropriate treatment for the purposes of Rule 4.1(c). Dr. Lally, however, did not accept that implanting a defibrillator would not be appropriate treatment for that purpose. Dr Lally did not accept that there is no reasonable therapeutic alternative to the use of beta blockers because he thought that it would be reasonable to implant a defibrillator.
67. Dr Lally attacked the table set out in the WADA answer concerning the Athlete’s pre- and post-Atenolol results. Dr Lally considered these results to be “cherry picked”.
68. Dr Lally also made the point that the use of percentages rather than raw numbers to measure improvement is wrong and misleading. In elite shooting a small difference in raw numbers makes a huge difference in results.

69. Dr Lally accepted that beta blockers may have side effects such as dizziness, tiredness and blurred vision. He accepted that these side effects may affect a shooter's performance. He accepted that not every shooting athlete will invariably benefit from beta blockers.
70. Dr Lally did not accept that cardio-selective beta blockers like Atenolol are less effective in reducing tremors than others. According to Professor Pipe Atenolol or another cardio-selective beta blocker would not normally be used to reduce tremor because it has a minimal ability to reduce such tremors. Professor Pipe considered that Type 2 beta blockers reduce tremor, but that one would not give an asthma patient a Type 2 beta blocker. Professor Pipe said there is a multiplicity of beta blockers with entirely different qualities/characteristics. In response, Dr Lally said that according to his evaluation Atenolol can be used for tremor.
71. According to article 4.4.5 of the ISSF ADR in an earlier version "*The ISSF shall never and under no special circumstances grant a TUE for the use of a beta-blocker to Athletes who compete or intend to compete at the international level*". Dr Lally disputed strongly that the ISSF TUEC decision was dictated by the inflexible policy against allowing TUEs in respect of use of beta blockers. Dr Lally explained that the change of this rule had been decided and that the ISSF TUEC was already working on the basis of the change of position envisaged in it at a time when the decision was taken. Dr Lally denied that the ISSF TUEC did not consider the question impartially and independently. Dr Lally denied that his expert evidence before the Panel was given under the influence of the former ISSF policy against beta blockers. Dr Lally said that he is "open minded" on this issue.

Dr Jean-Emmanuel Monneyron

72. He is an ear-nose-and-throat doctor in France. Formerly, he was a top shooter having represented France in the Olympic Games. Dr Monneyron gave a history of the use of beta blockers in shooting. At the 1984 Los Angeles Games 9 of 21 medallists in shooting tested positive for beta blockers. Of all ADRVs in shooting since 1986, 60% involved beta blockers.
73. Dr Monneyron listed the following skills required of a good shooter:
 - (a) The need to work at shooting full time;
 - (b) Lots of training to acquire the skill;
 - (c) Mastery of nerves under pressure of competition;
 - (d) Physical fitness;
 - (e) Reasonable eye sight;
 - (f) Discipline.
74. Dr Monneyron explained that women most of the time shoot better than men with rifle but

that by contrast men shoot better than women with pistol because pistols need shoulder strength. Shooting is a precision sport; competitors try to be as motionless as possible. The effect of Beta blockers depends on the physical condition of the individual to whom they are administered. Beta blockers can reduce the pulse rate, heart rate or anxiety, which is a very important factor. When shooting prone, the beating of the heart always causes wobbles. Shooters learn to shoot between heart beats. The slower one's heart beat the better one's performance.

75. Dr Monneyron admitted that it is possible that someone who uses beta blockers gains no advantage and that this depends on the individual. The side effects of beta blockers, *e.g.* dizziness and tiredness, can be very disturbing.
76. Dr Monneyron gave some examples of some tests which could be used to determine effect of beta blockers on heart beat such as the SCAT test; a laser attached to the rifle which measures the area or degree of "wobbling" of the rifle's barrel. If one coupled SCAT results with the heart beat results one may be able to get a before and after picture of the effect of beta blockers.
77. Dr Monneyron rejected the graphs tendered by the Athlete as any reliable evidence that beta blockers did not improve her performance. In respect of the comparisons with Ms Neuirth, Dr Monneyron said that there was a very big difference in the performance of the two athletes.
78. Dr Monneyron explained a possible difference or discrepancy in scores by pointing out that, when shooting from a standing position, it is normal for the barrel of the gun to wobble about a bit and that shooters learn to time the shot to be between "wobbles". When shooting in the kneeling and prone positions, one has the benefit of a sling which reduces or eliminates wobble. Young shooters sometimes find it difficult to readjust back to shooting in the standing position and to remember the need to shoot between the "wobbles" after having used the sling in the other positions.
79. Dr Monneyron argued that had the graphs relied upon by WADA been submitted to the ISSF TUEC it would not have changed his view. He accepted that it would have been very difficult for the Athlete to produce evidence to show that her anxiety levels were not reduced by reason of taking Atenolol. He pointed out that there were many factors, other than beta blockers, which could have affected the Athlete's performances at the various competitions and the times shown in the graphs and instanced better equipment.

Professor Andrew Pipe

80. Professor Pipe said that the only downside of implanting an ICD in a young person is the risk always attendant on surgery. The ICD is generally reserved for more serious cases where the QT interval is above 0.50 seconds. Professor Pipe said that as a physician he could not advise a young woman in the Athlete's circumstances to implant a defibrillator. He did not agree that insertion of an ICD would be a practice accepted as proper by a responsible body of medical practitioners skilled in the relevant area. Implanting a defibrillator is, according to Professor

Pipe, a treatment of last resort. Professor Pipe admitted that an ICD does not have the same side effects as beta blockers but asserted it does have its own side effects such as anxiety about system failure and sometimes physical discomfort if the person who has had an ICD lies down on the ground because of pressure through the skin on the implant.

81. Professor Pipe explained that beta blockers are not helpful in some sports because they can produce minimum arousal whereas in elite sports one often wants maximum arousal.
82. Professor Pipe agreed that some beta blockers have the effect of reducing tremor, heart rate and anxiety. The effect of beta blockers on “anticipatory anxiety”, *i.e.* “nerves” or “stage fright” is very unreliable because many patients on beta blockers still get very anxious.
83. Professor Pipe admitted that the written Decision does not refer to the graph evidence of the Athlete. Professor Pipe commented that despite absence of a referral to it in the Decision, all of the material provided by the Athlete was of significance in the decision making.
84. Professor Pipe agreed that the sentence in the Decision “[g]iven that there is no scientific evidence for a performance-enhancing effect of beta blockers on shooting in general, there is accordingly no evidence that there is a beneficial effect of Atenolol on the shooting performance in this Athlete” could have been better expressed. And that the opening words in that sentence up to the words “in general” should rather have been expressed as follows: “*There is no evidence that overall beta blockers always produce an enhancement in performance*”.
85. Professor Pipe acknowledged that there should have been a more specific reference to the fact that his Panel assessed the pre and post beta blocker performance in this Athlete. He could not recall whether the Panel consulted any expert in shooting to see whether graphs indicated any performance enhancement.
86. Professor Pipe told the Panel that if he now was making the decision alone whether or not to grant a TUE, he would be asking for more information because the points made by his colleagues Drs Lally and Monneyron were “*very valid*”. He also acknowledged that he would now be seeking to consult an expert in shooting to determine the significance of the comparative graphs of performance.
87. Professor Pipe acknowledged that the whole purpose of a TUE is for an individual to get an individualised consideration of their circumstances. The fact that nowhere in the Decision is there any mention of the Athlete’s individual circumstances Professor Pipe explained as “*an error of omission*”.
88. Professor Pipe was asked what words he would add, if any, to the précis of evidence set out in the first bullet point at paragraph 80 of the Answer which says “*that the scientific literature does not allow the conclusion that a shooter’s performance will necessarily benefit from the administration of Atenolol*”. Professor Pipe said that the phrase “but has a remote possibility of doing so” is all he would add to that statement.

89. Professor Pipe agreed that the only evidence of performance enhancement or otherwise in the present case are the Athlete's performance statistics in the form of the graphs. Professor Pipe agreed that he has not the expertise to analyse those statistics. Professor Pipe agreed that it would have been very useful to have information about pre and post heart rate figures
90. Professor Pipe pointed out that Atenolol is cardio specific and therefore highly unlikely to have an effect on tremor.
91. Professor Pipe indicated that he would still defend the decision of the WADA TUEC "on the basis of the evidence before us".
92. Professor Pipe argued that if someone is in fact having ventricular fibrillation, ICD is far more effective than beta blockers. There are some places in the world, where clinical guidelines may not be at the forefront of medical practice, where doctors might, in the circumstances of this particular case, provide treatment by way of an ICD rather than beta blockers. Sports issues aside, Professor Pipe cannot think of any proper guidelines to the effect that ICD would be the first recommended treatment in a case like that of the Athlete unless there were problems with other treatments, such as repeated fainting by the athlete whilst on beta blockers.
93. Professor Pipe conceded that he cannot conceive of any reason why the Prohibited List Committee would take beta blockers off the Prohibited List.

Professor James I Hudson

94. He is fulltime Professor of Psychiatry at Harvard. He has had clinical care of psychiatric patients for over 30 years. Psycho pharmacological treatment is his main focus. He has over 30 years of experience in scientific research and holds a doctorate in Epidemiology. He has reviewed the relevant scientific literature, most particularly in respect of individuals with heightened anxiety pre and during performance.
95. Professor Hudson told the Panel that beta blockers have the effect of reducing anxiety. The studies have looked especially at the cases of public speakers and professional musicians. Some studies showed some detrimental effects but, on average, there is clear evidence of overall performance enhancement. The studies show that 25% of professional musicians use beta blockers for their most challenging performances. Professor Hudson prescribes beta blockers regularly for performance anxiety. He regards it as a first line treatment in such cases. In his experience individuals taking beta blockers become more confident over time; they have much less anticipatory anxiety because they know or believe in advance that come the time to perform the beta blockers will stop them from feeling anxious. Hence they do not feel "anxious" in advance.
96. Professor Hudson was asked about the statistical graph type evidence produced by the Athlete. He was damning as to its evidentiary value. He said that it is virtually valueless scientifically. It is non-experimental and reflects changes in real world conditions over a period of time. There are obviously a myriad of factors affecting shooting performance. The comparison with data

from another competitor is also useless. Even though the studies relied upon by the ISSF TUEC are not new, the science behind them is sound and in line with contemporary evidence.

97. In Professor Hudson's view:

(a) Beta blockers confer performance enhancing effect, on performance and anticipatory performance, and in respect of tremor and heartbeat.

(b) Neither the Respondent nor the Athlete has provided credible evidence to suggest that there is no performance enhancement on Athlete's part.

98. Professor Hudson agreed that not every individual will get a performance enhancing effect. He also agreed that some beta blockers are more apt to reduce tremor than others, though he conceded less expertise on that discrete topic and would defer to the opinion of a cardio vascular expert such as Professor Pipe. There is no completely objective measure of anxiety. He agreed it would be "a challenge" to prove non-reduction in anticipatory anxiety.

99. Professor Hudson said that his conclusions are based on scientific certainty which means on a balance of probabilities or with a greater than 50% chance. His opinions did not change if "Atenolol" is substituted for "beta blockers" in the evidence he gave. He said that Atenolol reduces tremor but reduces tremor less than other beta blockers.

100. In his opinion on average it is far more likely a shooter's performance would improve after the administration of Atenolol. There is overwhelming evidence of beta blockers reducing anxiety.

IV. SUBMISSIONS OF THE PARTIES

A. The Appellant's submissions

101. The Decision is based on the Respondent's TUEC's erroneous statement that Atenolol is not performance enhancing in shooting "in general". This assertion is flawed in the following two ways: (1) beta blockers (including Atenolol) are included on the WADA 2013 Prohibited List, a mandatory International Standard under the WADACode; and (2) Article 4.3.3. of the WADA Code states that the inclusion of any substance on the Prohibited List (because it is performance-enhancing or has the potential to be performance-enhancing) cannot be challenged by any party.

102. Furthermore, the Decision bases its reasons on WADA's misguided opinion that the ISSF has failed to establish clear scientific evidence of any distinct capacity of beta blockers to enhance performance in shooting sport. Based on its inclusion on the Prohibited List and the Respondent's own rationale for a substance's inclusion on the Prohibited List, the Appellant certainly does not have the burden of proving to the WADA TUEC that beta blockers have a performance enhancing effect on shooters.

103. Additionally, by unilaterally asserting that the existing scientific evidence on the performance enhancing effect of beta blockers on shooters is “insufficient”, WADA contradicts its own position as illustrated in previous prior CAS jurisprudence as well as its own long-standing justification for the inclusion of beta blockers on the Prohibited List. Moreover, WADA had reached its Decision without even mentioning the scientific evidence provided by the ISSF.
104. Besides these errors of law, the WADA TUEC fails to even consider whether the Athlete has fulfilled her burden of proving that she satisfies the mandatory International Standard for Therapeutic Use Exemptions (ISTUE) requirements for the granting of a TUE. In fact, the Athlete has not satisfied this burden.
105. Finally, because the Athlete did not submit conclusive evidence to prove that the requested use of Atenolol “*would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal health*” she failed to satisfy Article 4.1.b) of the ISTUE and therefore, her TUE had to, and has to, be denied.

1. *Performance enhancing effect of beta blockers in shooting sport*

106. The statement made by the WADA TUEC that Atenolol is not performance enhancing in shooting sport *in general* – despite the fact that it is a prohibited substance according to the 2013 Prohibited List – is flawed.

2. *The Prohibited List*

107. Section P.2 of the 2013 Prohibited List as an International Standard states that beta blockers are prohibited both in-competition and out-of-competition in shooting sport. Article 4.3.3 of the WADA Code states that WADA’s final determination of the substances on the Prohibited List is not open to challenge or review.
108. In accordance with Article 4.3.1 of the WADA Code, a substance will be included on the Prohibited List if, *inter alia*, but most significantly, WADA determines that the substance has the potential to enhance or enhances sport performance.
109. Beta blockers have been on the WADA List of Prohibited Substances because of their performance-enhancing effect on shooters (and all other athletes practicing accuracy sports), since the list was first published by WADA in 2003. Before then, beta blockers were prohibited in shooting sport under the IOC Medical Code.
110. While they are on the Prohibited List, beta blockers are not a threshold substance for which a quantitative analysis is possible under the International Standard for Laboratories. This means that once a TUE for a beta blocker is granted, it is impossible for a laboratory to verify the dosage in which an athlete is taking the substance in the likely event that an adverse analytical finding is reported by a WADA-accredited laboratory following doping control.

3. *The performance-enhancing benefits of beta blockers in shooting sport*

111. The performance-effect of beta blockers in shooting sport – in contrast to other sports – derives from the unique components of practicing high performance shooting sport, which are, *inter alia*, the following: First, high performance shooters are remarkably skilled at firing shots between heartbeats. Faster heart rates due to nervousness and competition pressure make it more difficult to do this. Secondly, high performance shooting results are directly correlated to the stability or hold-movements of the rifle or pistol. A major component of stability of hold-movements is muscle tremor (hand and arm in pistol, upper torso and hand in rifle). Nervousness and competition-pressure increase tremors. Dr Jean-Emmanuel Monneyron, the Appellant’s expert witness has corroborated and provided greater insight into the skills needed in shooting.

112. The effect of beta blockers like Atenolol are explained on the website www.medecinenet.com as follows:

“Atenolol is a beta-adrenergic blocking agent that blocks the effects of adrenergic drugs, for example, adrenaline or epinephrine, on nerves of the sympathetic nervous system. One of the important functions of beta-adrenergic stimulation is to stimulate the heart to beat more rapidly. By blocking the stimulation of these nerves, atenolol reduces the heart rate and is useful in treating abnormally rapid heart rhythms. Atenolol also reduces the force of contraction of heart muscle and lowers blood pressure. By reducing the heart rate, the force of muscle contraction, and the blood pressure against which the heart must pump, atenolol reduces the work of heart muscle and the need of the muscle for oxygen”.

113. In other words, Atenolol is capable to help shooters to slow down their heart rate, which makes firing between the heart rates easier and therefore, can lead to an enhancement of the shooter’s performance.

114. The web site www.helpguide.org provides additional insight on some of the uses of beta blockers:

“Beta blocker medications for anxiety”

Beta blockers are a type of medication used to treat high blood pressure and heart problems. However, beta blockers are also prescribed off-label for anxiety. Beta blockers work by blocking the effects of norepinephrine, a stress hormone involved in the fight-or-flight response. This helps control the physical symptoms of anxiety such as rapid heart rate, a trembling voice, sweating, dizziness, and shaky hands.

Because beta blockers don’t affect the emotional symptoms of anxiety such as worry, they’re most helpful for phobias, particularly social phobia and performance anxiety. If you’re anticipating a specific anxiety-producing situation (such as giving a speech), taking a beta blocker in advance can help reduce your “nerves”.

115. Joseph Wegmann, R.Ph., LCSW, a licensed clinical pharmacist and a clinical social worker with more than thirty years of experience in the field of psychopharmacology, echoes this

statement in his article “Treating Performance Anxiety with Beta Blockers” (<http://www.pharmatherapist.com/treating-performance-anxiety-with-beta-blockers>):

“In psychiatry, beta-blockers are used in the treatment of anxiety disorders with manifestations such as palpitations, sweating and tremor. As such, performance anxiety that may affect public speakers, musicians or those taking an examination seem to be well suited for beta-blocker treatment. These medications may be taken as needed approximately one to two hours prior to a stressful event. When use is carefully monitored, side effects are generally mild and include weakness, tiredness and possibly bradycardia (slowed heart rate)”.

116. As stated by Brian Brennan, M.D., Associate Director, Translational Neuroscience Research, McLean Hospital:

“... beta blockers tend to be used most frequently in situations where there is performance anxiety or public speaking anxiety situation and they work primarily by actually blocking the physical manifestations of anxiety, so they have very little effect on the emotional sense of anxiety. But what they do is help with things like tremors and palpitations and shortness of breath, and sweating and the physical symptoms people experience when they’re in anxiety inducing situations. So in that way they can actually make people much more functional, much more able to tolerate these types of situations that cause a lot of anxiety for them”.

117. The ability to calm nerves and to reduce anxiety and physical tremors is beneficial to any shooter when faced with a high-pressure situation in the moments of actual competition.

118. In support of Dr Brennan’s statement, the ISSF refers to a similar statement of Franklin Schneider, M.D., a research psychiatrist in the Anxiety Disorders Clinic at the New York State Psychiatric Institute and a professor of psychiatry at the Columbia University College of Physicians and Surgeons, who says:

“Taken an hour before a performance, beta blockers will reliably decrease symptoms like a pounding heart and a trembling voice or hands”.

119. At the WADA Symposium in Lausanne, Switzerland on 13-14 April 2010, Anti-Doping Norway was invited by WADA to present a study on the need for a risk assessment in the process of planning doping controls. The study, approved by WADA, concluded that:

“the effect of beta blockers on psychomotor parameters, which are crucial in most aiming sports, is more or less unchallenged. The effect of beta blockers will thus:

- *not improve endurance*
- *not improve force-generating capacity*
- *improve performance in aiming sports”.*

Anti-Doping Norway's corresponding PowerPoint presentation refers to beta blockers as performance-enhancing substances in aiming sports which, like shooting, involve aiming.

120. Therefore, the Appellant submits that the use of the Atenolol provides the Athlete with both physical performance enhancing benefits and mental performance enhancing benefits. This submission has been supported by the Appellant's three expert witnesses: Dr. Jean-Emmanuel Monneyron, Dr. James Michael Lally and Professor James I. Hudson.

4. *Scientific research evidence for the performance enhancing effect of beta blockers*

121. The performance enhancing effect of beta blockers in precision sports like shooting sport has been confirmed in ample scientific articles which include but are not limited to:

- *'Beta blockade used in precision sports - effect on pistol shooting performance'* conducted by the Institute of Medical Physiology at the University of Copenhagen (the American Physiological Society, February 1986);
- A 2008 study published in the British Journal of Pharmacology *'The Rush to Adrenalin: Drugs in Sport Acting on the B-adrenergic system'* by E Davis, R Loiacono, and R J Summers, Department of Pharmacology, Monash University, Clayton, Victoria, Australia;
- *'The Influence of muscle tremor on shooting performance'* by Martin Lakie, Experimental Physiology 95.3, 2010, p. 441-450,

122. In 2009, in an appeal proceeding before the CAS (CAS 2009/A/1948) WADA relied on these same journal articles as scientific references to successfully argue and show that beta blockers were performance enhancing in the sport of shooting.

123. The *CAS 2009/A/1948* case also involved a TUE application by a shooter for the use of a beta blocker. In that case, the athlete appealed a WADA TUEC decision confirming an International Paralympic TUEC decision to deny him a TUE for the use of a beta blocker. the athlete was a 56 year-old Paralympian who had already suffered two heart attacks and undergone double by-pass and open heart surgery.

124. In the *CAS 2009/A/1948* case, the reasons given by the WADA TUEC for reaching its conclusion that the requirements of Article 4.3 (now 4.1 b) of the ISTUE had not been fulfilled are set out as follows and closely mirror those of the ISSF TUEC in the case at hand:

"Considering the numerous publications and the scientific literature suggesting a significant improvement of sport performance in activities requiring precision and accuracy, such as shooting, by the use of different beta blocking agents. In these studies, it was demonstrated that shooting scores were significantly improved. The enhancement was not only correlated in changes in heart rate or systolic blood pressure, suggesting that the improved performance also results from decreased hand tremor and anxiolytic effects. It is therefore

strongly speculated that peripheral rather than central blockade, contributes to the beneficial effect” (see para. 89).

125. In that case, the WADA successfully argued before CAS that beta blockers were performance-enhancing substances in shooting because of their ability to slow the heart rate and reduce hand tremors. Accordingly, the athlete did not meet his burden of proving that his use of the beta blocker did not provide additional enhancement other than that which might be anticipated by a return to a normal state of health.
126. In the *CAS 2009/A/1948* case, the Respondent presented ample scientific references dated in the 1970s, 1980s and 1990s which all supported the conclusion that beta blockers are undeniably performance-enhancing in shooting sport.
127. The World in Sport Science website was considered to provide reliable information by the WADA TUEC members in the *CAS 2009/A/1948* case, and the ISSF agrees. As stated at para. 91 of the *CAS 2009/A/1948* Award:

“As a result of ingesting beta-blockers, arteries become wider. This is beneficial particularly if an individual has a heart problem since the hearts demand for oxygen and blood is reduced and does not have to work as hard to pump blood through the body. As well, artery dilation can relieve chest pain (angina), irregular heart beat, glaucoma, lessen the occurrence of migraines and even reduce nerve-including muscle twitches and shaking. The calming effect of beta blockers on muscle action has made the drugs as a popular, although illegal, choice of some athletes whose performance depends on balance (such as gymnastics) or a steady hand (archery, shooting and biathlon)”.

128. In other research materials cited at Par. 92 of the *CAS 2009/A/1948* case, namely the 1997 SportsMed. Report, it is recorded, *inter alia*, that:

“Beta-blockers have been found to reduce heart rate and tremor and to improve performance in sports that are not physiologically challenging but require accuracy (e.g. pistol shooting)”.

129. Similarly, citing the 2008 report in the British Journal of Pharmacology in, paragraphs 93 and 94 of the *CAS 2009/A/1948* case it is stated that:

“Beta-AR antagonists (beta-blockers) are used in sports that require steadiness and accuracy, such as archery and shooting, where their ability to reduce heart rate and muscle tremor may improve performance”.

“Beta-AR antagonists are widely used therapeutically to treat heart failure, high blood pressure, cardiac arrhythmias, angina and glycoma, but they have also been used illicitly in sport to reduce tremor, particularly in pistol shooting and motor racing. (The World Anti-Doping Code and in particular the 2008 Prohibited List International Standard)”.

130. In the *CAS 2009/A/1948* case, the CAS Panel sided with WADA and the International Paralympic Committee by denying the athlete’s TUE application.

131. It is interesting, even disquieting, that the Decision in this case makes no reference to the *CAS 2009/A/1948* award or its reasons.

5. *WADA concluded erroneously that the Athlete satisfied the requirements of Article 4.1 of the ISTUE.*

132. The WADA conclusion that the Athlete has satisfied the requirements for a TUE pursuant to Article 4.1 ISTUE is incorrect because:

(i) the WADA TUEC determined that there is no performance-enhancing effect of beta blockers on shooters “*in general*”, in complete contradiction to the Prohibited List, and

(ii) the WADA TUEC did not further examine whether the use of the Atenolol would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal in the individual case of the Athlete as prescribed by Article 4.1.b) of the ISTUE.

6. *Respondent’s erroneous statement regarding the general performance enhancing effect of beta blockers in shooting sport*

a. Performance enhancing effect of beta blockers according to the Prohibited List

133. The Panel of the WADA TUEC concluded that the Athlete fulfilled the Requirements of Article 4.1.b) of the ISTUE as follows:

“Given that there is no scientific evidence for a performance-enhancing effect of beta-blockers on shooting in general, there is accordingly no evidence that there is a beneficial effect of Atenolol on the shooting performance on this athlete” (emphasis added).

134. This conclusion is at odds with Article 4.3.3 of the WADA Code and Article 4.3.1. of the ISSF ADR.

135. According to Section P2. of the 2013 Prohibited List, beta blockers (including Atenolol) are prohibited in shooting sport both in-competition and out-of-competition. As already stated the consequence of the specification of Atenolol as a Prohibited Substance in shooting sport is explained in Article 4.3.3 of the WADA Code and Article 4.3.1. of the ISSF ADR as follows:

“The classification of substances into categories on the Prohibited List is final and shall not be subject to challenge by an Athlete or other Person based on an argument that the substance [...] did not have the potential to enhance performance” (emphasis added).

136. Therefore, the WADA TUEC could not properly declare Atenolol as non-performance enhancing in shooting sport. As long as Atenolol is a prohibited substance according to the Prohibited List, its performance-enhancing effect or potential performance-enhancing effect cannot be challenged by any person, including the WADA TUEC.

137. The conclusion by the WADA TUEC contradicts the WADA Code, the ISTUE and the Prohibited List and all the principles behind the World Anti-Doping Program.

138. It is a consequence of the WADA Code as has been confirmed by CAS that:

“The TUE procedure is (thus) exclusively a method by which the athlete may request an individual exception to the principle of the prohibition; this exemption is based on individual and specific data and motivations (see CAS 2009/A/1948, para. 81)”.

139. With respect to Article 4.1.b) of ISTUE, the Decision does not mention or consider any “individual” and/or “specific” data of the Athlete. On the contrary, it provides a blanket statement that beta blockers are not performance-enhancing in shooting sport. This conclusion cannot be upheld as long as this substance is on the Prohibited List.

140. How would the ISSF be able to explain to a shooting athlete facing a two-year ban as a result of an anti-doping rule violation for the use of a beta blocker that another athlete has been allowed to use this substance because the WADA TUEC has unilaterally determined – in clear contradiction to its Prohibited List and to the principle of harmonization which is at the heart of the World Anti-Doping Program – that beta blockers are not performance-enhancing?

141. The Decision must be set aside because it violates Article 4.3.3 of the WADA Code and Article 4.3.1. of the ISSF ADR, not to mention the fundamental rationale behind the fight against doping in sport.

b. Beta blockers have a performance enhancing effect in shooting-sport

142. The Appellant notes that in light of Section P2. of the 2013 Prohibited List and Article 4.3.3 of the WADA Code, the ISSF does not have the burden to prove that beta blockers are performance-enhancing in shooting sport. The ISSF has nonetheless chosen to provide comprehensive evidence of this established performance-enhancing effect in order to bring finality to this argument.

143. The WADA TUEC stated in the Decision that the literature made available to it by the Appellant for the performance-enhancing effect “*has to be considered as insufficient to constitute any claim of general performance enhancement*”. The WADA TUEC apparently was of the mistaken belief that the ISSF had the burden of proving that beta blockers have a performance-enhancing effect in shooting sport. Yet, because beta blockers have been on the Prohibited List since 2003 solely because of their known performance-enhancing effect in shooting sport, the WADA TUEC statement was fatally flawed.

144. Additionally, the WADA TUEC did not even mention the scientific articles on the performance-enhancing effect of beta blockers in shooting sport submitted to it on request by the Appellant on 24 October 2013. One of the main arguments in the flawed Decision’s conclusion that beta blockers are not performance-enhancing is that the scientific articles which the WADA TUEC had in hand were outdated, “*with the most recent publication being 27*

years old". Yet, the Decision does not mention, and the WADA TUEC seemingly did not consider, any of the journal articles submitted to the Respondent on 24 October 2013 by Dr. Lally. (For completeness, it should be noted that those articles were the only articles submitted by the ISSF to WADA).

145. Dr. Lally, Chairman of the ISSF TUEC, has asserted that the performance-enhancing benefit provided by beta blockers cannot be disputed. He also has stated that it is not purely a cardiac issue. Certainly, the heart rate is reduced, but the other ancillary effects of beta blockers on humans, namely the reduction of hand tremors, a calming of nerves, and a reduction of performance anxiety also serve as evidence of the many benefits that beta blockers can bestow on shooters. That is why they are on the Prohibited List.

c. CAS jurisprudence

146. The ISSF emphasizes that the WADA position on the performance-enhancing effect of beta blockers prior to the Decision has long been established.
147. The ISSF relies on CAS 2007/A/1395 in which WADA appealed a decision of the National Shooting Association of Malaysia involving the use of beta blockers. In the award in para. 70 Dr. Olivier Rabin, the WADA Science Director, is quoted as follows:

"Propranolol [a beta blocker] is a prohibited substance described as a non cardiac selective beta-blocker. Propranolol is used to manage hypertension, myocardial infarctions, cardiac arrhythmias and prophylaxis of migraines. It can be used to alleviate anxiety disorders and tremors. (...) the use of Propranolol for a Shooter would have a calming effect by significantly reducing the tremor of the hands, leading to significantly enhanced precision in the act of shooting".

148. Later in CAS 2007/A/1395 at para. 75, the Respondent is quoted in subpar. 1. as follows:

"Propranolol enhances performance in shooting The nature of the substance may play a role in establishing the intention of the athlete to enhance his/ her sport performance. An athlete is obviously more likely to intend to enhance his/ her sport performance by taking a substance capable of doing so than by taking one not capable of doing so ...".

149. Accordingly, the CAS Panel in CAS 2007/A/1395, concluded at para. 77:

"... that the performance enhancing effects of Propranolol in shooting cannot be ignored".

150. It should be noted here, that Propranolol and Atenolol are both similar beta-adrenergic blockers and have similar effects on the human body (also see the Section P2. of the 2013 Prohibited List. Therefore, any suggestion that the CAS 2009/A/1948 and CAS 2007/A/1395 cases are irrelevant to the case at hand because they involve Propranolol, not Atenolol, should be disregarded and rejected.

151. The *CAS 2009/A/1948* case, which also involved a review by WADA of a denied TUE for the use of a beta blocker, is even more in point. There, WADA explicitly argued that beta blockers were performance-enhancing in shooting because of their ability to slow the heart rate and to reduce hand tremors (see para. 48 *et seq.*).
152. The WADA TUEC Decision fails to mention or refer to the ample scientific evidence brought forward by WADA itself in the *CAS 2009/A/1948* case, in arguing that beta blockers are not performance-enhancing in shooting.
153. Therefore, the Decision must be set aside because the performance-enhancing effect of beta blockers in shooting has been recognised by everyone in the sports world, including WADA and CAS.

d. Additional shortcomings of the Decision

154. The WADA TUEC faults the ISSF for not having cited all of the scientific studies that it has long been aware of and on which it based its Decision.
155. Yet, the ISSF is not aware of the obligation for any TUEC to cite all the scientific articles relied upon when rendering its decisions. This is especially true when addressing the performance-enhancing effect of a substance that is already included on the Prohibited List.
156. Further, echoing this position, the WADA expert witness, Dr. Jenoure, (Crossklinik Merian Iselin Spital Fohrenstrasse 2, 4009, Basel, Switzerland), a specialist in sports medicine and the Chair of the WADA TUEC at the time said at par. 90 of the *CAS 2009/A/1948* case:

“... I approached my role on the TUEC as its Chair as being a person of medical expertise and that I could rely on that expertise without having to state in the decision the particular published work and scientific literature that are known or researched for the decision”.

157. The CAS Panel accepted that position at par. 109 and again at par. 112 of the *CAS 2009/A/1948* case:

“That said, we do consider it permissible for the Committees considering TUE applications, measured against the applicable published International Standards criteria, to refer generally to medical and scientific literature and studies which are publicly available and which one or other or both of those Committees may consider relevant and persuasive to a considered and reasoned point of view. There is, in our view, nothing inherently unsatisfactory or unfair about the WADA TUEC in this case referring to such studies as being amongst the body of knowledge possessed by them and relied upon by them for reaching their conclusion”.

158. The ISSF certainly agrees with this reasoning. The ISSF TUEC members did not feel the need to cite all of the studies and journal articles relied upon in their decision to deny the Athlete's TUE. They relied on their own expertise and long-established knowledge, be it medical, scientific, historical, or personal, of the effect of beta blockers on shooters.

159. The WADA TUEC also faults the ISSF for basing its decision to deny the TUE on outdated articles and outdated peer reviews. Oddly, the “outdated” articles that the WADA TUEC cited in the Decision were not even provided by the Appellant.
160. Strikingly, while on the one hand, the Decision faults the ISSF TUEC for failing to bring forth “sufficient” scientific evidence to prove something that did not need to be proven; on the other hand, it does not provide any new scientific evidence to justify its bold and ostensibly biased statement that beta blockers are not performance-enhancing in shooting.
161. Needless to say, the ISSF did not trouble to pass along all the scientific literature it relied upon and that had been cited and relied upon by WADA in the *CAS 2009/A/1948* case. The Appellant assumed that the Respondent would, at the very least, have knowledge of it.

7. *The Athlete’s TUE application must be denied*

162. The ISSF’s evidence and expert witnesses confirm what is already reflected and established in the 2013 Prohibited List (and every Prohibited List since the creation of WADA): (i) that the use of beta blockers is prohibited both in-competition and out-of-competition in shooting sport because they are performance-enhancing and (ii) what is already reflected and established in the ISTUE: that in order to be granted a TUE for the use of a beta blocker, an athlete must satisfy all four ISTUE criteria.
163. The Athlete’s TUE application must be denied because she did not satisfy her burden of meeting the four ISTUE criteria required in order to grant her a TUE and, the ISSF’s appeal must succeed because the WADA TUEC failed to examine whether the Athlete has, in fact, satisfied the requirement of Article 4.1.b ISTUE.

a. The Athlete has the burden of proof for her entitlement to a TUE

164. In par. 81 of the *CAS 2009/A/1948* case, the CAS Panel accurately analysed the burden of proof relating to TUEs and reached the following conclusion:

“It is clear that it is for the athlete to establish his or her entitlement to a TUE exemption before each and any of the relevant TUE Committees”.

165. Here, the CAS Panel must equally examine whether the evidence provided by the Athlete leads to the conclusion that her use of beta blockers:

“would produce no additional enhancement of performance other than that which might be anticipated by a return to a state of normal health” (see Article 4.1.b) ISTUE).

b. Evidence provided by the Athlete is not conclusive

166. The Athlete did not provide conclusive evidence that the prescribed Atenolol has no additional performance-enhancing effect other than that which might be anticipated by a return to a state of normal health (see Article 4.1.b) ISTUE).
167. Beta blockers are prohibited in shooting sport because they provide an unfair advantage to any athlete using them over every other athlete competing in the same category. The beneficial use of a beta blocker by an athlete does not provide for an even playing field.
168. The Athlete provided no evidence at all before the ISSF TUEC in order to satisfy the requirement of proving that her use of the Atenolol does not provide her with an advantage.
169. In her request to the WADA TUEC she has provided a series of tables which claim to show that she sometimes performs better without the use of beta blockers.

These tables were not submitted to the ISSF TUEC along with the Athlete's initial TUE application. These tables also seem to not have been considered by the WADA TUEC. Therefore, in accordance with Article 10 of the ISTUE, which provides that a TUE Review Committee should only consider documents submitted with the initial TUE application, and because the WADA TUEC had not requested this additional information in accordance with Article 8.10 of ISTUE, the Athlete's tables should not, in any event, have been accepted as part of the WADA TUE Review and should also not be accepted by the CAS.

170. However, irrespective of that procedural objection, the evidence allegedly provided by these tables is not credible. Given the day-to-day variations in scores that any one shooter would have with or without the use of a beta blocker, and without the information as to whether the Athlete has or has not taken a beta blocker, no researcher, statistician or medical expert could make responsible decisions on the limited information provided by these tables.
171. The scant evidence brought forward by the Athlete is not conclusive and is not sufficient for a Panel to be comfortably satisfied that her individual use of a beta blocker has not provided or will not provide performance-enhancing benefits.
172. The only evidence that the Athlete provided regarding her assertion that her performance was not enhanced by her use of the Atenolol are tables of shooting sport results allegedly showing that she sometimes performs better without taking beta blockers. This evidence alone cannot lead to the conclusion that all the aforementioned benefits of beta blockers on shooters have not or will not positively influence the Athlete's individual performance.
173. The Athlete must satisfy the requirement of Article 4.1.b) ISTUE that her therapeutic use of Prohibited Substance does not and shall not provide performance enhancement beyond a state of normal health. She has not discharged this burden.

174. In *CAS 2009/A/1948* at par. 118, the Panel similarly found that, regarding his use of beta blockers, the athlete had *“not discharged the burden resting upon him to establish his entitlement to a TUE”*.
175. Notwithstanding the fact that the athlete had provided concrete evidence using a Holter monitoring test which demonstrated that his heart rate was not influenced by the use of beta blockers, the Panel ruled that he failed to meet his burden of proof because he failed to show that his use of the beta blocker had no influence on his hand tremors.
176. If the results of a verifiable monitoring test provided insufficient and inconclusive evidence for the CAS Panel to conclude that Article 4.1.b) ISTUE was satisfied in *CAS 2009/A/1948*, then, certainly, the tables submitted by the Athlete here cannot qualify as conclusive or convincing evidence that all of the possible performance-enhancing effects of beta blockers have had no impact on the Athlete’s shooting performance or may not be beneficial to the Athlete’s shooting sport performance in the future.
177. Therefore, the evidence provided by the tables neither shows that the use of the Atenolol currently does not provide the Athlete with an advantage nor that its use may not provide or potentially provide performance enhancement at any point in the future.
178. On the contrary, at the European Junior Championships, the Athlete scored a 208.5, won a gold medal with a score which was higher than the winner of the (senior) women’s Open 10m Air Rifle category which was 208.3. Only one year before in the European Junior Championship in 2012, she had placed 58th.
179. Given such outstanding results for such a young shooter with only a few years of experience, it is hard to deny that the use of the Atenolol may have had a direct beneficial effect on her shooting performance.
180. Based on the medical and scientific evidence presented above, it would be equally hard to deny the comfort that the Athlete has in knowing at the moment of competition that: her tension is lessened, her nerves are calmed, her anxiety is reduced and hand tremors will not be a factor while competing, would also be beneficial to her overall performance.
181. Therefore, over and above the cardiac element, both by (1) calming nerves, tension and anxiety in what is undoubtedly a very stressful sporting discipline which requires complete focus and relaxation and (2) by reducing physical tremors which is also obviously of immense benefit in accuracy disciplines, the use of beta blockers by the Athlete produces an additional enhancement of performance other than that which might be anticipated by return to a state of normal health following the treatment of a legitimate medical condition. As stated and as has been confirmed by each of the ISSF’s expert witnesses, this enhancement will occur because a reduced heart rate, a calming of the nerves, of tension and of anxiety and a reduction in hand tremor, and other physical tremors, may be felt in all cases even though the performance-enhancing effect of a beta blocker on each individual shooter will vary depending on the individual, his or her condition, the type of beta blocker prescribed and the prescribed

dosage. In this case, the use of the beta blocker would place the Athlete at an unfair advantage over every other competitor in her discipline. So, the TUE must be denied.

182. It must be noted that the ISSF has always been and remains sympathetic to the Athlete's unfortunate situation. However, in order to protect the integrity of shooting sport and of its Anti-Doping Program and in order to respect and safeguard the right of all shooting sport athletes to compete against each other on an even playing field, the ISSF, as a signatory to the WADA Code, bears the important responsibility of properly applying all the mandatory elements of the World Anti-Doping Program. Although the outcome is indeed regrettable for the Athlete, the Appellant remains confident that it has rightly fulfilled its responsibilities and obligations under the WADA Code and the ISTUE by objectively denying the Athlete's TUE request for the use of the prohibited beta blocker.

B. The Respondent's submissions

183. ISSF notes that the Athlete placed first in the 10 Meter Air Rifle competition at the 2013 European Junior Championship and 58th at the same championship in 2012. The inference ISSF seeks to draw is that the Athlete's victory at the 2013 championship is an abnormally good result which can only be due to her atenolol treatment. Not only is this inference no more than speculation, but WADA also fails to understand the underlying logic; as the Athlete began the beta-blocker treatment in March 2011, she would have been taking beta-blockers at both the 2012 and the 2013 European Junior Championships.
184. ISSF also states that the Decision does not refer to any of the articles provided by Dr. Lally to the WADA TUEC. In fact, the Decision explicitly refers two of the articles sent (or cited) by Dr. Lally, namely the studies by *Kruse et al.* and *Antal LC & Good CS*.
185. The references provided in Decision were intentionally limited to the empirical studies examining the effects of beta-blockers on shooting performance (including, but not limited to, the two studies provided or referenced by Dr. Lally). Indeed, it is clear from their content that the bullet point comments of the WADA TUEC on pages 6 and 7 of the Decision are limited to these empirical studies.
186. Whereas the WADA TUEC considered that these empirical studies of the effects of beta-blockers on shooting performance were more pertinent than other articles provided by Dr Lally (*e.g.* the articles on the effect of beta-blockers on stage fright in musicians), the omission of such articles from the references provided on page 6 of the Decision does not mean that these other articles were not considered.

a) TUE conditions - General

187. In order for an athlete to be granted a TUE, he/she must meet the four conditions set out article 4.1 (a) - (d) of the IS TUE. WADA accepts that Ms Ungerank bears the burden to establish that each of these conditions is met.

188. WADA submits that, as no higher standard of proof is specified in the IS TUE (or elsewhere), Ms Ungerank must meet her burden of proof on the balance of probabilities. Indeed, article 3.1 of the World Anti-Doping Code, although not strictly applicable in this instance, requires that persons alleged to have committed an anti-doping rule violation must establish facts on the balance of probabilities.
189. Ms Ungerank is not a party to these proceedings. If the Panel considers that, notwithstanding her absence, it may grant the relief requested against her, WADA effectively assumes Ms Ungerank's burden of proof in its role of defending the decision of the WADA TUEC.
190. The ISTUE includes in its Introduction the following comment:

"The Standard will be applied according to an individual's circumstances. For example, an exemption that is appropriate for an Athlete with a disability may be inappropriate for other Athletes".
191. This case-by-case approach, which focuses on the individual circumstances of the athlete concerned, has been endorsed by CAS on a number of occasions. For example, in the case of *CAS 2004/A/769*, the Panel stated at paragraph 46:

"The TUE procedure is (thus) exclusively a method by which the athlete may request an individual exception to the principle of prohibition; this exemption is based on individual and specific facts and motivations".
192. In the case of *CAS 2009/A/1948*, the Panel found that it was essential to consider *"the specific matters particular to the athlete, his or her medical condition, or the full breadth of circumstances upon which the athlete relies for the TUE application. All relevant information must be considered, be it of general application or specific to the athlete"*.
193. The four conditions in the IS TUE are exhaustive; if they are met, there is no discretion on a TUEC to refuse to grant the TUE (see the *CAS 2009/A/1948* case; paragraph 78).
194. The *CAS 2009/A/1948* case also established that the scope of the review of the CAS Panel is not limited to the documents and evidence filed together with the TUE application. The Panel found that article R57 of the Code and the *de novo* nature of CAS proceedings entitled it to review additional material, which had not been placed before the body whose decision is the subject of the appeal.
195. In short, Ms Ungerank (or WADA in her stead) must satisfy the Panel on the balance of probabilities that the four TUE conditions are met. To that end, WADA may also rely not only on the evidence put before the ISSF TUEC and WADA TUEC but also on additional, relevant material. If WADA does satisfy the Panel that the four conditions are met, the grant of the TUE must be confirmed.

b) ISSF policy against granting TUEs for beta-blockers

196. Notwithstanding the requirement for an individual assessment of each TUE application, the ISSF had effectively pre-judged Ms Ungerank's case before it ever arose.

197. Article 445 of the ISSF ADR provides as follows:

"The ISSF shall never and under no special circumstances grant a TUE for the use of a beta-blocker to Athletes who compete or intend to compete at the international level" (emphasis added).

198. Article 4.4.5 ISSF ADR is a non-compliant regulation which goes against the very essence of the IS TUE and the TUE process, *i.e.* that exemptions from the general prohibition may be granted to specific individuals if the relevant conditions are met on the particular facts of their case.

199. The intransigence of the policy is evident from the tautological expression underlined above. It is clear that the ISSF will never give a TUE for beta-blockers, even in cases such as that of Ms Ungerank where an athlete satisfies all the conditions.

200. The decision of the ISSF TUEC was pre-determined by the ISSF policy enshrined at article 4.4.5 ISSF ADR. Indeed, the prejudice resulting from the blanket policy is evident in the decision of the ISSF TUEC:

(i) Ms Ungerank manifestly satisfies condition 4.1 (a) IS TUE. If Ms Ungerank did not take beta-blockers, her life would be endangered due to the risk of a cardiac arrest. Notwithstanding this fact, the ISSF TUEC held in its decision dated 12 September 2013 that the *"Athlete may have fulfilled the first criteria [sic] of the ISTUE – to some extent"* (emphasis added).

(ii) The ISSF TUEC also stated in its decision that *"the analysis of the ECG seems to show that the QT interval does not seem to be that long"*. This assertion is both unsubstantiated and misleading. There is no doubt that Ms Ungerank suffers from LQTS. Professor Pipe has explained that the length of Ms Ungerank's QT interval (which in any event varies over time) does not cast any doubt on her diagnosis.

(iii) The ISSF TUEC Panel considered that *"the fact that the athlete placed first and set a world record at her first junior international competition is evidence that the beta-blocker may offer and provide her with significant performance enhancing properties"*. As already mentioned, it is pure speculation to suggest that the world record performance is itself evidence that Ms Ungerank's performance was enhanced by beta-blockers.

201. Even if the ISSF TUEC ostensibly performed an analysis of the TUEC conditions (albeit a perfunctory one), it is very difficult to imagine that the conclusion (*i.e.* a refusal) was not foregone. Even in its Appeal Brief, the ISSF maintains the same rigid and absolute approach to the issue of TUEs for beta-blockers. For example, at paragraph 89:

“Beta-blockers are prohibited in shooting sport because they provide an unfair advantage to any athlete using them” (emphasis added).

202. It is important to stress that article 4-4.5 ISSF ADR only purports to bind the ISSF; in particular, it does not seek to prevent WADA from undertaking a proper assessment of the TUE application in view of the individual circumstances of the case, as required by the IS TUE. Indeed, article 4-4.7 of the ISSF ADR stipulates that WADA’s decision may reverse the ISSF’s decision to refuse a TUE *“if such decision did not comply with the International Standard for Therapeutic Use Exemptions”*.
203. Unlike the ISSF TUEC, whose discretion was necessarily fettered by article 4-4.5, the impartial WADA TUEC approached this case with no bias or political pressure. It had no reason to favour the ISSF or the Athlete. In the end, the highly experienced members of the WADA TUEC came to the conclusion that Ms Ungerank satisfied all four TUE conditions.

c) *Condition 4.1 (b) - Application*

204. Whereas the ISSF TUEC considered that (i) Ms Ungerank did not satisfy conditions 4.1(b) and 4.1(c) and (ii) condition 4.1(a) was only partially satisfied (whatever that means), the ISSF has chosen to base its appeal against the Decision entirely on condition 4.1(b) IS TUE.
205. Condition 4.1 (b) IS TUE is difficult to apply literally in this case. The Athlete is asymptomatic. The prohibited substance in question is not taken to mitigate or heal symptoms (as is envisaged by condition 4.1 (b) IS TUE) but to minimize the risk of a cardiac arrest. As she has no symptoms, Ms Ungerank’s condition does not negatively affect her performance.
206. Whereas Ms Ungerank (or her counsel) may not have done so, WADA will accept the most stringent application of condition 4.1(b) IS TUE: As Ms Ungerank’s condition does not negatively affect her health, she is required to demonstrate on the balance of probabilities that atenolol does not improve her performance.

d) *Empirical studies on effects of beta-blockers on shooting performance*

207. The view of ISSF appears to be that *all* beta-blockers enhance shooting performance in *all* athletes. This is presumably the reasoning underlying the blanket rule at article 4.4.5 ISSF ADR. WADA does not accept this position on the basis of the scientific evidence.
208. On the contrary, the scientific literature points to a significant divergence in the effects of beta-blockers on different individuals. Indeed, the *Clarkson and Thompson article* mentioned by ISSF states:

“Studies are needed to examine the effects of various doses in different individuals and to ascertain the reason for the large interindividual difference”.

209. The WADA TUEC considered five empirical studies (including two sent or cited by Dr. Lally) which examined the effects of beta-blockers on shooting performance. None of these studies resulted in improved shooting performance in all the test subjects and, in many cases, a significant percentage of the testing subjects fared worse after the administration of beta-blockers.

(i) In the *Gibbons & Philipps* study, the shooting performance of six test subjects was recorded after the administration of (i) 300mg of acebutolol (2-3 hours prior to the test) and (ii) a placebo. Of the six subjects, three scored worse after the administration of acebutolol (vis-à-vis the placebo).

(ii) In the *Siitonen L et al.* study, the shooting performance of twenty-four test subjects was recorded after the administration of (i) 40 mg oxprenolol (one hour prior to the test) and (ii) a placebo. One third of the shooters performed the same or better with the placebo as compared to with the beta-blocker). The study concludes that the more competent shooters did not benefit from the oxprenolol: “*The best effect of beta-blockade was found in shooters who were less experienced and competent than those that did not benefit from the beta-blockade*”.

(iii) In the *Sjongers JJ et al.* study, the shooting performance of 12 shooters was recorded after the administration of (i) 30ml alcohol (40 percent), (ii) 40 mg oxprenolol (30 minutes prior to the test) and (iii) a placebo: No significant difference was noted between the effects of the placebo, the alcohol and the beta-blocker. *Sjongers et al.* found that any ameliorative effect was due “*more than anything else to a placebo-type effect*”.

(iv) The *Antal LC and Good CS* study, conducted different tests with varying doses of beta-blocker on slow shooting and rapid fire pistol shooting:

- Slow shooting:
 - The performance of twenty test subjects was recorded after the administration (one hour prior to the test) of (i) 80 mg oxprenolol and (ii) a placebo. Four (out of the twenty) shooters performed worse on oxprenolol as compared to the placebo.
 - The performance of eighteen test subjects was recorded after the administration (one hour prior to the test) of (i) 40 mg oxprenolol and (ii) a placebo. Five (out of the eighteen) shooters performed worse on oxprenolol vis a vis the placebo.
- Rapid pistol shooting: The performance of twenty two test subjects was recorded after the administration (ninety minutes prior to the test) of (i) 40 mg oxprenolol and (iii) a placebo. There was no evidence of a material improvement in scoring on oxprenolol as compared to the placebo.

(v) In the *Kruse et al.* study, the shooting performance of thirty three test subjects was recorded after the administration of (i) 150 mg of metoprolol (50 mg on the morning of the test and 100 mg two hours prior to shooting) and (ii) a placebo. Of the thirty three

shooters, one third performed the same or worse on metoprolol. Interestingly, this study reached the opposite conclusion to *Siitonen* by finding that the more experienced and competent shooters benefitted more from the beta-blocker.

210. In order to achieve maximum impact, the individuals in these five studies were administered significant doses of beta-blocker in the hours prior to the test. Despite this fact, a number of individuals in each study performed worse after the administration of beta-blockers”. Indeed, the percentage of individuals performing worse was often significant: 50 (*Gibbons & Philipps*); 33 (*Siitonen et al.* & *Kruse et al.*).

e) *Uncertainty as to the reasons for any improvement*

211. If it is uncertain from the empirical studies what percentage of shooters would improve performance by using beta-blockers, the reasons for any improvement appear equally uncertain. In his review of the ergogenic potential of the substances and methods on the prohibited list, Mads Drange concludes

“Whether the performance enhancing effect is a result of reduced muscle tremor, reduced heart rate, or both, is still unclear”.

212. *Kruse et al.* noted that improvements were not apparently related to cardiovascular changes and speculated that hand tremor reduction might be the most likely cause. More particularly, hand tremor reduction was described as a *“likely candidate”* for the improvement.

f) *Different beta-blockers may produce different effects*

213. It must also be underlined that none of the empirical studies used atenolol. As the WADA TUEC noted in the Decision, beta-blockers are a heterogeneous group of substances and would not necessarily produce the same effects. By way of example:

- (i) It has been shown that only certain types of beta-blocker were effective in reducing tail tremors in rats. Hydrophilic beta-adrenergic receptor antagonists such as atenolol did not reduce the tail tremor. Conversely, non-selective and lipophilic beta-adrenergic receptor antagonists such as propranolol did suppress tail tremor.
- (ii) Studies have shown that atenolol is not as effective as other beta-blockers in reducing tremors:
 - In *Dietrichson & Espen*, atenolol failed to reduce tremor amplitude whereas timolol did effectively reduce tremors.
 - Similarly, *Jefferson et al.* found that atenolol was less effective in reducing tremor than propranolol and sotalol.

- The *S. Calzetti et al.* paper entitled “*Metoprolol and propranolol in essential tremor: a double-blind, controlled study states that “atenolol, a cardio-selective β drug, which therefore has preferential action on β -1 receptors, was found to be less effective than either propranolol or sotalol, two non-selective β blockers, on reducing the severity or tremor”.*”
- (iii) Even the papers provided by Dr Lally confirm that beta-blockers have differing characteristics and that atenolol, as a cardio-selective beta blocker, is less effective than other beta-blockers in terms tremor reduction:
- In the *Davis, Loiacono and Summers* paper, entitled “*The rush to adrenaline: drugs in sport acting on the B-adrenergic system*”, it is noted that atenolol is a selective β 1-Adrenoreceptor (AR) antagonist; that is to say that it acts only on β 1-ARs. Propranolol, on the other hand, is a non-selective beta-blocker which acts on both β 1-ARs and β 2-ARs. The paper notes that β 2-ARs have a wider distribution than β 1-ARs and control a wider variety of functions. In particular, the authors note that β 2-ARs promote tremor and that non-selective beta-blockers (which act on β 2-ARs) have been used in pistol shooting to reduce tremors (see pages 584-586 of the *Davis et al.* paper). The conclusion of the *Davis et al.* paper reiterates that the β 2-ARs are the “*most attractive drug target*”. Atenolol is a selective β 1-AR antagonist and, therefore, does not act on the β 2-ARs.
 - The *Lakie M.* paper, entitled “*The influence of muscle tremor on shooting performance*”, confirms that (i) it is β 2-agonists which increase tremor size (page 444) and (ii) “ *β 2-Blockers have a more potent tremolytic activity*” (page 447).

g) Side Effects of Beta-Blockers and hyper-responders

214. The literature clearly indicates that beta-blockers can cause serious side-effects which would be detrimental to shooting performance.
215. Even the literature produced by the ISSF mentions, *inter alia*, fatigue, dizziness, blurred vision, depression and muscle cramps.
216. In her letter to WADA requesting a review of the decision of the ISSF TUEC, the Athlete claimed that she suffered a number of side-effects including dizziness and circulation problems. Ms Ungerank’s medical records from May 2011 confirm that, in the early stages of her treatment, she suffered from tiredness and dizziness on a daily dosage of 2*25 mg.
217. In addition to the side-effects which atenolol engenders in certain individuals (including Ms Ungerank), it results from the literature produced by the ISSF that hyper-responders to beta-blockers may perform worse as they would lack the sufficient “anxiety” to perform well (see paragraph 2.1.2 of the *Clarkson & Thompson* paper, referred to at section B. of the Decision).

h) Conclusion on relevant scientific literature

218. A review of the relevant literature permits the following findings:
- a. In the studies directly measuring the effects of beta-blockers on shooting performance, a significant percentage of shooters perform no better or even perform worse, as a result of the administration of beta blockers.
 - b. Even if certain beta-blockers may have performance-enhancing effects on certain individuals, they may also result in side effects (or a hyper-response) which negatively affect shooting performance.
 - c. Whereas some studies conclude that competent shooters benefit more from beta-blockers, others suggest the opposite.
 - d. The postulated physiological reasons for performance enhancement (in certain individuals) are unclear and empirically unproven; authors appear to suggest that hand tremor reduction may be a more likely cause than heart rate reduction.
 - e. Different beta-blockers produce different effects; in particular, numerous empirical studies and academic papers suggest that atenolol (which does not act on β_2 -ARs) is ineffective (or certainly less effective) in reducing tremors.
219. A critical review of the literature most certainly does not allow one to conclude that every beta-blocker positively influences the performance of every shooter.
220. Ultimately, the question for this Panel to answer is whether, based on the specific facts of her case, Ms Ungerank's shooting performance benefits from her atenolol treatment.

i) Analysis of Ms Ungerank's scoring results

221. As set out below, an analysis of Ms Ungerank's scoring reveals quite clearly that atenolol has not led to an improvement in her shooting performance. It should be recalled at the outset that Ms Ungerank first began using atenolol in March 2011.
222. Ms Ungerank's statistics, upon which the calculations and conclusions by WADA are based, have been approved as correct by the Austrian Sport Shooting Federation (Ms. Margit Melmer).

223. A table summarizing Ms Ungerank's mean scores per event for her three disciplines - Air Rifle, 50m Prone and 50m 3 Position - in 2009, 2010 and 2011 is set out below (Table 1):

YEAR	AIR RIFLE	50M PRONE	50M 3 POSITION
2009 (12 -13 years)	378.2	567.6	545.7
2010 (13-14 years)	388.3	585.0	564.4
2011 (14-15 years)	392.9	588.4	573.4

224. The percentage improvement in mean scores (per event) are set out in Table 2 for the following years: 2010 (compared with 2009) and 2011 (compared with 2010):

YEARS	AIR RIFLE	50M PRONE	50M 3 POSITION	MEAN % IMPROVEMENT
2009 -2010 (without atenolol)	2.67%	3.06%	3.43%	3.05%
2010-2011	1.18%	0.58%	1.59%	1.12%

225. The following examples should serve to illustrate the calculations of percentage improvement set out at Table 2 above:

- *Ms Ungerank had an Air Rifle scoring average of 388.3 in 2010 and average of 392.9 in 2011 (see Table 1). The percentage improvement in 2011 is therefore the differential [392.9 minus 388.3 = 4.6] divided by the scoring average in the first of the two years [388.3 in 2010] multiplied by 100. Therefore, Ms Ungerank's percentage scoring improvement for Air Rifle between 2010 and 2011 is $[4.6/388.3]*100 = 1.18\%$.
- **The mean percentage improvement across all disciplines for 2011 (compared with 2010) is the sum of the percentage increases across all three disciplines $[1.18\% + 0.58\% + 1.59\%]$ divided by three = 1.12%.

226. An analysis of the above results reveals the following:

- a. In 2011, the Athlete's average percentage improvement (compared with 2010) across all three disciplines was 1.12%.

- b. In 2010 (during which period Ms Ungerank took no beta-blockers), her average percentage improvement (compared with 2009) across all three disciplines was 3.05%, nearly two percentage points more than her improvement in 2011.
 - c. Her highest percentage improvement in 2011 was circa 1.6%, in the 50m-Three-Position discipline.
 - d. Her highest percentage improvement in 2010 is circa 3-4%, in the 50m-Three-Position discipline.
 - e. In all three disciplines, Ms Ungerank's scoring performance improved more in 2010 (without beta-blockers) than in 2011 (with beta-blockers).
227. In short, there is no discernable spike in Ms Ungerank's performance after the commencement of beta-blocker treatment. In fact, the rate of Ms Ungerank's scoring improvement slowed down in 2011 (the year in which she started using atenolol).
228. Table 3 below records Ms Ungerank's scores, for each of the three disciplines mentioned above, in her last three tournaments before the commencement of the atenolol treatment ("Pre-Atenolol Results") and her first three tournaments after commencing such treatment ("Post-Atenolol Results"). As can be seen the Pre-Atenolol Results and the Post-Atenolol Results are only a matter of months apart (Table 3):

	AIR RIFLE		50M PRONE		50m 3 POSITION	
	Event Scores	Total	Event Scores	Total	Event Scores	Total
Pre-Atenolol Results	396	1185	591	1765	571	1692
	393		578		553	
	396		596		568	
Post-Atenolol Results	395	1183	592	1766	579	1719
	392		587		569	
	396		592		571	

229. The results at Table 3 above reveal that Ms Ungerank's scores shortly before and shortly after commencing atenolol treatment are remarkably similar. In two disciplines (Air Rifle and 50m Prone), the aggregate scores are almost identical.
230. In summary, the year-by-year statistics (Tables 1 & 2) show that improvement in 2011 (post-atenolol) was slight and a logical (if reduced) progression of the improvement from 2010. The results from a snapshot of competitions before and after the commencement of atenolol treatment (Table 3) indicate clearly that atenolol did not improve Ms Ungerank's performance. This conclusion is consistent with Ms Ungerank's own subjective appreciation of her performance:

“I was not able to ascertain any performance enhancement in my case. If you take the side-effects into account associated with this medication, (weight increase, occasional dizziness, circulation problems, reduced ability to practice), it is really more a question of performance reduction”.

231. The fact that Ms Ungerank’s performance continued to improve in 2011 (albeit at a slower rate than in 2010) is hardly surprising in a young athlete. Ms Ungerank was born in 1996 and was therefore only 13-15 years of age in the period 2009 to 2011.
232. In Ms Ungerank’s case, there are other specific factors to explain why her performance may have improved (or rather continued to improve) in 2011. In particular, according to the witness Ms Melmer of the Austrian Sport Shooting Federation it is a matter of:
- a. Ms Ungerank began to attend a specialized sports school in September 2010;
 - b. Ms Ungerank benefitted from the services of a more experienced coach who was recruited to the Austrian national junior team after the World Championship in 2010; and
 - c. Ms Ungerank benefitted from improvements in her ammunition and shooting clothing over the course of 2010.
233. The improvement demonstrated by Ms Ungerank in 2011 (post-atenolol) is not only consistent with her pre-atenolol scoring progression and understandable for reasons related to her training regime and equipment, it is also comparable with the statistics of other elite shooters of a similar age.
234. Ms Katharina Neuwirth is another elite Austrian shooter. Her scoring results between the ages of 12 and 18 for Air Rifle and 50m Three-Position are set out in Table 4. Mr Christian Kramer of the Tiroler Landesschützenbund has approved Ms Neuwirth’s scoring results as being correct. The mean scores for each discipline by year are set out at Table 4 below:

YEAR	AIR RIFLE	50M 3 POSITION
2006 (age 12-13)	368	N/A
2007 (age 13-14)	382.4	543.3
2008 (age 14-15)	387.6	551
2009 (age 15-16)	387.2	557
2010 (age 16-17)	387.3	567.8
2011 (age 17-18)	390	N/A

235. Using the same method of calculation as for Ms Ungerank above, Ms Neuwirth improved her mean score per event (i) for Air Rifle by 3.9% in 2007 (age 13-14) and 1.36% in 2008 (age 14-15) and (ii) for 50m Three-Position, by 1.42% in 2008 (age 14-15), 1.09% in 2009 (age 15-16) and 1.94% in 2010 (age 16-17).
236. Ms Ungerank began to take atenolol in March 2011, when she was 14 years old. Her mean scoring average improved in 2011 by 1.18% (Air Rifle), 0.58% (50m Prone) and 1.59% (50m Three-Position). This scoring improvement in 2011 (which is significantly less than her improvement in 2010 without atenolol) is comparable (if not indeed less) than the improvement achieved by Ms Neuwirth at a similar age.

j) Conclusion

237. This appeal has been lodged by ISSF in an attempt to defend the ISSF's inflexible policy to deny TUEs to any athlete for any beta-blocker in any circumstances. That policy, which does not bind the WADA TUEC or the CAS, is entirely incompatible with the IS TUE which requires that decisions on TUE applications are decided based on the circumstances of each individual case.
238. The ISSF has resolved, notwithstanding the findings of the ISSF TUEC at first instance, not to contest conditions 4.1(a) and 4.1(c) IS TUE before the CAS. As condition 4.1(d) has never been in question in the proceedings to date, this Panel need only decide whether Ms Ungerank satisfies condition 4.1(b).
239. In order to satisfy the only disputed condition - art. 4.1(b) IS TUE - Ms Ungerank is required to show, on the balance of probabilities, that atenolol did not improve her performance. As Ms Ungerank is not a party, WADA assumes this burden of proof in her stead.
240. The empirical studies regarding the effects of beta-blockers on shooting performance have produced mixed results. A significant percentage of the shooters performed worse or no better on the beta-blockers, despite administration being timed so as to produce optimal effects. Furthermore, the studies do not identify the precise reason(s) why certain shooters appear to benefit from beta-blockers; they also reach different (indeed, diametrically opposite) conclusions as to whether those that benefit are the more or less competent shooters.
241. Beta-blockers also produce numerous side-effects, certain of which (*e.g.* dizziness, fatigue) would no doubt have the potential to worsen shooting performance.
242. It is important to bear in mind that none of the empirical studies involved atenolol.
243. Scientific literature suggests that different types of beta-blockers produce different effects and, importantly, act on different β ARs; indeed, there is good reason to consider that atenolol is less effective than non-selective beta-blockers at reducing tremors.

244. WADA submits that, on the basis of the scientific literature alone, it is not possible to conclude with any certainty whether Ms Ungerank's performance is improved by atenolol.
245. However, an analysis of (i) Ms Ungerank's year-by-year scoring statistics and (ii) a snapshot of her competition results pre- and post-atenolol indicate very strongly that Ms Ungerank's performance has not been improved as a result of her intake of atenolol. On the one hand, there is no short-term spike in performance (in the snapshot); on the other hand, Ms Ungerank's longer-term improvement in 2011 is (i) less pronounced than her pre-atenolol improvement (in 2010), (ii) comparable to improvements of other elite athletes of her age (Ms Neuwirth) and (iii) understandable in light of changes to Ms Ungerank's training regime and equipment.
246. As atenolol does not enhance Ms Ungerank's performance, she has satisfied condition 4.1(b) IS TUE. The fact that the remaining three conditions are met is not disputed by ISSF.
247. As she has met the requisite conditions in the IS TUE, Ms Ungerank is entitled to retain the TUE granted to her by the WADA TUEC.

V. JURISDICTION

248. The jurisdiction of the CAS derives from article 4.4.6.3 of ISSF ADR where it is stated that "[A] decision by WADA to reverse a TUE decision may be appealed by the Athlete, the National Anti-Doping Organization and/or ISSF exclusively to CAS, in accordance with Article 13". In article 13.4 it is said that "TUE decisions may be appealed exclusively as provided in article 4.4".
249. Article 10.3 of the IS TUE states that "[D]ecisions by WADA to affirm or reverse the TUE decisions of an Anti-Doping Organization may be appealed to CAS as provided in Article 13 of the Code".
250. The jurisdiction of CAS is not disputed by the Parties and is otherwise confirmed by the Order of Procedure duly signed by WADA and ISSF.
251. Therefore, CAS has jurisdiction to decide the appeal.

VI. ADMISSIBILITY

252. WADA has not contested the jurisdiction of CAS to hear this dispute pursuant to article 10.3 of the IS TUE and article 13.4 of the ISSF ADR. WADA has also accepted that the ISSF lodged its Statement of Appeal with CAS within the 21-day deadline set out at article 13.6 ISSF ADR.
253. Pursuant to Article R49 of the CAS Code, the Panel is satisfied that the appeal was filed in due time and is admissible as far as the IS TUE and ISSF ADR concerns.

254. As regards the issue of the Athlete not being a party in these CAS proceedings the Panel makes the following observations.
255. As set out in its Answer dated 11 February 2014, WADA challenges the admissibility of aspects of this Appeal because of the failure to join the Athlete, Ms Ungerank, as a party in the Statement of Appeal. Counsel for WADA rightly acknowledged at the hearing of the Appeal that this was a “technical” submission meaning, as the Panel understands it, that it has nothing to do with the merits of either the decision of the ISSF TUEC nor with the merits of the decision appealed against, namely the decision of the WADA TUE Panel.
256. It is necessary to identify precisely the submission which is made on behalf of WADA. That is revealed by paragraph 16 of WADA’s Answer. That paragraph states:
- “WADA’s primary submission in these proceedings, therefore, is that the Appellant’s requests for relief set out at paragraph (a) and (b) of page 5 of the Statement of Appeal are inadmissible”.*
257. At the time the Answer was filed, Prayer 1 for relief in the Statement of Appeal was in the following form:
- “1. to set aside the decision of the WADA TUEC dated November 18 [sic], 2013 and*
- i. to reject the TUE application made by Ms Ungerank;*
- ii. alternatively, to refer the case back to WADA for another WADA TUEC Panel comprised of different members to consider Ms Ungerank’s application in correct accordance with the Prohibited List and IS TUE...”.*
258. The other two prayers for relief sought costs orders against the Respondent.
259. This Panel is of the view that events have overtaken the submission as to admissibility made by WADA.
260. On the second day of the hearing before this Panel, 23 July 2014, the Appellant applied to amend Prayer 1 for Relief in its Statement of Appeal by:
- i. correcting the date of the WADA TUEC decision by substituting “November 29, 2013” for “November 18, 2013”; and
- ii. deleting everything after the reference to the date of the decision, including subparagraphs (a) and (b).
261. WADA did not oppose that amendment and the Panel accordingly made the amendment as requested.

262. The consequence is that the requests for relief which WADA submits are inadmissible in paragraph 16 of its Answer are no longer sought and, therefore, such relief will not be granted. On this basis alone, therefore, WADA's submission as to admissibility should be rejected.
263. However, notwithstanding the amendment of the Statement of Appeal, WADA did not withdraw its submission as to inadmissibility of the appeal. It apparently seeks to maintain that submission even though, following the amendment, it was clear, if it had not been before, that no relief was sought against the Athlete.
264. For the reasons which follow, this Panel does not consider WADA's submission as to inadmissibility should be upheld.
265. In spite of the detailed description of all the letters and arguments in this matter it is relevant to once again set out, as briefly as possible, a chronological history of relevant events as follows:
 - a) On October 2, 2013, the Athlete requested that WADA review the decision of the ISSF TUEC not to grant a TUE. That request was made pursuant to Article 10.2 of the IS TUE.
 - b) On November 29, 2013, the WADA TUEC made its decision in respect of that review, reversing the denial of the TUE and, therefore, in accordance with Article 10.2 of the IS TUE, the Athlete from the date of that reversal had the benefit of a TUE.
 - c) Article 10.3 of the IS TUE provided for a right of appeal from WADA's reversal in accordance with Article 13 of the 2009 WADC.
 - d) Article 13.4 of the 2009 WADA Code gave to the ISSF, as the anti-doping organisation whose decision was reversed, a right of appeal from the WADA reversal to CAS.
 - e) The ISSF exercised that right of appeal by filing with CAS a Statement of Appeal dated 18 December 2013 naming WADA as the only Respondent.
 - f) However, on the same day, it sent to the Athlete a letter attaching the Statement of Appeal and informing her that it was being filed on that day with CAS. The letter drew to the Athlete's attention Article 41.3 of the CAS Code which deals with possible participation by a third party in a CAS Appeal. The letter set out the terms of R41.3 of the CAS Code and went on to say:

"ISSF is informing you of its appeal against the WADA TUE Committee decision dated 16 November 2013 [sic] granting Ms Nadine Ungerank a TUE for Atenolol, in order to allow Ms Nadine Ungerank to intervene should she wish to do so..."
 - g) By letter dated 27 December 2013, a lawyer representing the Athlete informed the CAS office that the Athlete wished to intervene in the Appeal and the CAS office acknowledged that by a letter to the Athlete's lawyers dated 10 January 2014.

- h) On 8 January 2014, prior to the acknowledgement letter by the CAS office referred to above, WADA's lawyers wrote to CAS challenging the admissibility of the Appeal in circumstances where the Athlete had not been joined as a Respondent in the Statement of Appeal. Significantly, in that letter, WADA's lawyers, as in paragraph 16 of the Answer ultimately filed, focused on the fact that there were Prayers for Relief directed against the Athlete.
- i) Shortly after, on 14 January 2014, the lawyers for the Athlete wrote to the CAS office informing it that the Athlete had changed her mind and no longer wished to intervene in the Appeal. The reason given was that the Athlete was "a student achieves no income and she might possibly be charged with incalculable and unpayable costs".
- j) By letter dated 16 January 2014, the CAS office informed the parties of the Athlete's withdrawal of her request for intervention and invited submissions from the parties as to the consequences of the failure to name the Athlete as a Respondent in the Statement of Appeal.
- k) On 21 January 2014, the Appellant's lawyers responded by a letter to the CAS office. That letter:
 - i) acknowledged that the Athlete might be affected by the outcome of the proceedings;
 - ii) stated that the appeal was not directed against the Athlete as respondent because it was not her decision that the Appellant was challenging;
 - iii) submitted that, in the circumstances, the Athlete had expressly waived her right to be heard and to present further evidence in support of her TUE application;
 - iv) pointed out that the Athlete would still be entitled to apply for a TUE before the ISSF TUEC in the future and support her application with new evidence and that any CAS Award would not hinder her right to re-apply;
 - v) again invited the Athlete to formally join the proceedings should she wish to do so;
- l) By letter dated 31 January 2014, the CAS office wrote to WADA for its comments on the Appellant's letter dated 21 January 2014 and, in particular, whether WADA agreed to add the Athlete as a further respondent.
- m) On 4 February 2014 WADA's lawyers prepared and sent a detailed written response. Their letter, *inter alia*,:
 - i) pointed out the potentially severe consequences for the Athlete's career should the CAS appeal by ISSF be upheld;
 - ii) referred to some CAS jurisprudence said to be relevant;

- iii) rejected the argument that the Athlete had waived her right to be heard; and
 - iv) again, urged that no relief could be granted by CAS detrimental to the Athlete because of her non-joinder as a respondent in the Statement of Appeal.
- n) The letter, however, did not expressly accept the invitation from CAS to inform it whether WADA agreed to add the Athlete as a respondent in the Appeal. Implicitly, however, the content and tone of WADA's letter leaves no doubt that WADA thought either that the Athlete could not or should not be added as respondent to the Appeal at that stage.
- o) That is certainly the way the letter was interpreted by the CAS office. By letter dated 4 February 2014 to the parties, Mr Singer, Counsel to the CAS, noted WADA's objection to adding the Athlete as a party and informed the parties that the issue would be determined by this Panel when constituted.
- p) When this Panel was constituted it gave consideration to the issue of the Athlete's potential non-involvement in the Appeal which obviously was a cause for concern. It decided that the Athlete should be invited to participate in the Appeal at least as an observer.
- q) Accordingly, Mr Singer wrote to the Athlete's lawyers on 3 July 2014 informing them of the hearing date for the appeal and inviting the Athlete to attend as an observer.
- r) By email dated 16 July 2014, the Athlete informed the CAS office that she would not be attending the hearing. She did not request any adjournment of the hearing.
266. It is apparent from the chronology just recited that, despite not being named formally as a respondent in the Statement of Appeal, the Athlete has been given several opportunities to participate in the appeal in various capacities but has made a conscious choice not to do so.
267. It is further apparent that there is an element of common cause or common interest between WADA and the Athlete in that each wishes to uphold the decision of WADA's TUEC and that WADA is well able through its own resources and experience and its highly competent counsel to present all relevant arguments in favor of dismissing the appeal and/or upholding the decision of WADA's TUEC.
268. Indeed, as Mr Wenzel, appearing for WADA in the Appeal candidly acknowledged, it is a matter of pure speculation as to what, if anything, the Athlete's presence could add to the legal or factual arguments which he made so ably.
269. In these circumstances, to the extent to which WADA's arguments as to inadmissibility depend expressly or impliedly upon a contention that the Athlete has been, or will be, denied procedural fairness or natural justice by reason of her non-joinder as a respondent, this Panel rejects that contention. Such a contention would appear to elevate form above substance.

270. If, as a matter of form, a person is not a respondent but has been given proper notice of the appeal and a proper opportunity to participate in the appeal, this Panel does not think such a person (or anyone else) can complain of any lack of procedural fairness if a deliberate choice is made not to participate.
271. Any prejudice which the Athlete might suffer is caused not by the form in which she has been joined to the proceedings, or has been invited to join the proceedings, but rather by her choice not to participate at all. Any detriment which she suffers is the same as it would have been had she been named as a respondent in the Statement of Appeal but still chosen not to participate.
272. Therefore, the Appeal is not inadmissible on the basis that there has been a denial of procedural fairness.
273. However, as the Panel understands it, WADA also submitted that, based on CAS jurisprudence, the Appeal would nevertheless be inadmissible because it was a requirement of an admissible appeal that the “proper” respondents be named in the Statement of Appeal and that the failure to name a “proper” respondent was fatal to the admissibility of the appeal even if that involved no denial of procedural fairness.
274. The Panel finds itself unable to accept that submission. Explicit or implicit in all the cases that the Panel has been referred to is the notion that the non-joinder is unfair to the person not joined. There is no unfairness here for the reasons stated. But out of deference to WADA’s careful arguments the Panel will develop its reasoning a little more fully.
275. As previously noted, the Statement of Appeal, as amended, seeks no relief against the Athlete. Rather the relief sought is confined to setting aside the Decision and to seeking costs orders against WADA. But it is true that the Athlete is directly affected if such relief is granted. The consequence of setting aside the Decision will be to revoke or rescind the TUE granted by that body to the Athlete with the further consequence that the Athlete will be at risk of being charged with an ADRV if she decides to continue to participate in the sport of shooting whilst taking Atenolol.
276. Article R58 of the CAS Code provides that a CAS Panel shall decide the dispute, in the absence of a choice of law by the parties, according the laws of the country in which the sports-related body which has issued the challenged decision is domiciled or according to the rules of law the Panel deems appropriate.
277. WADA its registered seat in Switzerland. Further, according to Article 176 paragraph 1 of Switzerland’s Federal Code on Private International Law (CPIL), Chapter 12 of the CPIL shall apply to an arbitration if the seat of the arbitral tribunal is in Switzerland and if at least one of the parties at the time the arbitration agreement was concluded was neither domiciled nor habitually resident in Switzerland.

278. Pursuant to article R28 of the CAS Code, the seat of the CAS is Lausanne, Switzerland. Additionally, the ISSF is domiciled in Germany. Thus, Swiss law, in general, governs this appeal as far as procedural issues are concerned.
279. In those circumstances this Panel deems it appropriate to determine the question of admissibility in accordance with Swiss law.
280. Under Swiss law, the defending party has standing to be sued (“*légitimation passive*”) if it is personally obliged by the “disputed rights” at stake. In other words, a party has standing to be sued and thus may be summoned before CAS only if it has some stake in the dispute because something is sought against it (emphasis added – see CAS 2007/A/1329 at [27]; CAS 2012/A/2981 at [43] and CAS 2007/A/1367 at [37]).
281. Since no relief is being sought against the Athlete it follows that she has no standing to be sued under Swiss law and could not, therefore, be summoned before CAS.
282. WADA, on the other hand, is clearly a proper respondent for the purpose of this appeal. Relief is sought against it, namely the overturning of its decision (compare CAS 2007/A/1329 at [27]-[32]).
283. Whilst, as submitted by WADA, it may well be the obligation of the Appellant to identify the proper respondent at the outset of the procedure (see paragraph 14 of the Answer and CAS 2008/A/1602) the consequence of not identifying all proper respondents is not that the appeal is wholly inadmissible but only that the Panel may decline to make any orders against a person who is a proper respondent but has not been joined or may limit the scope of its review to the orders sought against the party properly joined as a respondent (compare CAS 2011/A/2654 at [8.9]).
284. Thus, the Panel is satisfied that the ISSF properly joined WADA as a respondent for this Appeal and that it was not necessary that the Athlete be joined as a respondent especially in the light of the amendment made to the relief sought in the statement of appeal. Even if such an amendment had not been made, the Panel would have reached a conclusion to the same effect since, on the facts before it, there was no lack of procedural fairness to the Athlete.
285. It follows that this Panel concludes that this appeal is admissible.

VII. APPLICABLE LAW

286. Article R58 of the CAS Code provides as follows:

“The Panel shall decide the dispute according to the applicable regulations and, subsidiarily, 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”.

287. It is common ground between the parties that the applicable regulations of this case are the ISSF ADR and IS TUE which applies to all members and participants in the activities of the ISSF or of its member federations. Therefore, these rules shall apply to the merits. As to procedural issues, the procedural rules of the Code, and – as the Panel already has confirmed – supplemented if necessary by Swiss procedural law and principles, shall be applied.

VIII. THE PANEL'S FINDINGS ON THE MERITS

288. This is a case which juxtaposes in an unusual fashion two conflicting interests, on the one hand the desire of a young athlete of apparent early promise but adventitiously diagnosed with a potentially fatal heart condition to participate, at the highest level, in her chosen sport, on the other hand the entitlement of her potential competitors to be confident they are not asked to challenge an athlete with an unfair advantage induced by prohibited substances.
289. To determine where the balance is to be struck requires analysis of the relevant legal instruments and application of the relevant provisions of those instruments to the facts as found. Article 2.1 of the WADA Code replicated, *mutatis mutandis*, in ISSF's own rules in the incarnation applied by the ISSF TUE Committee, provide as an example an anti-doping rule violation the presence of a prohibited substance which include beta-blockers. However, Article 4.4 of the WADA Code provides so far as material.

"Presence of a Prohibited Substance [...] consistent with the provision of an applicable therapeutic use exemption issued pursuant to the International Standard for Therapeutic Use. Exemptions shall not be considered an anti-doping rule violation".

This provision is also reflected in ISSF ADR in article 4.4.1.

290. The IS TUE of January 2011, provides so far as material, as follows:

"1.0 The Code permits Athletes to apply for therapeutic use exemptions (TUE) i.e. permission to use, for therapeutic purposes, substances or methods contained in the List of Prohibited Substances or Methods where Use would otherwise be prohibited.

Criteria for granting – Therapeutic Exemptions

4.0 A Therapeutic Use Exemption (TUE) may be granted to an Athlete permitting the Use of a Prohibited Substance or Prohibited Method. An application for a TUE will be reviewed by a Therapeutic Use Exemption Committee (TUEC). The TUEC will be appointed by an Anti-Doping Organization.

4.1 *A TUE will be granted only in strict accordance with the following criteria:*

- a. *The Athlete would experience a significant impairment to health if the Prohibited Substance or Prohibited Method were to be withheld in the course of treating an acute or chronic medical condition.*
- b. *The Therapeutic Use of the Prohibited Substance or Prohibited Method would produce no additional enhancement of performance other than that which might be anticipated by a return to a state or normal health following the treatment of a legitimate medical condition. The Use of any Prohibited Substance or Prohibited Method to increase “low-normal” levels of any endogenous hormone is not considered an acceptable Therapeutic intervention.*
- c. *There is no reasonable Therapeutic alternative to the Use of the otherwise Prohibited Substance or Prohibited Method.*
- d. *The necessity for the Use of the otherwise Prohibited Substance or Prohibited Method cannot be a consequence, wholly or in part, of the prior Use, without a TUE, of a substance or method which was prohibited at the time of Use (“The four criteria”).*

291. Article 4.4.7 IAAF ADR provides that “IAAF shall appoint a panel to consider application for the grant or recognition of TUEs (the “TUE Committee”). The TUE Committee shall promptly evaluate and decide upon the application in accordance with the relevant provisions of the International Standard for Therapeutic Use Exemptions”.

292. In the view of the Panel

(1) Satisfaction of all the four criteria is a necessary ground precondition for the grant of a TUE. Nothing else will suffice for such a grant. That is the impact of the words “*in strict accordance*”. Whether it is a sufficient grant is not an issue in this appeal.

(2) The burden of establishing satisfaction of these four criteria rests on the athlete.

293. A question which is not expressly addressed in the IS TUE is the standard of proof. IAAF contend for “comfortable satisfaction”; WADA for “balance of probabilities”. There are cogent arguments for each position.

294. On the one hand, the interests of athletes’ competitors demand a stringent sanction for the athlete to escape the ordinary consequences of use of a prohibited substance; and since the object is prophylactic not punitive, the higher standard should apply.

295. On the other hand, Article 3.1 of the WADA Code provides that where this Code places 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 specified facts or circumstances, the standard of proof shall be by a balance of probability, except as provided in Articles 10.4 and 10.6 of the WADA Code where the athlete must satisfy a higher burden of proof.

296. This provision is not directly applicable since, *ex hypothesis*, the applicant for a TUE has not committed an anti-doping violation, but seeks to avoid being subject to one. It could be said nonetheless to provide an apt analogy.
297. Previous case law does not address this issue expressly. The Panel has considered two cases in which the use of beta blockers by a shooter was under consideration – see CAS 2007/A/1395 (77), CAS 2009/A/1948 (118) earlier mentioned. In those cases predecessor panels reached conclusions of fact in the context of IS TUE 4.1(b) but without reference to the standard of proof applied.
298. However, as appears from our analysis of the evidence this Panel does not need to resolve this issue, but respectfully recommend that WADA in any revision of the IS TUE address it specifically.
299. Of the four criteria
- (a) though put in provisional issue by ISSF, was in the event conceded to be satisfied;
 - (d) was always accepted to have been satisfied.
300. As to (c) the Panel notes that the athlete has to show not that there is no alternative treatment but that there is no reasonable alternative treatment. The requisite method of proof is set out under the [notice] TUE Application Process:
- “The application shall include a statement by an appropriately qualified physician attesting to the necessity of the otherwise Prohibited Substance or Prohibited Method in the treatment of the Athlete and describing why an alternative, permitted medication cannot, or could not, be used in the treatment of this condition”.*
301. It is common ground that there are three treatments for LQTS designed to prevent sudden cardiac arrest due to ventricular fibrillation: beta blockers, left cardiac sympathetic Denervation (LCSD) and an Implantable Cardioverter Defibrillator (ICD). Since two alternative treatments are available for the Athlete, the question is whether they are reasonable.
302. The Panel, while recognising that an athlete such as Ms Ungerank will be seeking to be permitted to use a prohibited substance in order to engage in competitive sport, does not consider as a matter of principle that, as the price to pay for competing in such sport she/he can be compelled *in lieu* to use a treatment which is not being advised as the treatment of choice by a responsible medical practitioner, in particular where the alternative treatment carries with it greater hazards and no greater chances of success. The statements of doctors who addressed this issue on behalf of the athlete Dr Otmar Pachinger (*“Bei dieser Patientin ist eine Betablocker Therapie sinnvoll und indiziert* [freely translated from German into English: *for this patient a beta-blocker therapy is reasonable and indicated.*])” and Dr Ulrich Schweigmann (*“In Long QT Syndrome Type 1 Betablockers are the drug of choice, other drugs are less effective”*) were not compliant in form with the requirements of IS TUE Article 8.11 but are, in the Panel’s judgment, essentially so in substance. Furthermore, the Panel accepts Professor Pipe’s view that the

weight of informed medical opinion would not recommend as a treatment of first resort something other than beta blockers for the Athlete herself, especially given the risks always attendant on invasive surgery. The interests of the competitors are adequately protected by the need for the Athlete also to satisfy criterion (b) around which most of the argument in the present case revolved.

303. The Panel reminds itself that in a *de novo* hearing it must consider all the evidence before it which bears on the correctness or otherwise of the Decision to grant a TUE whether or not such evidence was before the WADA TUEC. Nonetheless in evaluating that evidence, it cannot wholly ignore the approach of the WADA TUEC not least because Professor Pipe, albeit providing testimony as an expert was also a member of the Committee and had in consequence an inevitable, if understandable, predisposition to seek to support it.
304. Two elements of WADA's defence of the Decision as advanced before the Panel were (i) the absence of scientific evidence to establish the performance enhancing effect of atenolol generally and (ii) evidence of lack of such performance enhancing effect on the Athlete in particular.
305. The second element was, however, conspicuous by its absence in the record of the Decision which stated in the material part *"given that there is no scientific evidence from performance enhancing effect of beta blockers on shooting in general, there is accordingly no evidence that there is a beneficial effect of atenolol on the shooting performance in this athlete"*. The Panel construes *"in general"* to be shorthand for *"always and in all athletes"*: otherwise the sentence makes no sense at all and notes that this is, according to Professor Pipe's testimony, the interpretation apparently intended.
306. However, deconstructing that sentence the first clause is the premise and the only premise from which the conclusion in the second clause is drawn. While not impugning the good faith of Professor Pipe, that nonetheless attention was given to evidence particular to the Athlete, the Panel is not persuaded in the circumstances that it can have bulked large in the WADA TUEC's deliberations.
307. This might all be of little significance save as a matter of history, if, by the time he came to give evidence before the Panel, Professor Pipe had enlarged the scope of his enquiry into athlete-specific matters. But in WADA's answer of 11 February 2014 the Panel were given a trailer of his evidence: *"Professor Andrew Pipe: Professor Pipe will be called to participate in any debate as to the scientific issues raised in this case and set out in the Decision or this Answer. In particular, he is expected to testify that (i) beta blockers are a heterogeneous group of substances which do not all produce the same effects and (ii) that the scientific literature does not allow the conclusion that a shooter's performance will necessarily benefit from the administration of atenolol"*. This again deploys precisely the same limited reasoning as the WADA TUEC.
308. Of Professor Pipe's two propositions the first was common ground, as indeed was the second in the way in which it was articulated. No expert for either side averred that beta blockers confer a performance enhancing advantage on all shooters in all circumstances: such effect might, it was accepted, in some athletes be neutral or indeed detrimental. No expert for either

side averred that beta blockers are uniform in their effect or disputed that atenolol, being cardiac specific, might have less impact on tremor or anxiety than other beta blockers, the subject of consideration in previous cases.

309. As a matter of ordinary English to say that something will “*not necessarily happen*” – or as Professor Pipe put it in his oral evidence to the Panel - “*not automatically happen*” – a difference of vocabulary but not of meaning - is tantamount to saying no more than that it will not always happen and is simultaneously suggesting that any exceptions will be limited. Professor Pipe, under questions from the Panel, demurred from the proposition that at the end of the same sentence the additional clause “*but may well do so*” would be appropriate and suggested in lieu “*but there is a remote possibility of it doing so*”. That clause however sits uneasily with the proceeding sentence and the Panel notes, indeed, prefers Professor Hudson’s proposed addition “*more likely than not*”.
310. In any event, the Panel do not accept that the scientific literature suggests only “*a remote possibility*”.
311. Finally it cannot be ignored that beta blockers (not merely some) are on the Prohibited List, both for in- and out-of-competition which provides: “*Unless otherwise specified, beta blockers are prohibited In-Competition only, in the following sports*”
 - *Shooting (ISSF, IPC) (also prohibited Out-of-Competition)*”.
312. Beta blockers include, but are not limited to, the following:

Acebutolol, alprenolol, atenolol, betaxolol, bisoprolol, bunolol, carteolol, carvedilol, celiprolol, esmolol, labetalol, levobunolol, metipranolol, metoprolol, nadolol, oxprenolol, pindolol, propranolol, sotalol, timolol.
313. Professor Pipe told the Panel that there is no present intention to remove beta blockers from the Prohibited List. This, of itself, in the Panel’s judgment, is indicative of the height of the hurdle confronting the Athlete who seeks to satisfy Condition 4.1(b), for even on the premise that atenolol will have a beneficial performance enhancing effect on some persons but will not on others, it remains for the Athlete to show that she falls into the category with those who would derive no performance enhancing effect from use of the substance.
314. WADA relied on two main items to seek to satisfy the burden of proof (1) the competitive records of the Athlete herself and (2) the records of a comparator, Ms Neuwirth.
315. With characteristic realism Mr Wenzel for WADA recognised that the former was far more important to his case than the latter. In many areas of the law use is made of comparators. In CAS cases on appropriate sanctions for doping violations where the athlete prays in aid a defence of no fault or no significant fault she/he not infrequently invokes earlier cases as setting a benchmark. But in those cases CAS has constantly emphasised that the invocation is of no utility before it, unless the defendant and the alleged comparator are materially similar.

The same philosophy is exemplified in the area of anti-discrimination law in all its modern variety.

316. In the Panel's view, no reliance can be placed on a single comparator about whom nothing is known other than she was also female, an elite shooter, and had agreed mean scores between the ages of 12-18 in air rifle and 50 metre 3 position shooting. It is not necessary to be a statistician to recognise that as a comparator such single sample is manifestly inadequate. At the very least the records of a cohort of similarly circumstanced competitors at the same competitions as the Athlete would have been required to draw any sensible conclusions.
317. As to the Athlete's own statistics, the evidence was clear that success in shooting is down to a multitude of factors, physical, physiological, equipment, coaching, training, competitive experience, and even luck. In such circumstances to detect what caused or did not cause any improvement in an athlete's performance (whether in this case the beta blockers or something else) would be exceptionally difficult. The accelerated rate of progress in the year before the Athlete took Atenolol compared with that in the year after can – the evidence from both sides suggested – be attributed to increased physical maturity, better training and equipment. The progress has continued after the start of the treatment with Atenolol as can be seen in Table 5 below.
318. The Athlete has provided statistics which are said to show that her improvement after starting to use Atenolol is not really remarkable (see paragraphs 226 – 239) According to WADA the best evidence of non-improvement is Table 3 (see paragraph 231) ISSF has, however, pointed out that in 2012 - 2013 (both being years after she started to take Atenolol) her improvement is greater than before. ISSF has warned that in any event comparisons in percentage development from one year to another do not give a fair comparison.
319. The Panel recognises that the chosen results in Table 3 are not the complete results from the Athlete during these years. They represent the last three tournaments before the use of Atenolol and the first three after starting the treatment. When so chosen they appear to give the results contended for by WADA, namely to show that there is no development at all in those competitions. It is the Panel's view that this is a too short time perspective on which to rely. If from the material provided one chooses **all** competitions before and after the starting of the treatment one can recognise an increase in the average scores after the commencement of the Atenolol treatment. While such increase may be what one would expect in the case of an Athlete when she/he is both maturing and on receipt of better training and other benefits, the influence of Atenolol cannot be discounted.
320. WADA has provided all the results from competitions made by the Athlete during the years 2009 – 2011. According to the witness Ms Malmer, this is a complete record of all the results made by the Athlete during these years.

321. The results can be summarized in this table (Table 5).

YEAR	COMPETITIONS	AVERAGE SCORING	LOWEST SCORE	HIGHEST SCORE
<u>50m Rifle 3 positions</u>				
2009	11	546	531	558
2010	19	564	543	580
2011	18	573	566	583
Note: In the year 2011 all competitions took place after the start of the treatment with atenolol.				
<u>Air Rifle</u>				
2009	12	378	360	395
2010	30	388	379	394
2011 (pre)	11	391	384	396
2011 (post)	19	394	386	399
Note: 2011 (pre) are the competitions this year before the treatment with atenolol started on 11 March 2011 and 2011 (post) are the competitions after that date.				
<u>50m Rifle Prone</u>				
2009	11	568	559	572
2010	21	585	571	596
2011	18	588	581	595
Note: All competitions in 2011 are after the start of the treatment with atenolol.				

322. The Panel notes that these results demonstrate that it is concerned with the case of a young and promising athlete who made great progress from one year to another. If one compares the scoring between the years one can observe that the scores accomplished after the start of the treatment with atenolol are the best whether the comparison is of average score, lowest score or highest score and whatever discipline is considered, with a single exception; the best result in 50m Rifle Prone was achieved in 2010 but the difference between 596 in 2010 and 595 in 2011 is minimal and both scores are of highest world class. Even if one compares the results in Air Rifle within the year 2011 in which year the treatment started the results are better after the start of the treatment than before.

323. A comparison of the results accomplished before and after the start of the treatment shows, in the Panel's view, rather that the previous progress of the Athlete continued. The question

posed is whether this progress and the excellent competitive results is a function of physical development, better training, better equipment or the impact of atenolol? The burden of establishing satisfaction of the four TUE criteria rests on the Athlete. The Panel cannot find that the statistics provided by the Athlete and WADA assist WADA's case, namely to show that there is no development at all in the competitions after the treatment started. Raw statistics which are unfiltered and not broken down by weighing different factors are inherently inconclusive.

324. Professor Pipe who did not proclaim any expertise in the sport of shooting, admitted that as a result of what he had learned from the ISSF's experts during the hearing, he would himself if a member of a Committee newly seized of the same application by the Athlete for a TUE, have sought further information both about the sport and about details of the competitions in which the Athlete's scores were registered. Yet, and in the Panel's view inconsistently, he still sought to defend the actual Decision.
325. Mr Wenzel asked rhetorically what more could the Athlete have done? The Panel accepts that no controlled test with the Athlete using a placebo as an alternative to atenolol would be permissible since that could jeopardise her health. A record of the Athlete's heart beat before she started the atenolol therapy, compared with it after, (had it existed) would, Professor Pipe acknowledged, have been of potential importance, even if it might not have answered questions about atenolol's impact on any tremor or anxiety (if any) from which she previously suffered or might suffer in the future.
326. The issue for the Panel however is not whether the Athlete has done all that she could do to provide evidence but whether the evidence which she has actually provided is sufficient to establish that the criterion in 4.1(b) is satisfied. The Panel concludes that it is not.
327. It does so with the regret appropriate in the case of someone, like the Athlete, who has been able to participate in a chosen sport at the highest level while at the same time being the victim of a heart complaint. Nonetheless while all human rights instruments recognize that there is a right to life, none recognize that there is an equivalent right to sport.

ON THESE GROUNDS

The Court of Arbitration for Sport rules:

1. The appeal filed on 18 December 2013 by the International Shooting Sport Federation is upheld and the decision adopted by the Therapeutic Use Exemption Committee of the World Anti-Doping Agency on 29 November 2013 set aside.
2. The decision adopted by the Therapeutic Use Exemption Committee of the International Shooting Sport Federation on 12 September 2013 is confirmed.
3. (...).
4. (...).
5. All other motions or prayers for relief are dismissed.