TAS / CAS
TRIBUNAL ARBITRAL DU SPORT
COURT OF ARBITRATION FOR SPORT
TRIBUNAL ARBITRAL DEL DEPORTE

CAS 2023/A/9731 Tamás Kenderesi v Hungarian Anti-Doping Agency (HUNADO)

ARBITRAL AWARD

rendered by the

COURT OF ARBITRATION FOR SPORT

sitting in the following composition:

President of the Panel:	Mr James Drake, KC, Barrister, London, United Kingdom
Arbitrators:	Dr Péter Pákay, Attorney-at-Law, Budapest, Hungary
	Dr Ulrich Haas, Professor in Zurich, Switzerland and Attorney-at-Law, Hamburg, Germany

in the arbitration between

Tamás Kenderesi, Pecs, Hungary
Represented by Dr Tamás Hergenröder, Attorney-at-Law Hergenröder Law Firm, Pecs, Hungary

Appellant

and

Hungarian Anti-Doping Agency (HUNADO**)**, Budapest, Hungary
Represented by Mr Nicolas Zbinden and Mr Adam Taylor, Attorneys-at-Law, Kellerhals Carrard, Lausanne, Switzerland and Mr Gergely Balazs Szabo, HUNADO Legal Director, Budapest, Hungary

I. THE PARTIES

1. The Appellant is Mr Tamás Kenderesi (the "**Athlete**" or the "**Appellant**"), an international swimmer of Hungarian nationality who specialises in the butterfly. His results include a bronze medal in the 200m butterfly at the 2016 Olympic Games in Rio de Janeiro, a bronze medal at the 2016 European Championships in London, and a bronze medal at the European Short Course Championships in Copenhagen, Denmark in December 2017.

2. The Respondent is the Hungarian Anti-Doping Agency ("**HUNADO**" or the "**Respondent**"), the National Anti-Doping Organisation for Hungary. HUNADO has issued, pursuant Government Decree No.363/2021, the HUNADO Anti-Doping Rules 2021 (the "**HUNADO ADR 2021**"), which rules are based on the model rules for national anti-doping organisations developed by the World Anti-Doping Agency ("**WADA**") in compliance with the World Anti-Doping Code 2021 (the "**WADC**").

3. The parties are referred to collectively as the "**Parties**".

II. OUTLINE OF THE APPEAL

4. This is the Athlete's appeal to the Court of Arbitration for Sport ("**CAS**") pursuant to the Code of Sports-related Arbitration (2023 edition) (the "**CAS Code**") against a decision issued on 28 April 2023 by the Respondent's Anti-Doping Committee (the "**Anti-Doping Committee**") by which the Anti-Doping Committee found that the Athlete had committed an anti-doping rule violation ("**ADRV**"), namely use of a prohibited substance or method, and imposed a period of ineligibility on the Athlete of four years starting from the date of the Athlete's provisional suspension, 23 January 2023 (the "**Challenged Decision**").

III. FACTUAL BACKGROUND

5. Set out below is a summary of the relevant facts based on the Parties' written submissions, pleadings and evidence adduced in these proceedings and from matters of public knowledge. While the Panel has considered all matters put forward by the Parties, reference is made in this Award only to those matters necessary to explain the Panel's its decision and reasoning.

A. The ABP

6. At the core of this appeal is the Athlete's haematological profile as set forth in the Athlete's Biological Passport (or "**ABP**") and this appeal arises in the context of HUNADO's Athlete Biological Passport Program (the "**ABP Program**"). As part of the ABP Program, HUNADO has established an Athlete Passport Management Unit (the "**APMU**") which operates within the WADA-accredited laboratory in Seibersdorf, Austria (the "**Seibersdorf Laboratory**").

7. In general terms, the ABP is based on a longitudinal monitoring of athletes and provides "*a means of detecting blood doping indirectly by monitoring changes over time in parameters in the athlete's blood that would ordinarily be expected to remain relatively stable, but that would deviate from the norm in predictable ways in the event of blood doping (eg use of rEPO will change the levels of hematocrit, haemoglobin, and reticulocyte cells in the blood in predictable ways). The basis of the ABP is that in appropriate circumstances the proper inferences to draw from changes in the parameters over time is that the athlete has Used a Prohibited Substance or Prohibited Method.*": see Lewis, A. and Taylor, J., 2021. *Sport: Law and Practice.* London: Bloomsbury, at p827.

8. The following account of the ABP is gratefully adopted from CAS 2020/A/7510 at para 5ff; and Lewis, A. and Taylor, J., 2021. *Sport: Law and Practice.* London: Bloomsbury, at p827ff:

    a. Three substances or methods are well known to be used for blood doping, namely: (i) administering recombinant human erythropoietin (by injection to trigger erythropoiesis, the process by which new erythrocytes (or red blood cells) are produced; (ii) synthetic oxygen carriers (i.e. infusing blood substitutes such as a haemoglobin-based oxygen carrier or perfluorocarbons to increase haemoglobin ("**HGB**") well above normal levels); and (iii) blood transfusions (i.e. infusing a matching donor's or an athlete's own, previously extracted red blood cells to increase the HGB to an abnormal level).

    b. In order to combat such blood doping, WADA developed and refined the concept of the ABP, and formally introduced its blood testing program in 2009. The ABP consists of an electronic record that compiles and collates a specific athlete's test results and other data over time. Each individual athlete has a unique ABP.

    c. The hematological module of the ABP records values in an athlete's blood samples of parameters known to be sensitive to changes in red blood cell production. The values collected and recorded include concentration of HGB and a percentage of new and immature red blood cells called reticulocytes ("**RET%**").

    d. The ratio of the HGB and RET% values is used to calculate a further value, known as the "**OFF-score**" (which is calculated: (HGB x10) – (60 x $\sqrt{}$RET)), which is sensitive to changes in erythropoiesis. The combination of either a high HGB and low RET%, or of a low HGB and high RET%, produces a high OFF-score.

    e. The longitudinal marker values from the collected blood samples are fed into a Bayesian statistical model, known as the 'Adaptive Model'. The Adaptive Model uses an algorithm that takes into account both variability of blood values reported in a large population and factors affecting the variability of individual factors (for example, sport, gender, age), the possibility of errors in measuring values, and potential confounding factors (e.g., altitude, training) in order to predict the upper and lower limits within which the athlete's future values would normally be expected to fall, assuming that the athlete is healthy and not blood doping.

f. The selected biological markers are monitored over a period of time and a longitudinal profile is created that establishes upper and lower limits within which the athlete's values would be expected to be found, assuming normal physiology (i.e. that of a healthy and non-doping individual).

g. The Adaptive Model calculates the probability of abnormality of the sequence of values in the ABP profile. At the outset, when the first samples are collected from a particular athlete, the upper and lower limits are based on population norms at the level of specificity of 99%, but over time, as samples are collected from the same athlete, the limits become individualized based on the athlete's individual values. An athlete therefore becomes his/her own point of reference.

h. Each time a blood sample is collected and analysed, the Adaptive Model calculates where the reported HGB, RET% and OFF-score values fall within the athlete's expected distribution and sets a new range of expected results for the athlete.

i. As further values from further samples are collected from an athlete, the model calculates the likelihood that any of them falling outside the predicted range would be observed in a healthy, non-doping athlete. If that likelihood is less than 1/100 (or in the case of sequence variations, 1/1000) an "Atypical Passport Finding" ("**APF**") is reported.

j. Where the Adaptive Model "flags" a sample as abnormal, meaning falling outside an athlete's usual values, a process is triggered whereby the ABP is assessed in conformity to the International Standard for Testing and Investigations ("**ISTI**"), the WADA ABP Guidelines, and the WADA International Standard for Results Management ("**ISRM**").

k. An initial review is conducted to check for possible explanations that could account for these irregularities, such as recent travel, illness, altitude exposure, or other known stress factors on the athlete's physiology.

l. If no clear, immediate explanation is found, the case is sent to an independent panel of experts. This panel usually includes hematologists, endocrinologists, physiologists, and anti-doping scientists. Each panel member independently reviews the flagged data, considering the athlete's full profile, previous results, and any known personal or environmental factors that may affect biological markers.

m. The panel members use their expertise to assess whether the atypical values are likely due to natural variation or if they resemble patterns commonly associated with doping. They may also consider contextual information, such as the timing of competitions, training periods, and any medical information provided by the athlete that could explain the atypicality.

n. The experts then discuss their findings together to reach a consensus on the profile. They may recommend further investigation or testing, especially if they believe the irregularities might have an innocent explanation. If the experts agree that the abnormalities are highly suspicious and consistent with doping, they report their conclusions to the relevant anti-doping organisation. If the panel finds a plausible explanation, the case may be closed with no further action. If the panel suspects possible doping but lacks definitive evidence, they may recommend targeted testing of the athlete to monitor for future abnormalities. If doping is strongly suspected, the case is escalated for potential disciplinary action.

9. The nature and extent of the ABP, and the "ABP Adaptive Model", have been explored and explained in various CAS awards: see, e.g., CAS 2010/A/2235; CAS 2012/A/2773. The Panel respectfully agrees with and adopts what was said in CAS 2016/O/4464 as follows:

"*148. […] the Sole Arbitrator observes that the ABP has been generally accepted as a reliable and accepted means of evidence to assist in establishing anti-doping rule violations (see CAS 2010/A/2174, para. 9.8; VIRET M., Evidence in Anti-Doping at the Intersection of Science and Law, 2016, p. 735; LEWIS/TAYLOR (Eds.), Sport: Law and Practice, 2014, para. C.126).*

149. This is not to say that no criticism on the ABP is permitted or that the reliability of the evidence provided by the ABP in a specific case cannot be reproached, it is however at least indicative that the credibility of the ABP system as a whole is not to be mistrusted easily. The Sole Arbitrator hence finds that the ABP system is to be presumed valid, unless convincing arguments are made that a specific element of the system does not operate satisfactorily.

150. The Sole Arbitrator is mindful of the warnings expressed in legal literature that a pitfall to be avoided is the fallacy that if the probability of observing values that assume a normal or pathological condition is low, then the probability of doping is automatically high (VIRET M., Evidence in Anti-Doping at the Intersection of Science and Law, 2016, p. 763, with further references to Dr. Schumacher and Prof. d'Onofrio 2012, p. 981; Sottas 2010, p. 121) and that it has been submitted in this context that "if the ADO is not able to produce a "doping scenario" with a minimum degree of credibility ("density"), the abnormality is simply unexplained, the burden of proof enters into play and the ADO's case must be dismissed since there is no evidence pleading in favour of the hypothesis of "doping" any more than for another cause" (VIRET M., Evidence in Anti-Doping at the Intersection of Science and Law, 2016, p. 774).

151. This view has indeed also been adopted in CAS jurisprudence and the Sole Arbitrator finds that another CAS panel summarised it nicely by stating that "abnormal values are (for the purposes of the ABP) a necessary but not a sufficient proof of a doping violation" (CAS 2010/A/2235, para. 86). Although such panel continued by emphasising that it is not necessary to establish a reason for blood manipulation, the

panel noted the coincidence of the levels with the athlete's racing schedule and stated the following:

"As Dr. Sottas convincingly explained, in the same way as the weight of DNA evidence said to inculpate a criminal is enhanced if the person whose sample is matched was in the vicinity of the crime, so the inference to be drawn from abnormal blood values is enhanced where the ascertainment of such values occurs at a time when the Athlete in question could benefit from blood manipulation" (CAS 2010/A/2235, para. 102).

152. The Sole Arbitrator agrees with these considerations and, as such, concludes that from the mere fact that an athlete cannot provide a credible explanation for the deviations in his or her ABP it cannot automatically be deduced that an anti-doping rule violation has been committed. Rather, the deviations in the ABP are to be interpreted by experts called to put into the balance various hypothesis that could explain the abnormality in the profile values, i.e. a distinction is made between a "quantitative" and a "qualitative" assessment of the evidence."

B. The Athlete's ABP

10. The Athlete is classified by World Aquatics as an international-level swimmer, and is a member of the HUNADO's ABP pool and, as such, participates in HUNADO's ABP Program. The Athlete provided a number of blood samples between 7 September 2014 and 2 July 2022, 46 of which were included in the Athlete's haematological profile, as set forth in the table below (in reverse chronological order).

Sample No.	**Sample Ref.**	**Testing Date**
46	966372	2022-07-02
45	915712	2022-06-06
44	1049420	2022-05-31
43	1049300	2022-05-18
42	**1035141**	**2022-04-27**
41	908888	2022-04-21
40	908884	2022-04-10
39	908875	2022-02-13
38	916486	2022-01-09
37	908720	2021-11-27
36	725321	2021-11-23
35	902111	2021-10-19
34	908589	2021-10-02
33	**908567**	**2021-09-13**
32	908561	2021-06-30
31	908370	2021-05-28

30	749217	2021-04-29
29	730227	2021-04-13
28	730122	2021-03-16
27	672411	2019-10-15
26	671615	2019-08-18
25	647902	2019-07-03
24	648409	2019-06-05
23	605423	2019-05-05
22	398762	2018-08-13
21	398743	2018-06-20
20	341609	2018-03-20
19	341495	2018-02-04
18	335906	2017-12-05
17	**341315**	**2017-12-03**
16	**362057**	**2017-11-07**
15	**346565**	**2017-07-19**
14	346560	2017-07-19
13	**335885**	**2017-07-11**
12	317931	2017-05-29
11	315562	2017-04-24
10	323663	2017-03-20
9	323641	2017-03-05
8	168803	2017-01-31
7	226285	2016-11-28
6	109086	2016-07-12
5	191908	2016-06-20
4	109083	2016-05-09
3	128523	2016-03-30
2	826703	2015-06-23
1	817015	2014-09-07

11. The samples were sent to and analysed by WADA-accredited laboratories and returned to the HUNADO APMU. For certain of the samples – those in **bold** in the above table – the Adaptive Model reported atypical values and triggered a review of the Athlete's ABP.

12. Accordingly, on or before 28 September 2022, the APMU sent to each of Dr Ozren Jaksic, Dr Laura Garvican-Lewis and Dr Jakob Mørkeberg (collectively, the "**Expert Panel**") a request to review the Athlete's (anonymous) blood profile and to provide an independent initial review. Each of them did so on an individual basis.

13. Subsequently, the APMU requested the Expert Panel to provide a joint expert opinion in relation to the Athlete's haematological profile and, under cover of letter dated 28 September 2022, the three independent experts issued a "Joint Expert Opinion" (the "**Joint Expert Opinion No.1**"). In that opinion, the Expert Panel set forth their quantitative and qualitative assessments of the ABP as follows:

a. Sample 13: a low OFF-score in July 2017 leading up to the World Championships.

b. Sample 15: a low OFF-score in July 2017 leading up to the World Championships.

c. Sample 16: collected two days before the Hungarian National Championships in November 2017 showed an abnormally high HGB concentration of 16.2 g/dL and a low RET% of 0.42, resulting in an atypically high OFF-score.

d. Sample 33: showed some atypical features with an elevated HGB, RET% and immature reticulocyte fraction ("**IRF"**) after the Tokyo Olympics but in the lead up to a World Cup in early October 2021. The follow up samples collected later the same year (but still before the World Cup) show different results especially for the HGB.

e. Sample 42: collected on 27 of April 2022 had a low HGB and elevated RET%, with a low OFF-score.

14. The Expert Panel's qualitative assessment was in the following terms:

"Qualitative Assessment

Sample 16 collected in November 2017 shows an abnormally high hemoglobin concentration for the athlete of 16.2 g/dL and low % reticulocytes (%ret) of 0.42, resulting in an atypically high OFFscore. A high OFFscore reflects an elevated hemoglobin mass and low %ret indicating an erythropoietic downregulation. This has been observed after cessation of EPO (Gore et al. 2003) or after blood transfusions (Damsgaard et al. 2006). This sample is collected two days before the Hungarian Nationals in 2017 and after some low OFFscore values (Sample 13 and 14) in July in the same year.

Samples 13 and 15 are collected in the lead up to the World Championships in 2017 and could indicate prior blood withdrawal such as seen during an autologous blood transfusion procedure (Damsgaard et al. 2006).

In addition, sample 33 shows some atypical features with an elevated Hb, %ret and immature reticulocyte fraction (IRF) after the Tokyo Olympics but in the lead up to the World Cup in early October 2021. The follow up samples collected later the same year (but still before the World Cup) shows [sic] *different results especially for the Hb.*

Sample 42 collected on the 27th of April 2022 has a low Hb with elevated %ret, which is highly atypical. Nevertheless, the athlete declares the donation of 450mL of blood on the day before on the doping control form. The sample is collected four days after the National Championships. The reason for and documentation of the blood donation should be provided."

15. By way of conclusion, the Expert Panel stated that, in their opinion "*it is highly likely that the abnormalities are the result of blood manipulation and that it is unlikely that the passport is the result of any other cause.*"

C. The APF

16. In light of the that conclusion, HUNADO recorded an "Adverse Passport Finding" ("**APF**") in respect of the Athlete in the WADA Anti-Doping Administration and Management System ("**ADAMS**").

17. On 4 October 2022, HUNADO notified the Athlete of the APF (attaching, *inter alia*, the Joint Expert Opinion No.1 and the ABP Documentation Package dated 8 September 2022). In that notice, HUNADO informed the Athlete that he was entitled to submit reasons and supporting documentation that might explain the APF.

D. The Athlete's Explanation

18. In response:

    a. On 17 October 2022, the Athlete provided a history of his blood donation (with documents).

    b. On 4 November 2022, the Athlete sent to HUNADO an expert opinion of Dr Timea Kováts dated 4 November 2022.

    c. On 22 November 2022, the Athlete provided English translations of these documents.

    d. The Athlete also provided the following materials: world ranking sheets and training notes; the Doping Control Form ("**DCF**") for Sample 13; a statement from his coach, Mr Imre Tari; certificates of blood donations from 23.08.2017, 14.02.2018, 29.08.2020 and 26.04.2022; biochemical and haematological results from analysis of private blood samples from 14.05.2018, 20.03.2019, 06.08.2019 and 17.10.22; results from pulmonary tests performed on 09.06.2021 supporting an asthma diagnosis; and a statement from Dr Timea Kováts, the Hungarian Swimming Association's team physician.

E. The Expert Panel's Review of the Explanation

19. On 23 November 2022, HUNADO forwarded these materials to the Expert Panel for their review and on 11 January 2023 the Expert Panel issued a further "Expert Opinion" ("**Joint Expert Opinion No.2**")

A. Samples 13 and 15

The athlete explains that the reason for the low OFFscores is due to a period of hard training before the World Championships. We acknowledge the plasma volume expanding effect of an increased workload during intense training periods, which has

been well described in the scientific literature also in swimmers (Mackinnon et al. 1997). Nevertheless, we disagree with the argumentation that increased training in general will result in an increased level of %ret. To support his hypothesis, Dr. Kováts refers to a study by Dressendorfer et al. from 1991 where blood was sampled from runners during a 20-day road running race and found an increased reticulocyte count over the course of the sampling period. In essence, these findings cannot be transferred to swimmers where the biomechanical load and hence mechanical stress acting on the body is very different. In contrast, in other non-weightbearing activities, such as cycling, a change in training load has shown to result in a decrease (not an increase) in %ret (Astolfi et al. 2021). Regardless, the effect of changes in training load on the %ret is small and already build into the reference ranges and thresholds in the adaptive model of the Athlete Biological Passport. Even in combination with iron substitution e.g., 'Mega Daily One Plus', we find it unlikely that an increase in %ret will occur. In a normal healthy population of athletes without iron-deficiency anaemia, iron supplementation will not induce reticulocytosis, nor a change in Hbmass (Garvican et al . 2014). The article Dr. Kováts refers to (Andrès et al. 2010) where reticulocytosis relates to iron-deficient patients and these results cannot be transferred to an healthy athlete.

We also disagree that the results of blood sample 15 were affected by suboptimal transportation conditions. A typical sign of suboptimal storage is an elevated mean corpuscular volume (MCV), which will be evident within 24-hours during storage at room temperature (Cornet et al. 2012). The MCV in Sample 15 was perfectly normal and in line with other values from the athlete.

B. Sample 16

The athlete explains that the reason for the low OFFscore is because the sample was collected during a training session and therefore was caused by plasma volume contraction and hence a higher Hb. Training calendar notes suggests that the athlete was doing swimming training on 23.10.2017 from 9.15 to 11.20 am, but no training notes/records are provided for the day the sample was collected. Only a statement from the coach is used to prove that the athlete was doing the same training from the 23.10.2017 and onwards and therefore also on the day of the test (07.11.2017). The sample was collected at 10.37 am e.g., apparently during the training session. Nevertheless, the athlete was asked during the doping control, whether he had been training during the last two hours, to which the athlete answered 'no'. In the athlete's response, it is stated that he did not report the training session on the DCF because "he thought that a relatively light training was not work mentioning". It is well recognized that the exercise intensity is important for the degree of plasma volume shift observed after an acute exercise bout (Convertino et al. 1983), with the greater the exercise intensity, the greater the plasma volume decrease (and resulting increase in Hb). Thus, it would not appear that the "light training" session should have a marked increase in Hb. It is also puzzling that the athlete donated blood on the 23.08.2017, but that this was not mentioned by the athlete during the doping control session. Although, we agree that blood donation e.g., 450 mL of blood two months before will not affect the blood result of Sample 16 (Pottgiesser et al. 2008), we are not convinced (from the current

documentation) that the athlete was tested during a training session. Even if he was, the acute effect of "light " training will only have a minimal impact (increase) on the Hb and not affect the %ret, which partly drove the OFFscore to the observed abnormal level.

The argumentation of using citrate to prove a recent blood transfusion or the lack of positive EPO tests e.g., from a sample collected a few days later can also be dismissed. First of all, citrate is used as an anticoagulant in some but not all blood bag preservations. Furthermore, when stored blood is transfused into a person, citrate is quickly metabolized to bicarbonate. One unit of packed red blood cells usually contains 3 grams of citrate, which in an individual with normal liver function is metabolized within 5 minutes (Li et al. 2015). Hence it is highly unlikely that increased citrate concentrations will be present in a sample collected 3 days later.

In addition, any lack of recombinant EPO in a sample collected 3 days later will not disprove that the athlete has been using recombinant EPO. A low %ret value (as observed in Sample 16) indicates that erythropoiesis is down regulated due to an excess amount of red blood cells. This blood picture exists when the use of recombinant EPO has been discontinued for several days or weeks (Gore et al. 2003).

Since recombinant EPO is only detectable for a few days, a negative test will not rule out previous recombinant EPO use.

C. Sample 33

The athlete explains that the reason for the high Hb, %ret and IRF was due to a low physical activity level during a period with no competitions e.g., off season and that similar elevated Hb values have been observed during periods with injuries. The athlete provides private blood tests to support this hypothesis. It is obvious that such private blood tests should be examined with caution for several reasons. Firstly, there is no preanalytical or analytical standardisation or documentation for private samples (e.g., 10 min seated wait time prior to collection, no exercise in the previous 2 hours before collection). There is also no comparability with the other ABP tests of the profile. Such comparability is usually confirmed by the independent external quality control (Centre Suisse de Controle de Qualité (CSCQ)) which compares all laboratories which are part of the network analysing ABP samples. Further, it cannot even be determined if such samples in fact belong to the athlete. Lastly, it is always unclear if the athlete presents all available private results or just a selection that suits their case. For all these reasons, previous decisions in ABP cases have supported the practise of not admitting private blood tests as part of ABP blood profiles.

Nonetheless, an increase in Hb during the off season or periods of detraining (Schumacher et al, 2002; Bejder 2017) has been documented previously and may explain the increased Hb in this sample and is supported by the reduction in Hb in sample 34 collected 3 weeks after returning to training. However, we refute the athlete's expert explanation that tobacco consumption during this period would elevate the ret% and IRF values. In the study by Schmidt et al, low dose Carbon monoxide was

administered at regular intervals throughout the day to maintain the CO-Hb level at 5% continuously for 3 weeks to mimic the hypoxic environment of altitude training. It is highly unlikely that the athlete's tobacco consumption during the "hard partying" phase, was equivalent to that of a chronic smoker and thus without the continuous exposure, there is no erythropoietic stimulation.

D. Sample 42

The athlete explains that the reason for the low Hb and high %ret was due to a recent blood donation. This blood donation is documented, and the athlete also reported it (in contrast to previous donations) on the doping control form during the doping control session. Hence this explanation is accepted.

Although it is outside the scope of our duties as medical experts to access the authenticity of the documentation, we were puzzled by the form code at the top of the certificates of blood donations. Here it says: 'eProgesa form code: D0808_ V07 _2020.03.22' indicating that the form was developed on the 22.03.2020. Nevertheless, two of the certificates for the blood donations (dated 23.08.2017 and 14.02.2018) were apparently before this date.

Conclusion

Therefore, considering the provided explanation from the athlete, we confirm our opinion that the likelihood of the abnormalities in the %ret described above being due to blood manipulation, namely the artificial increase of red cell mass for example ESAs and/or blood transfusions, is high. On the contrary, the likelihood of other factors such as changes in training load or preanalytical factors such as sample storage is very low.

[…]"

F. The Notice of Charge

20. On 23 January 2023, HUNADO notified the Athlete that, on the basis of Joint Expert Opinions No.1 and No.2, the Athlete was charged with a violation of Article 2.2 of the HUNADO ADR and that the Athlete was provisionally suspended from 23 January 2023 (the "**Notice of Charge**").

21. On or about 11 February 2023, the Athlete refuted the charge and provided a detailed response to the charge. The principal points made by the Athlete were as follows: (a) the Joint Expert Opinion No.2 is prejudiced and biased; (b) there were serious anomalies surrounding the sample collections; and (c) there was an innocent explanation, there set out, in respect of each of the six samples identified by the Expert Panel as atypical.

22. On 25 February 2023, the Athlete provided (in a letter to HUNADO) a response to the alleged ADRV. In that letter, the Athlete contended that 61.5% of the samples taken in 2017 were "*not suitable*" and that "*it was not possible to base the doping charge on such an error percentage*". Further, "[i]*f all the samples taken in the entire period 2014-*

2022 were properly handled, then the calculated 9/48, ie 18.75% total error percentage would not be acceptable either".

G. The Proceedings before the HUNADO Anti-Doping Committee

23. The Athlete disputed the charge and the Chair of the HUNADO Anti-Doping Committee appointed a three-member panel (this is the Anti-Doping Committee defined above) to hear the matter. It was comprised of a lawyer, Dr Balazs Budai, and two medical doctors, Drs Eva Martos and Gabor Pavlik.

24. The Anti-Doping Committee held a hearing on 17 March 2023 at which the parties were represented and at which the Athlete called the following people as witnesses: Dr Kováts (sports physician), Dr Renáta Csalódi (haematologist), Mr Márton Rakovics (biostatistician), and Ms Ibolya Kenderesiné Szücs (the Athlete's mother).

25. The Anti-Doping Committee issued its decision on 28 April 2023 (this is the Challenged Decision) by which, as has been noted, it found that the Athlete had committed an ADRV in violation of Article 2.2 of the HUNADO ADR for use of a prohibited substance, and imposed a period of ineligibility on the Athlete of four years starting from the date of the Athlete's provisional suspension, 23 January 2023.

IV. PROCEEDINGS BEFORE THE CAS

26. On 16 June 2023, the Athlete filed his Statement of Appeal (dated 15 June 2023) against the Challenged Decision with the CAS Court Office. In his Statement of Appeal, the Athlete nominated Dr Emil Neszmélyi as arbitrator.

27. On 28 June 2023, the Athlete filed his Appeal Brief (dated 27 June 2023) against the Challenged Decision with the CAS Court Office with CAS.

28. On 6 July 2023, HUNADO nominated Prof. Ulrich Haas as arbitrator.

29. On 11 July 2023, the CAS Court Office informed the Parties that, due to the fact that Dr Emil Neszmélyi was on the ADD List of Arbitrators, he was not eligible to be appointed to the Panel in these appeal proceedings. The Athlete was invited to appoint another arbitrator by 18 July 2023.

30. On 17 July 2023, the Athlete nominated Dr Dávid Gyula as arbitrator. At the same time, the Athlete challenged the appointment of Prof. Haas on the basis that "*he participated in the creation of the WADA Code on behalf of WADA*".

31. On 18 July 2023, the CAS Court Office invited HUNADO and Prof. Haas to respond to the challenge; and on 19 July 2023, Prof. Haas responded to the challenge to his appointment.

32. On 4 September 2023, the Director General of CAS granted to HUNADO a 10-day extension of time to submit its Answer.

33. On 17 September 2023, HUNADO submitted its Answer.

34. On 25 September 2023, the Athlete requested a case management conference ("**CMC**") and a hearing on the merits; and on 26 September 2023, HUNADO expressed its view that it did not insist on either a CMC or a hearing on the merits.

35. On 16 October 2023, the Challenge Commission of the Board of the International Council for Sport ("**ICAS**") issued its decision on the Athlete's challenge to Prof. Haas, by which the challenge was dismissed.

36. On 5 December 2023, the CAS Court Office informed the Parties of the formation of the Panel in this appeal as follows: Dr Dávid Gyula; Prof. Haas; and Mr James Drake KC as president.

37. On 20 December 2023, the Panel held a CMC in this matter. Amongst other things, the Parties were directed as follows: (a) the Athlete was directed to make any requests for document production by 30 December 2023; (b) HUNADO was directed to respond to any such requests by 15 January 2024; (c) the Parties were directed to submit a joint schedule for the hearing by 15 January 2024, which deadline was subsequently extended, upon request, to 26 January 2024; and (d) the Parties were directed to provide any outstanding witness statements and expert reports on which they sought to rely by 31 January 2024.

38. On 28 December 2023, the Athlete made the following "*production requests*": (a) the minutes of the hearing before the Anti-Doping Committee on 17 March 2023; (b) the expert opinion of Dr Kováts dated 4 November 2022; (c) the presentation by Dr Kováts to the Anti-Doping Committee; (d) the Athlete's submissions to the Anti-Doping Committee; and (e) the five negative test results relating to the Athlete as appearing in ADAMS.

39. On 15 January 2024, HUNADO responded to these production requests. HUNADO's position was as follows: (a) the hearing minutes were sent to the Athlete's representative on 12 April 2023; (b) the expert opinion of Dr Kováts dated 4 November 2022 was submitted by the Athlete; (c) the presentation by Dr Kováts to the Anti-Doping Committee was submitted by the Athlete; (d) the Athlete's submissions to the Anti-Doping Committee were submitted by the Athlete; and (e) the five negative test results relating to the Athlete as appearing in ADAMS were provided by HUNADO.

40. On 26 and 30 January 2024, the Parties submitted their respective proposals for the hearing schedule. Also on 30 January 2024, the Athlete requested that the Panel direct HUNADO to provide English translations of all of the documents submitted to the Anti-Doping Committee including those at sub-paragraphs (a) to (d) of their request of 28 December 2023 (see above).

41. On 27 March 2024, the CAS Court Office informed the Parties that the Athlete's request for a direction that HUNADO provide English translations of the said documents was denied.

42. On 27 May 2024, the CAS Court Office informed the Parties that the Panel was available for a hearing on 19 June 2024, and the Parties were asked to confirm their availability, in response to which:

    a. on 29 May 2024, HUNADO stated that it was not available for a hearing on 19 June 2024; and

    b. on 30 May 2024, the Athlete noted HUNADO's unavailability and asked for alternative dates.

43. On 5 June 2024, the CAS Court Office informed the Parties that the Panel was available for a remote hearing on 24 and 25 July 2024, and the Parties were asked to confirm their availability, in response to which:

    a. on 10 June 2024, the Athlete stated that he could do either date with a preference for 24 July 2024; and

    b. on 10 and 19 June 2024, HUNADO stated that it was not available for a hearing on 24 or 25 July 2024 and requested a hearing date for September 2023.

44. On 14 July 2024, the CAS Court Office informed the Parties that Mr Dávid Gyula had withdrawn from the Panel and the Athlete nominated Dr Péter Pákay in his place.

45. On 24 July 2024, the CAS Court Office informed the Parties that the hearing would take place remotely on 18 September 2024.

46. On 21 August 2024, the Athlete indicated that Dr Csalódi was not available to appear as an expert witness at the hearing and the Athlete requested that he be permitted to call Dr Balázs Sonkodi instead. The Athlete also sought to submit a further report by Dr Kováts dated 5 July 2024 and a "*genetic testing report*" from the University of Pecs dated 21 August 2014.

47. On 3 September 2024, HUNADO objected to these requests by the Athlete.

48. On 9 September 2024, the CAS Court Office informed the Parties that the Panel had decided to deny the said applications by the Athlete. On the same day, the Parties returned signed copies of the Order of Procedure in this matter.

49. On 18 September 2024, the hearing took place remotely as scheduled. The following people participated in the hearing:

    a. The Panel:

        i. Mr James Drake KC (as president)

        ii. Dr Péter Pákay

        iii. Prof. Ulrich Haas

b. For the Athlete:

i. Dr Tamás Hergenröder, Counsel

ii. Mr B. Kovacs, Counsel

iii. Agota Matyasföldi, Interpreter

iv. Dr Timea Kováts, Physician, Hungarian Swimming Association

v. Mr Tari Imre, Coach

vi. The Athlete

c. For HUNADO:

i. Mr Nicolas Zbinden, Counsel

ii. Mr Adam Taylor, Counsel

iii. Mr Gergely Balazs Szabo, HUNADO Legal Director

iv. Dr Ozren Jaksic, Expert Panel

v. Dr Laura Garvican-Lewis, Expert Panel

vi. Dr Jakob Mørkeberg, Expert Panel

d. For the CAS:

i. Ms Andrea Sherpa Zimmermann, CAS Counsel

50. At the outset of the hearing, the Parties confirmed that they had no objection to the jurisdiction of CAS in this appeal and no objection to the composition of the Panel.

51. At the hearing, the Panel asked the Parties to provide an agreed translation of the Hungarian Government Decree 43/2011 on the Rules of Anti-doping Activities and the Government Decree 363/2021 on the Rules of Anti-doping Activities, which they duly did on 27 September 2024. The Panel also asked for copies of the studies referred o in the expert opinions relied upon by the Athlete, which were provided on the same date. The Panel also invited the Parties to make further written submissions in relation to the consequences of any ADRV. The Athlete did not avail himself of that opportunity but HUNADO did so, filing short written submissions on 26 September 2024.

52. At the close of the hearing, the Parties confirmed that they had a full and fair opportunity to present their respective cases before the Panel.

V. THE EVIDENCE

53. The Parties adduced factual and expert evidence as follows.

54. For the Athlete:

a. The Athlete provided two responses to the alleged ADRV, dated 11 and 23 February 2023 (see above). The Athlete did not provide a witness statement or give evidence at the hearing. He did however make a statement to the Panel at the hearing.

b. A letter from Dr Timea Kováts dated 4 November 2022 to the Expert Panel and a response (undated) in relation to Sample 16. Dr Kováts also gave oral evidence at the hearing. Dr Kováts is a medical doctor with a PhD in molecular biology and is a cardiologist and a sports medicine specialist and has worked with swimmers since 2015.

c. Mr Tari Imre, the Athlete's coach, who gave oral evidence at the hearing.

d. The Panel notes here that the Athlete indicated in his Appeal Brief that he would also rely on the evidence of Dr Renáta Csalódi (a haematologist), Mr Márton Rakovics (a biostatistician), and Ms Ibolya Kenderesiné Szücs (the Athlete's mother) but none provided a report or statement and none was called to give evidence at the hearing. The same is true in respect of a number of witnesses who were said to be friends of the Athlete who would testify as the Athlete's behaviour; in the result, nonesuch was called to appear at the hearing.

55. For HUNADO:

a. The Joint Expert Opinions No.1, No.2, and No.3 (as defined in this Award) from the Expert Panel, the members of which also gave oral evidence at the hearing.

i. Dr Jaksic is a haematologist, Head of the Department of Haematology at the Zagreb University Hospital, and Associate Professor of Medicine at the University of Zagreb; he is on two APMU panels.

ii. Dr Mørkeberg is an exercise physiologist and is Senior Science Manager for the Denmark ADO. He has a PhD in blood doping. He is a member of 13-14 APMU panels.

iii. Dr Garvican-Lewis has a PhD in exercise physiology and is Director of Science at USADA. She is on 12 APMU panels.

b. Fact witness statements from the following (none of whom was required to appear at the hearing):

i. Ms Juvancz, HUNADO Quality Control and Testing Manager.

ii. Ms Földi, HUNADO doping control coordinator.

iii. Ms Johannesson, IDTM Managing Director.

iv. The members of the Anti-Doping Committee (as to freedom from conflicts).

v. Dr Tiszeker, HUNADO General Director.

VI. SUBMISSIONS OF THE PARTIES

56. The Parties made submissions, both in writing and orally at the hearing of the matter, which the Panel has carefully considered. The Panel sets out below the essential nature of the principal submissions advanced by the Parties.

A. The Athlete's Submissions

The Anti-Doping Committee

57. The Anti-Doping Committee committed "*serious procedural irregularities when it disregarded the evidence and evidentiary motions submitted by the Athlete and adopted its decision*".

58. In particular:

a. The Anti-Doping Committee completely ignored the Athlete's submissions on sample handling and violated the Athlete's right to a fair hearing. Consequently, the first instance proceedings "*cannot be considered as substantial since the committee did not even apply its own procedural rules*".

b. The Anti-Doping Committee violated the Athlete's right to a fair trial, and did not independently and impartially examine the evidence; the transcript shows that the Anti-Doping Committee was "*under the undue influence of the legal representative of HUNADO*". During a break in the hearing, the Anti-Doping Committee "*had a telephone conversation with the two responsible staff members of HUNADO, asking for further briefing on the case*". One member of the committee said that "*he has no time for this case, he is not going to review any further documents of the postponed decision*".

Jurisdiction

59. According to HUNADO's notice dated 4 October 2022, the Athlete committed six ADRVs in respect of Samples 13 (11 July 2017), 15 (19 July 2017), 16 (7 November 2017), 17 (3 December 2017), 33 (13 September 2021) and 42 (27 April 2022). There are therefore six different doping offences on six different dates "*and shall therefore be judged on the basis of the legal sources applicable and in force on the 6 respective dates*".

60. As a result, the offences in relation to Samples 13, 15, 16 and 17 are governed by Hungarian Government Decree 43/2011 on the Rules of Anti-doping Activities and Sample 33 and 42 are governed by Government Decree 363/2021 on the Rules of Anti-doping Activities.

61. The former provides in relevant part as follows:

"*Section 8 (1) The second instance doping procedure initiated as a result of an appeal against a decision of the Doping Commission taken at first instance shall be conducted by the Doping Appeal Committee. The Doping Appeal Committee shall operate within the framework of the Permanent Court of Arbitration for Sport.*

…

Section 18(6) If, as a result of the preliminary review procedure, it is found that the competitor has a medical exemption or that there has been a clear deviation from international requirements for doping control, the adverse consequences of a positive test result and other conduct giving rise to an anti-doping offence shall not apply.

…

Section 22 (1) The burden of proving that an anti-doping violation has occurred shall lie with the Doping Commission or the Doping Appeals Board conducting the doping procedure, subject to the exceptions specified in Paragraph (4). A fact which has not been proved beyond reasonable doubt shall not, except as provided for in paragraph 2, be assessed against the person subject to the doping procedure.

(2) The anti-doping offence referred to in Section 12(1) (a) shall be deemed proven if: (a) the prohibited substance, its derivative or marker is present in the competitor's sample A, the competitor has renounced analysis of his sample B and the sample B is not analysed, or (b) analysis of sample B confirms that of sample A.

(3) In the case of approved laboratories accredited by WADA, unless proven otherwise in accordance with paragraph 4(b), they shall be deemed to have acted in accordance with the international requirements applicable to laboratories with regard to the analysis and custody of a doping sample.

(4) The burden of proof shall be on the person subject to the doping procedure that: (a) have deviated from international requirements for the control of doping in the course of doping control, or (b) the analysis and/or custody of the sample has deviated from the international requirements applicable to laboratories and the positive analytical result is the result of that deviation.

(5) A derogation within the meaning of paragraph 4 shall be accepted as having been proved if it is at least as indicative as possible.

(6) In the context of an anti-doping offence committed pursuant to subsection (24) of Section 3, the person subject to the doping procedure shall prove beyond doubt the deviation referred to in subsection (4).

(7) Where the person subject to the doping procedure proves a derogation under points (a) to (b) of paragraph 4, the burden of proving that the deviation did not lead to a positive test result or any other conduct giving rise to the anti-doping offence shall be on the competent Doping Board or the Appeals Board to establish an anti-doping offence."

62. In light of this, in respect of the doping offences alleged by HUNADO to have been committed in 2017, these proceedings before CAS are "*premature*" since there should have been an appeal to the Permanent Court of Arbitration for Sport in Hungary.

Applicable Rules

63. The procedure is primarily governed by Government Decree 43/2011.

64. The system of proof and proceedings in this case "*is extremely questionable because the Athlete … is obliged to prove a negative fact, namely that he did not commit blood doping or did not use a prohibited method*". In a system based on the rule of law, "*it is nonsensical to convict someone of doping without objective evidence … on the basis of facts that are not proven beyond a reasonable doubt*". It is for this reason that Section 22 of Government Decree 43/2011 "*stipulates that a fact not proved beyond reasonable doubt shall not be imputed to the person subject to the doping proceedings, except as provided in paragraph (2)*". The ABP creates "*an unlawful situation*" because it permits a "*prediction*" based on a statistical model to be used as evidence towards a conviction.

65. Throughout these proceedings, HUNADO has ignored "*the facts, evidence and evidentiary submissions*" of the Athlete. Article 8.8 of WADA's ISRM sets out the principles of doping management.

The ADRV

66. The burden is on HUNADO to establish that there has been an ADRV. According to Government Decree No.43/2011, the standard of proof is beyond a reasonable doubt.

67. In this case, the Athlete's ABP is "*incomplete, incorrect and … manipulated*" as a result of the process of sampling and testing on the part of HUNADO and, as a result, the ABP "*should be excluded from the evidence due to the serious anomalies in the sample handling*".

68. The Athlete has analysed the information provided by HUNADO in respect of the 46 samples. HUNADO provided information only with respect to 50% of the samples; the samples withheld "*presumably contain a similar amount of irregularities*". Many of the samples were "*irregularly handled*". By way of example, Samples 7, 11, 12, 15, 17, 19,

30, 32, were transported without refrigeration; and two samples were missing, wrongly excluded from the Athlete's ABP, namely 192066 and 31674 each dated 7 March 2017.

69. As to the six samples identified by the Expert Panel which formed the basis of the alleged ADRV, the Athlete's submissions may be summarised as follows.

70. Sample 13:

a. On 24 June 2017, the Athlete participated in the Sette Colli race in Italy, where he underwent a urine doping control which was negative.

b. On 11 July 2017, Sample 13 was taken, with a RET % of 1.69, "*which is relatively high considering the data to date, but still within the expected individual range after sampling No.24*".

c. From 2 July 2017, the Athlete was attending a training camp in Debrecen, Hungary. It was "*the most strenuous training camp of his life*".

d. The Expert Panel acknowledged in the Joint Expert Opinion No.2 that the plasma-volume increasing effect of an increased workload "*has been well described in the scientific literature*".

e. The increased training load "*decreased the HGB concentration, which automatically resulted in increased reticulocyte production (with the increase in exercise load, the HGB concentration decreased significantly (14.9 – 14.1) as compared with sample No.12, which was definitely associated with an increase in RET % and therefore a decrease in the calculated OFF-Score*".

f. In their review, the Expert Panel ignored the fact that the Athlete "*has had a haemorrhoids disease since 2013*" which illness "*is cumulative in the family, and the family members try to keep it secret because of shame, so they only consult a doctor in exceptional cases*". In the spreadsheet relied upon by the Athlete there is an entry immediately before Sample 13 that says: "*Training camp. Mid-week recurrence of haemorrhoids with significant bleeding*".

g. On 1 June 2017, the Pecs clinic doctor prescribed Ketodex tablets and collagen for the Athlete's recurrent shoulder ligament inflammation. Constipation is not an uncommon side-effect of Ketodex and caused "*severe constipation*" in the Athlete and which, during the training camp at Debrecen, "*resulted in significant bleeding of his existing internal haemorrhoids*" from 5 July 2017 "*for 5-6 days*". The total blood loss is estimated to be 150 ml "*which alone could have had a minor effect on the increase in RET%*". The Athlete did not consult a doctor and did not want to interrupt his training camp.

h. The Athlete followed the "*family practice*" of taking 2*2 Delatrex daily and vitamin B12 tablets of 1000µg twice a day and consumed at least 0.5l of beetroot or cherry juice daily. "*The known haematopoietic effect of high levels of vitamin*

B12 and the high folic acid content of 100% beetroot juice can compensate for blood loss by increasing reticulocyte volume."

i. This is confirmed by the decreasing RET% (1.69-1.45) and increasing HGB concentration (14.1 – 14.3) in Sample 15 taken one week later.

j. The Athlete did not mention his blood donation in the DCF. He did not understand English very well at the time and he understood the question "*Has the athlete donated or lost blood or received blood transfusion(s) during the last 3 months?*" to be asking "*Has the athlete given blood or suffered blood loss due to medical or emergency procedures in the last 3 months?*", the answer to which was no.

k. The incident repeated itself in January-February 2022. On 14 January 2022, the Athlete sought treatment for his recurrent shoulder pain. He started taking Ketodex as before, which "*caused distress*" and haemorrhoidal bleeding. He adopted the usual treatment according to family practice (as above). On 27 January 2022, he sought medical help, and on 1 February 2022 underwent a colonoscopy examination. The examination revealed the presence of rectal blood in the stool. This episode gave rise to the same HGB reduction and increase of RET% as happened in 2017 for Sample 13.

l. This demonstrates that the result of Sample 13 was not the result of blood manipulation, and the use of a banned substance can be "*completely excluded*".

71. Sample 15:

a. Sample 14 was classified as invalid and was not included in the ABP. This sample was collected on 19 July 2022 and analysed on 20 July 2022. The analytical reported an IRF of 3.6%.

b. Sample 15 was also collected on 19 July 2022 and analysed on 20 July 2022, three minutes after Sample 14, reporting an IRF of 6.4%.

c. The Athlete "*has every right to question and be concerned*" as to how these two samples, taken and sampled at the same time, can give rise to such a difference in IRF values; such a significant difference in IRF "*is evidence of the influence of temperature on the results from irregular transport*".

d. For Sample 15, taken eight days after Sample 13 during a demanding training period, "*the increase in HGB, the decrease in RET% and the increase in OFF-Score are also noticeable. This is a natural process; blood transfusion and EPO can be excluded*".

e. Had the Expert Panel taken into account the effect of the "*highly stressful training period*", they would have rejected their earlier assumption of blood manipulation.

72. Sample 16:

a. On 23 August 2017, the Athlete "*had his first blood donation in his life*".

b. On 7 November 2017, the Athlete provided Sample 16 during training.

c. When he did so he "*had already forgotten*" the fact that he had donated blood on 23 August 2017. This omission resulted in incorrect data being recorded in the ABP. The forgetfulness and omission are attributable to the Athlete "*but to hold him responsible or to impose a ban (also) for a possible distortion of results due to this omission … would be a disproportionate punishment*".

d. According to Annex I, I.2.1 of ISTI, a sample should not be taken within two hours of training and if it is taken within that period, the doping control officer ("**DCO**") shall record the nature, duration and intensity of the training.

e. Sample 16 was taken within that two hour period and the DCO made no record of the above details. It should therefore be excluded from the Athlete's ABP.

f. In the Joint Expert Opinion No. 2, the Expert Panel took into account the evidence (the coach's statement) in which it was acknowledged that the sample was taken during training but said that the Athlete made no mention of that in the DCF. The DCO "*obviously knew this because the sampling took place in the swimming pool and the Athlete appeared for the sampling with a wet body*".

g. In the expert opinion of Dr Kováts, the term used on that day was "*relatively light training session*" which the Expert Panel "*deliberately distorted*" to "*light training session*".

h. The two terms are "*fundamentally different*": the former can have a "*significant effect*" on haemoglobin levels, while the latter "*may cause only a minor change*". "*The deliberate paraphrasing indicates discrimination and bias against the Athlete.*"

73. Sample 17:

a. Sample 17 was taken on 3 December 2017.

b. The temperature logbook is missing.

c. Sample 17 was transported to the Seibersdorf Laboratory without refrigeration such that the average temperature of the sample cannot be determined and its usability and integrity cannot be guaranteed.

d. The Expert Panel presumes that the irregular transport did not affect the condition of the sample.

e. The Expert Panel has acknowledged "*a serious violation of the international rules on transportation and therefore sample No.17 cannot be included in the Athlete's biological passport*".

f. Sample 18 was taken two days after Sample 17. Sample 18 was transported to the Seibersdorf Laboratory at an average temperature of 3.8˚C and the analysis for that sample produced "*completely normal results*".

g. It is "*unthinkable and unrealistic*" that the Athlete would manipulate his blood just five days before the European Short Track Championships in Denmark.

h. A urine sample was taken at the same time and it was negative.

i. There is only one possible explanation for the analysis of Sample 17: it was delivered without refrigeration.

74. Sample 33:

a. Sample 33 was taken on 13 September 2021.

b. For this sample, the temperature data logger was started after the sample was taken and stopped when the sample had been obtained because the DCO took the sample with him. From then on, the only thing known about the sample is that a further 2:40 hours elapsed before it was analysed.

c. It is possible that it was stored at room temperature in which case it could have warmed up to 20˚C. For a blood stability score ("**BSS**") equal to 85, as required by ISTI, Annex I, the acceptable maximum average temperature is 14.6˚C. It cannot be excluded that if the sample was exposed to higher temperatures during that 2:40 hours the average temperature could have reached 15 ˚C by the time of the analysis.

d. According to the literature, suboptimal sample treatment can affect RET%; considering the above, it is likely that suboptimal sample treatment played a role in the elevated RET% and the IRF measured in this sample.

e. After the Tokyo Olympics the Athlete "*was very disappointed and completely stopped training*". He "*completely abandoned dietary supplements*"; took several holidays; reduced his activity to zero. If in the company of a smoker he smoked 10-15 cigarettes a day. He did not live the life of a professional athlete, "*to which his body was obviously reacting biologically*".

f. The Expert Panel "*basically agrees*" that periods of detraining may result in elevated HGB (at Joint Expert Opinion No.2 at p.4); and it does not dispute Dr Kováts' opinion that "*intensive cigarette smoking significantly increases the level of reticulocytes and the immature reticulocyte fraction*".

g. The Athlete's smoking during his resting period "*is a perfectly reasonable and psychologically justified cause of the abnormal values*".

h. The Expert Panel disregards the fact that during the period of doping controls, blood was taken from the Athlete on 57 occasions. This "*alone would explain to some extent the constantly varying ABP values*".

75. Sample 42:

a. The Athlete indicated during the sample collection that a blood sample of 450 ml had been collected from him on 26 April 2022 yet the ABF records "transfusion". "*This misleading labelling could imply that the Athlete's data …was the result of a blood transfusion (i.e. blood draw + blood donation) when in fact he only had a blood donation, i.e., a specific amount of blood loss of 450 ml.*"

b. The Athlete's explanation as to his blood donation has now been accepted by the Expert Panel.

The Competition Schedule

76. The Expert Panel should have regard to the Athlete's competition schedule in assessing the likelihood of doping on the part of the Athlete.

77. A distinction must be drawn between enhancing performance through illegal means and whether a doping offence has been committed. "*The fact that there is sufficient evidence to conclude that an athlete engaged in doping does not automatically mean that the athlete … has committed a doping offence. In the case at hand, even doping has not been proven, let alone that a doping offence has been committed.*"

78. The Athlete did not use any prohibited substance or method to achieve a better result and blood manipulation would make sense if used to achieve an outstanding HGB value just before competitions. But the Athlete's HGB values were normally low before his major races, not reaching 15 g/dL, and all blood samples taken during training just prior to major competitions had normal HGB levels on average. By contrast, in 2019, 2021 and 2022, outside competitions and during rest periods the Athlete's HGB levels increased significantly.

79. There was no reason for the Athlete to commit a doping offence because there was no professional benefit for him to do so. The Athlete's uncontested results achieved before and after the alleged doping offence show that results did not improve as a result of any doping "*but at another time when any such doping would not have had an effect on their performance*".

80. Such improvement by the Athlete is "*wholly and exclusively attributable to a more intense training regime*".

Relief

81. The Athlete, by his Appeal Brief, sought the following relief:

"The decision challenged by the appeal should therefore be annulled."

B. HUNADO's Submissions

The Anti-Doping Committee Decision

82. The Anti-Doping Committee held a hearing at first instance on 17 March 2023. Prior to the hearing, the committee forwarded a number of questions in relation to the Joint Expert Opinions to the APMU. The APMU replied on 16 or 17 March 2023. The Anti-Doping Committee forwarded the reply to the Athlete with a 14 day period to respond.

83. The Athlete requested to inspect the HUNADO file and did so on 27 March 2023, and then responded to the Anti-Doping Committee on 31 March 2023 (dated 29 March 2023). The Anti-Doping Committee met on 20 April 2023 and taking into account the fact that the Athlete's response contained no new facts, evidence, or motions, decided to proceed to issue its decision without a further hearing.

84. The Anti-Doping Committee was not under the influence of HUNADO. HUNADO was audited by WADA in the year 2021-2022, including the results management processes, and WADA confirmed the independence of the results management mechanism, including the Anti-Doping Committee. Further:

a. Each of the members of the Anti-Doping Committee made a declaration of no conflict of interest in August 2021, which also acknowledges their obligation to be operationally independent.

b. The members of the Anti-Doping Committee declare that they performed their duties independently and have not been influenced by any third party.

c. HUNADO's Dr Agnes Tiszeker has declared that she has never instructed the members of the Anti-Doping Committee.

d. HUNADO provides the infrastructure for the Anti-Doping Committee, and in this way the members of the Anti-Doping Committee and HUNADO may be in contact with each other; but that does not mean that the Anti-Doping Committee is controlled by HUNADO.

e. The fact that the Athlete made a secret recording of the closed session of the Anti-Doping Committee and quotes some of its statements "*is a characteristic of the whole Appeal Brief: it is full of out-of-context, untrue statements that raise serious ethical questions*".

Jurisdiction

85. Article 13.2.1 of the HUNADO ADR provides that "*In cases arising from participation in an International Event or in cases involving International-Level Athletes, the decision may be appealed to CAS*".

86. The Athlete is an International-Level Athlete and his appeal is therefore to CAS. The procedural authority of CAS is confirmed by Hungarian law:

    a. For the period between 2017 and 2021, by the Sports Act, Article 14 (2a) of which provides that "International-level athletes can only appeal to CAS against a final disciplinary sanction for doping".

    b. As from 2021, by Government Decree No.363/2021, §6(2) of which provides that "*In cases arising from participation in an International Event or in cases involving International-Level Athletes, the decision may be appealed to the Court of Arbitration for Sport*".

87. The Athlete's claim that the appeal to CAS is "*premature*" and that the HUNADO Appeal Committee should act as a second instance body is therefore "*not true*".

The Applicable Rules

88. Pursuant to §4/B of Act I of 2004 on Sport, HUNADO's ADR apply to Hungarian citizen athletes. Such rules must comply with the requirements set forth in Government Decree No. 363/2021 on anti-doping activities. That decree sets out the following requirements:

    a. Article 1:

    "*For the purposes of this Decree:*

    world anti-doping program: encompasses all of the elements needed in order to ensure optimal harmonization and best practice in international and national anti-doping programs, adopted by WADA, including in particular the Code, the International Standards and Technical Documents, as well as the Models of Best Practice and Guidelines."

    b. Article 2:

    "*(5) In performing its functions, in line with the world anti-doping program, HUNADO shall regulate anti-doping activities, doping controls, anti-doping rule violations, and sanctions in its own rules (hereinafter called HUNADO Rules), which shall be published on HUNADO's website together with the WADA Code.*

    (6) In the framework of its anti-doping activities and doping controls, HUNADO shall comply with the provisions of HUNADO Rules and the world anti-doping program."

89. Article 27.1 of the HUNADO ADR provides that they "*shall enter into force on 1 January 2021*" and they repeal any previous version of the HUNADO ADR. This is consistent with Article 10 of the Government Decree No. 363/2021, which provides that the decree shall be applied to ADRVs committed after 1 January 2021.

90. The present case is not based on an adverse analytical finding (AAF) but on an Adverse Passport Finding (APF). The Expert Panel identified six "*suspicious*" samples and those six samples "*with the tendency of the markers identified in the adaptive model itself establish the* [ADRV]". Therefore, there are not six offences, as the Athlete contends, but one "*single continuous doping offence, which is considered to have been committed with the unanimous 'likely doping' opinion of the Experts*". All references by the Athlete to an earlier version of the ADR are therefore "*unfounded and without merit*".

The ADRV

91. Of the various samples provided by the Athlete in the period 7 September 2014 and 2 July 2022 as part of HUNADO's ABP Program, a total of 46 samples were included in the Athlete's haematological profile.

92. The Athlete contends that a number of these samples "*are incorrect*" and cannot be taken into consideration. All of the samples are suitable for inclusion in the Athlete's haematological profile. The two samples that were excluded as invalid by the APMU were excluded because they were not suitable for reliable conclusions to be drawn from them; all the other samples were defined as "valid" in ADAMS "*and no circumstances have been reported by the laboratory or the Testing Authority that would have been required under ISL 5.3.3 if any abnormality was identified in the sample*". In any event, the Athlete has not proven that any departure from an international standard could reasonably have caused the ADRV.

93. As to the six anomalous samples on which the Expert Panel relied, the submissions of HUNADO may be summarised as follows.

94. HUNADO sent to the Expert Panel the Athlete's Appeal Brief and asked it to comment on the Athlete's explanations therein. The Expert Panel issued a further opinion dated 4 August 2023 (the "**Joint Expert Opinion No.3**"). In relevant part, the Expert Panel reported as follows:

"*Hemorrhoidal Bleeding and Supplements*

In the appeal brief and on the basis of exhibit F-19, it is proposed, that some of the abnormalities in the profile are due to blood loss from hemorrhoids. It is further argued that the subsequent treatment with JutaVit vitamin B12 tablets of 1000 mg twice a day and organic beetroot juice (with high folic acid content) would have led to blood markers normalization afterwards. First of all, we note that this argumentation has not been submitted to us in any 15 of the previous submissions by the athlete.

Our understanding is that the only information about anal bleeding is from exhibit F-19 and a colonoscopy performed on the 1st of February 2022. In F-19 it is stated that on the 14th of February 2013 hemorrhoidal bleeding was treated by a family doctor. A certificate dated 20 18.10.2022 and signed by Dr. Verebély Péter Sándor (Exhibit F-20) was provided, with a diagnosis of "Hemorrhoids, without complications". According to F-19 hemorrhoids recurred on:

- *10th of August-26th of September 2016 (No ABP relevant for this period).*
- *14th of December 2016-2nd of January 2017 (No ABP relevant for this period).*
- *2nd-19th of July 2017 (Sample 13 and 15 collected during this period).*
- *29th of July-27th of September 2021 (Sample 33 collected during this period).*

We find it highly unlikely that bleeding e.g., due to hemorrhoids would induce the changes observed in samples mentioned above. First of all, the blood picture observed in Sample 13/15 and Sample 33 are markedly different, with a high Hb in the latter, which contrast the normal response to blood loss.

Furthermore, the fact that the athlete did not declare blood loss on the doping control forms and only sought medical assistance in 2013 and 2022 (and not in 2017 and 2021) makes us question that any significant bleeding actually occurred in 2017 and 2021. Being an athlete who has undergone several doping controls, the athlete should fully understand that his signature on the doping control form is legally binding and that by signing the doping control form he attests that the information on the doping control form is correct.

If bleeding due to haemorrhoids did in fact take place around the collection of Sample 13/15 and 33, we find it highly unlikely that the results in the ABP are the result of hemorrhoidal bleeding. On page 23-24 of the Appeal Brief it is stated that the estimated blood loss is estimated to around 150 mL and that the bleeding started on the 5th of July 2017 and lasted 5-6 days. Hence Sample 13 was collected just after the bleeding had ceased. Sample 13 had a 25 %ret value of 1.69% and a Hb of 14.1 g/dL. The average %ret and Hb of the previous valid samples were 0.76% and 15.2 g/dL. Hence the approximate change in Sample 13 from his 'normal values' were an increase of 0.93 percentage point in %ret and a decrease of 1.1 g/dL in Hb. Sample 15 collected 8 days later showed similar values although a slightly higher Hb (14.3 g/dL) and a slightly lower %ret (1.45%) were present. A recent study by Krumm et al. 30 2023 examined the effect of withdrawing exactly 150 mL blood on the ABP markers (Krumm et al. 2023). Here it is evident that one and two weeks after blood withdrawal the Hb is and %ret are unchanged. The amount is simply too small to have any effect on the ABP. Even the withdrawal of one bag of blood corresponding to 450 mL of blood does not induce the changes observed in the profile (Voss et al. 2022). Hence it is our opinion that a significant amount of blood (>450 mL) much greater than the estimated amount must have been lost to induce the observed changes.

It is also proposed that the self-medication with Jutavit vitamin B12 tablets of 1000mg twice daily in conjunction with organic beetroot juice (with high folic acid content) contributed to the increased reticulocytes observed in sample 13 and 15. Whilst it is acknowledged that folate, vitamin B12 and iron have key roles in the formation of new red blood cells (erythropoiesis), and that deficiency can result in anemia, there is no evidence that supplementation in a non-anemic state induces erythropoiesis (Koury et al. 2004). The normal MCV observed in the athlete throughout the profile also speaks against any deficiencies relevant for erythropoiesis.

Influence of training load

We also wish to respectfully highlight the misinterpretation of our previous statements relating to the effect of training load on plasma volume and reticulocyte production (Appeal brief page 23). Whilst it is correct that increased training load results in a plasma volume expansion (and thereby a decrease in Hb concentration), this does not "automatically result(sic) in increased reticulocyte production," as claimed. As stated in the Mackinnon et al. 1997 paper, "these changes are not considered to reflect a true anemia but are attributed to the expansion of plasma volume in response to endurance training." The erythropoietic system is well adapted to respond to acute changes in arterial oxygen content that may arise from significant blood loss or hypoxic exposure, but does not respond to mild changes in plasma volume, where the hemoglobin mass remains constant. Further, since %ret is independent of plasma volume, training load induced plasma volume changes have no effect on this parameter.

Samples not included in the Blood Profile

The Athlete refers to the fact that samples 317674 and 192066 are missing from the hematological data table, and as such, a total of 48 samples should be included, not 46. This information is new to us. We had no information about these samples neither in ADAMS nor in the documentation provided to us when we wrote our joint expert opinion and the replies 5 to the athlete's arguments. We have now been made aware that the ABP Sample with sample ID 192066, collected on 8th March 2017, was not included in the profile and have received the Hematological Passport Lab Results in exhibit F-8. Although the inclusion of this sample in the profile would have slightly changed the individual thresholds, the abnormalities and the interpretation of the critical samples as explained in previous reports remain the same.

Further, it can be seen in F-9 that sample 317674 was a "blood" (serum) sample not ABP sample and therefore does not form part of the ABP (specific analysis for the ABP must be performed on whole blood).

Invalidation of Sample 14

Samples 14 and 15 were collected during the same sample collection session. The invalidation was performed according to the Athlete Biological Passport Operating Guidelines 8.2.3. Sample 15 was collected at 21:20 and sample 14 at 21:30. Since the blood parameters in the samples were almost identical, when asked by the APMU, we

recommended the APMU to invalidate the second collection e.g., Sample 14. Nevertheless, either one could have been kept in the profile without any effect on the profile and our interpretation of the results. The small difference in the immature reticulocyte fraction (IRF) between Sample 14 and 15 has no impact on our interpretation. The difference is small especially considering the allowed reference range provided for internal quality control material E-Check assay sheet by SYSMEX (see any Laboratory Documentation Package). The IRF is not a primary marker of the ABP and there are no requirements as to differences between consecutive measurements as is the case for Hb and %ret (WADA ABP Operating Guidelines).

Sub-optimal Sample Storage and Transportation

We reiterate our previous statement that we find it highly unlikely that these samples as well as all samples included in our evaluation were not fit for purpose.

In the appeal brief there seems to be several misunderstandings. In the table on page 19-20 5 which refers exhibit F-11 (the ABP Documentation Package) the [question mark] at the temperature (T) does not mean that the sample was not refrigerated, but rather that the Certificate of Analysis (CA) was requested in which the temperature logger file is not included in accordance with the WADA requirements (WADA Technical Document – TD2022LDOC).

Furthermore, it is stated that only 23 ABP Documentation Packages are available out of 46 samples. Again, with reference to the WADA Operating Guidelines there is no need to have documentation for all samples: "It is only mandatory to have a full ABP Laboratory Documentation Package for those Samples that are deemed essential by the Expert panel (see TD LDOC [7]). Other relevant Samples, for example those that confirm the baseline levels of a 15 Marker, only require an ABP Laboratory Certificate of Analysis (see TD LDOC [7])".

With regards to Sample 10, 15, 17 and 28 we confirm our previous opinion that there were no indications of sub-optimal transportation conditions. No irregularities in the blood such as hemolysis was reported by the analyzing laboratories and as we have stated previously, the lack of temperature data and potential elevated transportation temperatures for such short periods is highly unlikely to have any effect on the blood results. With regards to the samples with no temperature recordings at all during the transportation (Sample 15 and 17), only Sample 15 was mentioned in our report. It is argued by the athlete that the MCV in this sample was slightly higher (84.5) than the average in samples collected the same year (83.6 fL). An 25 MCV of 84.5 fL is perfectly in line with the normal MCV range for the athlete, which has several samples showing higher values that have not been questioned by the athlete. An increase in MCV of about 5% is expected in blood samples kept at room temperature for 1 day (De Baca et al. 2005). This is not evident in any of the samples in the profile supporting that all samples were refrigerated during transportation even though no temperature logger was present in a 30 few samples.

On the contrary, Sample 15 was collected 8 days after Sample 13, had comparable blood results and confirms that the results were due to biological changes and not analytical irregularities.

Sample 17 had the same lowered %ret value as in the previous and subsequent sample and 5 had a MCV in the lower range for the athlete.

Finally, we must stress that the paper of Kouri et al. 2005, referenced by the athlete, states on page 474 that: "The measurement uncertainties of the erythrocyte count, MCV and haemoglobin concentration were small. The stability of the samples for haematological examinations was good except for thrombocytes, which should be analysed without delay". Thrombocytes not part of our assessment, and we are confident that the blood results included in our assessment should remain valid.

Therefore, we find no data or any other proof by the athlete that any of the samples in the profile have been affected by suboptimal storage conditions during transportation.

Conclusion

We therefore maintain our original opinion that the abnormalities are highly likely the results of blood doping and unlikely the result of any other cause. …"

95. HUNADO adopted that report and made further submissions on these particular samples, which may be summarised as follows.

96. Sample 13:

a. This sample was collected on 11 July 2017.

b. The Expert Panel's quantitative assessment was a high RET% and a low OFF-score.

c. The Expert Panel's qualitative assessment was that the sample was collected in the lead up to the World Championships in 2017 and could indicate prior blood withdrawal such as that seen during autologous blood transfusion.

d. The Athlete's contention that intensive training caused the abnormalities was "*refuted*" by the Expert Panel in the Joint Expert Opinion No.2, so that the intensive training at Debrecen does not therefore "*automatically*" lead to an increase in RET%, at least not to such an extreme extent (1.69). This is confirmed by the Expert Panel in the Joint Expert Opinion No.3.

e. The Athlete's haemorrhoidal disease was not accepted by the Anti-Doping Committee as an explanation given that (i) he relied on a spreadsheet prepared which he had prepared; (ii) he attached a doctor's certificate dated 18 October 2022 which said "*haemorrhoids without complications*"; and (iii) the Athlete did not declare haemorrhoidal bleeding on any of his DCFs. Haemorrhoidal

bleeding does not therefore provide a scientific explanation for the deviation of this sample.

f. The constipation, if any, caused by Ketodex is therefore irrelevant.

g. The Athlete's negative urine test on 24 June 2017 is also irrelevant; the present case is about deviations in the ABP not in the positivity or negativity of individual samples.

97. Sample 15:

a. The Expert Panel's quantitative assessment was a low OFF-score.

b. The Expert Panel's qualitative assessment was that the sample was collected in the lead up to the World Championships in 2017 and could indicate prior blood withdrawal such as that seen during autologous blood transfusion.

c. The Athlete competed in the World Championships in Budapest on 26 July 2017. This sample was taken one week before and shows a low HGB (14.3) and a high RET%, with a low OFF-score (70.75).

d. The Athlete complains that only one of the two samples taken during the same collection session was included in his profile. That is correct. Article 8.2.3 of the WADA ABP Operating Guidelines provides that, where more than one sample is taken during the one sample collection session, one is to be included in the ABP and the others are to be invalidated.

e. In any event, either sample could have been included and the difference between the parameters was so small that it would not change the Expert Panel's interpretation of the Athlete's profile.

f. The Athlete complains that no temperature logger was used for this sample and that the BSS and temperature indicators are missing; and that the sample was unrefrigerated when transported. That is not correct:

i. The sample was collected on 19 July 2017 during the 2017 World Championships and the temperature of the sampling room was recorded at 25˚C.

ii. The DCOs declared that the samples were packed in a refrigerated container after collection and the sample box was sealed at 21:22 hrs and placed in the refrigerator at HUNADO's office at 0:30 hrs on 20 July 2017.

iii. The samples were stored refrigerated until the time of delivery to the Seibersdorf Laboratory and were handed over to the courier in a cooled condition.

iv. The Seibersdorf Laboratory carried out its analysis within 1.5 hours of receipt and the status of the sample as defined by the Seibersdorf Laboratory as recorded in ADAMS is "*valid*".

v. Even if there had been a departure by HUNADO in respect of the handling of the sample, Article 3.2.3 of the HUNADO ADR provides that the Athlete would then bear the burden of showing that any such departure "*could reasonably have caused*" an ADRV. The Athlete did not adduce any evidence on this.

98. Sample 16:

a. Sample 16 was collected on 7 November 2017.

b. The Expert Panel's quantitative assessment was a high OFF-score.

c. The Expert Panel's qualitative assessment was that the sample was collected in November 2017 and showed an abnormally high HGB concentration for the Athlete of 16.2 g/dL and a low RET% of 0.42, resulting in an atypically high OFF-score. A high OFF-score reflects an elevated HGB mass and low RET% indicating an erythropoietic downregulation. The sample was collected two days before the Hungarian Nationals in 2017 and after some low OFF-score values (Samples 13 and 14) in the same year.

d. The sample was taken the day before the start of the 2017 National Championships. The Athlete was asked during the doping control whether he had been training, to which he said no. The Athlete later said that he did not report the training session on the DCF because he "*thought a relatively light training was not worth mentioning*".

e. The sample was collected by the DCO in Százhalombatta, Hungary. Three athletes were tested during the sampling. The DCO recorded that the sample was taken before training; the DCO mission summary says "*Athlete was notified at swimming pool before they started training. … Tamás Kenderesi first provide blood samples from left arm and later he also provide urine sample before training. … Blood samples was collected before they started with training.*"

f. If the Athlete did participate in "*light*" training that would not explain the values of Sample 16, as the Expert Panel noted in the Joint Expert Opinion No.2.

g. The National Championships, which started the day after the sample collection, "*leaves no other explanation for the Athlete's haematological profile other than doping*".

99. Sample 17:

a. Sample 17 was taken on 3 December 2017.

b. The Expert Panel's quantitative assessment was a high OFF-score.

c. The Expert Panel makes no specific reference to a qualitative assessment; only the tendency has been assessed.

d. The Athlete refers to Sample 18 taken on 5 December 2017 which showed a lower HGB compared to Sample 17. The Athlete is incorrect when he says that the high HGB values in Sample 17 was due to unrefrigerated transport. It is not the HGB but the mean corpuscular volume ("**MCV**") parameter that indicates the suitability of the sample for analysis. The Expert Panel noted in its Joint Expert Opinion No.3 that an increase in MCV of about 5% is expected in blood samples kept at room temperature for one day and that this was not the case with respect to any of the samples indicating that the samples were refrigerated.

e. The fact that a urine sample was taken at the same time and was negative does not prove that the Athlete has not been involved in blood manipulation. Detection of blood doping can be done by direct analysis or by indirect analysis by means of an athlete's ABP. The two methods are different and a negative urine result does not rule out the possibility of an ADRV.

f. The Athlete complains that no temperature logger was used for this sample and that the BSS and temperature indicators are missing; and that the sample was unrefrigerated when transported. That is not correct:

    i. The sample was collected during a home visit and was kept refrigerated until the time of delivery to the Seibersdorf Laboratory as confirmed by the sample collection form, the chain of custody form completed by the DCOs, and the statement of the DCOs. It is also supported in the temperature records for the refrigerator at HUNADO, which show that the temperature did not exceed 7°C during storage.

    ii. Although the temp-logger was missing during transport, the refrigerated state of the sample is clear as explained by the HUNADO doping control coordinator and the sample was delivered in winter (December 2017).

    iii. The HUNADO quality control manager also confirms that HUNADO complies with the WADA cooling requirements for the transport of ABP samples.

    iv. The Seibersdorf Laboratory carried out its analysis within 1.0 hours of receipt and the status of the sample as defined by the Seibersdorf Laboratory as recorded in ADAMS is "*valid*".

g. Even if there had been a departure by HUNADO in respect of the handling of the sample, Article 3.2.3 of the HUNADO ADR provides that the Athlete would then bear the burden of showing that any such departure "*could reasonably have caused*" an ADRV. The Athlete did not adduce any evidence on this.

100. Sample 33:

a. Sample 33 was taken on 13 September 2021.

b. The Expert Panel's assessment was that the sample showed some atypical features with an elevated HGB, %RET, and IRF after the Tokyo Olympics but in the lead up to the World Cup in early October 2021.

c. The Athlete claims that, although a temp-logger was used for this sample, it was switched on late and switched off on arrival at the laboratory and that this played a role in the elevated RET% and IRF. This was based on a statement in the ABP Documentation Package that the "*data logger started after sample collection*". But this was an administrative error; it is clear from the ABP Documentation Package and ADAMS that the temp-logger was switched on long before sampling.

d. Two hours 40 minutes elapsed between the arrival of the sample in the laboratory and it was stored at room temperature. If this were not the case the MCV value would have indicated that the sample was unsuitable for analysis and the laboratory would reported to ADAMS if it identified any abnormalities in the sample. No such abnormalities were recorded and the status of the sample in ADAMS is recorded as "*valid*".

e. The Expert Panel considered the sample to be suitable for analysis.

f. Even if there had been a departure by HUNADO in respect of the handling of the sample, Article 3.2.3 of the HUNADO ADR provides that the Athlete would then bear the burden of showing that any such departure "*could reasonably have caused*" an ADRV. The Athlete has not done so.

g. In relation to the Athlete's contentions that his smoking explained the hight RET%, the Expert Panel (in its Joint Expert Opinion No.2) explained that smoking does not explain the RET% in the sample.

101. Sample 42:

a. Sample 42 was taken on 27 April 2022.

b. The Expert Panel's quantitative assessment was a low HGB, elevated RET%, and a low OFF-score.

c. The Expert Panel's qualitative assessment was that a low HGB with elevated RET% was highly atypical.

d. The Athlete explained that he had donated 450 ml of blood the day before the sample collection. The Expert Panel called for documentation to support that blood donation, which the Athlete provided, upon receipt of which the Expert Panel accepted the explanation.

e. HUNADO therefore accepts the Athlete's explanation with respect to this sample.

The Competition Schedule

102. The Panel should disregard the Athlete's sporting performance; it is "*completely irrelevant*". Comparing two results as a method of supporting the contention that the Athlete did not dope is "*specious*": see SR/102/2020, para.79.

Relief

103. HUNADO's prayers for relief were as follows:

"*14.1 HUNADO respectfully requests the CAS to rule as follows:*

14.1.1. The decision HUNADO/2022/DE/04, rendered by the acting Panel of the Doping Committee of HUNADO in the matter of Mr Tamás Kenderesi is maintained.

In particular, HUNADO requests confirmation that:

a) Mr Tamás Kenderesi is found to have committed an anti-doping rule violation under rule 2.2 of the HUNADO Anti-Doping Rules.

b) Mr Tamás Kenderesi is sanctioned with a four-year period of ineligibility starting from the date of provisional suspension, i.e. from 23 January 2023.

c) All competitive results obtained by Mr Tamás Kenderesi from 11 July 2017 until 23 January 2023 (i.e. the date of his provisional suspension) are disqualified, with all resulting consequences (including forfeiture of medals, points and prizes).

14.1.2. The arbitration costs shall be borne by Mr Tamás KENDERESI.

14.1.3. All costs incurred by HUNADO in connection with the present appeal proceedings be covered by Mr Tamás KENDERESI, including legal and other costs."

VII. JURISDICTION OF CAS

104. Article R47 of the CAS Code provides as follows:

"*An appeal against the decision of a federation, association or sports-related body may be filed with CAS if the statutes or regulations of the said body so provide or if the parties have concluded a specific arbitration agreement and if the Player has exhausted the legal remedies available to it prior to the appeal, in accordance with the statutes or regulations of that body.*

An appeal may be filed with CAS against an award rendered by CAS acting as a first instance tribunal if such appeal has been expressly provided by the rules of the federation or sports-body concerned."

105. The Athlete invoked the jurisdiction of CAS pursuant to Section 13.2.1 of the HUNADO ADR 2021 which provides as follows:

"*13.2 Appeals from Decisions Regarding Anti-Doping Rule Violations, Consequences, Provisional Suspensions, Implementation of Decisions and Authority*

A decision that an anti-doping rule violation was committed, a decision imposing Consequences or not imposing Consequences for an anti-doping rule violation, or a decision that no anti-doping rule violation was committed; a decision that an anti-doping rule violation proceeding cannot go forward for procedural reasons (including, for example, prescription); a decision by WADA not to grant an exception to the six-months notice requirement for a retired Athlete to return to competition under Article 5.6.1; a decision by WADA assigning Results Management under Article 7.1 of the Code; a decision by HUNADO not to bring forward an Adverse Analytical Finding or an Atypical Finding as an anti-doping rule violation, or a decision not to go forward with an anti-doping rule violation after an investigation in accordance with the International Standard for Results Management; a decision to impose, or lift, a Provisional Suspension as a result of a Provisional Hearing; HUNADO's failure to comply with Article 7.4; a decision that HUNADO lacks authority to rule on an alleged antidoping rule violation or its Consequences; a decision to suspend, or not suspend, Consequences or to reinstate, or not reinstate, Consequences under Article 10.7.1; failure to comply with Articles 7.1.4 and 7.1.5 of the Code; failure to comply with Article 10.8.1; a decision under Article 10.14.3; a decision by HUNADO not to implement another Anti-Doping Organization's decision under Article 15; and a decision under Article 27.3 of the Code may be appealed exclusively as provided in this Article 13.2.

13.2.1 Appeals involving International-Level Athletes or International Events

In cases arising from participation in an International Event or in cases involving International-Level Athletes, the decision may be appealed exclusively to CAS."

106. It is common ground that the Challenged Decision is a decision that an ADRV was committed and that the Athlete is an International-Level Athlete. It follows therefore that the CAS has jurisdiction in this matter.

107. The Parties confirmed the jurisdiction of CAS when they each signed the Order of Procedure which stated as follows: "*The Appellant relies on Section 13.2.1 of the WADA Code, Article 13.2.1 of the HUNADO Anti-Doping Code and Article 6(2) of the Government Decree 363/2021 (28.VI) as conferring jurisdiction on the CAS. The jurisdiction of the CAS is not contested by the Respondent and is confirmed by the signature of the present order.*" The Parties also confirmed the jurisdiction of CAS at the outset of the hearing.

108. The Panel accordingly confirms CAS jurisdiction.

109. In so doing, the Panel rejects the arguments put forward on the part of the Athlete to the effect that, because HUNADO alleges six different ADRVs some of which pre-date the HUNADO ADR 2021 then the issue of jurisdiction is to be determined according to the provisions of Hungarian Government Decree 43/2011 on the Rules of Anti-doping Activities which provided that an appeal against a decision of the Anti-Doping Committee is to be brought to the Doping Appeal Committee (within the framework of the Permanent Court of Arbitration for Sport). This is entirely contradicted by the Athlete's own invocation of jurisdiction pursuant to the HUNADO ADR 2021 and is in any event misconceived. It is misconceived because there are not six separate ADRVs here but one and the appeal is from the Challenged Decision of the Anti-Doping Committee dated 28 April 2023 such that the route of appeal from that decision is as set forth in the HUNADO ADR 2021, which is doubtless why the Athlete relied upon the 2021 rules in bringing his appeal.

VIII. ADMISSIBILITY

110. Article R49 of the CAS Code provides in relevant part as follows:

"*In the absence of a time limit set in the statutes or regulations of the federation, association or sports-related body concerned, or in a previous agreement, the time limit for appeal shall be twenty-one days from the receipt of the decision appealed against.*"

111. There is no issue in this appeal that the appeal was lodged by the Appellant in time, such that the appeal is admissible on that basis and there is no other objection to the admissibility of the appeals.

112. The Panel therefore confirms that the appeal is admissible.

IX. APPLICABLE LAW

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

"*The Panel shall decide the dispute according to the applicable regulations and, subsidiarily, to 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 that the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision.*"

114. HUNADO has enacted the HUNADO ADR 2021 which came into force on 1 January 2021 (and which expressly repeal any previous versions of the HUNADO ADR). HUNADO maintained that such rules apply to the present proceedings, both procedurally and substantively. The Athlete did not disagree with this submission (indeed he positively relied upon the HUNADO ADR 2021) and did not suggest that an

earlier edition of the HUNADO ADR should be applied in respect of any of the samples collected prior to the introduction of the HUNADO ADR 2021, and did not provide the Panel with any such earlier edition of the rules.

115. Accordingly, the Panel will decide this appeal primarily according to the HUNADO ADR 2021 (including the WADC and the International Standards) and subsidiarily to the laws of Hungary on the basis that is the country in the Anti-Doping Committee has issued the Challenged Decision. In this respect, the Panel notes that the HUNADO ADR 2021 apply according to their own terms but, by Article 24.3 therein, they also expressly incorporate the WADC and the various WADA International Standards, such as the ISTI and the ISRM.

X. SCOPE OF THE PANEL'S REVIEW

116. Article R 57 of the CAS Code provides in relevant part as follows:

"*The Panel has full power to review the facts and the law. It may issue a new decision which replaces the decisions challenged or annul the decision and refer the case back to the previous instance …* ."

117. The Panel therefore has full power to examine *de novo* the facts, matters and circumstances in these appeals in order to assess whether or not the ADRV has been established and what, if any, sanctions should follow.

118. In this context, the Athlete levels a number of criticisms at the Anti-Doping Committee and the manner in which it conducted the first instance hearing. It is enough to say that, as has been expressed in innumerable CAS awards, any procedural defect in the first instance hearing has now been cured by this *de novo* appeal, and there is no need, or use, in considering such allegations: see, e.g., 2008/A/1574 at para 42.

XI. THE ATHLETE'S APPLICATION

119. On 21 August 2024, the Athlete made an application to adduce the following evidentiary material: (a) an expert report from a geneticist, Dr Sonkodi, which the Athlete wished to rely upon in place of the evidence of Dr Csalódi, a haematologist, who was not available to give evidence; and (b) a further report from Dr Kováts dated 5 July 2024 in response to the Joint Expert Opinion No.2. The Panel denied the application and indicated that the reasons would be included in this Award.

120. In short, the Panel denied the application as to the report from the geneticist because it was too late in the day to seek to adduce the evidence on a new scientific discipline, of a geneticist in the place of a haemotologist; to do so would be unfair on HUNADO and if granted would require an adjournment of the hearing so as to allow HUNADO time to consider the evidence and gather its own in riposte. And the Panel denied the application to introduce a further report from Dr Kovats dated 5 July 2024 (which sought to address what was said by the Expert Panel on 11 January 2023) because it was

plainly open to the Athlete to do so when he filed his Appeal Brief and there was no explanation offered as to why he did not, and therefore no exceptional circumstances in accordance with Article R56 of the CAS Code.

XII. THE MERITS OF THE APPEAL

121. The Panel turns to the merits of the appeal.

122. The overarching issues to be determined by the Panel are whether HUNADO has established, to the relevant standard of proof, that the Athlete has committed an ADRV by reason of the use of a prohibited substance or method in violation of Article 2.2 of the HUNADO ADR 2021 and if so, what are the appropriate consequences?

A. The ADRV

123. HUNADO contends that the Athlete committed an ADRV within the meaning of Article 2.2 of HUNADO ADR 2021, which contention is based upon the analytical data within the Athlete's ABP as well as the interpretation of that data by the Expert Panel. For his part, the Athlete challenges that contention on a number of grounds.

The relevant legal framework

124. The relevant legal framework under to the HUNADO ADR 2021 is as follows:

"***ANTI-DOPING RULE VIOLATIONS***

The purpose of Article 2 is to specify the circumstances and conduct which constitute anti-doping rule violations. … Athletes … shall be responsible for knowing what constitutes an anti-doping rule violation … .

The following constitute anti-doping rule violations:

…

2.2 Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method

2.2.1 It is the Athletes' personal duty to ensure that no Prohibited Substance enters their bodies and that no Prohibited Method is Used. Accordingly, it is not necessary that intent, Fault, Negligence or knowing Use on the Athlete's part be demonstrated in order to establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method.

2.2.2 The success or failure of the Use or Attempted Use of a Prohibited Substance or Prohibited Method is not material. It is sufficient that the Prohibited Substance or Prohibited Method was Used or Attempted to be Used for an anti-doping rule violation to be committed.."

125. As to the burden of proof, Article 3 of the HUNADO ADR 2021 provides in relevant part as follows:

ARTICLE 3 PROOF OF DOPING

3.1. Burdens and Standards of Proof

HIUNADO shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether HIUNADO has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability, but less than proof beyond a reasonable doubt. Where these Anti-Doping Rules place the burden of proof upon the Athlete … to rebut a presumption or establish specified facts or circumstances, except as provided in Clauses 3.2.2 and 3.2.3 hereof, the standard of proof shall be a balance of probability.

3.2. Methods of Establishing Facts and Presumptions

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

…

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

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

3.2.3 Departures from any other International Standard or other anti-doping rule or policy set forth in the Code or these Anti-Doping Rules shall not invalidate analytical results or other evidence of an anti-doping rule violation, and shall not constitute a defense to an anti-doping rule violation; provided, however, if the Athlete or other Person establishes that a departure from one of the specific International Standard provisions listed below could reasonably have caused an anti-doping rule violation based on an Adverse Analytical Finding or whereabouts failure, then

HUNADO shall have the burden to establish that such departure did not cause the Adverse Analytical Finding or the whereabouts failure:

…

(ii) a departure from the International Standard for Results Management or International Standard for Testing and Investigations related to an Adverse Passport Finding which could reasonably have caused an anti-doping rule violation, in which case HUNADO shall have the burden to establish that such departure did not cause the anti-doping rule violation;

(iii) a departure from the International Standard for Results Management related to the requirement to provide notice to the Athlete of the B Sample opening which could reasonably have caused an anti-doping rule violation based on an Adverse Analytical Finding, in which case HUNADO shall have the burden to establish that such departure did not cause the Adverse Analytical Finding;18

(iv) a departure from the International Standard for Results Management related to Athlete notification which could reasonably have caused an anti-doping rule violation based on a whereabouts failure, in which case HUNADO shall have the burden to establish that such departure did not cause the whereabouts failure.

126. It follows that the burden of proving the ADRV falls on HUNADO. It is axiomatic that, in this respect, the atypical ABP values are a necessary but not a sufficient proof of a doping violation: see e.g., CAS 2010/A/2235 at para. 35. It remains for HUNADO to prove, to the relevant standard of proof, that the evidence shows that the Athlete has committed the alleged ADRV, viz., the use of a prohibited substance or method in violation of Article 2.2 of the HUNADO ADR 2021.

127. As was explained in CAS 2020/A/7510 at para. 98ff (and see also CAS 2011/A/2384 & 2386 at para. 252ff), it is for the Panel to assess the evidence as a whole, including the quantitative analyses provided by the Adaptive Model, the qualitative assessments on the part of the Expert Panel (they being experts in the field), and the explanations (and evidential corroboration thereof, if any) on the part of the Athlete, and form a view that it is comfortably satisfied that an ADRV has taken place. However, because the Athlete is possessed of all or most of the information in relation to his physiological characteristics and habits, while the burden of proof remains on HUNADO at all times, once the Adaptive Model triggers anomalous results then the Athlete comes under an evidential burden to offer a detailed explanation in order to show that, even if such results are consistent with an ADRV, the particular facts, matters and circumstances surrounding the results militates against a determination by the Panel that it is comfortably satisfied that an ADRV has taken place.

128. It is well to note also that there is a line of CAS authority that suggests that the Panel must be satisfied, on the evidence, that there is what is called a 'doping scenario' that is sufficient to support the alleged ADRV to the Panel's comfortable satisfaction. This notion has been summarised in CAS 2017/A/5045 at para. 120 as follows, which the Panel gratefully adopts:

"*This Panel understands this CAS jurisprudence to mean the following: even if all scenarios other than doping can be excluded (on a balance of probability), this does not suffice for the Panel to be comfortably satisfied that the Athlete committed blood manipulation. Instead, the use of a prohibited substance or method must – in addition – be a plausible and likely explanation of the values obtained for the Panel to positively assume that the Athlete doped. Such assessment must be made based on all evidence before the Panel.*"

129. The upshot of this is that HUNADO must produce evidence (in practice, mainly or exclusively expert evidence) that the Athlete's atypical results can be plausibly explained by the use of one or other prohibited substances or methods or a combination thereof. That is what is required to be presented as a 'doping scenario'.

130. The Athlete makes three principal arguments as to why HUNADO has not discharged its burden.

a. First, it is said that the standard of proof as a matter of Hungarian law is beyond reasonable doubt and that standard has not been met here.

b. Second, it is said that the Athlete's ABP, as compiled by HUNADO, is incomplete, incorrect and/or it has been manipulated such that the Athlete's haematological profile is unreliable and should be excluded from the evidence.

c. Third, the Athlete disagrees with the ultimate conclusion of the Expert Panel. The Athlete contends that the noted abnormalities can be explained in innocent terms and do not support the conclusion that there has been blood doping and/or manipulation.

Standard of Proof

131. As to the standard of proof, as noted above, the Athlete contends that Government Decree No.43/2011 "*expects a level of proof beyond reasonable doubt*" and that HUNADO has no satisfied that standard.

132. It is enough to say that Government Decree No.43/2011 has been overtaken in time by Government Decree No.363/2021 and that the applicable standard of proof is that set forth in HUNADO ADR 2021, namely to the comfortable satisfaction of the Panel. Whether that standard has been met or not will turn on a consideration of the material relied upon by HUNADO and the objections of the Athlete to that material, all to be addressed below.

Reliability of the ABP

133. The second objection on the part of the Athlete is that the Athlete's ABP is incomplete, incorrect and/or it has been manipulated such that the Athlete's haematological profile is unreliable and should be excluded from the evidence.

134. Article 3 of the HUNADO ADR 2021 is set forth above. It deals with: (a) the methods by which parties may establish facts; and (b) certain presumptions. As to the methods, it provides that facts related to an ADRV may be established by any reliable means. The comment to Article 3.2 adds to this by stating that "*HUNADO may establish an* [ADRV] *under Article 2.2 based on … conclusions drawn from the profile of a series of the Athlete's blood … Samples, such as data from the Athlete's* [ABP]". It is obvious that, as a matter of principle, HUNADO may rely upon the Athlete's longitudinal data as set forth in his ABP, and conclusions drawn therefrom by the Expert Panel, in seeking to establish the alleged ADRV.

135. Nevertheless, the Athlete identifies what he says are various "*irregularities*" in the sample collection process that render his entire ABP unsafe to rely upon for the purposes of the alleged ADRV. (The Athlete did not expressly rely upon cast this complaint in the terms of Article 3 of the HUNADO ADR 2021 but that is logically where his complaint leads.)

136. In this context, the Athlete relies upon Article 5.4 of the HUNADO ADR 2021 which obliges HUNADO to conduct testing in accordance with ISTI. As part of his complaint, the Athlete argues that HUNADO has failed to comply with the requirements set forth in ISTI, particularly the provisions of Annex I, which is entitled "ANNEX I - COLLECTION, STORAGE AND TRANSPORT OF BLOOD *ATHLETE BIOLOGICAL PASSPORT SAMPLES*" **(ISTI, Annex I).**

137. The immediate, and fatal, difficulty for the Athlete is that, as is provided for in Article 3.2.3 of the HUNADO ADR 2021, even if the Athlete was able to establish that there had been a departure from the sample handling requirements set forth in ISTI, such departure would neither invalidate nor constitute a defence to the ADRV unless and until the Athlete established, the burden being on him, that any such departure "*could reasonably have caused"* an ADRV.

138. As it happens, the Athlete made no submissions at all in this respect, such that, even if he had established any or all of the departures complained of, he has not established that any such departure could reasonably have caused the alleged ADRV, and his complaints in this respect must fail. The Panel need not therefore consider the particulars of these matters. In any event, the Panel notes that none of the alleged departures from the International Standards submitted by the Athlete is of such nature to reasonably have caused the analytical results obtained.

139. Finally in this respect, the Athlete complained that two samples were "*missing*" from the Athlete's ABP, namely 317674 and 192066, such that his ABP was "*incomplete*". When asked about this, the Expert Panel explained that: (a) 317674 was a blood serum

sample and not an ABP sample and should not have been included in the Athlete's ABP; and (b) 192066, collected on 8 March 2017, was indeed missing from the Athlete's ABP. It should have been included; however, the APMU corrected the error, included it in the ABP and re-ran the Adaptive Model, which produced "*slight*" changes in the individual thresholds. The Expert Panel nevertheless confirmed their interpretation of the critical samples remained the same.

140. In all, therefore, the Panel concludes that it may proceed on the basis that the Athlete's ABP is indeed complete and represents a reliable means by which HUNADO may establish the facts supporting the alleged ADRV.

141. The Panel notes in passing that, before the Anti-Doping Committee, the Athlete sought to rely on private blood sample analyses. He did not, however, do so before the Panel so that these can be set to one side. There is in any event a line of authority at CAS, with which the Panel agrees, that relying on such private analyses is fraught with difficulties given that there is no assurance that the samples have been analysed with the same rigour and discipline as would be the case in a WADA-accredited laboratory or that what is relied upon by any given athlete is the complete picture. In this regard, the Panel agrees with and adopts the reasoning in CAS 2023/A/10025 & 10027, where it is stated at para. 190 as follows:

"The Panel accepts that blood samples obtained from athletes under the ABP program to be included in an athlete's ABP and, ultimately, to establish a possible ADRV, ought to be collected and analysed under stringent conditions. This is necessary to ensure the integrity and acceptance of the ABP program as a valid means of establishing an ADRV. For this reason, privately collected samples cannot be included in the ABP."

The Explanations

142. As noted above, an APF does not of itself justify a conclusion that an ADRV has been committed but, instead, calls for an explanation by the Athlete of the abnormalities of his profile, all the more-so because it is the Athlete, and not HUNADO, who is in possession of the relevant information that might ground an explanation.

143. It is in this context that the Panel addresses the third (and most important) objection advanced by the Athlete which relates to the explanations for the abnormalities found in the samples relied upon by the Expert Panel and HUNADO. It is the Athlete's contention that these abnormalities can be explained in innocent terms and do not support the conclusion that there has been blood doping and/or manipulation on the part of the Athlete.

144. As noted above, the Expert Panel based its conclusions on six samples within the Athlete's ABP, viz,

a. Sample 13 collected on 11 July 2017

b. Sample 15 collected on 19 July 2017

c. Sample 16 collected on 7 November 2017

d. Sample 17 collected on 3 December 2017

e. Sample 33 collected on 13 September 2021

f. Sample 42 collected on 27 April 2022

145. The Panel notes at once that the Expert Panel has accepted the Athlete's explanation in respect of Sample 42, as has HUNADO. It is no longer necessary therefore for the Panel to consider that sample.

Sample 13 (collected 11 July 2017):

146. In its Joint Expert Opinion No.1 the Expert Panel noted that this sample had been flagged by the Adaptive Model as showing a high RET% and a low OFF-score. According to the Expert Panel, Sample 13 was collected in the lead up to the World Championships in 2017 and could indicate prior blood withdrawal such as seen during an autologous blood transfusion procedure.

147. For his part, the Athlete contended that this analysis could be explained by reason of: (a) increased training load; (b) severe rectal bleeding; and (c) the intake of beetroot and/or cherry juice, which explanations the Expert Panel did not accept.

148. The Panel notes that the quantitative assessment is not challenged by the Athlete; high RET% (1.69) and a low OFF-score. A high RET% indicates an increased production of reticulocytes which can result from the body's natural response to anaemia or blood loss or from the use of erythropoiesis-stimulating agents ("**ESAs**") to increase red blood cell production; and a low OFF-score suggests high HGB and low RET% which likewise may indicate recent blood transfusions or the use of ESAs. This the Expert Panel noted when they indicated that such parameters could indicate prior blood withdrawal such as that seen during autologous blood transfusion.

149. Increased Training Load:

150. The Athlete advances as an explanation for the atypical results of Sample 13 that he was involved, from 2 July 2017, in what he described as "*the most strenuous training camp of his life*". He suggested that this increased training load decreased his HGB concentration which automatically resulted in an increased RET% and therefore a decrease in the OFF-score. The Athlete relied upon a study from 1991 where the RET% of runners over a 20-day race showed an increase.

151. The Expert Panel differed. It said that a long period of intense training can be a confounder in that an increased workload may expand the plasma volume in the blood (which will decrease the relative HGB concentration) but the ABP thresholds reflect in any event athlete training loads, and that increased training does not, generally speaking, give rise to an increased RET% in swimmers. The Expert Panel was of the view that the study relied upon by the Athlete related to runners (who experience the destruction of

red blood cells due to the foot-strike inherent in the activity) and was not transferrable to swimmers "*where the biomechanical load and hence mechanical stress on the body is very different*". According to the Expert Panel, in non-load-bearing sports the RET% decreased during an increase in training load. In any event, the Expert Panel explained, the effect of training loads on RET% is relatively small and would not explain the spike in RET% found for this sample.

152. On balance, the Panel accepts the view of the Expert Panel that the atypical parameters for this sample are unlikely to be explained by the increase in intensity in training. The Panel agrees that, even if the training brought about an increase in RET% (i.e. red blood cell production in order to meet the increased oxygen demands), the increase would be relatively minor in the sport of swimming, which is not load-bearing thereby decreasing the degree of mechanical stimulation that might otherwise enhance, or require, red blood cell production, and would not and does not explain the RET% found in this sample. In the Panel's view, it is also more likely that any increase in RET% from any increased training on the part of the Athlete would be transient and would not explain an elevated sample many days hence.

153. Rectal Bleeding:

154. The Athlete submitted that the Expert Panel had ignored the fact that the Athlete had (or has) haemorrhoids, and that this caused an episode of significant bleeding during the training camp for 5-6 days from 5 July 2017, during which he lost about 150mL of blood. He said that he was prescribed Ketadex for his inflamed shoulder and that constipation was a "*not uncommon*" side effect of Ketadex, which then led to rectal bleeding. He said that the episode was corroborated by the spreadsheet prepared by or for Dr Kováts, although he did not consult a doctor at the time because he did not wish to interrupt his training camp.

155. The Expert Panel was of the view that it was "*highly unlikely*" that the quantitative results returned for this sample were the result of the Athlete's rectal bleeding. The estimated blood loss of around 150mL was not enough to give rise to the recorded parameters. According to the Expert Panel, a recent study indicated that the loss of 150 mL of blood produced no change at all in the HBG and RET% in the two weeks after withdrawal; and another study showed that 450mL did not induce the magnitude of changes observed for this sample. It was, therefore, the Expert Panel's opinion "*that a significant amount of blood* (>450mL) *much greater than the estimated amount* [of 150mL] *must have been lost to induce the changes*". The Expert Panel also noted that the Athlete's spreadsheet noted haemorrhoids at the time that Samples 13, 15 and 33 were collected and yet the HGB levels for Samples 13 and 15 (14.1 and 14.3) were markedly different to that for Sample 33 (16.1), which was inexplicable if haemorrhoids were the explanation.

156. The Panel prefers the view of the Expert Panel in this respect. There was nothing from the Athlete to counter the inconsistent HGB and RET% parameters between Samples 13 and 15 on the one hand and Sample 33 on the other, or to suggest that the conclusion on the part of the Expert Panel to the effect that a blood loss of 150mL was simply not

enough to give rise to the atypical values for this sample. In addition, there was little in the way of corroboration for the Athlete's explanation: the spreadsheet prepared by or for the Athlete provides poor corroboration (all the more so in the absence of any explanation by the Athlete as to who prepared the spreadsheet, when and for what purpose); there is no contemporaneous medical report (the Athlete choosing not to seek medical advice at the time); what medical report there is post-dates by some measure the episode relied upon and merely records "*haemorrhoids without complications*"; and the Athlete did not ever declare that he suffered from haemorrhoids on any DCF.

157. Vitamin B12/ Beetroot / Cherry Juice:

158. The Athlete also submitted that, in response to his haemorrhoids, he had followed the "*family practice*" of, *inter alia*, taking vitamin B12 tablets twice a day and consuming 0.5L of beetroot or cherry juice daily. He submitted that these explained the increased RET%.

159. The Expert Panel disagreed. The Expert Panel acknowledged that vitamin B12 and iron have key roles in the formation of new red blood cells (erythropoiesis), but said that there is no evidence that supplementation in a non-anaemic state induces erythropoiesis.

160. The Panel agrees with the Expert Panel. Vitamin B12 is crucial for red blood cell production and a deficiency can lead to anaemia, so that supplementation with vitamin B12 may assist with red blood cell production, potentially normalising RET%. But there is no scientific basis for the Athlete's submission that, of itself, and in the absence of anaemia, supplementation with vitamin B12 will elevate the reticulocyte count and certainly not to the level here; indeed this was fairly accepted by Dr Kováts. That is explained in the study by Koury, M. and Ponka, J., 2004. New Insights into Erythropoiesis: The Roles of Folate, Vitamin B12, and Iron. *Annu. Rev. Nutr.* 24:105-31. The same is true for beetroot juice; it can improve blood flow but it does not directly give rise to an increase in the reticulocyte count. As for cherry juice, it is well known that cherries are high in antioxidants but there is no scientific support known to the Panel, and none adduced by the Athlete, for the suggestion that cherry juice enhances red blood cell production.

161. On balance, therefore, the Panel does not accept the explanations proffered by the Athlete for the atypical Sample 13, and agrees with and adopts the interpretation put forward by the Expert Panel that the data is consistent with and explicable by prior blood withdrawal such as that seen during autologous blood transfusion.

Sample 15 (collected 19 July 2017):

162. In its Joint Expert Opinion No.1, the Expert Panel noted that this sample had been flagged by the Adaptive Model as showing a low OFF-score. According to the Expert Panel, Sample 13 was collected in the lead up to the World Championships in 2017 and could indicate prior blood withdrawal such as seen during an autologous blood transfusion procedure.

163. For his part, as outlined above, in this context the Athlete contended that the data was attributable to the demanding training period in July 2017; and HUNADO repeated its submissions in this respect.

164. That being so, the Panel takes the same view as above with respect to Sample 13. The Panel does not accept that the Athlete's explanations for the atypical values of Sample 15, and accepts and adopts the interpretation put forward by the Expert Panel that the data is consistent with and explicable by prior blood withdrawal such as that seen during autologous blood transfusion.

Sample 16 (collected 7 November 2017):

165. In its Joint Expert Opinion No.1, the Expert Panel's quantitative assessment of Sample 16 was that the sample showed an abnormally high HGB concentration for the Athlete of 16.2 g/dL and a low RET% of 0.42, resulting in an atypically high OFF-score. As the Expert Panel noted, a high OFF-score reflects an elevated HGB and low RET% indicating an erythropoietic downregulation (i.e., a decrease in the production of red blood cells by the bone marrow).

166. For his part, as outlined above, the Athlete contended that this analysis was explicable by reason of the fact that the sample was taken during a training session. As set forth above, the Panel does not accept this and has found, as a matter of fact, that the sample was taken prior to training.

167. Accordingly, there being no other explanation for the atypical sample, the Panel accepts and adopts the conclusion of the Expert Panel that the data is consistent with and explicable by prior blood withdrawal such as that seen during autologous blood transfusion.

Sample 17 (collected 3 December 2017):

168. By the Joint Expert Opinion No.1, the Expert Panel's quantitative assessment was a high HGB and a high OFF-score. The Expert Panel makes no specific reference to a qualitative assessment but it is notorious that high HGB and a high OFF-score is a strong indicator of blood manipulation or doping in that the high HGB levels cannot be attributed to the natural process of red blood cell production but are due to external factors, such as the use of EPO or blood transfusions.

169. The Athlete levelled complaints as to the irregularity of this sample, but these have been dealt with above. As to its interpretation, the Athlete raises two matters: (a) that it is "*unthinkable and unrealistic*" that the Athlete would manipulate his blood just five days before the European Short Track Championships; and (b) that a urine sample was taken at the same time and it was negative.

170. The Panel is persuaded by neither. Unfortunately, it is neither unthinkable nor unrealistic for an athlete to seek to enhance his or her performance by blood manipulation before an important event; it happens all too often and this protest does

not provide a rationale of some sort against doping. Nor does the negative urine sample assist the Athlete here. As HUNADO submitted, the fact that a negative urine sample was taken at the same time is no indication that the Athlete has not been involved in blood manipulation. Detection of blood doping can be done by direct analysis or by indirect analysis by means of an athlete's ABP. The two methods are separate and distinct and a negative urine result does not and cannot rule out the commission of an ADRV by blood manipulation.

171. Accordingly, the Panel does not accept that the atypical values in Sample 17 are explicable by the matters relied upon by the Athlete and the Panel accepts and adopts the interpretation put forward by the Expert Panel that the data is consistent with and explicable by blood manipulation.

Sample 33 (collected on 13 September 2021):

172. According to the Expert Panel, this sample showed some atypical features with an elevated HGB, high RET%, and high IRF in the lead up to the World Cup in early October 2021.

173. The Athlete levelled complaints as to the irregularity of this sample, but, once again, these have been dealt with above. As to its interpretation, the Athlete contends that the Expert Panel failed to take into account (a) the Athlete's cigarette smoking during his resting period and (b) the Athlete's detraining, which factors, so it was said, resulted in the atypical results.

174. Smoking:

175. The Athlete submitted that, in and around the collection of this sample, he had taken up smoking in the order of "*10-15 cigarettes at a time*" if in the company of smokers. It was said that his body reacted biologically by increasing the level of reticulocytes. The Athlete relied in this regard upon the invocation by Dr Kováts of a scientific paper by Schmidt, W.F.J., Haupt, S., Hoffmeister, T., and Schwenke D., 2020. *Chronic Exposure to Low-Dose Carbon Monoxide Alters Hemoglobin Mass and* $VO_{2max.}$ Medicine & Science in Sport & Exercise, 52 (9), 1879-1887. In reliance on this paper, Dr Kovats concluded that that heavy cigarette smoking would significantly increase the production of red blood cells and would therefore explain the atypical value.

176. The Expert Panel took a different view. It said that, in the Schmidt study, low-dose carbon monoxide (CO) was administered at regular intervals throughout the day to maintain the CO/HGB level continuously for three weeks so as to mimic the hypoxic environment of altitude training, and that it was "*highly unlikely*" that the Athlete's tobacco consumption was anything like the same magnitude. The Expert Panel concluded that the Athlete's smoking would not have brought about any erythropoietic stimulation.

177. The Panel agrees with the assessment of the Expert Panel. The Schmidt study was aimed at determining the effect of chronic low-dose CO (administered 5 times a day from

8:00am and then every four hours until midnight) on HGB on healthy and moderately trained athletes. It says nothing at all about the effect of intermittent heavy cigarette smoking on HGB or RET%. It certainly does not provide support for the Athlete's explanation that his smoking was the cause of the atypical high HGB, RET%, and IRF parameters in early October 2021.

178. Reduced Training Load:

179. The Athlete also sought to explain the atypical values detected for this sample by reference to his reduced training load at the time. As noted above, the Athlete contended that, after the Tokyo Olympics, he was very disappointed and stopped training, reducing his physical activity to zero. The Athlete submitted that this explained, perhaps together with his smoking, the atypically values.

180. The Expert Panel accepted that an increase in HGB during periods of detraining has been recognised previously (in studies by Schumacher et al, *Hematological indices in elite cyclists*, 2002. Scan J Med Sci Sports 12, 301-308; and Bejder et al 2017) and may, said the Expert Panel, explain some of the increase in the HGB concentration of the Athlete in this sample. The Expert Panel nevertheless disagreed that reduced training could provide any explanation for the increase in RET% found in this sample, and there were various scientific studies that supported the view that a decrease in training load does not impact RET%. The Expert Panel therefore remained on the view that this atypical result remained unexplained by the Athlete.

181. On balance, the Panel accepts the view of the Expert Panel that the atypical parameters for this sample are unlikely to be explained by the turndown in training. The Panel agrees that, even if the reduced training load brought about an increase in HGB, the reduced training load provides no explanation for the change in RET% for this sample, and that atypical value remains altogether unexplained by the Athlete.

Doping Scenario

182. As noted above, in order to discharge its burden of proof, HUNADO should be able to articulate a so-called 'doping scenario' absent which the atypical values in the Athlete's APF will go unexplained, as it were, with the result that HUNADO does not meet its burden. The question therefore remains: has HUNADO put forward evidence that the Athlete's atypical results can be plausibly explained by the use of one or other prohibited substances or methods or a combination thereof?

183. In this appeal, HUNADO (supported by the expert views of the Expert Panel) do contend that the anomalous ABP values are consistent and contemporaneous with the Athlete's competition schedule, and that they are attributable therefore to blood manipulation of one sort or another – that is the doping scenario relied upon. For example:

    a. Samples 13 and 15, collected in July 2017, gave rise to low OFF-score values (and thus high HGB and low RET%) for the Athlete in the lead up to the 2017

FINA World Championships in Budapest which took place in the period 14-30 July, 2017.

b. Sample 16, collected on 7 November 2017, returned an abnormally high HGB of 16.2 g/dL and a low RET% of 0.42, resulting in an atypically high OFF-score and was collected two days prior to the Hungarian National Championships in November 2017.

c. Sample 33, collected on 13 September 2021, showed atypical features of elevated HGB, high RET% and IRF after the Tokyo Olympics but in the lead up to a World Cup in early October 2021.

184. In response, the Athlete submitted that his competition schedule, and the testing around that schedule, demonstrated that this doping scenario was unlikely.

185. The Athlete's first submission in this respect was that blood manipulation would make sense if used to achieve an outstanding HGB value just before competitions but his HGB values were normally low before his major races, not reaching 15 g/dL, and all blood samples taken during training just prior to major competitions had normal HGB levels on average. But this is simply belied by the data: as noted above, the atypical values identified by the Adaptive Model all concerned elevated HGB in the lead up to significant events, so the point goes nowhere.

186. The Athlete further submitted that there was no reason for the Athlete to commit a doping offence because there was no professional benefit for him to do so. He submitted that his results before and after the alleged doping offence were no different and that any improvement at other times was due to his "*more intense training regime*". It is enough to say that this sort of protest has never availed an athlete in the past and that neither does it do so now.

187. In the event, the Panel accepts what is said by the Expert Panel and HUNADO that the pattern of atypicality here, tied to the Athlete's competitive schedule, is entirely consistent with an attempt to improve performance by the Athlete across a number of significant events. There is, in short, a plausible doping scenario.

Conclusion

188. On the basis of the evidence before the Panel, as described in some detail above, the Panel concludes as follows:

a. The Athlete's ABP contains clear abnormalities for different markers with respect to Samples 13, 15, 16, 17 and 33.

b. The Athlete's various complaints as to the reliability of the ABP generally are unfounded; the Athlete's ABP is a reliable account of his longitudinal blood profile for the period 2014 through 2022 and stands as a reliable means by which HUNADO may establish the facts related to this alleged ADRV.

c. The Athlete has offered a number of explanations in respect of the abnormalities in his blood profile. In the Panel's view, none of the matters advanced by the Athlete provides a satisfactory explanation for the detected abnormalities.

d. The Panel agrees with the Expert Panel that the abnormal values detected in the Athlete's haematological profile are symptomatic of the use and discontinuation of an erythropoiesis-stimulant agent or a blood transfusion.

e. The detected abnormalities are consistent a doping scenario by which the Athlete has attempted to improve performance across a number of significant events.

189. In the result, therefore, the Panel does not accept the Athlete's explanations in respect of the atypical samples now relied upon by HUNADO. It follows that the Panel accepts, without reservation, the conclusion of the Expert Panel that the abnormalities detected in the Athlete's ABP "*are highly likely the results of blood doping and unlikely the result of any other cause*".

190. Accordingly, the Panel is comfortably satisfied that HUNADO has discharged its burden of proof that the Athlete has committed an ADRV in breach of Article 2.2 of the HUNADO ADR 2021.

The Consequences

191. The next issue therefore what are the consequences for the Athlete?

192. The legal framework with respect to the consequences is set forth in the HUNADO ADR 2021, the relevant clauses of which are set forth in relevant part below.

"***Article 9. AUTOMATIC DISQUALIFICATION OF INDIVIDUAL RESULTS***

An anti-doping rule violation in Individual Sports in connection with an In-Competition test automatically leads to Disqualification of the result obtained in that Competition with all resulting Consequences, including forfeiture of any medals, points and prizes.

Article 10. SANCTIONS ON INDIVIDUALS

…

10.2. Ineligibility for Presence, Use or Attempted Use of a Prohibited Substance or Prohibited Method or Possession of a Prohibited Substance or Prohibited Method

The period of Ineligibility for a violation of Articles 2.1, 2.2, or 2.6 shall be as follows, subject to potential elimination, reduction or suspension pursuant to Article 10.5, 10.6 or 10.7:

10.2.1. The period of Ineligibility, subject to Article 10.2.4, shall be four (4) years where:

10.2.1.1. The anti-doping rule violation does not involve a Specified Substance or a Specified Method unless the Athlete… can establish that the anti-doping rule violation was not intentional.

10.2.1.2. The anti-doping rule violation involves a Specified Substance or a Specified Method and HUNADO can establish that the anti-doping rule violation was intentional.

10.2.2. If Article 10.2.1 does not apply … the period of Ineligibility shall be two (2) years.

10.2.3. As used in Article 10.2, the term "intentional" is meant to identify those Athletes or other Persons engaged in conduct which he or she knew constituted an anti-doping rule violation or knew that there was a significant risk that the conduct might constitute or result in an anti-doping rule violation and manifestly disregarded that risk. An anti-doping rule violation resulting from an Adverse Analytical Finding for a substance which is a Specified Substance and is prohibited only In-Competition and the Athlete can establish that the Prohibited Substance was Used Out-of-Competition, shall be rebuttably presumed to be not intentional unless it is proved otherwise. An anti-doping rule violation resulting from an Adverse Analytical Finding for a substance which is not a Specified Substance and is prohibited only In-Competition shall be considered not intentional if the Athlete can establish that the Prohibited Substance was Used Out-of-Competition and in a context not related to sport performance.

…

10.5. Elimination of the Period of Ineligibility Where There Is No Fault or Negligence

If an Athlete or other Person establishes in an individual case that he or she bears no Fault or Negligence, the otherwise applicable period of Ineligibility shall be eliminated.

10.6. Reduction of the Period of Ineligibility Based on Insignificant Fault or Negligence

10.6.1. Reductions of sanctions in particular circumstances for violations of Clauses 2.1, 2.2, or 2.6 of the Rules.

All reductions of sanctions under Clause 10.6.1 hereof shall be mutually exclusive and not cumulative.

10.6.1.1. Specified substances or Specified Methods

Where an anti-doping rule violation involves a Specified Substance (other than a Substance of Abuse) or a Specified Method and an Athlete or other Person can establish No Significant Fault or Negligence, then the period of Ineligibility shall be at a maximum two years of Ineligibility and at a minimum of a reprimand without assignment of a period of Ineligibility, depending on the degree of Fault of the Athlete or other Person.

…

10.6.2. Application of No Significant Fault or Negligence beyond the application of Clause 10.6.1 hereof

If an Athlete or other Person establishes, in an individual case where Clause 10.6.1 is not applicable, that he or she bears No Significant Fault or Negligence, then, subject to further reduction or elimination as provided in Clause 10.7 hereof, the otherwise applicable period of Ineligibility may be reduced based on the Athlete or other Person's degree of Fault, but the reduced period of Ineligibility may not be less than one-half of the period of Ineligibility otherwise applicable. If the otherwise applicable period of Ineligibility is a lifetime, the reduced period under this Clause may be no less than eight years.

…

10.10. Disqualification of Competition Results Subsequent to Sample Collection or Commission of an Anti-Doping Rule Violation

In addition to an automatic Disqualification of results achieved at a Competition which produced the positive Sample under Article 9, all other competitive results obtained by the Athlete from the date a positive Sample was collected … or other anti-doping rule violation occurred, through the commencement of any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified with all of the resulting Consequences, including forfeiture of any medals, points and prizes.

…

10.13. Commencement of the Period of Ineligibility

Where an Athlete is already serving a period of Ineligibility for an anti-doping rules violation, any new period of Ineligibility shall commence on the first day after the current period of Ineligibility has been served. Otherwise, except as provided below, the period of Ineligibility shall start on the date on the final hearing decision providing for Ineligibility was assigned, or, if the is waived or there is no hearing, on the date on Ineligibility is accepted or otherwise imposed.

10.13.1. Delays not attributable to the Athlete or other Person

Where there have been substantial delays in the hearing process or at other aspects of Doping Control, and the Athlete … can establish that such delays are not attributable to the Athlete … the Doping Committee, if applicable, may start the period of Ineligibility at an earlier date commencing as early as the date of the Sample collection or the date on which another anti-doping rule violation last occurred. All competitive results achieved during the period of Ineligibility, including retroactive Ineligibility, shall be Disqualified.

10.13.2 Credit for Provisional Suspension or Period of Ineligibility Served

10.13.2.1 If a Provisional Suspension is respected by the Athlete … then the Athlete … shall receive a credit for such period of Provisional Suspension against any period of Ineligibility which may ultimately be imposed. If the Athlete … does not respect a Provisional Suspension, then the Athlete … shall receive no credit for any period of Provisional Suspension served. If a period of Ineligibility is served pursuant to a decision that is subsequently appealed, then the Athlete or other Person shall receive a credit for such period of Ineligibility served against any period of Ineligibility which may ultimately be imposed on appeal. …"

Period of Ineligibility

193. This appeal is not concerned with a Specified Substance. It follows that, according to Article 10.2.1 of the HUNADO ADR 2021, a violation of Article 2.2 leads to a period of ineligibility of four years unless the Athlete is able to establish that the ADRV was not intentional.

194. As a starting point, it is uncontroversial that, in all but the most exceptional circumstances, blood manipulation is an intentional form of doping. It is, as HUNADO submitted, a sophisticated form of doping and will not in the ordinary run of things happen by negligence: see also CAS/O/5822 at para. 163. In any event, there was nothing at all from the Athlete in relation to whether or not his alleged ADRV was intentional. That was not the nature of his challenge; indeed, the Athlete made no submissions at all in relation to consequences. That being so, the Athlete has not discharged his burden in this respect and the starting period of ineligibility must be four years.

195. Moreover, because the ADRV is to be characterised as intentional there is no scope for the application of the above-cited provisions relating to the elimination or reduction of the period of ineligibility upon an assessment of the Athlete's level of fault. Nor is there any submission by HUNADO as to aggravation. The period of ineligibility thus remains at four years with, of course, credit to be given for any period of provisional suspension pursuant to Article 10.13.2 of the HUNADO ADR 2021, there being no suggestion that the Athlete has not respected his suspension. For the sake of practical certainty, this means that the Athlete is ineligible for the four year period commencing 23 January 2023.

196. It is next necessary to consider what must be done, if anything, with respect to the disqualification of the Athlete's results.

197. The rules relating to disqualification set forth in the HUNADO ADR 2021 are set forth above: Article 9, Article 10.1, Article 10.10. There is no suggestion here that Articles 9 and 10.1 are in play; the focus therefore is in Article 10.10 of the HUNADO ADR 2021 which bears repeating here:

"*10.10. Disqualification of Competition Results Subsequent to Sample Collection or Commission of an Anti-Doping Rule Violation*

In addition to an automatic Disqualification of results achieved at a Competition which produced the positive Sample under Article 9, all other competitive results obtained by the Athlete from the date a positive Sample was collected … or other anti-doping rule violation occurred, through the commencement of any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified with all of the resulting Consequences, including forfeiture of any medals, points and prizes."

198. This appeal does not, of course, concern a positive sample, so that can be set aside. In the current context the rule provides that all competitive results obtained by the Athlete from the time that the ADRV occurred, through to the commencement of any provisional suspension or period of ineligibility period, shall, *prima facie*, be disqualified.

199. As has been noted elsewhere (see e.g. CAS 2018/A/5822 at para. 174; CAS 2010/A/2235 at para. 65), the rule is geared to the situation where the violation is an occurrence rather than a process and yet for an ABP case such as this the ADRV does not occur on a specific date but instead of an elongated period of time (by definition). Different CAS panels have dealt with this incongruity in different ways, some calibrating the applicable period from the date of the first sample in the ABP, some seeking to apply a period that best matched the perceived doping conduct of the athlete.

200. As the Panel has noted, the Athlete made no submissions in this respect, while, for its part, HUNADO called for the disqualification of all of the Athlete's results from 11 July 2017, that being the date of Sample 13, the first of the samples triggered by the Adaptive Model as showing abnormal values, that being, so it was submitted, the first evidence of the Athlete's ADRV. Indeed, this is what the Anti-Doping Committee did. HUNADO also submitted that, in view of the nature and severity of the "*violations*" (plural), there was no room here for the application of the so-called fairness exception pursuant to Article 10.10 of the HUNADO ADR 2021.

201. Taking this last point first, the Panel disagrees. There is nothing especial about the nature and severity of the violation (singular, there is but one ADRV) that would disentitle the Panel to pay heed to the overarching fairness of the length and breadth of the disqualification in the context of an ABP case such as this where a considerable amount of time has elapsed between the first sample of the Athlete's ABP (9 July 2014) and the last (2 July 2022). This is all the more-so in the absence of an explanation by HUNADO as to why the Notice of Charge was not issued until January 2023. There was no answer to the question as to why, for example, HUNADO did not see fit to issue a charge in December 2017 upon the detection of the abnormalities of Samples 13, 15, 16 and 17 throughout the period July to December 2017.

202. The Panel has decided that fairness does require a recalibration of the disqualification consequences in this appeal. The Panel considers that it is fair to disqualify the results of the Athlete for: (a) the period 1 July 2017 through to and including 3 December 2017; and (b) 1 September 2021 through 30 September 2021, those two periods reflecting the periods of the abnormalities detected in the Athlete's haematological profile. There is, in the Panel's view, ample evidence that the Athlete used prohibited methods during

these periods and committed a serious ADVR but no evidence of any such or related behaviour by the Athlete at other times.

203. In the result, the Panel confirms the HUNADO decision as follows:

a. The Athlete shall be subject to a period of ineligibility of four years, commencing on 23 January 2023.

b. The Athlete's competitive results shall be disqualified, with all of the resulting consequences, including forfeiture of any medals, points and prizes, for the periods 1 July 2017 through to and including 3 December 2017 and 1 September 2021 through to and including 30 September 2021.

XIII. COSTS

(…)

ON THESE GROUNDS

The Court of Arbitration for Sport hereby rules that:

1. The Appeal filed by Tamás Kenderesi on 16 June 2023 against the decision issued on 28 April 2023 by the Anti-Doping Committee of Hungarian Ant-Doping Agency (HUNADO) is dismissed.

2. The decision issued on 28 April 2023 by the Anti-Doping Committee of the Hungarian Ant-Doping Agency (HUNADO) is confirmed.

3. (…).

4. (…).

5. All other and further motions or prayers for relief are dismissed.

Seat of arbitration: Lausanne, Switzerland
Date: 27 February 2025

THE COURT OF ARBITRATION FOR SPORT

James Drake
President of the Panel

Péter Pákay
Arbitrator

Ulrich Haas
Arbitrator