CAS 2020/A/7509 Evgeny Ustyugov v. International Biathlon Union

ARBITRAL AWARD

delivered by the

COURT OF ARBITRATION FOR SPORT

sitting in the following composition:

President:	Prof. Massimo Coccia, Professor and Attorney-at-law, Rome, Italy
Arbitrators:	Mr. Pierre Muller, Former Judge, Lausanne, Switzerland
	Mr. Romano F. Subiotto KC, Avocat in Brussels, Belgium, and Solicitor-Advocate in London, United Kingdom
Ad hoc Clerk:	Mr. Francisco A. Larios, Attorney-at-law, Miami, Florida, USA

in the arbitration between

Mr. Evgeny Ustyugov, Russia

Represented by Mr. Yvan Henzer, Attorney-at-law, Libra Law SA, Lausanne, Switzerland

Appellant

and

International Biathlon Union (IBU), Anif b. Salzburg, Austria

Represented by Messrs. Nicolas Zbinden and Anton Sotir, Attorneys-at-law, Kellerhals Carrard, Lausanne, Switzerland

Respondent

TRIBUNAL ARBITRAL DU SPORT
COURT OF ARBITRATION FOR SPORT
TRIBUNAL ARBITRAL DEL DEPORTE

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I. INTRODUCTION

1. This appeal is brought by the biathlon athlete Mr Evgeny Ustyugov against the International Biathlon Union to challenge a decision rendered on 27 October 2020 by a Sole Arbitrator of the CAS Anti-Doping Division ("ADD"), who found that Mr Evgeny Ustyugov had committed an Anti-Doping Rule Violation ("ADRV") and sanctioned him with a 4-year period of ineligibility and a disqualification of all competitive results obtained from 24 January 2010 to the end of the 2013-2014 season with all resulting consequences.

2. In his appeal, Mr Evgeny Ustyugov raised some preliminary objections, arguing in short that (i) the ADD did not have first instance jurisdiction and that, as a consequence, (ii) the CAS did not have jurisdiction on appeal, and that (iii) the ADD was irregularly constituted. This Panel, in its Award on Jurisdiction and Other Preliminary Issues dated 8 April 2022 (the "Preliminary Award"), dismissed those objections, by deciding that the ADD had first instance jurisdiction and was regularly constituted and that the CAS does have appellate jurisdiction over the merits of this case. The Preliminary Award was upheld by the Swiss Federal Tribunal in its judgment 4A_232/2022 of 22 December 2022. Therefore, the present final Award only addresses the merits of this case and does not deal with the preliminary issues adjudicated by the Preliminary Award, which are by now *res judicata*.

II. THE PARTIES

3. Mr Evgeny Ustyugov (the "Appellant", the "Athlete" or "Mr Ustyugov"), born on 4 June 1985, is a former international level athlete of Russian nationality who had a successful career in the sport of biathlon, winning, most notably, a gold and bronze medal in the 2010 Vancouver Winter Olympics, as well as a gold medal in the 2014 Sochi Winter Olympics.

4. The International Biathlon Union (the "IBU" or the "Respondent"), headquartered in Anif, Austria, is the international sporting federation and the world governing body for the sport of biathlon.

5. The Appellant and the Respondent are collectively referred to as the "Parties."

III. FACTUAL BACKGROUND

6. Below is a summary of the main relevant facts, as submitted by the Parties in their written pleadings and adduced at the hearing. Additional facts may be set out, where relevant, in connection with the legal discussion that follows. Although the Panel has considered all the facts, allegations, legal arguments and evidence submitted by the Parties in the present proceedings, it refers in this final Award only to the submissions and evidence it considers necessary to explain its reasoning.

A. Mr Ustyugov's Testing History and ABP

7. The Athlete began competing in international biathlon events in 2005. He competed for several years in IBU international events, obtaining several Olympic and World Championship medals as well as many World Cup podiums, until he retired from international biathlon competitions in 2014.

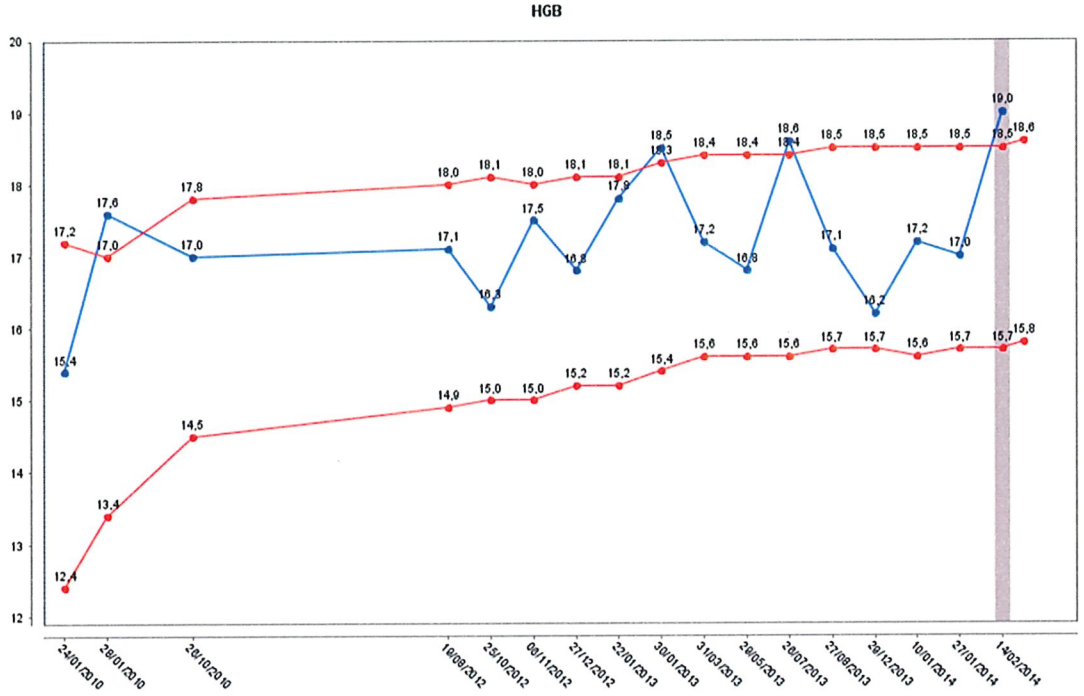
8. During his career, the Athlete underwent numerous doping tests in accordance with the IBU's testing program.

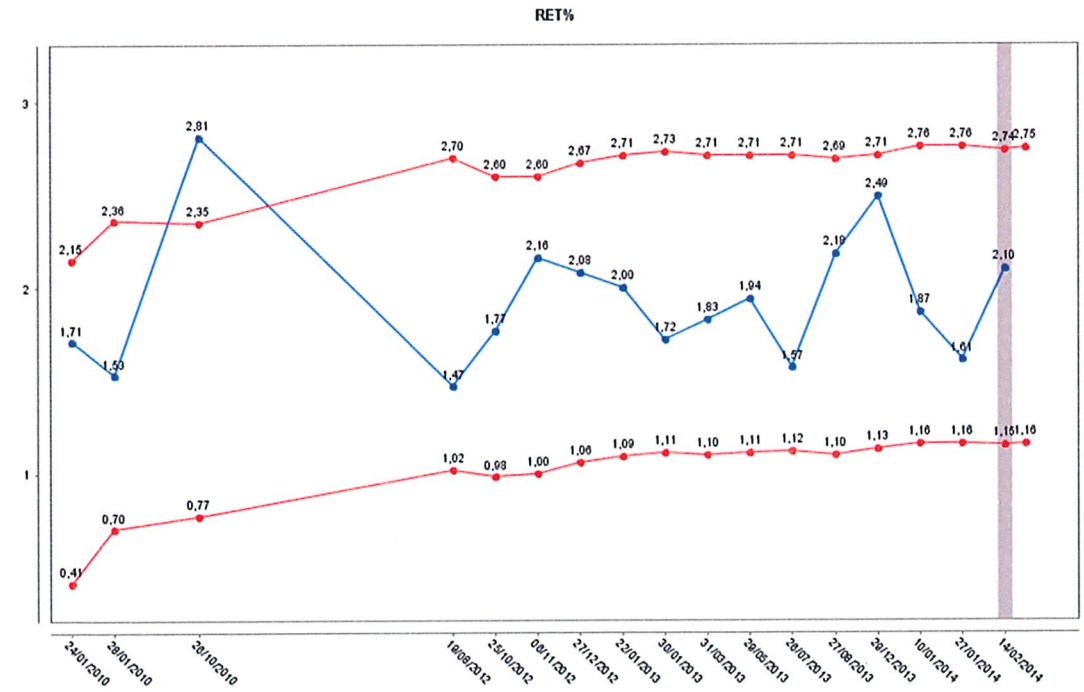
9. Blood samples periodically collected from the Athlete were compiled to create his hematological Athlete Biological Passport ("ABP"), a document which records and tracks the values of certain hematological parameters over time to monitor red blood cell production and detect blood manipulation. The biomarkers recorded in the ABP include hemoglobin concentration ("HGB"), the percentage of reticulocytes – i.e., young red blood cells – calculated out of the total red blood cells ("RET%"), and the ratio of the HGB and the RET%, as reflected by an "OFF-Score".

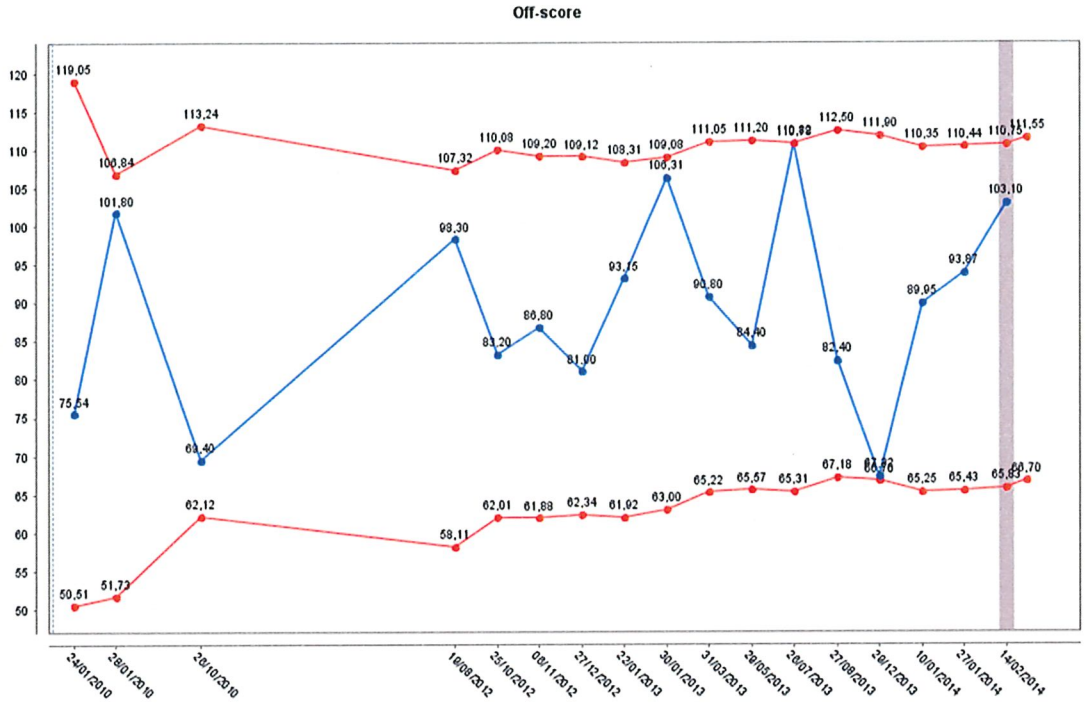
10. Mr Ustyugov's ABP consists of seventeen blood samples collected on behalf of the IBU from 24 January 2010 until 14 February 2014. The detected HGB, RET% and OFF-score values are shown in the table below (note that Samples 4 and 13 were held invalid and, accordingly, not included in the ABP):

No.	Date of Sample	HGB (g/dL)	RET%	OFF-score
1.	24 January 2010	15.4	1.71	75.54
2.	28 January 2010	17.6	1.53	101.80
3.	26 October 2010	17.0	2.81	69.40
4.	21 February 2012	17.7	1.05	115.52
5.	19 August 2012	17.1	1.47	98.30
6.	25 October 2012	16.3	1.77	83.20
7.	6 November 2012	17.5	2.16	86.80
8.	27 December 2012	16.8	2.08	81.00
9.	22 January 2013	17.8	2.00	93.15
10.	30 January 2013	18.5	1.72	106.31
11.	31 March 2013	17.2	1.83	90.80
12.	29 May 2013	16.8	1.94	84.40
13.	17 July 2013	17.7	1.98	92.60
14.	26 July 2013	18.6	1.57	110.82
15.	27 August 2013	17.1	2.18	82.40
16.	29 December 2013	16.2	2.49	67.32
17.	10 January 2014	17.2	1.87	89.95
18.	27 January 2014	17.0	1.61	93.87
19.	14 February 2014	19.0	2.10	103.10

11. Mr Ustyugov's ABP sample results were also reproduced in the following charts, which compare the detected HGB, RET% and OFF-score values to his individual limits as calculated by the Adaptive Model (a mathematical model that was designed to identify unusual results from athletes based on a longitudinal review of their blood values):







12. On 27 September 2016, the Nordic Athlete Passport Management Unit ("NAPMU") referred the Athlete's ABP for expert review. A panel consisting of Dr. Paulo Paixão, Prof. Giuseppe D'Onofrio and Prof. Michel Audran (hereinafter "ABP Panel") independently reviewed the Athlete's anonymized ABP.

13. During the IBU investigation relating to the Athlete, new ABP samples were collected and added to the Athlete's ABP on 25 October 2017 and 6 December 2017 (the "2017 Samples" *infra* at paras. 19 to 22).

B. The First ABP Panel Opinion

14. On 21 March 2017, the ABP Panel issued the Joint Expert Opinion (the "First ABP Panel Opinion"), finding as follows:

> "*In the automated analysis by the adaptive model, which determines whether fluctuations in the biomarkers of the Athlete Biological Passport are within the expected individual reference ranges for an athlete or not, the probability of abnormality, according to ABP software at the 99% specificity level, is > 99.9% for hemoglobin (HB), >99% for the Off-score and >99.5% for reticulocyte percentage (ret%). The athlete has several flagged samples: samples 2, 10, 14 and 19 for hemoglobin; sample 3 for ret%.*
>
> *This profile displays important variability, with difficult physiological explanations In particular, the sequence between samples 16 and 19 is very suspicious: sample 19, collected in-competition, has an increase to the highest hemoglobin value (19g/dL) of the profile in less than 3 weeks (2g/dL), with a slight increase in ret%, suggesting*

that the body's blood cell mass has been increased behind any physiological explanation. This sequence started with sample 16, which shows the lowest hemoglobin and the highest ret% results of the last three years; this sample was collected 1 week before a period of competitions, and hemoglobin increased thereafter to 17.2g/dL (sample 17) when the competition restarted, keeping this result (17g/dL) during his stay at the biathlon centrum (1700m), to peak on sample 19 (19g/dL). In the Doping control form of sample 19, the athlete declares that he stayed at altitude (1700m) for 1 month. It is well known that altitude can cause mild changes to the OFF score within a defined timeframe (1,2). Nevertheless, based on the many studies in which effects of altitude on the blood picture have been assessed, training at less than 2000m has very little hematological effect and cannot explain the hematological changes observed in this sample.

In addition, other hematological abnormalities are present in this passport, which are not compatible with normal physiology, altitude nor intense exercise, such as the very fast increase of hemoglobin from sample 1 to sample 2, the frequent combination of high hemoglobin with high or very high reticulocytes (such as in samples 3, 7, 9, 10), the extremely high hemoglobin value observed is [sic] *samples 10, 14 and 19 [...].*

In the medical document, on the other hand, results of the complete blood count (in translation), show that the athlete had a very high value of HB (18.9 g/dl) in September 2012. The document also includes blood counts of the athlete's father (HB 17.0 g/dl) and mother (HB 15.3 g/dl), which are in medium-high normal range for the general population. This finding raises the possible presence of a very rare congenital form of erythrocytosis in the athlete [5]. The possibility of a rare congenital form of erythrocytosis should be excluded by accurate, in-depth clinical diagnosis, including genetic and molecular studies. [...]

Based on these facts and the information available to date, it is our unanimous opinion that, in the absence of an appropriate explanation, the likelihood of the abnormalities described above being due to blood manipulation is high. On the contrary, the likelihood of environmental factors causing the described pattern is very low."

15. On 5 May 2017, the IBU sent the Athlete a letter notifying him of an investigation into a potential anti-doping rule violation (an "ADRV") pursuant to Article 2.2 of the IBU Anti-Doping Rules ("IBU ADR") following an Adverse Passport Finding issued by the NAPMU. The letter invited the Athlete to provide a written explanation for his ABP anomalies.

16. On 19 May 2017, the Athlete denied the ADRV charges. The Athlete wrote: "*I have elevated red blood cell count and this is a biological feature of my body only. But the reasons for these remains obscure for me. To prove my innocence, I am preparing to submit a medical examination, in particular the in-depth clinical diagnosis in specialized center regarding existence of the mutations associated with the elevated development of erythrocytes*". The Athlete followed this up with a letter of 12 July 2017, in which he stated that his doctors planned to conduct tests (i) for an "*abnormality in the EPO-signalling pathway genes and in parallel*", (ii) to "*examine the probability of*

acquired erythrocytosis", and (iii) to check for "*mutations in the genes associated with the oxygen-sensing pathway*".

17. On 20 July 2017, the Athlete provided a letter from geneticist Dr. E.G. Okuneva proposing to conduct Whole-Exome Sequencing ("WES") on the Athlete to identify any relevant genetic mutations, based on private testing which had allegedly revealed elevated HGB levels in the Athlete's mother.

C. The Second ABP Panel Opinion

18. On 7 September 2017, the ABP Panel issued a further joint expert opinion (the "Second ABP Panel Opinion"), finding as follows:

> "*[I]n his letter dated 19.5.2017, the Athlete states that elevated red blood cell count is a biological feature of his body and affirms his availability to undergo in-depth clinical studies in a specialized center regarding the existence of the mutations associated with erythrocytosis.*
>
> *Given such Athlete's availability, it is our opinion that it would be very useful to obtain recent information on the current Athlete's blood values. Such updated knowledge should be obtained by a few unannounced tests, collected according to the formal ABP protocol, repeated several times over a period of at least six months [...].*
>
> *[I]n our opinion WES, as mentioned in Dr Ogareva's document translation, is not a currently recognized method for the definition of congenital erythrocytosis and has never been applied to the molecular investigation of candidate subjects with this genetic condition. [...]*
>
> *In conclusion, it is our opinion that WES is not a currently recognized method for the identification of genetic variants associated with congenital erythrocytosis. Specific genetic analysis, on the other hand, should be performed in specifically expert laboratories, whose availability has to be verified. It is also our opinion that any further testing of the Athlete, which should also preliminary include new recent blood cell counts, should be carried out in strict adherence to the pre-analytical and analytical requirements prescribed by the Athlete Biological Passport Operating Guidelines, version 6.0 published in January 2017, including TD2017BAR and ISTI annexes K and L,, which regulate collection by anti-doping collection authorities, storage and transport with chain of custody and analysis of anonymous samples*".

19. On 2 October 2017, the IBU sent a letter requesting the Athlete's consent to conduct no-notice testing within a six-month period and for the Athlete to provide his whereabouts information to facilitate the collection of samples without prior notice. The request for consent read *inter alia* as follows:

> "*[T]he IBU is willing in principle to give you the opportunity to have further testing conducted in connection with your alleged congenital condition. I must stress that the IBU is under no obligation to afford you this opportunity in the circumstances of this case. Moreover the IBU is only willing to do so if you accept that the further testing shall be coordinated by the IBU and on the condition that you cooperate fully with the process. As a first step in that process, the IBU requires that you provide*

your written consent [...] to the full Testing authority of the IBU for an initial period of six months from the date of your consent (the "Relevant Period") for the purposes of an analysis, at one of the laboratories identified by the Expert Panel, for a potential genetic variation compatible with erythrocytosis and any other analysis that may be relevant in connection with the investigation of the alleged congenital condition. By providing such consent, you acknowledge and consent that the IBU may, without any limitation, collect blood samples from you (including without prior notice), arrange for the analysis of such samples by either WADA-accredited laboratories and other laboratories specialized in genetic analysis, store such samples for such period as may be necessary and process any data resulting from such analysis".

20. On 10 October 2017, the Athlete sent a letter to the IBU granting the requested consent: "*I read your letter and writing to inform you that I'm ready to fully cooperate and to provide all possible samples*". The Athlete went on to provide the requested whereabouts information.

21. Testing samples were collected from the Athlete on 25 October 2017: a blood sample was sent to Queen's University, Belfast laboratory for genetic analysis, and an ABP sample was sent to the Moscow laboratory for analysis.

22. On 6 December 2017, further samples (a urine, a blood, and an ABP sample) were collected from the Athlete: the ABP sample was sent to the Moscow laboratory for analysis, and the urine and blood samples were sent for analyses to the Cologne anti-doping laboratory, accredited by the World Anti-Doping Agency ("WADA").

D. Genetic Findings and the Third ABP Panel Opinion

23. The Belfast laboratory discovered a mutation of the EGLN2 gene in the Athlete through its genetic testing of the 25 October 2017 blood sample.

24. On 18 April 2018, Dr Mark Catherwood from the Belfast laboratory emailed the IBU the following:

> "*You will note from the report that we describe the variant detected as non-pathogenic in the gene EGLN2 (previously referred to as hypoxia inducible factor 2). This is thought not to be disease causing. The evidence to support this is twofold:*
>
> *1. This variant has not been described in case of erythrocytosis.*
>
> *2. This variant has been found in the normal population and is commonly referred to as SNP (single nucleotide polymorphism). SNPs are thought to be remnants of an evolutionary process that shaped human variation.*
>
> *Using this evidence and the information from the genetic databases, we believe that this variant is unlikely to be disease causing"* (hereinafter the "Belfast Report").

25. On 25 April 2018, the IBU sent an email to the Athlete notifying him of the 25 October 2017 and 6 December 2017 test results and inviting the Athlete to comment on them. The results were the following:

Date of Sample	HGB (g/dL)	RET%	OFF-score
25 October 2017	17.7	1.95	93.2
6 December 2017	18.5	1.61	108.9

26. On 15 May 2018, the Athlete replied to the IBU's request with the following comments received from "*professionals from the Institute of Hematology*":

> "*Erythrocytosis is a rare disorder characterized by increased red cell mass and elevated hemoglobin concentration and hematocrit. Several genetic variants have been identified as for erythrocytosis in genes. However, in spite of clinical investigation and screening for these mutations, the cause of the disease is not found in a significant number of patients, who are classified as having idiopathic erythrocytosis. And up to now, the phenomenon of idiopathic erythrocytosis is completely unexplored.*
>
> *The athlete was found to have a genetic feature in the form of an amino acid substitution for the protein encoded by the EGLN2 gene, this is one of the key enzymes that affect the regulation of erythropoietin production.*
>
> *In normoxia, HIFα is hydroxylated by oxygen-dependent prolyl hydroxylasis (encoded by EGLN1, EGLN2 and EGLN3), binds to VHL and becomes ubiquitized and degraded. And it cannot be ruled out that this amino acid substitution does not affect the activity of this enzyme and can be the cause of idiopathic erythrocytosis*".

27. On 16 June 2018, the ABP Panel issued a revised joint opinion (the "Third ABP Panel Opinion"), finding as follows:

> "*With an email dated 24.5.2018, you asked us to comment on the results of recent genetic studies and new ABP tests provided by the Athlete regarding his blood profile with ID BPX571J27. You made available to us:*
>
> – *A short letter from the athlete with an opinion concerning the new genetic results (Dated 15-5-2018);*
> – *Hematological and administrative data concerning two new ABP tests carried out in 2017;*
> – *Genetic results of the study in the Belfast Laboratory of genetic variants potentially involved in the development of erythrocytosis;*
> – *An email signed "Mark" (probably Dr Mark Catherwood) from the Laboratory of Molecular Hematology of Queen's University of Belfast)*
>
> *We refer to our previous Joint Evaluation, submitted on 21.3.2017 for the details of the abnormalities of this Athlete's blood passport. In brief, we had pointed out how abnormal hematological patterns were observed in several passport samples, such as:*

- *the sequence of samples 16 to 19;25*
- *the sequence of samples 1 and 2;*
- *the high values of hemoglobin in samples 10, 14, 19.*

In our first report we mentioned, on the basis of several hematologic features of this Athlete's profiles, the possibility of a very rare congenital form of erythrocytosis, deserving further investigation through genetic and molecular studies.

In a subsequent letter, dated 19.5.2017, the Athlete stated that elevated red blood cell count (generally corresponding to elevated HB in ABP) is a biological feature of his body and affirmed his availability to undergo in-depth clinical studies in a specialized center regarding the existence of the mutations associated with erythrocytosis. We expressed our opinion that it would be have been useful to obtain recent information on the current Athlete's blood values by further tests, collected according to the formal ABP protocol, and we have provided the APMU with references for several laboratories with specific expertise on genetic variants associated with congenital erythrocytosis, where the Athlete's blood could have been analyzed for the presence of relevant genetic mutations.

New laboratory tests and their results

In the subsequent period, two new ABP tests have been carried out in the following date[s] with the below reported results:

Date	HB (g/dl)	Reticulocyte %	OFF score
25-10-2017	17.7	1.95	93.2
6-12-2017	18.5	1.61	108.9

These results confirm the atypical presence of high HBs associated with increased reticulocytes, already pointed out in several samples of the Athlete's ABP Passport.

The Athlete's blood was also anonymously analyzed in the specialized laboratory of Molecular Hematology for the genetic study of essential erythrocytosis, directed by Professor Marie Frances McMullin, at the Belfast Queen's University. The Belfast Laboratory has sequenced a panel 10 of genes "considered relevant" in idiopathic erythrocytosis. As a result, a single nucleotide change of the gene EGLN2 was identified, with the following interpretation: "We have identified a mutation that we believe to be non-pathogenetic". In his email dated 18-4-2018, Dr Mark Catherwood from the Belfast Laboratory confirms the opinion that the variant detected in the gene EGLN2 is not-pathogenetic, that is not disease causing, on the basis of a twofold evidence:

- *This variant has not been described in cases of erythrocytosis;*
- *This variant has been found in the normal population.*

Experts comment and conclusion

Genetic analysis of the Athlete's blood has shown that he is carrier of a mutation, which is not rare and has not been previously described in cases of erythrocytosis, of the EGLN2 gene, which codifies for the protein prolyl-hydroxylase 2. [...]

It is our opinion that, in consideration of these genetic findings, as well as of the atypical hematological pattern in the [Athlete's ABP, anonymised as] BPX571J27 ABP, which is not fully consistent with the most used and plausible blood doping schemes, the likelihood of ESA doping behavior in this case cannot be considered sufficient to prosecute the Athlete on the only basis of the indirect evidence ensuing from his hematological profile.

This opinion is supported by the following elements.

1) EGLN2, although its variants have not been associated with pathology, is an important gene involved in the oxygen-sensing mechanism of the human body;

2) EGLN2 is included in the panel of genes for the genetic diagnosis of erythrocytosis because it is "potentially relevant";

3) Experimental studies have shown that the inhibition of the EGLN-product PDHs is capable of inducing increased production of erythropoietin in laboratory animals: although EGLN1 plays the dominant role, EGLN2 and 3 seem to have additive effects.

On the basis of the new findings and on the general characteristics of the BPX571J27 blood profile, therefore, we are unable to conclude that it is highly unlikely that this profile is the result of a normal physiological or pathological condition; similarly, we are unable to conclude that it is highly likely that it was caused by the use of prohibited substances or prohibited methods. On the other hand, we recommend further tests for the athlete, both in and out of competition, by searching all types of ESA in blood and urine and through further hematological ABP monitoring."

28. This Third ABP Panel Opinion was not notified to the Athlete at this time.

E. The Oxandrolone Case

29. In August 2018, the IBU charged the Athlete with an ADRV – separate from the present ABP proceedings – involving the Athlete's alleged use of the synthetic steroid known as oxandrolone revealed in a sample collected on 27 August 2013 (hereinafter the "Oxandrolone Case").

30. On 13 February 2020, the IBU Anti-Doping Hearing Panel ("IBU ADHP") found the Athlete guilty of the ADRV of Use of Oxandrolone. The IBU ADHP sanctioned the Athlete for a two-year period and annulled all competitive results from 27 October 2013 through the Athlete's retirement after the 2014 season.

F. Prof. Werge's Report and the Fourth ABP Panel Opinion

31. The Athlete's case was discussed on an anonymous basis at an ABP event meeting organized by WADA in December 2019, which was attended *inter alia* by geneticist Prof. Thomas Werge. At this meeting, Prof. Werge was asked whether the

hematological abnormalities in the (anonymous) passport of the Athlete could be explained by genetic variants (in particular EGLN2). He expressed his view that they could not be explained by such genetic variants. Prof. Werge was then asked by WADA to provide a report to that effect.

32. On 9 January 2020, Prof. Werge provided a report regarding the Athlete's genetic testing results in relation to his ABP, stating the following:

> "*I have been asked to provide a second opinion on the possible functional impact of a mis-sense, single-nucleotide variant (SNV) in the gene EGLN2.*
>
> *In the documents presented, the identified SNV is referred to as chr19(GRCh38):g.40806669G>A and NM_053046.3(EGLN2):c.958G>A C.958G>A, and is correctly stated that the SNV has previously been reported in publicly available databases and is referred to as rs774710749. The missense SNV leads to an amino-acid substitution in the encoded protein: Egl nine homolog 2.*
>
> *I confirm that the SNV has been observed in normal population, it is not reported in the ClinVar database that catalogues known pathogenic, genomic variants, and analysis of the putative functional impact of the SNV using the PolyPhen-2 tool predict it to be benign.*
>
> *In conclusion, I find no evidence to support a claim that the observed SNV, rs774710749, has functional consequences in humans of pathological, clinical or biological importance"* (hereinafter the "First Werge Report").

33. On 10 January 2020, the IBU sent an email to the NAPMU requesting further review of the Athlete's ABP by the ABP Panel. The email attachments included the First Werge Report, information regarding the Oxandrolone Case, and analyses of the samples collected from the Athlete on 25 October 2017 and 6 December 2017.

34. On 11 January 2020, the ABP Panel, taking into account the First Werge Report, issued a revised joint expert opinion (the "Fourth ABP Panel Opinion"), finding as follows:

> "*In his Expert Opinion, Professor Thomas Werge now affirms, on the basis of solid scientific evidence, that the observed mutation is observed among healthy subjects and has no 'functional consequences in humans of pathological, clinical or biological importance'. His statement confirms the comment of Dr Mark Catherwood to the analytical report from the Belfast laboratory (in which the mutation was found) that the variant detected in the gene EGLN2 is not-pathogenetic.*
>
> *On the basis of the exclusion of any possible role of the gene mutation in erythropoiesis, it is our unanimous opinion that it is highly likely that the abnormalities observed in this passport and described by us in detail in our first Joint Expert Report were caused by the use of prohibited substances or prohibited methods, and that it is unlikely that they were the result of confounding factors.*
>
> *In particular, even if a mild effect of anabolic steroids on erythropoiesis has been described in the scientific literature, it is our unanimous opinion that the timing, the type and the amplitude of the abnormalities in this passport fully exclude any role of anabolic steroids in their genesis*".

35. On 13 January 2020, the IBU sent a letter to the Athlete requesting comments to be considered by the ABP Panel in relation the Fourth ABP Panel Opinion.

36. On 20 January 2020, the Athlete replied to the IBU, stating that he "*strongly challenges any wrongdoings*" and "*does not recognize the authority of the [IB]U and of the CAS Anti-Doping Division upon him as he has never agreed to be placed under their jurisdiction*".

G. The Notice of ADRV Charge

37. On 21 January 2020, the IBU sent the Athlete a formal notice of ADRV charge of "*Use of a Prohibited Substance and/or a Prohibited Method in the period 2010-2014, in breach of Article 2.2 of the IBU Anti-Doping Rules*". The notice of ADRV charge invited the Athlete to admit the charge against him or request a hearing. On 7 February 2020, the Athlete formally denied the ADRV charge against him.

IV. THE APPEALED DECISION

38. On 25 February 2020, the IBU started disciplinary proceedings against the Athlete before the ADD.

39. On 27 October 2020, the ADD Sole Arbitrator (the "ADD Arbitrator"), ruled that the Athlete had committed an ADRV (hereinafter the "ADD Decision" or "Appealed Decision") and ordered as follows:

> "*1. The Anti-Doping Division of the Court of Arbitration for Sport has jurisdiction to decide on the subject matter of this dispute.*
>
> *2. The request for arbitration filed by the International Biathlon Union is upheld.*
>
> *3. Mr Evgeny Ustyugov is found guilty of an anti-doping rule violation in accordance with Article 2.2 of the 2009 IBU ADR Rules between 24 January 2010 and April 2014.*
>
> *4. Mr Evgeny Ustyugov is sanctioned with a 4-year period of ineligibility starting from the date of the final CAS ADD Award.*
>
> *5. All competitive results obtained by Evgeny Ustyugov from 24 January 2010 to the end of the 2013/2014 season, including, without limitation, all results and medals won at the 2010 and 2014 Olympic games, are disqualified, with all resulting consequences (including forfeiture of medals, points and prizes).*
>
> *6. The award is pronounced without costs, except for the ADD Court Office fee of CHF 1,000 (one thousand Swiss Francs) paid by the International Biathlon Union, which is retained by the ADD.*
>
> *7. Each party shall bear their own legal costs and other expenses incurred in connection with this arbitration.*
>
> *8. All other motions or prayers for relief are dismissed*".

40. Leaving aside the preliminary objections raised by the Appellant (already adjudicated by this Panel in the Preliminary Award and, by now, become *res judicata*), in reaching her decision on the merits of the charged ADRV the ADD Arbitrator held *inter alia* the following:

– On whether the IBU violated the principles of *res judicata* and *venire contra factum proprium*:

"*147. While the Athlete's ABP case was not very active in the period between the issuance of the Expert Panel Opinion in June 2018 and the receipt of the Werge Report in January 2020, it is clear to the Sole Arbitrator that no evidence presented either constituted a 'decision' of the IBU to forego pursuit of the Athlete's case or to ratify the findings of the ABP Panel. Neither could a de facto termination of the proceedings be implied. [...]*

150. For the Athlete's estoppel argument to succeed, there must have been some reliance in good faith by the Athlete to his detriment (CAS 2011/A/2473). No example of reliance on a representation made by, or on behalf of, or under the auspices of the IBU was proffered by the Athlete much less a detrimental reliance which is a pre-requisite to the success of this argument. Neither has any prejudice to the Athlete been demonstrated.

151. This is an APB case where the unique genetics of the Athlete are proffered to explain his haematological abnormalities. Nothing prevents that explanation and the underlying evidence and relevant witness testimony being considered by the Sole Arbitrator in these proceedings giving the Athlete the full opportunity to defend himself (see CAS 2014/A/3639)".

– On whether Prof. Werge's opinion was based on illegally obtained evidence:

"*155. Regarding the admissibility of illegally obtained evidence, the Panel in CAS 2016/A/4486 determined that the interest in the fight against doping can be greater than the individual's interest in not having an illicitly obtained evidence admitted.*

156. The admittance of evidence is subject to procedural laws. In this respect, Article 3.2 of 2009 IBU ADR determines that anti-doping rule violations may be established by 'any reliable means'. Considering the very large scope of means of admissible evidence provided by Article 3.2, the Sole Arbitrator considers that the Athlete's APB and expert witness opinions and statements should be considered as reliable means of evidence in the sense of the 2009 IBU ADR. Even illegally obtained evidence may be admissible if the interest in finding the truth is found to outweigh an athlete's rights as part of an overall balancing exercise.

157. WADA must be kept informed of investigations (Article 12 International Standard for Testing and Investigations), copied on charges (WADA Code Art. 7.10) and be notified of decision (WADA Code Art. 8.4). The Athlete was also aware that WADA was being kept appraised of the IBU's results management process as Dr Reid Aikin of WADA was inter alia *copied on the IBU letter of investigation to the Athlete regarding his ABP Profile of 13 January 2020.*

158. The Sole Arbitrator considers that the ABP of the Athlete was provided to Prof. Werge legally and on an anonymised basis by WADA, as the owner of ADAMS with

the right to access the Athlete's ABP information. Prof. Werge's Report as provided to WADA & IBU was done by his own admission, 'on the interpretation of the genetic analyses performed by Dr Mark Catherwood and coworkers at the UK Reference Center Belfast City Hospital, Molecular Haematology Unit, as they were presented to me by Dr. Reid.' The Belfast reports referred to 'Patient Name: 337973'."

– On whether the Athlete's genetic condition caused his ABP abnormalities:

"*182. Having weighed up the evidence given by all the experts, the Sole Arbitrator is persuaded by the evidence of the IBU's experts and is not persuaded that the Athlete's genetic variations are the cause of his high HGB levels. The scientific evidence presented by the Athlete is based primarily upon inference and hypothesis. The absence of more up-to-date literature or a study to demonstrate that any of the identified variants in the Athlete's genes had a functional impact was unhelpful to his case. Equally unsatisfactory was the rationale provided for the strikingly fortuitous timing of spikes in the Athlete's HGB proximate to major championships.*"

– On whether the 2017 samples proved that the Athlete did not use prohibited substances:

"*188. The Athlete indicated in his submissions that there were essentially two possible explanations, either that he produces naturally more HGB than the normal population or that he has continually taken prohibited substances since his retirement in 2014 to this day. On the basis that it has not been demonstrated that the Athlete's high HGB levels are naturally occurring as a result of a genetic condition, the only plausible explanation is that they are accounted for through the taking or Use of a prohibited substance or prohibited method. This is an ABP case, therefore only Use can be considered as an explanation and the Sole Arbitrator, on the basis of the expert evidence is comfortably satisfied that this is the case.*"

– On whether the private samples collected by the Athlete should be considered:

"*192. The Sole Arbitrator is not prepared to accept the inclusion of private blood tests taken over a period of 5 years since the Athlete retired, taken in unknown circumstances and for unknown purposes. Only samples taken and managed in accordance with the appropriate supervision and in accordance with the IBU and the WADA International Standards for collection, storage and testing of samples is appropriate to maintain a level playing field.*"

– On whether the altitude at which certain samples were collected could account for the Athlete's ABP abnormalities:

"*197. The Sole Arbitrator is not persuaded that in the Athlete's case altitude can account for the abnormalities in his ABP, in particular the high HGB levels and the even higher peaks which in some case increased by 2 g/dL within 4 days to reach 17.6 g/dL (between Sample 1 and 2) or over 3 weeks to reach 19 g/dL (between Sample 17 and 19).*"

– On whether the Athlete committed an ADRV:

"*198. The Sole Arbitrator, having considered all the evidence, determines that she is comfortably satisfied on the basis of the ABP profile of the Athlete that the Athlete committed an ADRV in that he used a prohibited substance and/or a prohibited*

method in the period 2010-2014 in breach of Article 2.2 of the 2009 IBU ADR. Consequently, consideration of the other circumstantial evidence submitted by the IBU in terms of reaching the threshold test is not necessary as the burden of proof has been met by the IBU."

– On whether other circumstantial evidence warrants harsher sanctions based on aggravating circumstances:

"*216. The Sole Arbitrator is comfortably satisfied the Athlete Used prohibited substances or prohibited methods on multiple occasions between 24 January 2010 and 14 February 2014. It is of note that blood doping using rEPO requires repeated administration (by injection) over a period of time and that blood doping by autologous blood transfusion requires both withdrawal and re-administration of the blood. The Expert Panel concluded that the Athlete's ABP reflected an artificial increase in HGB levels immediately proximate to the Vancouver Olympic Games 2010 and the Sochi Olympic Games 2014. The intention to illegally improve performance in the most important international competitions 'can be considered particularly reprehensible because these events enjoy [the] ultimate respect' and has been an aggravating factor in other CAS cases (2018/O/5667 and 5668).*

217. The Athlete has been found to have committed another ADRV in the Oxandrolone case. The outcome of that case remains in place as at the date of this Award (but is under appeal to CAS). Notwithstanding same, Article 10.7.4 IBU ADR provides that w[h]ere a separate violation cannot be treated under the multiple violations regime the second violation may nonetheless be treated as an aggravating circumstance;

> '10.7.4.2 If, after the imposition of a sanction for a first anti-doping rule violation, the BIU discovers facts involving an anti-doping rule violation by the Athlete or other Person which occurred prior to notification regarding the first violation, then the BIU will impose an additional sanction based on the sanction that could have been imposed if the two violations had been adjudicated at the same time. Results in all Competitions dating back to the earlier anti-doping rule violation will be disqualified as provided in Article 10.8'

218. In light of the overwhelming circumstantial evidence provided to the Sole Arbitrator, it is difficult to conclude other than that the Athlete has had the benefit of protection and support to artificially augment his performance through doping and to avoid detection. Given the diversity of support, its elaborate nature and its extent, it could not have been achieved other than with a significant degree of orchestration or common enterprise to commit the instant anti-doping rule violation."

V. THE PROCEEDINGS BEFORE THE CAS

41. On 13 November 2020, the Appellant filed a Statement of Appeal challenging the ADD Decision before the Court of Arbitration for Sport (the "CAS") in accordance with Articles R47 and R48 of the Code of Sport-related Arbitration (the "CAS Code"). In the Statement of Appeal, the Appellant attempted to nominate as arbitrator Prof. Pierre Tercier, who is not on the CAS list of arbitrators. The Appellant explained that he was

aware that Prof. Tercier did not appear on the CAS list, but that his nomination would be an "*adequate remedy to cure the lack of independence of the CAS Appeals Arbitration Division towards the CAS-ADD*". The Appellant also requested that the arbitration proceedings be stayed until the Swiss Federal Tribunal (hereinafter, also indicated as the "SFT") ruled on the challenge against the ADD Decision that the Appellant intended to soon file.

42. On 16 November 2020, the CAS Court Office acknowledged receipt of the Statement of Appeal. The CAS Court Office also invited the Appellant to nominate another arbitrator from the CAS list, since his nomination of Prof. Tercier as an arbitrator was invalid based on Articles R33 and R48, para. 1, of the CAS Code, which only allow nominations from the CAS list.

43. On 18 November 2020, the Appellant nominated Mr. Pierre Muller, former judge in Lausanne, Switzerland, as arbitrator. The Appellant reiterated that his attempt to nominate Prof. Tercier was done to "*ensure the independence of the CAS Panel from the CAS ADD*" as there was a "*structural issue with respect to independence and impartiality, when the CAS Appeals Arbitration Division is in charge to review decisions issued by another CAS Division*".

44. On 20 November 2020, the Respondent objected to the Appellant's request that the arbitration be suspended until the SFT ruled on the Appellant's appeal before that tribunal.

45. On 23 November 2020, the CAS Court Office informed the Parties that the Deputy President of the CAS Appeals Arbitration Division had decided to deny the Appellant's request to stay the proceedings pending the appeal before the SFT.

46. On the same day, 23 November 2020, the Athlete challenged the ADD Decision before the SFT, requesting that it be annulled pursuant to Article 190 of the Swiss Federal Act on Private International Law ("PILA") for lack of jurisdiction and for irregular constitution of the ADD.

47. On 30 November 2020, the Respondent nominated Mr. Romano Subiotto KC as arbitrator.

48. On 2 December 2020, the Appellant filed with the CAS an objection to jurisdiction and request to bifurcate the proceedings (the "Objection to Jurisdiction and Request for Bifurcation"), also reiterating his request to stay the CAS proceedings until the SFT issued a decision on the appeal filed on 23 November 2020. Along with this submission, the Appellant filed an expert report prepared by Prof. François Bohnet on the question of the jurisdiction of the ADD.

49. On 4 December 2020, the Appellant challenged the nomination as arbitrator of Mr. Romano Subiotto KC.

50. On 9 December 2020, the Respondent objected to the Appellant's Objection to Jurisdiction and Request for Bifurcation.

51. On 11 December 2020, the Respondent filed its comments with respect to the Appellant's challenge against the nomination of Mr. Subiotto KC as arbitrator.

52. On 15 December 2020, the CAS Court Office informed the Parties on behalf of the Deputy President of the CAS Appeals Arbitration Division that the decision on whether to bifurcate the proceeding would be deferred to the Panel, once constituted.

53. On 12 January 2021, the Appellant filed his Appeal Brief in accordance with Article R51 of the CAS Code. In para. 178 of the Appeal Brief, the Appellant requested "*that the IBU produces the whole case file in these proceedings as he wants to be sure that this Panel can issue a ruling based on all the available evidence. This file should in particular include ADAMS data with respect to the ABP. The IBU is also requested to file the agreement that would have been signed with the Russian Biathlon Union regarding the costs associated with proceedings initiated against Russian biathletes*".

54. On 14 January 2021, the Challenge Commission of the International Council of Arbitration for Sport ("ICAS") dismissed the Appellant's challenge against the nomination of Mr. Subiotto KC as arbitrator and indicated that the costs of that decision would be determined in the final Award or in any other final disposition of this arbitration.

55. On 26 January 2021, the CAS Court Office notified the Parties that Prof. Massimo Coccia, Professor and Attorney-at-law in Rome, Italy, had accepted his appointment as the President of the Panel.

56. On 3 February 2021, the CAS Court Office notified the Parties that, on behalf of the President of the CAS Appeals Arbitration Division and pursuant to Article R54 of the CAS Code, the Panel appointed to decide the matter would be constituted by Prof. Massimo Coccia, as chairman, Mr. Pierre Muller nominated by the Appellant, and Mr. Romano F. Subiotto QC nominated by the Respondent.

57. On 4 February 2021, the CAS Court Office notified the Parties that Mr. Francisco Larios, Attorney-at-Law in Miami, Florida, USA had been appointed as *Ad Hoc* Clerk in the present arbitration.

58. On 8 March 2021, the Respondent filed its Answer in accordance with Article R55 of the CAS Code. Along with this submission, the Respondent filed an expert report prepared by Prof. Antonio Rigozzi on the question of the jurisdiction of the ADD.

59. On 17 March 2021, the Panel invited the Parties to inform the CAS Court Office on the status of the Athlete's appeal before the SFT and to provide their comments on whether, in their opinion, there were "substantive grounds" to suspend the present CAS arbitration, pursuant to Article R55, fourth paragraph, of the CAS Code and Article 186.1bis PILA, until the SFT ruled on the Appellant's request to set aside the ADD decision.

60. On 24 March 2021, the Parties informed the CAS Court Office that the appeal procedure before the SFT was still pending and gave their respective comments on the

aforementioned issue of whether substantive grounds to suspend the CAS proceedings existed.

61. On 25 March 2021, the Panel, pursuant to Articles R32, third paragraph, and R55, fourth paragraph, of the CAS Code, suspended the arbitration proceedings until the SFT ruled on the Appellant's challenge against the ADD Decision.

62. On 18 June 2021, the Federal Tribunal held the Athlete's appeal as "inadmissible", i.e. "*irrecevable*" in French (see SFT Judgement of 18 June 2021, 4A_612/2020).

63. On 19 July 2021, the Panel noted that the SFT had issued its decision with grounds on the Athlete's appeal, and, accordingly, lifted the suspension of the CAS arbitration procedure. The CAS Court Office, on behalf of the Panel, invited the Appellant to indicate whether he maintained his request for bifurcation.

64. On 22 July 2021, the Appellant informed the CAS that he maintained his request for bifurcation as the SFT had not yet ruled on the alleged lack of jurisdiction and irregular constitution of the ADD.

65. On 19 August 2021, the Panel decided to bifurcate the proceedings and to decide on the issue of the alleged lack of jurisdiction and irregular constitution of the ADD as a preliminary matter, given that the SFT had left the issue open. The Panel invited the Parties to state whether they wished to file further submissions and/or whether they deemed a hearing necessary on such preliminary issues.

66. On 24 August 2021, the Parties indicated that they did not consider a further round of submissions necessary at this stage. As to whether a hearing was necessary, the Appellant did not request one and the Respondent left it for the Panel to decide.

67. On 30 August 2021, the Panel, considering the Parties' positions with respect to a hearing and a further round of written submissions, and pursuant to Articles R56 and R57 of the CAS Code, deemed itself sufficiently well-informed to rule on the issue of the alleged lack of jurisdiction and irregular constitution of the ADD based solely on the Parties' existing written submissions, without the need to hold a hearing.

68. On 8 April 2022, the Panel delivered the Preliminary Award, ruling as follows:

> "*1. The Court of Arbitration for Sport has jurisdiction over the appeal filed by Mr Evgeny Ustyugov on 13 November 2020 against the decision rendered on 27 October 2020 by the appointed Sole Arbitrator of the Anti-Doping Division of the Court of Arbitration for Sport.*
>
> *2. The request of Mr Evgeny Ustyugov to set aside the decision rendered on 27 October 2020 by the appointed Sole Arbitrator of the Anti-Doping Division of the Court of Arbitration for Sport due to the lack of jurisdiction of the Anti-Doping Division is rejected.*
>
> *3. The request of Mr Evgeny Ustyugov to set aside the decision rendered on 27 October 2020 by the appointed Sole Arbitrator of the Anti-Doping Division of the*

Court of Arbitration for Sport due to the improper constitution of the first instance adjudicator is rejected.

4. Any further or different request or motion related to the preliminary issues adjudicated in this award are rejected.

5. All other claims or issues, including the costs of this award, will be assessed and determined in the final award."

69. On 25 May 2022, the Athlete filed an appeal with the SFT against the Preliminary Award and requested the CAS to suspend the arbitration proceeding pending a decision of the SFT.

70. On 14 June 2022, the CAS Court Office informed the Parties that the Panel had granted the Appellant's request to suspend the CAS proceeding.

71. On 22 December 2022, the SFT dismissed the Athlete's appeal against the Preliminary Award (4A_232/2022).

72. On 10 January 2023, the CAS Court Office informed that Parties that, in view of the SFT's dismissal of the Athlete's appeal, the suspension of the CAS arbitration proceeding was lifted with immediate effect. The CAS Court Office also invited the Athlete to confirm (i) his request for production of documents made in para. 178 of the Appeal Brief and, if confirmed, to give further detail and reasons on the request, as well as (ii) his request for a public hearing made in para. 179 of the Appeal Brief.

73. On 27 January 2023, the Appellant confirmed his request for production of documents and explained: "*the ABP Panel appointed by the IBU initially found that the blood profile of the Appellant was not caused by the use of prohibited substances or prohibited methods. However, the ABP Panel changed its mind in less than 24 hours based on an unsubstantiated opinion provided by Prof. Werge. What happened between the issuance of the initial expert report of the ABP Panel, on 16 June 2018, and the new opinion dated 11 January 2020 remains completely unclear. It is legitimate for the Appellant to understand why the IBU suddenly decided to reopen the case against him and to initiate new proceedings. Furthermore, the accusations against the Appellant are based on very sensitive medical data and he has the right to have access to the whole case file in order to receive a copy of all data collected by the IBU. Since the IBU is seated in Austria, the IBU shall comply with the General Data Protection Regulation (GDPR) and the whole case file shall be disclosed pursuant to art. 15 GDPR*". The Appellant also requested the Panel to grant a second round of written submissions and confirmed his request for a public hearing, specifying however that, in light of the political context and related travel difficulties, the Appellant (as a Russian citizen) and his Russian experts were very likely going to attend the hearing online, while his Swiss counsel would attend the hearing in person in Lausanne.

74. On 15 February 2023, Prof. Coccia updated his disclosure form. The CAS Court Office granted the Parties the opportunity pursuant to Article R34 of the CAS Code to challenge Prof. Coccia as arbitrator if it considered the additional disclosure gave rise

to legitimate doubts over his independence. Neither party challenged Prof. Coccia's independence following said disclosure.

75. On 20 February 2023, the Respondent objected to the Appellant's requests for production of documents and for a second round of written submissions.

76. On 22 February 2023, the CAS Court Office informed the Parties *inter alia* that, with respect to the Appellant's procedural requests, the Panel had:

(i) Denied, in accordance with Article R44.3(1) of the CAS Code, the Appellant's request for production at para. 178 of the Appeal Brief as supplemented by his letter of 27 January 2023 for reasons that would be provided in the final Award;

(ii) Granted a second round of written submissions on the grounds that the Parties' submissions on the merits were filed two years earlier and that the Panel wished to ensure that the Parties had the opportunity to make reference to and exhibit the most recent scientific findings and literature;

(iii) Granted the public hearing and the possibility for the Appellant and his experts to attend the hearing through videoconference while their counsel would be present in person in Lausanne; considering that the hearing would be held in a hybrid format and the complex technical and legal issues at stake, the publicity of the hearing would be ensured through the publication of the full video recording of the hearing on the CAS website after the hearing.

77. On 27 April 2023, the Appellant filed his Reply.

78. On 30 June 2023, the Respondent filed its Rejoinder.

79. On 5 July 2023, the CAS Court Office issued the Order of Procedure, which was signed and returned on the same day by the Parties.

80. On 12 July 2023, the Appellant informed the CAS Court Office that Dr Ilya Efremov had allegedly discovered a new variant over the weekend that could explain the elevated values of the HBG in the Appellant's system and requested to submit new evidence in support thereof.

81. On 13 July 2023, a hearing was held at the CAS headquarters. In addition to the Panel, the *ad hoc* clerk (Francisco A. Larios) and CAS Counsel, the following persons attended the hearing:

– <u>For the Appellant</u>:

- Mr. Evgeny Ustyugov (Appellant, by videoconference)
- Mr. Yvan Henzer (Counsel, accompanied by videoconference by two interns from Libra Law, as consented by the Panel and the other party)
- Ms. Tatiana Petropavioskaya (Counsel)
- Ms. Oksana Sirotkina (Athlete Entourage, by videoconference)
- Prof. Pascal Kintz (expert, by videoconference)

- Dr. Manana Sokalova (expert, by videoconference)
- Dr. Douwer de Boer (expert, by videoconference)
- Dr. Ilya Efremov (expert, by videoconference).

– For the Respondent:

- Mr. Nicolas Zbinden (Counsel)
- Mr. Anton Sotir (Counsel)
- Mr. Adam Taylor (Counsel)
- Mr. Lucas Harrati (IBU Lawyer)
- Greg McKenna (Head of the Biathlon Integrity Unit)
- Prof. Giuseppe D'Onofrio (expert)
- Prof. Thomas Werge (expert)
- Aaron Walker (expert, by videoconference)
- Dr. Reid Aikin (expert, by videoconference).

82. At the beginning of the hearing, the Parties expressed they had no objections to the constitution and composition of the Panel. The Respondent then objected to the admissibility of the new evidence submitted by the Appellant on 12 July 2023. The Panel decided to admit the new evidence provisionally for the purposes of discussing it at that hearing, but reserved its right to decide on the admissibility of the document in the final Award.

83. At the end of the hearing, the Parties made no procedural objections and acknowledged that the Panel had fully respected their rights to be heard and to be treated equally throughout the proceeding. A few days after the hearing, as previously decided by the Panel when it upheld the Appellant's request to have a public hearing (*supra* at para. 76), and with no objection from the Parties, the video recording of the hearing was published on the CAS website and, thus, made available to the public.

84. On 14 July 2023, the Appellant sought to introduce into the record two publications forwarded to him by Dr Douwe de Boer.

85. On 17 July 2023, the CAS Court Office informed the Parties that the Panel had decided to admit both publications into the file for reasons that would be set out in the final Award. It also granted the Respondent an opportunity to comment on those publications, which it did on 24 July 2023.

VI. OVERVIEW OF THE PARTIES' POSITIONS ON THE MERITS

86. Given that (i) the Panel already decided on all the preliminary issues in its Preliminary Award dated 8 April 2022 (see *supra* para. 68), and that (ii) the Federal Tribunal dismissed the appeal against such Preliminary Award (see *supra* para. 71), thus

rendering the Panels' decision on those preliminary issues *res judicata*, only the Parties' positions on the merits of the case are reported hereinafter.

A. The Appellant: Mr Evgeny Ustyugov

87. In his prayers for relief, identically submitted in all his briefs, the Appellant requests that the Panel order the following:

> "*I. The appeal is upheld.*
>
> *II. On a preliminary basis, the CAS-ADD is found to have no jurisdiction in the dispute between Mr Evgeny Ustyugov and the IBU; therefore, the decision issued on 27 October 2020 by the CAS Anti-Doping Division is annulled.*
>
> *III. The decision issued on 27 October 2020 by the CAS Anti-Doping Division is annulled.*
>
> *IV. The International Biathlon Union shall be ordered to bear all arbitration costs and to reimburse Mr Evgeny Ustyugov the minimum CAS Court Office fee of CHF 1,000.*
>
> *V. The International Biathlon Union shall be ordered to pay Mr Evgeny Ustyugov a contribution towards the legal and other costs incurred in the framework of these proceedings in an amount to be determined at a later stage or at the discretion of the panel.*"

88. In support of his position on the merits, the Appellant submits the following:

a. The IBU has violated the principle of *venire contra factum proprium*. The IBU initiated disciplinary proceedings on 5 May 2017 by notifying the Athlete of adverse ABP findings. After the Athlete's samples of 25 October 2017 and 6 December 2017 were analyzed, the ABP Panel on 16 June 2018 determined "*we are unable to conclude that it is highly likely that [the Athlete's ABP abnormality] was caused by the use of prohibited substances or prohibited methods*". The IBU did not continue investigating the Athlete thereafter, and the disciplinary case was thus terminated *de facto*. The Athlete therefore had a legitimate expectation that the case was permanently closed and that he would not be prosecuted. Accordingly, the IBU should be estopped from reopening the case against the Athlete. Furthermore, the Athlete's case could not be reopened by the IBU in the absence of any new facts. The report of Prof. Werge is not a new fact and is an inadequate basis on which to start new proceedings. The report is not supported by any medical publication, and Prof. Werge's opinion aligns with the findings of the Belfast laboratory (which were already considered by the ABP Panel in the Third ABP Panel Opinion). Additionally, Prof. Werge relied on incomplete information, as he was not notified that the Athlete's samples reflect consistently elevated HGB levels, like those of his parents. Based on the violation of *venire contra factum proprium* and the re-opening of the case without new facts, the IBU must be barred to present this case.

b. The IBU's reopening of the present proceedings was based on illegal evidence. The IBU's sharing of the Athlete's genetic data with WADA and Prof. Werge was a breach its own commitments, as well as applicable data protection rules,

including the International Standard on Protection of Privacy and Personal Information ("ISPPPI") and the European Union's General Data Protection Regulation ("GDPR"). To be sure, the Athlete consented to further testing and accepted the terms of the 2 October 2017 letter from the IBU; however, in doing so, he did not consent to the sharing of his profile with third parties including WADA and Prof. Werge. The IBU violated (i) the ISPPPI by not deleting, destroying, or permanently anonymizing the Athlete's personal genetic data after the ABP Panel's Third Joint Opinion of 16 June 2018, pursuant to ISPPPI Articles 3.2, 9.2, and 10.1-2, and (ii) the GDPR by sharing the Athlete's genetic data without consent, and for different purposes than the original reason for collection, pursuant to GDPR Article 5 § 1(b) and (e), and Articles 13, 15 and 44-50 (Chapter V). Since the opinion of Mr. Werge is based on illegal evidence, it may not be used by the IBU as evidence to re-open disciplinary proceedings against the Athlete.

c. The IBU has not met its burden of proving that the Athlete committed an ADRV to the required standard of proof ("comfortable satisfaction" of the judging body), because the IBU's ABP sample collection did not comply with the standards of the Athlete Biological Passport Operating Guidelines ("ABP Guidelines"). The NAPMU's Athlete Biological Passport Documentation Package ("ABP Documentation Package") indicates that several of the Athlete's ABP samples were not collected in compliance with the ABP Guidelines and, therefore, may not be used as 'reliable evidence' to establish an ADRV pursuant to Article 3.2 of the IBU ADR. In particular, (i) the ABP Documentation Package does not indicate the reception date and transport time for samples 3-8 and, therefore, it is not possible to determine whether these samples were collected in compliance with WADA technical document TD2017BAR, and (ii) the ABP Documentation Package does not indicate storage temperature information for samples 2, 3, 10, 14, and 19 and, therefore, it is not possible to determine whether these samples were collected in compliance with Rules K.2.3 and K.2.4 of the ABP Guidelines.

d. The Athlete's ABP is not abnormal nor suspicious. First, Dr de Boer, former director of the WADA-accredited laboratory of Lisbon, applied a statistical tool to the Athlete's ABP called the "Biological Variation Approach," which is based on a SigmaPlot software. Dr de Boer's more appropriate approach found all the Athlete's HGB values to be within an acceptable range and the RET% not to be suspicious. Dr de Boer also found that (i) there is no correlation between HGB and RET% in the Athlete's ABP that would indicate use of blood transfusion or regular use of EPO, and (ii) micro-dosing must be excluded since the ABP cannot flag such doping practice. Second, the Athlete's HGB values did not, as Prof. D'Onofrio and the ADD Decision contend, rise with "*strikingly fortuitous timing*" in relation to major competitions. Prof. D'Onofrio incorrectly considered the invalid Sample 19, which was not analyzed within the 12-hour time limit required by the ABP Guidelines. Furthermore, elevated HGB values were revealed in sample 14, which was collected during a period without competitions, and in the two 2017 no-notice samples, which were collected despite the Athlete having been retired for over three years.

e. The Athlete did not use any prohibited substances or methods, and any abnormalities in the Athlete's ABP are due to the Athlete's hereditary

erythrocytosis, which causes consistently elevated HGB levels in the blood of the Athlete. The Athlete's medical condition is evident from the following:

- The Athlete has mutations in at least five genes (HFE; PIEZO1; EGLN2; AIRE; STXBP2), several of which he shares with his parents.
- Due to these genetic variants, both he and his parents have high HGB values.
- Two blood samples collected by the IBU in 2017 revealed high HGB values from the Athlete, despite having retired three years earlier.
- Fourteen Athlete's blood samples, privately collected for medical check-ups between 2010 and 2020 (the "Private Samples"), similarly reflect consistently high HGB values during and after the Athlete's career.
- Out of the 35 HGB values on the Appellant's record – 19 values registered by the ABP, 8 values deriving from the Private Samples collected between 2010 and 2013, 2 values recorded in 2017 (additional tests conducted by the IBU) and 6 values deriving from the Private Samples recorded randomly after his retirement – 32 (91%) are above 16.5 b/dl, 8 of which were recorded after his retirement. This proves that either the Appellant produces naturally more HGB than the normal population or the Appellant continued to use prohibited substances after his retirement. Since the second theory is illogical, the first must be accepted.
- The ABP Panel concluded in the Third ABP Panel Opinion that the EGLN2 gene may be responsible for the Athlete's high HGB levels (see *supra* at para. 23).
- The Werge Report's conclusion that there is "*no evidence to support a claim that the observed SNV, rs774710749, has functional consequences in humans of pathological, clinical or biological importance*" is not substantiated by any medical publication and, furthermore, was made without being told by WADA that the Appellant always recorded high levels of HGB and that his parents suffered from the same dysfunction.
- During the present proceedings, geneticists from Russian Institutes conducted Whole-Exome Sequencing on the Athlete's request identified the five genetic mutations. The geneticists concluded "*the constantly increased hemoglobin level of Evgeny Romanovich Ustyugov is explained by his unique genetic characteristics*". This was confirmed by GenoTechnologia LLC, which used the Sanger method to conduct a full genome sequencing: "*This study conducted with the help of sequencing according to Sanger, confirmed the data obtained earlier on the presence in Evgeny Romanovich Ustyugov of pathogenetically significant mutations, which cause iron overload in the organism, as well as excessive activation of erythropoiesis and increase in erythrocyte level in blood, including* [in the genes HFE, PIEZO1, EGLN2, AIRE, and STXBP2]. *Besides, additional polymorphisms have been revealed, which can also cause the elevated level of haemoglobin in blood, in particular* [in the genes HFE and STXBP2]. *Therefore, the presence of these polymorphisms causes constantly elevated level of haemoglobin in blood of Evgeny Romanovich Ustyugov*".

- Prof. Pascal Kintz (Professor of Legal Medicine and Toxicology Expert) and Dr Manana Sokolova (Haematologist and PhD in Medicine) concluded, in their respective expert reports, that the Athlete's high levels of HGB in his ABP are likely caused by the Athlete's rare congenital form of erythrocytosis.
- Dr Ilya Efremov (PhD in biology and specialist in genetics) concluded, in his expert report, that the high HGB levels of the Athlete can be explained by "*two polymorphic markers located in the HFE gene, namely rs1799945 (heterozygote C/G, H63D) and rs2071303 (heterozygote T/C)*". In Dr Efremov's opinion, the rare combination of these two variants in the HFE gene is sufficient to explain the high HGB values that the Athlete constantly shows (when he was competing and after his retirement from sport). Dr Efremov also mentioned that, on 22 September 2012, a genetic study conducted on the Athlete revealed a mutation in the HFE gene in the heterozygous form, H63D. Based on this finding, Dr Bogomolov made the following diagnosis in 2012: "*hereditary hemochromatosis (heterozygote H63D)*" and this diagnosis was made years before the IBU decided to initiate disciplinary proceedings against the Athlete.

B. The Respondent: IBU

89. In its prayers for relief, submitted in its Answer, the Respondent requests the Panel to rule as follows:

> "*(1) The appeal of Evgeny Ustyugov is dismissed.*
>
> *(2) The arbitration costs, if any, shall be borne by Evgeny Ustyugov.*
>
> *(3) The International Biathlon Union is granted a significant contribution to its legal and other costs*".

90. In support of its position, the Respondent submits the following:

a. The IBU's charge of the Athlete for an ADRV should not be estopped, as it does not violate the principle of *venire contra factum proprium*. The IBU never closed the case nor indicated to the Athlete that he would not be charged with an ADRV in connection with his ABP, and the Athlete did not detrimentally rely on any such IBU representation. The IBU reconsidered the case against the Athlete after receiving Prof. Werge's expert opinion, a new (and final) unanimous ABP Panel opinion, and additional circumstantial evidence indicating that the Athlete was doping and being systematically protected around the time of the Sochi Olympics. There is no evidence that the IBU acted in bad faith, as the Appellant contends.

b. The Athlete's data were validly shared to further the IBU's investigation, and Prof. Werge's report is admissible in accordance with WADA rules. The Athlete consented to undergo genetic testing for the purpose of the IBU's evaluation of his genetic mutation defense. His consent, therefore, included the use of such data in that evaluation by third party experts, such as Prof. Werge. Furthermore, Prof. Werge was provided only with an anonymized ABP during a WADA conference; Prof. Werge was provided with the Belfast Report only after he determined that the Athlete's genetic mutation argument was inadequate. In any case, CAS

jurisprudence indicates that even if the evidence was illegally obtained, it is admissible if the IBU's interest outweighs the Athlete's. In the present case, the public interest in fighting doping is clearly stronger than the Athlete's personal data-privacy interest.

c. The Athlete Biological Passport's peer-reviewed 'Adaptive Model' is a 'reliable means' of detecting doping and establishing an ADRV under CAS jurisprudence. Dr de Boer's statistical approach, however, is flawed, not validated, and not well-suited for evaluating blood parameters. Dr de Boer's statistical models include analyses from non-WADA-accredited laboratories of the Private Samples (i.e., some samples privately taken by the Athlete with no guarantee whatsoever of reliability), despite CAS jurisprudence (e.g. CAS 2017/A/5045) indicating the inadmissibility and unreliability of those types of samples. Dr de Boer's approach further fails to incorporate broader population-based values over time.

d. The minor procedural departures surrounding the collection of the Athlete's ABP samples do not warrant the samples' invalidation. The Athlete's unsupported claims of sample invalidity contradict Rule L.2.1.6.2 of WADA's International Standard for Testing and Investigations, which provides that relevant markers unaffected by such departures may be validly considered by the ABP Panel and included in the ABP's Adaptive Model analyses. The ABP Panel further noted that "*[t]he departures from WADA Guidelines requirements in this Passport are minimal and would not have caused any change in ABP markers to the Athlete's disadvantage.*"

e. The Athlete's ABP reflects extreme hematological abnormalities. Indeed, the ABP software indicated a sequence abnormality over 99.9% for the Athlete's HGB levels, which equates to a probability of occurrence in an athlete with normal physiological condition of less than 1 in 1,000. The sequence abnormality was similarly over 99% for the OFF-score and over 99.5% for RET%. Furthermore, samples 2, 10, 14, and 19 were individually flagged as outliers at 99% for the HGB marker, while sample 3 was flagged at 99% for RET%.

f. The Athlete's rise in HGB values coincided with major international competitions, which supports that he committed an ADRV. Indeed, his HGB spiked in the four days between the collection of samples 1 and 2, preceding the Vancouver Olympic Games. Similarly, samples 16-19, collected prior to the Sochi Olympic Games, culminated in the Athlete's highest recorded HGB value (in sample 19).

g. The Athlete's alleged genetic condition does not explain the abnormalities in his ABP. None of the identified variants have any proven link to elevated HGB levels. Indeed, Prof. Werge ruled out each of the Athlete's gene variants (HFE, PIZOL1, EGLN2, AIRE, STXBP2) as potential cause of his alleged condition, as he confirmed at the ADD hearing: "*none of the implicated variants that [he has] been presented with are considered to be pathogenic in these settings. And [he does not] see there's any evidence linking any of the implicated variants to relevant pathology either.*" In any case, as also explained by Prof. Werge, the Athlete's immutable genetic constitution does not explain the extreme volatility in the Athlete's ABP, nor the material value increases before major competitions.

h. Circumstantial evidence corroborates an ADRV finding. Indeed, there is evidence that the Athlete was a "protected athlete" in a large scale cover-up doping scheme. Prof. McLaren's reports (dated 18 July 2016 and 9 December 2016) detailed an extensive doping and protection scheme to undermine the anti-doping system in Russia. The Athlete was previously convicted in the Oxandrolone Case for the use of oxandrolone, a prohibited steroid that formed part of the doping scheme. Dr Rodchenkov testified that doping was "*particularly widespread*" in biathlon, and "*all of the athletes were carefully protected.*" There is evidence that the Athlete benefited from such protection. For example, the Oxandrolone Case originated by a whistleblower revealing the Athlete's positive oxandrolone sample had been hidden and misreported as negative (this 'disappearing positives' methodology was common to the Russian doping scheme). Furthermore, several of the Athlete's urine samples collected in Sochi on the occasion of the 2014 Winter Olympic Games were recorded alongside the Athlete's name, which is considered by WADA to indicate special detection. There is also evidence indicating that anti-detection strategies were used to hide the Athlete's doping, including undisputed evidence that some of the Athlete's urine samples had been manually swapped. Furthermore, the Athlete's retirement at 28 years old aligns with Dr Rodchenkov's suggestion that athletes "*facing a disqualification, in order to do it quietly would just announce the end of his or her career*".

VII. JURISDICTION

91. 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 Appellant has exhausted the legal remedies available to it prior to the appeal, in accordance with the statutes or regulations of that body*".

92. Article 31.1 of the IBU Constitution (2019 edition) so provides:

> "*To the extent that this Constitution or the Rules (including the IBU Integrity Code) give a party a right of appeal against any decision, that appeal is to be made (unless otherwise specified in this Constitution or in those Rules) exclusively to the CAS Appeals Division, which will appoint one or three CAS arbitrators to resolve the appeal definitively in accordance with the CAS Code of Sports-related Arbitration*".

93. Article 13 of the 2019 IBU ADR, in force at the time the Athlete's appeal was filed and this arbitration was commenced, provides in the relevant parts that "*Decisions made under these IBU Anti-Doping Rules may be appealed [...] in cases involving International-Level Athletes [...] exclusively to CAS*".

94. Article A21 of the ADD Rules provides that "*the award [rendered by an ADD Sole Arbitrator] may be appealed to the CAS Appeals Arbitration Division within 21 days from receipt of the notification of the final award with reasons by mail or courier in*

accordance with Articles R47 et seq. of the Code of Sports-Related Arbitration, applicable to appeals procedures".

95. It is undisputed that, at the time of the alleged anti-doping rule violation, the Appellant was an international-level athlete and that he has the right under Articles 8.4 and 13 of the 2019 IBU ADR, as well as Article A21 of the ADD Rules, to bring his appeal to the CAS against the ADD Decision.

96. This Panel ruled as follows with regard to jurisdiction in para. 1 of the operative part of its Preliminary Award (see *supra* at para. 68):

> "*The Court of Arbitration for Sport has jurisdiction over the appeal filed by Mr Evgeny Ustyugov on 13 November 2020 against the decision rendered on 27 October 2020 by the appointed Sole Arbitrator of the Anti-Doping Division of the Court of Arbitration for Sport*".

97. The above ruling on jurisdiction became *res judicata*, and thus final and binding on the Parties, when the SFT dismissed the challenge brought by the Appellant against the Preliminary Award (see *supra* at para. 71).

98. Therefore, the Panel confirms that it has jurisdiction to hear and adjudicate the merits of the Appellant's appeal against the ADD Decision.

VIII. ADMISSIBILITY OF THE APPEAL

99. Article R49 of the CAS Code so provides in the relevant part:

> "*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*".

100. Article 13.7.1 (entitled "*Appeals to the CAS*") of the 2019 IBU ADR so provides in its relevant part:

> "*The time to file an appeal to the CAS will be twenty-one (21) days from the date of receipt of the decision by the appealing party [...]*".

101. The challenged ADD Decision is dated 27 October 2020 and was received by the Appellant on 29 October 2020.

102. The Appellant filed his Statement of Appeal on 13 November 2020, well within the 21-day time-limit provided by Article 13.7.1 of the 2019 ICU ADR. The Respondent did not raise any objection as to the admissibility of the appeal.

103. Therefore, the Panel holds that the Athlete's appeal is admissible.

IX. APPLICABLE LAW

104. With regard to procedural matters, the Panel must apply Swiss law as *lex arbitri*, and in particular the PILA, given that this arbitration is seated in Lausanne (Article R28 of the CAS Code) and the Parties are not resident or domiciled in Switzerland. In accordance with Article 182.1 PILA, the procedural rules chosen by the Parties are the CAS Code (on the basis of the above quoted Article 31.1 of the IBU Constitution) and the 2019 IBU ADR (on the basis of its Article 1.4.2.2 which states that "*the procedural aspects of the case will be governed by these IBU Anti-Doping Rules*").

105. With regard to substantive issues, 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.*".

106. The "*applicable regulations*" are undisputedly the rules of the IBU. Article 33.1 of the IBU Constitution (2019 edition) provides as follows:

> "*Unless the IBU has explicitly agreed to the contrary, any dispute resolution proceedings involving the IBU, of whatever nature and in whatever forum [...] will be governed by the Constitution and the Rules, and (subsidiarily) by the laws of Austria*".

107. Therefore, the Panel will apply to any substantive issues the IBU rules and, subsidiarily, Austrian law.

X. EVIDENTIARY ISSUES

A. The Appellant's Requests for Production of Documents

108. The Appellant made a very succinct request for production in para. 178 of his Appeal Brief (and briefly supplemented it by the letter dated 27 January 2023). The Appellant requested:

- "*that the IBU produces the whole case file in these proceedings*" ("Request A");
- the "*ADAMS data with respect to the ABP*" ("Request B"); and
- "*the agreement that would have been signed with the Russian Biathlon Union regarding the costs associated with proceedings initiated against Russian biathletes*" ("Request C").

109. On 10 January 2023, the Panel invited the Appellant to give further details and explain the reasons for his request for production of documents (see *supra* at para. 72). The Appellant's letter of 27 January 2023, however, did not actually add any significant details on his requests for production. The Appellant limited his remarks to stating, with

respect to Request A, that he would like to know why "*the ABP Panel changed its mind [and] the IBU suddenly decided to reopen the case against him and to initiate new proceedings*" (see *supra* at para. 73).

110. The Respondent objected to all of the Appellant's request for the following reasons:

- Request A for being too unspecific. Respondent claimed that it did not "*even understand what the Athlete refers to*";
- Request B (in addition to being unclear and unspecific) for being moot, given that the Respondent had already provided as exhibits to its Answer all the analytical documentation relating to the Athlete's ABP, as well as the Athlete's competition and altitude schedules as taken from ADAMS; and
- Request C for being irrelevant.

111. The Panel, on 22 February 2023, rejected the Appellant's production requests for the reasons that are articulated herein:

- Request A is unclear and way too vague. In the Panel's view, the Appellant's request for the "*whole case file*" is unclear because the Appellant already had in his possession the whole case file of the first instance proceedings held before the ADD, and the ADD Sole Arbitrator based her decision solely on the evidence exhibited during the ADD proceedings. Furthermore, Request A is too vague. Indeed, according to the IBA Rules on the Taking of Evidence in International Arbitration ("IBA Rules"), which reflect commonly accepted standards in international arbitration and are often used as guidance in CAS proceedings, a party requesting production should provide "*(i) a description of each requested Document sufficient to identify it, or (ii) a description in sufficient detail (including subject matter) of a narrow and specific requested category of Documents*" (Article 3(a) of said IBA Rules). The request for the "*whole case file*", in order for the Appellant to understand why the Respondent "*suddenly decided to reopen the case against him*", fails to identify a specific document or category of documents and appears to be a fishing expedition which is not allowed by CAS jurisprudence and the IBA Rules. In addition, Prof. D'Onofrio, who is a member of the ABP Panel, was called to testify at the hearing and the Appellant did have the opportunity to cross-examine him on that point (see *infra* at para. 163 for Prof. D'Onofrio's testimony on the alleged "change of mind" of the ABP Panel).
- Request B is moot, because the analytical data used by the Respondent with respect to the ABP were submitted as exhibits to the Respondent's Answer (i.e. after the Appellant's request was made) and, thus, were introduced into the file.
- Request C is irrelevant. The Appellant has not provided an explanation, and the Panel is unable to discern, why and how the agreement between the IBU and the Russian Biathlon Union regarding the costs associated with the proceedings initiated against Russian biathletes could be pertinent to the present case.

B. Request to Submit Additional Evidence

i. Late evidence of an alleged new variant

112. On 12 July 2023, the night before the hearing, the Appellant informed the CAS Court Office that Dr Efremov, one of his experts, had allegedly discovered a new variant over the weekend that could explain the elevated values of the HBG in the Athlete's system (variant rs 1049481 in the gene CALR) and requested to submit new evidence in support thereof:

- a report (commissioned by the Athlete's counsel) dated 12 July 2023 and entitled "*Project documentation for the detection of mutant genotypes in a full-exome sequencing sample*", by Mr. Turakulov Rustamjon Ismailjonovich ("Document A").
- a study dated 29 October 2019 (revised on 17 April 2020) entitled "*Erythrocytosis with JAK2 GGCC_46/1 haplotype and without JAK2 V617F mutation is associated with CALR rs1049481_G allele*", by Ms. Luisa Anelli *et al.* ("Document B").
- an article dated 28 August 2022 entitled "*The genomic analysis brings a new piece to the molecular jigsaw of idiopathic erythrocytosis*", by Ms. Antonella Zagaria *et al.* ("Document C").

113. The Appellant argued that the aforementioned evidence should be admitted into the record because, although filed at the last minute, "*it is almost an impossible task to identify relevant variants out of more than 150,000 that can explain the so-called abnormalities in the ABP passport of the athlete*".

114. At the opening of the hearing the Respondent objected to the admissibility of the new report and evidence, arguing that after the closing of written submissions the Appellant was not entitled, pursuant to Article R56 of the CAS Code, to submit new documents without exceptional circumstances. With regard to the articles, the Respondent underlined that the Appellant had plenty of time to find and submit them during the two rounds of written submissions.

115. The Appellant, on the other hand, argued that the Respondent was being overly formalistic and that, since the Athlete was facing a 4-year ban with high consequences, the search for the truth should prevail over procedural rules.

116. As mentioned *supra* at para. 82, the Panel had decided to admit the new evidence provisionally for the purposes of discussing it at that hearing, but reserved its right to decide on the admissibility of the document in this final Award.

117. After careful consideration, the Panel has decided to admit the documents into the file. In particular, the Panel admits the report because it is based on a new variant which was only very recently discovered by Dr Efremov. With regard to the scientific articles, they are published material and, as such, they are of public domain and, in principle, could be even searched and relied on by the Panel *ex officio*. Therefore, all three new documents are admitted into the file. This said, the issue of their relevance and bearing

on this case is a distinct one and goes to the substance of the matter; indeed, the Panel observes that the Appellant did not even discuss the new evidence during the hearing, thus implying a limited significance of those documents.

ii. Publications submitted after the hearing

118. On 14 July 2023, the Appellant submitted two publications forwarded to him by Dr de Boer, which the Panel admitted to the record on 17 July 2023, for reasons that would be set out in this final Award. More specifically, the Appellant sought to introduce two studies entitled (i) "*Long-term biological variation estimates of 13 hematological parameters in healthy Chinese subjects*" by Peng *et al.* and (ii) "*Within-day biological variation and hour-to-hour reference change values for hematological parameters*" by Hilderink, *et al.* In its letter of 14 July 2023, the Appellant explained that the studies "*describe the biological variation approach with haematological parameters for clinical settings*" and allegedly prove that the "*model used by Dr. de Boer is fit for purpose*".

119. In finding the publications admissible, the Panel notes that the purpose for the Appellant's submission of the studies was to fulfil Prof. D'Onofrio's solicitation, made at the hearing, that Dr de Boer present publications on how the Biological Variation Approach is applied to blood-related measurements in a clinical context. Moreover, as already stated in reference to the other articles whose admissibility was contested by the Respondent (*supra*, para. 117), scientific articles are published material and, as such, they are of public domain and, in principle, could be even searched and relied on by the Panel *ex officio*. The Panel thus admits this late submission of documents from the Appellant.

XI. MERITS

A. Admissibility and unreliability of the Private Samples

120. The Panel notes that the Appellant has submitted 14 blood samples, collected on his behalf for medical check-ups between 2010 and 2020, as evidence of his consistently high HGB values, and that the Parties dispute whether such samples should be taken into account in assessing the Athlete's case.

121. The Appellant submits that these Private Samples must be taken into account, because one cannot expect the Athlete to provide a full chain of custody or for the samples to meet all the standards of the anti-doping rules since, at the time they were taken, the Athlete was retired. The Appellant further submits that the Respondent has not proven that the Private Samples are not genuine and provide no probatory value.

122. The Respondent, on the other hand, submits that the Private Samples must be excluded from consideration since the CAS (and other tribunals) have consistently refused to take such Private Samples into account for the following reasons: (i) an athlete would be able to "cherry-pick" the private tests that support his case, (ii) there is no chain of custody,

(iii) there is no guarantee that the samples even belong to the athlete, and (iv) the WADA protocols and the analytical equipment are not followed.

123. The Panel recognizes that CAS panels have held in the past that only samples collected for anti-doping purposes by the competent anti-doping bodies and using the relevant anti-doping protocols can be included in the ABP. For example, in CAS 2017/A/5045 the panel found that "*only samples collected for anti-doping purposes from the Athlete and that comply with the respective protocols should be included in the ABP in order to ensure that the data is reliable and reflects the true profile of an athlete. Only standardized sample taking and quality control ensure fair and comparable testing results, needed to establish a level playing field and to ensure the equal treatment of all athletes. Thus, the Panel is not prepared to include private tests results whose origins and conditions in which they were taken are unknown and undocumented*". Based on this jurisprudence, the ADD Sole Arbitrator in the first instance decided to exclude from consideration the Private Samples. More specifically, the ADD Sole Arbitrator excluded them because (i) they were "*taken in unknown circumstances and for unknown purposes*", and (ii) "*[o]nly samples taken and managed in accordance with the appropriate supervision and in accordance with the IBU and the WADA International Standards for collection, storage and testing of samples is appropriate to maintain a level playing field*".

124. The Panel finds that, irrespective of whether an athlete is retired or competing, private samples are, in principle, admissible evidence. Admissibility, however, only refers to whether the evidence is allowed to be presented by a party in an arbitration and introduced into the file. It is a separate question altogether whether the evidence is reliable, what probative value it may carry and whether private samples may be considered on an equal footing with the official anti-doping samples and inserted into the ABP. The Panel finds that private samples – while generally admissible into the file as legitimate evidence – are hardly reliable and lack any meaningful probative value, given that: (i) collection and analysis of the samples are not carried out using established anti-doping protocols to ensure their trustworthiness and comparability with official anti-doping samples tested in WADA-accredited laboratories; (ii) the laboratories picked by an athlete and the instruments, tests and personnel used by such laboratories, inevitably, would not be certified and validated by WADA as fit for anti-doping purposes and compliant with WADA standards; (iii) unlike official samples (which are specifically taken for anti-doping uses), such samples are taken voluntarily at an athlete's discretion, which means that their collection could be timed to ensure that the recorded values could support the athlete's case; (iv) due to a lack of supervision by an independent authority and lack of anonymity, samples could be altered or manipulated in a deceptive or fraudulent manner; and (v) an athlete could simply pick and choose which private samples to disclose, selecting only those that are beneficial to his case.

125. The Panel must also add that – contrary to what the Appellant argues – it is not the Respondent's burden to prove that the Private Samples are not reliable, but rather, in accordance with the probatory principle *ei incumbit probatio qui dicit, non qui negat*, it would fall on the Appellant to prove their reliability. However, the Appellant submitted no evidence which could cure the above listed concerns or, at the very least, a significant portion thereof.

126. In light of the above, while the Panel finds the Private Samples – i.e., the analytical results of 14 blood samples exhibited by the Appellant – admissible and, accordingly, admits them into the case file, it also finds them unreliable as evidence. In particular, the Panel is of the view that the Private Samples may not be blended with the official ABP samples in order to expand, reformulate or recalculate the Appellant's ABP longitudinal profile and his reference range of acceptable values.

B. Validity of ABP Samples

127. The Appellant submits that the ABP sample collection did not comply with the standards of the Athlete Biological Passport Operating Guidelines ("ABP Guidelines"). The Appellant maintains that the NAPMU's Athlete Biological Passport Documentation Package ("ABP Documentation Package") reported that several of the Athlete's ABP samples were not collected in compliance with the ABP Guidelines. In particular, the Appellant claims that the ABP Documentation Package does not indicate (i) the reception date and transport time for Samples 3-8 – collected between October 2010 and December 2012 (see the exact dates *supra* at para. 10) – so their compliance with WADA technical document TD2017BAR cannot be verified, or (ii) the storage temperature information for Samples 2, 3, 10, 14, and 19 – collected between January 2010 and February 2014 (see the exact dates *supra* at para. 10) – so their compliance with Rules K.2.3 and K.2.4 of the ABP Guidelines cannot be verified (in particular, the "Temperature follow-up form" is missing). In the Appellant's view, this means that they are invalid and unreliable samples and, in turn, cannot be used to establish an ADRV. The Appellant also submits that Sample 19 is invalid as it was not analyzed within the allotted time limit.

128. The Respondent, on the other hand, argues that there were only minor procedural departures surrounding the collection of the Athlete's ABP samples that do not warrant the samples' invalidation or put in question their reliability. Indeed, according to Rule L.2.1.6.2 of WADA's International Standard for Testing and Investigations ("ISTI"), relevant markers unaffected by minor procedural departures may be validly considered by the ABP Panel in their qualitative assessment of the ABP. The Respondent also underscores that the ABP Panel, in a report dated 1 March 2021, demonstrated that, even assuming there were minor departures from the requirements in the ABP Guidelines (*quod non*), they are immaterial and do not prevent the sample data from being taken into account.

129. The Panel observes that the relevant provisions provide the following:

- Rule 3.2 of the 2009 IBU Anti-Doping Rules: "*The facts related to anti-doping rule violations may be established by any reliable means, including admissions*".

- WADA technical document TD2017BAR (p. 31 of the ABP Guidelines, version 6.0 of January 2017, whose application was invoked in the Appeal Brief): "*The blood Sample shall be analyzed as soon as possible upon reception and no later than 12 hours of Sample reception unless the Sample Collection Authority provides specific information regarding the Sample collection and transportation*

conditions which would allow the Laboratory to extend the time window of the analysis of the Sample without affecting blood stability".

- Rule K.2.3 of the ABP Guidelines: "*The Sample shall be refrigerated from its collection until its analysis with the exception of when the Sample is analyzed at the collection site without delay. The storage procedure is the DCO's responsibility. The storage and transport device shall be capable of maintaining blood Samples at a cool temperature during storage. Whole blood Samples shall not be allowed to freeze at any time. In choosing the storage and transport device, the DCO shall take into account the time of storage, the number of Samples to be stored in the device and the prevailing environmental conditions (hot or cold temperatures). The storage device shall be: a) Refrigerator. b) Insulated cool box. c) Isotherm bag. d) Any other device that possesses the capabilities mentioned below*".

- Rule K.2.4 of the ABP Guidelines: "*A temperature data logger shall be used to record the temperature from the collection to the analysis of the Sample except when the Sample is analyzed at the collection site without delay. The temperature data logger shall be able to: a) record the temperature in degrees Celsius at least once per minute; b) record time in GMT; c) report the temperature profile over time in text format with one line per measurement following the format "YYYY-MM-DD HH:MM T"; d) have a unique ID of at least six characters*".

- Rule L.2.1.6.2 of the ISTI: "*A Marker result which is not affected by the non-conformity can still be considered in the Adaptive Model calculations. In such case, the APMU shall provide the specific explanations supporting the inclusion of the result(s). In all cases, the Sample shall remain recorded in the Athlete's Passport. The Experts may include all results in their review provided that their conclusions may be validly supported when taking into account the effects of the non-conformity*".

130. The Panel observes that the ABP Documentation Package states as follows: "*The reception time was in this ABP Doc Pack therefore retrieved from the Laboratory Documentation Packages whenever this was possible; this was possible when the full Laboratory Documentation Package (full LDPs) had been requested (samples 1-2, 9-12, and 14-19), but not when only the Certificate of Analysis (CA) had been requested (samples 3-8). 'Reception date/time' and 'Transport time' is therefore N/A for samples 3-8*". According to the Appellant, this means that one cannot assess whether the twelve-hour rule was complied with by the laboratories in charge of the analysis and, in turn, results in the invalidity and unreliability of samples 3 to 8.

i. Timing of sample analysis

131. With respect to the validity of Samples 3-8 of the ABP, the Panel finds that the form for each sample indicates a deadline of "*48 hours to analyze the sample*" and that in each of those forms such deadline was indicated as "*respected*" (except sample 4). Indeed, the analytical turnaround time is marked for each sample and each falls within said 48-hour time limit: Sample 3 had an analytical turnaround time of 25:34 hours; Sample 5

took 38:41 hours; Sample 6 took 19:15 hours; Sample 7 took 20:32; and Sample 8 took 29:07 hours. On the other hand, Sample 4 had an analytical turnaround time of 57:29 hours and, accordingly, was deemed invalid and not included in the ABP (see *supra* at para. 10).

132. As explained at the hearing by Dr Reid Aikin (Associate Director of ABP at WADA), at the time, the total time of 48 hours was allocated to analyzing a sample, where 36 hours was given to the anti-doping organization for the collection and transport of the sample and 12 hours was given to the laboratory to conduct the analysis thereon. Dr Aikin confirmed that if the 12 hours for conducting the analysis was exceeded, the result would have been automatically invalidated within ADAMS; however, if the analysis was still conducted within the total allotted 48 hours, the Athlete Passport Management Unit (APMU), i.e. the management unit in charge of managing and monitoring the data collected from athletes participating in the ABP program, could revalidate the samples on the basis of the verified stability of the blood.

133. This is confirmed, for example in the WADA Guidelines for Blood Sample Collection (versions 2.2 August 2010 and 2.3 August 2011), which stated that "*Transport of Blood Sample(s) from site of collection to Laboratory should be made as soon as possible and preferably within 36 hours of collection*" (Article 7.7.5) and that "*[t]he DCO shall keep the samples under his/her control until they are passed to the courier. Blood Samples should be dispatched as soon as possible after collection to arrive at the Laboratory ideally on the same day, and preferably within 36-48 hours of collection*" (Article 7.6.10). The same is stated in the Athlete Biological Passport Operating Guidelines & Compilation of Required Elements, Version 4.0 (November 2013), which stated that "*Blood Samples shall be transported as rapidly as possible to a Laboratory or WADA Approved Laboratory for the ABP located close to the Sample Collection site, and be delivered no later than 36 hours following Sample Collection*" (see Article 7.2 of APPENDIX B of WADA Technical Document – TD2014BSTR) and "*[t]he blood Sample shall be analyzed within 48 hours of Sample Collection*" (see Appendix C of the same".

134. As to the timing of Sample 19 of the ABP, the Panel notes that the form reports a transportation time of 09:50 hours and an analytical turnaround time of 43:35 hours, with a footnote indicating that the "*[e]xact time of collection cannot be found in the LDP. 14.02.2014 15:30 is retrieved from the DCF in ADAMS. In the LDP, the session ended 14.02.2014 23.00 (see page 5 in the LDP)*". However, the Panel notes that, according to the "*Report on IBU Mission M-207514755 During Sochi Games*" and other evidence submitted by the Respondent (in particular email correspondence related to the Sochi Games), five of twenty samples collected at a training camp in Sochi on 14 February 2020 by the IBU for analysis, including Sample 19 of the Athlete's ABP, were withheld (by the doping control officers working for the 2014 Olympic Games, as part of an anti-detection strategy to cover up doping) on the basis of the missing gender information (which, according to the unrebutted Dr Aikin's testimony during the hearing, is not a valid reason to withhold a sample) and not forwarded to the Sochi laboratory until after the 36-hour period for collection and transportation of a sample had expired. This caused Sample 19 to have an analytical turnaround time of 43:35 hours and for ADAMS to automatically record the results as invalid. However, this

sample – along with the other four – was properly revalidated in 2016 by the competent APMU.

135. Based on the above, the Panel holds that Samples 3, 5, 6, 7, 8 and 19 all complied with the timing requirements of WADA.

ii. Temperature of sample analysis

136. As to samples 2, 3, 10, 14, and 19 and their alleged lack of compliance with Rules K.2.3 and K.2.4 of the ABP Guidelines for not reporting storage temperature information, the Panel observes that:

- Sample 2 reports that the data logger was initially not used. In a footnote it is explained that the "*Sample was collected 08:00, but temperature logger records start at 11:19…*". The form confirms that thereafter temperature during transportation was recorded and that temperature at reception was 4-5°C.
- Sample 3 has a "*N/A*" next to "*Temperature during transportation correct?*" and "*Temperature at reception*".
- Sample 10 confirms the temperature during transportation was correct and that temperature at reception was refrigerated. However, no temperature follow up form was submitted to indicate the exact temperatures.
- Sample 14 has a "*N/A*" next to "*Temperature during transportation correct?*" and "*Temperature at reception*". In a footnote, it indicates that "*Stop date and time noted as 27.07.2013 12:10 in LDP. This is prior to reception time? According to logger the temperature was above 12 °C for a total of 41 minutes (highest temperature 13.1 °C, average temperature 8.7 °C)*".
- Sample 19 reports that the data logger was not used. It has "*N/A*" next to "*Temperature during transportation correct?*" and reports a temperature at reception of 12.3°C, with a footnote reading "*the Laboratory, temperature logger was not provided. The temperature was however measured upon receipt with a laser gun*".

137. The Panel finds that even if these constitute departures from the ABP Guidelines, they are immaterial and have not caused any change in the ABP markers to the disadvantage of the Athlete so as to warrant their invalidity. This is supported by the ABP Panel's report of 1 March 2021, which is unrebutted by counter-expert evidence, where it carefully analyzed the situation and stability of each of the aforementioned samples and confirmed the validity and reliability of all of them, finding no red flags:

- Sample 2: "*Temperature during transport: CORRECT. Temperature logger was used until reception by lab. Temperature (measured every 5 minutes) was constantly between 5.0-10.6°C (mean 5.8°C). CAT was 26:34 hours and BSS is 43.74 (that is, <85). Excellent scattergrams distribution, normal red cell indices and absence of flags, as in fresh samples. Perfect storage*".
- Sample 3: "*The instrument reports show excellent scattergrams distribution, normal red cell indices and absence of flags, as in fresh samples*".

- Sample 10: "*Temperature during transport: CORRECT. Temperature logger (every minute) was used and temperature was constantly between 3.2-7.7°C (mean 4.1°C). CAT was 26:34 hours and BSS is 38.77 (that is, <85). Perfect storage. Excellent WBC distribution, normal indices, no flags*".
- Sample 14: "*Temp. above 13° for 41 minutes, not relevant. Mean temp. 8.7°C. CAT: 32:16. BSS: 58:26 (that is, <85). Perfect storage. Excellent WBC distribution, no flags*".
- Sample 19: "*Temperature at reception: 12.3°C. Perfect storage. Excellent WBC distribution, HB/turb flag due to high HB (MCHC>36.5). *The red blood cell index is calculated from hematocrit (HCT) and HB as it follows: [(HB/HCT)*100]. In this case [(51.3/18.9)*100]=36.8 g/dL. It is very common in samples with extremely high HB*".

138. The ABP Panel so concluded (being unrebutted by any other expert evidence):

> "*The departures from WADA Guidelines requirements in this Passport are minimal and would not have caused any change in ABP markers to the Athlete's disadvantage. There is recognized scientific and experimental evidence that a slight deviation of temperature during storage does not affect the quality of samples and the blood count results. Several studies on the stability of haematological parameters in blood samples are found in the scientific literature. Many authors have confirmed that the measurement of hemoglobin concentration is stable for at least 72 hours, both at room temperature (RT) and 4°C on Sysmex instruments [Ashenden et al, 2013; De Baca et al, 2006; Lombardi et al, 2011]. The MCV, on the other hand, tend to increase in a predictable measure: importantly, no sample in this Passport displays an abnormally increased MCV, all values lying between 88.0 and 91.2 fL, except for the invalid sample 4, which shows, as expected, moderate red cell swelling (MCV 96.1 fL) due to the long storage. Reticulocyte count has also been demonstrated as a robust parameter: there is irrefutable evidence that reticulocytes are stable for at least 48 hours at room temperature and 72 hours if refrigerated [Ashenden et al, 2013; De Baca et al, 2006; Lombardi et al, 2011]*".

139. The ABP Panel's conclusion is fully in line with Rule L.2.1.6.2 of the ISTI which states that a marker can still be included in the ABP if not affected by the non-conformity and if a specific explanation supporting the inclusion of the results is made.

140. The Panel also takes note of the Appellant's argument at the hearing that a double standard would be created if the Panel were to accept the non-confirming ABP samples but not the Private Samples submitted by the Athlete (as it has done). The Panel rejects this argument because the Private Samples are not subject to any of the anti-doping rules or protocols. The ABP samples, on the other hand, are subject to them, including the aforementioned provision that permits minor deviations from the protocols with justified reason. In this case, the ABP Panel has confirmed, on the basis of published scientific studies, that the minor deviations did not lead to an inaccuracy of the ABP markers or unfairly disadvantage the Athlete, whereas the same cannot be said and done

for the Private Samples, as there is no information whatsoever on the protocols followed during their collection and analysis (not to mention the other important concerns listed above at para. 124).

iii. Conclusion on the validity of samples

141. In light of the foregoing, the Panel finds that the 17 samples recorded in the Athlete's ABP are valid and should be taken into consideration in assessing whether the Athlete has committed an ADRV.

C. No illegally obtained evidence

142. The Appellant submits that the Respondent's case is based on illegally obtained evidence. In particular, the Appellant objects to the fact that the Respondent shared with WADA his genetic data – including the tests conducted on 25 October 2017 and 6 December 2017 – and that this was a breach of the Respondent's commitments, the ISPPPI and GDPR. In the Appellant's view, the Respondent needed to obtain the Athlete's specific consent and, having failed to do so, the provision of the Athlete's ABP to Prof. Werge at the WADA conference was illegal and, in turn, the Respondent may not use the Werge Report to charge the Appellant with an ADRV. The Appellant acknowledges that he granted the Respondent consent to conduct further unannounced tests to investigate and evaluate his genetic defense. However, the Appellant argues that the Respondent deviated from the granted consent, as it had no right to share his genetic profile to WADA and WADA could not validly accept such information, bearing in mind that, as a retired athlete, the Appellant was not subject to the rules whereby he would consent to share sensitive medical data to anti-doping organizations.

143. The Respondent, on the other hand, submits that it validly shared the Athlete's data to further investigation and evaluation of his case because the Athlete himself had granted the IBU consent to undergo further testing for the purpose of investigating and evaluating his genetic defense. Moreover, pursuant to CAS jurisprudence, even if the evidence is deemed illegally obtained, it is admissible because the IBU's interest in the fight against doping outweighs the Athlete's personal data-privacy interest.

144. The Panel observes that the Athlete granted to the Respondent his consent on 10 October 2017 to undergo further testing in connection with his "*alleged congenital condition*" (see *supra* at paras. 19 and 20). This consent granted the Respondent the right, "*without any limitation*", to collect blood samples without prior notice, to arrange for analysis of such samples (including by WADA and other laboratories specialized in genetic analysis), to store the samples, and to "*process any data resulting from such analysis*" (*Idem*).

145. Furthermore, the Panel notes that, as held in the Preliminary Award (*res judicata* by now), even after his retirement the Athlete remained subject to the subsequently issued IBU ADR (see paras. 104-116 of the Preliminary Award). The Panel reasoned in said Preliminary Award that the Appellant signed a declaration without any reservation on 26 January 2006 (the "2006 Declaration"), under which he agreed to be subject to all IBU regulations as amended from time to time, including the 2019 ADR, provided that

he did not "retract" the declaration (more specifically, the Appellant had contractually agreed to "*recognize and observe the IBU Constitution, all orders, rules and contracts of the IBU [to bear the] responsibility to get information on any amendment to these rules and directives [and that] this declaration is valid until as long as it is not retracted by the undersigned*"). The Panel found in the Preliminary Award that the Appellant had never retracted the 2006 Declaration, not even when he retired from the sport in 2014, since the IBU regulations did not state that the retraction of this declaration was one of the consequences of an athlete's retirement. The Panel also found that there was no indication that the 2006 Declaration was not intended to apply to retired athletes or that the declaration was limited in scope to a specific event. Moreover, the Panel notes that there is no evidence on file that the Appellant ever submitted to the Respondent such a declaration of retraction, even after the notification of said Preliminary Award.

146. As the Athlete remains subject to the IBU rules, Article 14.6 ("Data Privacy") of the IBU ADR applies to him. That provision states that athletes consent to the following:

- Article 14.6.1: "*IBU may collect, store, process or disclose personal information relating to athletes and other persons where necessary and appropriate to conduct their anti-doping activities under the Code, the International Standards (including specifically the International Standard for the Protection of Privacy and Personal Information) and these Anti-Doping Rules*".
- Article 14.6.2: "*Any participant who submits information including personal data to any person in accordance with these Anti-Doping Rules shall be deemed to have agreed, pursuant to applicable data protection laws and otherwise, that such information may be collected, processed, disclosed and used by such person for the purposes of the implementation of these Anti-Doping Rules, in accordance with the International Standard for the Protection of Privacy and Personal Information and otherwise as required to implement these Anti-Doping Rules*" (see e.g. editions 2016 and 2018).

147. The Panel finds – based on the consent granted by the Athlete on 10 October 2017 and on the IBU ADR – that the Respondent did not breach any data protection rules.

148. First, the Respondent did not commit a data breach in sharing the Athlete's ABP at the WADA conference because it was anonymized. As confirmed by Dr Aikin in his testimony, the conference was simply a working group that meets annually to discuss the ABP and shares anonymized complicated cases that arose that year. Moreover, Dr Aikin confirmed that the members in attendance are always bound by strict confidentiality agreements.

149. Second, the Respondent did not commit a data breach by sharing the Athlete's genetic data with Prof. Werge since (i) the consent granted by the Athlete on 10 October 2017 was broad, and (ii) the reason for sharing his genetic data was directly related to the very purpose of the consent granted on that day, i.e. to investigate and evaluate his genetic defense with a view to checking whether such defense could exonerate him from the ADRV charge. It is expected that, in order to analyze the Athlete's genetic defense, his data would need to be presented to experts in that field, such as Prof. Werge. The consent granted by the Athlete on the basis of the IBU ADR is also broad and permits

the sharing of the Athlete's data with a specialist as it would fall under the Respondent's right to "*disclose personal information relating to athletes [...] where necessary and appropriate to conduct their anti-doping activities under the Code*".

150. In light of the foregoing, the Panel does not find that the Respondent breached its commitment, as undertaken in the letter of 2 October 2017, or any data protection rules, including those contained in the ISPPPI or the GDPR. Therefore, the Werge Report does not constitute illegally obtained evidence. This conclusion is bolstered by Article 3.2 of the IBU ADR, which establishes broadly that an anti-doping rule violation may be established by "*any reliable means*".

151. The Panel adds that, in any case, according to well-established CAS jurisprudence, even illegally obtained evidence does not violate procedural public policy and is not inadmissible in a CAS arbitration if there is an overriding public or private interest at stake, such as the search for truth in doping cases. For example, in CAS 2016/A/4486, the panel held that "*it has to be recalled that even illegally obtained evidence may be admissible if the interest to find the truth prevails (Art. 152, 168 Swiss Code of Civil Procedure; HAFTER, Commentary to the Swiss Code of Civil Procedure, 2nd ed., para. 8). According to the Swiss Federal Tribunal and the ECHR, the courts shall balance the interest in protecting the right that was infringed by obtaining the evidence against the interest in establishing the truth. If the latter outweighs the former, the courts may declare a piece of evidence admissible for assessment even though it was unlawfully acquired (BERGER/KELLERHALS, International and Domestic Arbitration in Switzerland, 3rd ed., p. 461) [...]. This balancing test set out by the Swiss Federal Tribunal, and applied by the CAS, is in line with the jurisprudence of the European Court of Human Rights (see i.e. K.S and M.S v. Germany, no. 33969/11, ECHR 2016-V, 6 October 2016, and case law cited)*" (see also *ex multis* CAS 2011/A/2426 and CAS 2009/A/1879).

152. In the present case, even if the ABP of the Athlete had been provided to WADA and Prof. Werge illegally (*quod non*), the Panel finds that the Werge Report could be used by the ABP Panel to evaluate the Athlete's genetic defense because there are overriding private and public interests at stake tilting in favour of using this evidence, namely (i) the private interest of the Athlete himself to have a renowned genetics expert scientifically check whether he has a particular medical condition and whether his genetic defense can exonerate him, (ii) a private interest of each athlete to be reassured that he/she can compete on a level playing field without having to face athletes whose performances are artificially boosted by doping practices, (iii) a private interest of the IBU and all its member federations to identify and sanction doping offenses to dissuade similar misconduct in the future and protect the integrity of the sport, and finally (iv) a general public interest in the fight against doping to protect sporting fair play and the health of athletes. The Appellant argues that the balance of interests should tilt in his favour because one cannot "reopen" a case using illegally obtained evidence. As the Panel holds in the next section, however, the Respondent never closed and "reopened" the case against the Athlete; it remained opened at all times as the investigation developed.

D. No estoppel or *venire contra factum proprium*

153. According to the Appellant, the Respondent should have been estopped from "re-opening" the case against the Athlete on 21 January 2020 for an ADRV. According to the Appellant, the Respondent violated the principle of *venire contra factum proprium* and acted in bad faith. In the Appellant's view, the case against the Athlete should have been considered definitely closed on 16 June 2018, when the ABP Panel issued the Third ABP Panel Opinion and WADA and IBU decided not to challenge it. The Appellant believes he had a legitimate expectation that the case was terminated and would not be reopened.

154. The Respondent, on the other hand, does not believe that it should have been estopped from charging the Athlete with an ADRV. The Respondent argues that it never closed the case against the Athlete and, especially, it never informed the Athlete that he would not be charged for an ADRV in connection with his ABP. Therefore, the Athlete could not have relied to his detriment on the Respondent's conduct.

155. According to well-established CAS jurisprudence, the doctrine of estoppel is defined as a general principle of law "*firmly established in common law and known in other legal systems even though under a different heading (e.g. reliance in good faith, venire contra factum proprium) [...] that arises when one makes a statement or admission that induces another person to believe something and that results in that person's reasonable and detrimental reliance on the belief*" (CAS 2011/A/2473, at para. 33). In other words, under the principles of estoppel and *venire contra factum proprium*, a party may not act against its own actions that created an assumption to another party relying in good faith and detrimentally on that assumption (CAS 2018/A/5552, at para. 81; see also CAS 2017/O/5264, 5265 & 5266, at para. 243).

156. The Panel recognizes that the ABP Panel issued a Third ABP Panel Opinion on 16 June 2018, in which it asserted to be "*unable to conclude that it is highly likely that [the Appellant's ABP abnormality] was caused by the use of prohibited substances or prohibited methods*" (see *supra* para. 27).

157. This report, however, was only an internal document exchanged between the ABP Panel and the IBU as demonstrated by the facts that: (i) the Respondent did not at that time notify the report to the Athlete, and (ii) the ABP Panel concluded the report by asking the Respondent whether it had any further questions ("*[w]e remain at your disposal for any further questions you might have*"). The Third ABP Panel Opinion was not shown to the Athlete until 13 January 2020, in the context of inviting the Athlete to comment on the findings of the Fourth ABP Panel Opinion.

158. Furthermore, at no point did the Respondent communicate to the Athlete that the investigation against him had concluded or that he would not be charged with an ADRV.

159. Based on the foregoing, it is clear that the Respondent never made any representation to the Athlete and, thus, the latter does not have any basis for claiming that he detrimentally relied on the former's conduct.

160. The Panel thus holds that, since the Athlete has failed to show he was induced into reasonable and detrimental reliance, there was no violation of the principle of estoppel or *venire contra factum proprium* when the Respondent charged the Athlete on 20 January 2020. The Respondent was free to charge that Athlete at that time considering that, as is uncontested by the Parties, the statute of limitations for an ADRV had not expired.

E. Athlete's commission of an ADRV

161. The Appellant submits that he did not use any prohibited substances or methods, and any "abnormalities" in the Athlete's ABP were due to the Athlete's hereditary erythrocytosis. The Appellant maintains he has proven he has hereditary erythrocytosis since (i) his parents have high HGB values and (ii) his medical records show consistent high HGB values in competition, out of competition, during his sports career and after his retirement. The Appellant appointed geneticists who found 5 gene variants and several polymorphisms, which in their view caused the Athlete to have erythrocytosis and resulted in his elevated HGB values in the ABP. The Appellant asserts that even the ABP Panel acknowledged, in the Third ABP Panel Opinion, the possibility that the alleged abnormality in his ABP could have been cause by a gene mutation (EGLN2).

162. The Respondent, on the other hand, submits that none of the gene mutations identified by the Appellant have any proven link to elevated HBG levels. In support, the Respondent points to (i) the Belfast Report, which determined the gene mutation EGLN2 was non-pathogenic and not associated with erythrocytosis, and (ii) the Werge Report, which found that the variation had no "*functional consequences in humans of pathological, clinical or biological importance*". Moreover, the Respondent submits that the alleged hereditary erythrocytosis does not explain the fluctuations and peaks in the Athlete's ABP or why those peaks happened to occur right before major competitions.

163. In support of their positions, the Parties retained several experts to submit reports and testimony, which can be summarized as follows:

i) Dr Douwe de Boer (former director of the WADA-accredited laboratory of Lisbon, called by the Appellant):

Since the specific software used by the Nordic APMU was not available to him, Dr de Boer used a "Biological Variation Approach" (which is based on a SigmaPlot software) to assess the Athlete's case. According to Dr de Boer, this approach is more relevant for the Appellant's case because the software used by the APMU relies on algorithms that implement data of a "representative group of athletes"; however, no group can be representative of the Appellant's individual situation, bearing in mind that he suffers from erythrocytosis unlike other athletes. Moreover, it is therefore preferable to use a statistical model that considers more the variation in time as does the Biological Variation Approach. Dr de Boer concluded – taking into account the 17 valid samples supplied by APMU, the 14 Private Samples, and the 2 samples taken by the IBU in 2017 – that, according to the Biological Variation Approach, the consistently elevated HGB concentrations in the Appellants' blood profile and the variations are all within the common

expected maximum biological variation. Dr de Boer found that the RET% values of the Appellant are also not suspicious and there is no correlation between HGB and RET% that would indicate the use of blood transfusion or regular use of EPO or any use of a prohibited substance and method. Dr de Boer also testified that the first admittedly suspicious sequence (Samples 1 to 2) could simply be the result of an infection combined with "analytical uncertainties", which together significantly reduced the HGB value in Samples 1.

ii) Professor Pascal Kintz (Professor of legal medicine and toxicology expert, called by the Appellant):

Professor Kintz explained that erythrocytosis is suspected when HGB is above 18.5 g/dL or the packed cell volume (PCV) is greater than 0.52 in a man. An absolute or true erythrocytosis is present only when the red cell mass (RCM) is greater than 125% of that predicted for sex and body mass (Keohane et al, Br Med J, 2013). Professor Kintz concluded as follows:

> "*several points have to be taken into consideration before the abnormalities observed in the athlete's biological passport of Evgeny Ustyugov can be attributed, with no doubt, to doping:*
>
> *– 2 unannounced blood tests, performed late 2017 under control of the sport authorities, several years after retirement, have demonstrated an elevated HGB. In addition, 2 WADA controls (in Cologne), performed on blood and urine collected on the same dates, have indicated that the tests did not evidence a prohibited substance or a prohibited method*
>
> *– 6 additional blood tests, performed from 2015 to 2020, after retirement of the athlete, have demonstrated high levels of HGB*
>
> *– 3 gene mutations, in 2 different laboratories, have been found. The variant c.187C>G of the HFE gene has been considered in the joint report of 13 May 2020 to correspond to a pathogenic variant. The two other variants (c.5863C>T from the PIEZO1 gene and c.958G>A from the EGLN2 gene) are of unclear clinical significance and deserve more investigation with respect to their possible pathogenic status*
>
> *Given it has been verified that the athlete is presenting 3 mutations, one cannot consider that the ABP of Evgeny Ustyugov is presenting abnormalities, which can be listed as characteristic of doping practices. At this time and given the new data from the joint report of 13 May 2020 of the Genomic center of the Russian National Research Medical University, his biological passport can be in relation with a specific genetic profile*".

Prof. Kintz added that, if the Athlete did not have erythrocytosis and doped, only a massive amount of EPO could explain such high HGB values in the Athlete's ABP and that micro-dosing would not be a possible explanation. According to Prof. Kintz, however, the laboratory would have detected such massive intakes of EPO.

iii) Dr Manana Sokolova (Hematologist, PhD in Medicine, called by the Appellant):

Dr Sokolova found that the hereditary mutation revealed in Evgeny Ustyugov, including variant N°1 (in the HFE gene; H63A) and variant N°2 (in the EGLN2 gene), can result in abnormal values in the Athlete Biological Passport, such as an increased level of HGB. Dr Sokolova explained, with respect to the EGLN2 gene mutations, that "*potential participation in HIF regulation and erythrocytosis development has not been fully studied yet. The fact that EGLN2 is not reflected in the ClinVar database simply means that the information on the influence of this gene on human health is absent as of today, as respective studies have not been conducted [...]. In this regard, one cannot be sure that this mutation is non-pathogenic and has no influence on human medical parameters*". Dr Sokolova further explained, as to HFE (variant H63A), that it could be the cause of erythrocytosis, and that this mutation could influence the blood values of the Athlete: "*As the sport of biathlon is associated with high-endurance exercise, where hepcidin synthesis can increase, and therefore reduce iron availability, it may be assumed that the carriers of mutations of hereditary HFE have a genetic advantage in sporting results with high oxygen demand and high muscle load [...]. Therefore, it may be assumed that mutation in the gene HFE limits the hepcidin increase caused by physical activity, which results in an increase in iron availability and increased stimulation of erythropoiesis – this is what is necessary for high working capacity and endurance during athletic training. In addition, higher iron availability can help athletes to recover more effectively between competitions. Taking into account the considerations mentioned above, the conclusion can be drawn that mutation of HFE (H63A) with heterozygous genotype can possibly explain the increased level of hemoglobin, hematocrit and erythrocytosis*". According to Dr Sokolova, during the Athlete's sports career, he had normal levels of iron and ferritin due to physical activities; however, post-retirement his blood values show increased level of iron and ferritin, which is one of the main symptoms of hemochromatosis, which consequently leads to erythrocytosis and increased level of HGB.

iv) Dr Ilya Efremov (PhD in biology and genetics specialist, called by the Appellant):

Dr Efremov concluded that genetic traits (genotypes for specific loci) established for the Athlete can explain the "abnormalities" in his ABP, namely the increased content of HGB, erythrocytes and hematocrit in the peripheral blood over a long period of time. He explained that the "*combined genotype established for Evgeny Romanovich Ustyugov by two polymorphic markers located in the HFE gene, namely rs1799945 (heterozygote C/G, H63D) and rs2071303 (heterozygote T/C) may be the only and sufficient reason for elevated blood haemoglobin levels (erythrocytosis). The findings allow us to rule out forms of erythrocytosis such as ECYT1...ECYT8 for Evgeny Romanovich Ustyugov*".

v) Professor Giuseppe D'Onofrio (Professor of Hematology, Oncology and Clinical Pathology, member of the ABP Panel, called by the Respondent):

Professor D'Onofrio found that the dynamic evolution of HGB demonstrates blood manipulation. In his view, the HGB sequence is greater than 99.9% likely not to be physiological, even considering the alleged gene variations. He described

the Athlete's passport as an "arrogant" one, as there are no attempts to mask the changes in HGB and RET%, which are obvious signs of manipulation.

Professor D'Onofrio rejected: (i) Dr de Boer's claim that the lower HGB value of Sample 1 as compared to Samples 2 occurred because of an infection since there is no evidence or indication whatsoever that the Athlete had an infection during that time and he is unaware of any infection that could cause such a serious degree of change in a person's HGB level; (ii) Dr. Sokolova's position that training/competition depletes iron levels in an athlete; and (iii) Dr. Bogomolov's diagnosis of "*hereditary hemochromatosis*" because hemochromatosis is a condition that is diagnosed clinically and not through genetic testing, and, moreover, because the recommendation of "*administration of No. 4 blood exfusions (400 ml/week) under Hb and ferritin control*" would not be given to an athlete that has normal values of iron (as did the Athlete).

vi) Prof. Thomas Werge (Professor of Genetics, called by the Respondent):

Prof. Werge concluded that that the variants mentioned by the Athlete could not cause the increased HGB levels of the Athlete. Prof. Werge reviewed the Athlete's gene variants and concluded:

HFE: The H63D variant of the HFE-gene is very common (a common variant, in the context of genetics, refers to a version of a DNA sequence that is present in a significant proportion of a population and, as such, is neutral with no relevant impact on human traits or disease). The H63D variant – as a common variant – cannot have a high effect on erythrocytosis; otherwise, a high portion of the population would suffer from that condition. Furthermore, the claim that the H63D variant has been shown to be the cause of hemochromatosis and thus a possible cause for increased HGB levels is wrong. It relies on observations and hypotheses reported in the late 1990s and later disproven and abandoned. A study based on a cohort of approximately 15,000 subjects demonstrated that there was no clinically relevant effect of the H63D variant on HGB levels. There is a functional pathogenic variant in the HFE gene (C282Y), but it is not a variant carried by the Athlete.

PIZOL1: There is no evidence that the identified variant to the PIZOL1 gene leads to increased HGB levels. The variant is associated with dehydrated hereditary stomatocytosis (DHS). However, the literature indicates that this pathology, which compromises red blood cell physiology, will not increase HGB levels. In fact, a study specifically found that individuals affected by this variant "*were not anemic and their hemoglobin concentrations were not statistically different from unaffected individuals*". There is no clinical evidence that the Athlete suffers from DHS and the pathology is, in principle, inconsistent with high performance endurance sport.

EGLN2: The EGLN2 gene has been identified in a single patient with a confirmed clinical diagnosis of erythrocytosis, and since the EGLN2 gene is part of the oxygen-sensing pathway, it was speculated that this mutation or other deleterious mutations might confer risk of developing erythrocytosis. While legitimate, this observation has not been substantiated in subsequent studies of idiopathic erythrocytosis following the initial 2016 report. The variant identified in the

Athlete is fundamentally different to the one identified in the aforementioned case of the single patient and is not predicted to be deleterious. The statement that "*mutations in this gene are presumably associated with erythrocytosis*" is incorrect both in the case of EGLN2 and in general. There is also no evidence that variants in the EGLN2 gene could cause oscillations in HGB levels of an individual.

AIRE and STXBP2: There are no studies on these variants that could even suggest that they could have any impact on HGB values in the examinee.

164. Based on the disagreement between the Parties and their respective experts, the Panel will address the following issues in the subsections to follow before reaching its conclusion on whether Respondent has proven to a comfortable satisfaction that the Athlete committed an ADRV between 24 January 2010 and April 2014 in violation of Article 2.2 of the 2009 IBU ADR Rules:

(i) whether there are abnormalities in the Athlete's ABP;

(ii) whether the abnormalities in the Athlete's ABP can be explained by the Athlete's alleged genetic condition (i.e. hereditary erythrocytosis);

(iii) whether the abnormality in Samples 1 to 2 can be explained by an alleged infection;

(iv) whether the 2017 Samples and the Private Samples should be taken into account in the assessment of the Athlete's case; and

(v) whether circumstantial evidence supports an ADRV finding.

165. Preliminarily, however, the Panel wishes to briefly deal with the alleged lack of credibility of the ABP Panel and of its member Prof. D'Onofrio, raised by the Appellant, due to the fact that those experts (including Prof. D'Onofrio) changed their mind between the Third ABP Panel Opinion dated 16 June 2018 (where the ABP Panel was "*unable to conclude that it is highly unlikely that this profile is the result of a normal physiological or pathological condition; similarly, we are unable to conclude that it is highly likely that it was caused by the use of prohibited substances or prohibited methods*" while recommending further investigations, *supra* at para. 27) and the Fourth ABP Panel Opinion dated 11 January 2020 (where the ABP Panel, after considering Prof. Werge's opinion on genetics issues, concluded that "*it is highly likely that the abnormalities observed in this passport and described by us in detail in our first Joint Expert Report were caused by the use of prohibited substances or prohibited methods, and that it is unlikely that they were the result of confounding factors*", *supra* at para. 34).

166. The Panel finds that the ABP Panel's change in conclusion in the Fourth ABP Panel Opinion (*supra* at para. 34) does not prove, as suggested by the Athlete, that Professor D'Onofrio or the ABP Panel were biased or that their opinions are unreliable and lack credibility. The Panel does not detect any indication that Professor D'Onofrio or the ABP Panel had a bias, preconceived notion, or any sort of attitude suggesting they merely attempted to implicate or accuse the Athlete; nor is there any proof that Professor D'Onofrio or the ABP Panel were instructed or pressured by the Respondent to find

against the Athlete. On the contrary, the Panel finds that the fact itself that Professor D'Onofrio and the other experts on the ABP Panel were very careful and refrained, in an interlocutory stage, from finding against the Appellant is evidence of their good faith and of the fact that they did not have any preconceived agenda against the Athlete. They revised their conclusions simply because of the new scientific evidence presented over the course of the investigation, as Prof. D'Onofrio testified during the hearing.

167. Indeed, the Panel observes that in the First ABP Panel Opinion on 21 March 2017 (see *supra* at para. 14), the ABP Panel concluded that the abnormalities in the Athlete's ABP were likely a result of blood manipulation; however, the ABP Panel mentioned that the possibility of erythrocytosis deserved further investigation through genetic and molecular studies. Thereafter, on 7 September 2017, in response to the Athlete's request that WES testing be performed, the ABP Panel suggested in its Second ABP Panel Opinion that genetic testing and further unannounced ABP tests be conducted to investigate his claim of erythrocytosis (see *supra* at para. 18). Indeed, Prof. D'Onofrio confirmed at the hearing that at that time he felt it necessary, in order to assess the genetic defense of the Athlete, to ask for clinical information and external testing in a specialized lab. It was based on these further tests, information and scientific evidence requested by the ABP Panel, that the ABP decided to revise its opinion on 16 June 2018 and issue the Third ABP Panel Opinion (*supra* at para. 27). As Prof. D'Onofrio recalled during his testimony, it was on the basis of a new gene (EGLN2), whose clinical effect was unknown to the ABP Panel at the time (and knowing that a similar polymorphism EGLN was associated with erythrocytosis), that they could not conclude that doping was highly likely. However, further evidence was later submitted to the ABP Panel – the Werge Report of 9 January 2020, concluding that the EGLN2 gene was non-pathogenic and benign – which convinced the ABP Panel that the First ABP Panel Opinion was in fact correct. Accordingly, the ABP issued the Fourth ABP Panel Opinion on 11 January 2020 confirming its original position (see *supra* at para. 34).

168. The Panel finds that, under the circumstances, the credibility of the experts on the ABP Panel, including Professor D'Onofrio, is strengthened rather than weakened by the various revisions of their conclusions. In fact, as already mentioned, given the lack of any signs of bad faith and the ABP Panel's considerable efforts to assess the Athlete's genetic condition, the revision of their conclusions demonstrates the ABP Panel members' objectivity, priority in accuracy, and *bona fide* will to reach scientifically robust conclusions.

169. The Panel is of the view that this finding of objectivity and good faith and, thus, of credibility of the ABP Panel, is further corroborated by the circumstance, as testified at the hearing by Prof. D'Onofrio, that during his many years as an ABP expert he found on average that among the ABP profiles that are anonymously submitted to him for the initial expert evaluation – i.e. the ABP profiles that are flagged by the system as "abnormal" or anyway that deserve more attention – about 30% end up being considered as normal, about 60% are considered to be merely suspicious (not showing any clear doping scenario), and only about 10% point to a likely doping scenario and prompt further enquiries. Prof. D'Onofrio also recalled in his testimony that, in accordance with the ABP Guidelines, this residual 10% of ABP profiles is sent – still anonymously – for evaluation to the ABP Panel, whose three members must all independently and

separately find that a doping scenario is likely, which prompts the exchange of opinions within the ABP Panel and the issuance of a joint expert report, which in turn prompts, if a high likelihood of doping is found, an investigation (not yet an indictment) by the competent anti-doping organization and the request to the concerned athlete to provide some explanations. Prof. D'Onofrio also pointed out in his testimony that "the first role of the [ABP] expert is to avoid false positives and this is what we have tried to do also in this case".

170. To conclude on this point, the Panel is of the view that the ABP Panel's change of mind in the evaluation of the Athlete's ABP, in light of the data and process described by Prof. D'Onofrio in his testimony, actually excludes any biased attitude of the ABP Panel against the Athlete and denotes the genuine, *bona fide* effort to search for the truth while trying to avoid a false positive. In other terms, the ABP Panel's change of mind between the Third and the Fourth ABP Panel Opinion actually lends credibility to Prof. D'Onofrio and his colleagues on the ABP Panel rather than the opposite. This Appellant's argument thus fails.

i. Abnormalities in the Athlete's ABP

171. The Panel first finds that there are abnormalities in the Athlete's ABP. Indeed, The Athlete's ABP reveals that the probability of doping, according to the ABP software, exceeded 99.9% for HGB, 99% for OFF-score and 99.5% for RET%. The Panel observes that the ABP software flagged samples 2, 10, 14 and 19 for high HGB, (17.6, 18.5, 18.6, and 19.0 g/dL) and sample 3 for RET% (2.81%).

172. Dr de Boer suggested during his testimony at the hearing that these HGB values are not abnormal for the Athlete because his baseline is 18 g/DL. The Panel rejects that the Athlete's baseline for HGB is 18 g/DL because among the 17 valid samples only 3 show levels of HGB of 18 g/DL or more. Nor can the HGB value of 17 g/DL be considered relatively low, as suggested by Dr de Boer, since 10 of the Athlete's valid samples float around that value. The Panel considers that, based on the ABP, the Athlete's baseline appears to be between 16 and 17 g/DL, along the lines of what Prof. D'Onofrio suggested during his testimony at the hearing; it follows that the flagged samples 2, 10, 14 and 19 do show abnormal levels of HGB.

173. In fact, even Dr de Boer admitted during cross-examination that the Athlete's HGB values in his ABP are relatively high and that they should be investigated for cause. Indeed, in response to a question from Respondent's legal counsel on whether the HGB concentration in the ABP was inconsistent (as reflected by its significant peaks and troughs throughout Samples 1 to 19), Dr de Boer admitted that there were "*relatively high*" levels of HGB and that one of the possible causes for the elevated concentration was doping: "*yes [...] it is important to find a cause and once more, indeed, the application, let's say, of doping related substances can be the cause*". The Panel recognizes that Dr de Boer was then quick to point out that this was not the only possible cause and that the high levels of HGB could also be caused by genetics. However, what is relevant here is that Dr.de Boer recognized some significant anomaly in the Athlete's ABP profile that required an explanation.

ii. The alleged genetic condition

174. The Panel then finds that the abnormalities in the Athlete's ABP have not been proven to be caused by the alleged genetic condition of the Athlete (i.e. hereditary erythrocytosis).

a. Insufficient proof that the Athlete's genetics caused high HGB levels in ABP

175. First, the Panel finds that the Athlete has failed to prove that he has consistently high levels of HGB. The Athlete argues that he suffers from erythrocytosis and that this causes consistent elevated levels of HGB; however, in reviewing his ABP there are only 3 samples (samples 10, 14 and 19) out of 17 in which his HGB levels are at or above 18.5 g/DL, which, according to Dr. Kintz (the Appellant's own expert) is the threshold for suspecting erythrocytosis. Moreover, there are some significantly lower levels of HGB in some of his ABP samples (e.g. 15.4 in sample 1, 16.3 in sample 6, 16.2 in sample 16) which are difficult to square with an alleged erythrocytosis.

176. Second, the Panel is not persuaded that any genetic variants identified by the Athlete – HFE, EGLN2, PIEZO1, AIRE and STXBP2 – could cause the high levels of HGB in his ABP. There is, in the Panel's view, a lack of direct scientific evidence that any of these variants cause erythrocytosis or contribute to increased HGB levels. As correctly found by the ADD Sole Arbitrator, the scientific evidence presented by the Athlete is based primarily upon inference and hypothesis.

177. In particular, the Panel is not persuaded by:

- Dr. Sokolova's explanation that the HFE genetic variant could be the cause of erythrocytosis and, in turn, of the Athlete's high HGB values. As convincingly explained by Prof. Werge, the variant observed in the Athlete is not functional or pathogenic; it is a common genetic variant (present in a significant portion of the general population) that is neutral with no relevant impact on human traits or diseases; there is, as Prof. Werge admits, a functional pathogenic variant in the HFE gene (C282Y); however, it is undisputed that the Athlete does not carry this variant.
- the study relied on by Dr. Efremov entitled "*Erythropoietin Concentration in Boys With p.His63Asp Polymorphism of the HFE Gene*" by Kaczorowska-Hac *et al.* This study analyzed the impact of the H63A polymorphism of the HFE gene on erythropoiesis taking into consideration endogenous EPO production in the developmental age, and reported an increase in iron concentration, caused by HFE gene mutation, leading to intensified HGB production in children. The Panel finds, however, that the study lacks any meaningful relevance and probative value to the case at hand since it was only performed on a small sample of 18 individuals, and, moreover, focuses only on children.

178. The Panel is also not persuaded by the Appellant's arguments that: (i) there are inexplicable cases of erythrocytosis and that the Athlete could simply fall into that category (according to Dr de Boer, in a French study on 56 adults with high HGB, 40% of the cases found no cause for the high HGB), and (ii) the fact the EGLN2 is not

reflected in the ClinVar (a database that provides information about the relationships among gene variations and their interpretations of clinical significance) only means that currently there is a lack of information on the impact of that gene on human health, but does confirm the gene variation's non-pathogenic and benign nature (see Prof. Sokolova's expert report summarized *supra* at para. 163(iii)).

179. The Panel finds that it is the burden of the Athlete to prove his case (in defense of the abnormalities found in the ABP) that he suffers from erythrocytosis and establish a clear link between his gene variations and his high levels of HGB. Contrary to what the Appellant suggested during the hearing, the burden of proof is not on the Respondent to exclude all genetic variations in his profile as a cause of the high HGB values in his ABP. The Athlete, thus, cannot simply rely on the fact that the cause of his alleged condition is complicated to find or inexplicable, or that there are insufficient studies to understand with certainty whether one of the gene variations he possesses affect HGB levels.

180. In light of the foregoing, the Panel holds that, on the balance of probabilities, there is insufficient proof that the Athlete's genetics caused the elevated HGB values in his ABP.

b. Lack of explanation for the fluctuations and peaks in the Athlete's HGB levels

181. Even if the Panel were to accept that the Athlete suffered from a genetic condition that caused high levels of HGB (*quod non*), the Panel finds that there is no coherent and substantiated explanation for the significant fluctuations in the Athlete's ABP.

182. The Panel finds that, even if the Athlete had hereditary erythrocytosis, his HGB levels would be consistently high and any variations in HGB levels would be minor since, as convincingly explained by Prof. D'Onofrio, the biological variability of the HGB parameter is usually of less than 3% for a healthy individual and up to 4% for an Athlete, with an analytical variability of only 1%. In the present case, however, the Athlete's ABP shows high volatility of his HGB values. Indeed, the Athlete's HGB values fluctuate and to a considerable degree, ranging from as low as 15.4 (Sample 1) to 18.5, 18.6 and 19 g/DL (Samples 10, 14 and 19).

183. The experts called by the Appellant have not provided a convincing explanation as to why the Athlete's alleged hereditary erythrocytosis would cause these significant fluctuations. If indeed the Athlete had this condition and, as suggested by Dr de Boer, his baseline HGB level was 18 g/DL (*quod non*), there would need to be an explanation as to why there are 12 HGB values that fall far below that baseline. However, no such explanation has been provided.

184. During the hearing, the Panel expressed its concern that, even assuming that genetics could explain the Athlete's high levels of HGB, there appeared to be no explanation as to how genetics could cause the significant fluctuations in the readings and why they coincided with important competitions of the Athlete.

185. In response, Prof. Werge answered that genetics is static and, thus, by default, it explains static features. Prof. Werge explained that one could only "*hypothesize [...] that you have genetic variance that creates some instability*" but this instability would be "*there all the time and not only on particular occasions*". This supports the notion that, if the Athlete had erythrocytosis, his HGB would be consistently high (which is not the case).

186. As for Dr Sokolova, she testified as follows at the hearing: "*As far as this variability is concerned, there's fluctuations of the level of hemoglobin, which may confuse some why at one point it's almost normal and then at another point in time it's from 160 and above. But if you look at the hereditary mutation which is a given pass from the parents, quite clearly the childhood and adolescent period is when in a person we see the person growing physically, being active, and excess iron that one may find in the body because of this mutation is being consumed down to the normal level, continuously consumed. And, as the person grows, for example, a person goes into an active sport. We also register such fluctuations because in an active exercise iron has been consumed more actively and so the excess iron will go down, become normal, will go lower or will jump up, depending upon the state of the person active training, relaxation, high above the sea level, or because of some other reason, and we can see that the patients with hemochromatosis, this hemochromatosis is extended throughout so many years. Danger emerges post 50 years old when a person acquires certain somatic conditions when he grows old and is no longer physically active, and at that point in time we are no longer going to register such fluctuations. We will continuously see high iron concentration and continuous higher level of hemoglobin. So this can be explained by path genetically ...*".

187. In other words, Dr Sokolova suggests that iron levels affect HGB levels and that individuals with hereditary mutations, specifically related to hemochromatosis, may experience fluctuations in iron levels. Furthermore, according to Dr Sokolova, engaging in active sports or exercises further influences these HGB fluctuations based on the varying intensity of iron consumption.

188. The Panel is not persuaded by Dr Sokolova's explanation. First of all, the Panel finds there is insufficient proof that the Athlete suffered from hemochromatosis. The Appellant has only submitted a diagnosis dated 22 September 2012 by Dr Bogomolov. However, the Panel is not comfortable relying on this diagnosis because the Appellant has not called Dr Bogomolov as an expert witness to explain his diagnosis and to be cross-examined, and because, as convincingly explained by Prof. D'Onofrio, the diagnosis is suspicious since (i) the diagnosis of hereditary hemochromatosis should be based on a clinical diagnosis and not a genetic analysis, and (ii) at the time of the diagnosis in 2012 his iron levels were normal (25.1 µmol/l). Even Dr Sokolova admitted in her expert report that "*the Athlete has no clinical symptoms or signs of hemochromatosis in the presence of heterozygous mutation of the gene HFE (H63A)*". Second, there is insufficient evidence on record to support that iron values of a biathlon athlete are affected by training/competition to the degree seen in the Athlete's ABP. As convincingly testified by Prof. D'Onofrio: (i) it is pure speculation – not backed by any studies to his knowledge – that iron stimulates erythrocytosis directly, and (ii) only the injection/consumption of iron would explain an Athlete having normal iron parameters

in 2012 and high iron levels a couple of years later after his retirement, because it is not possible for iron levels in a body to increase so much in such a short time.

189. As a final point, the Panel notes that Dr Efremov – who is a geneticist – did not testify in response to the Panel's question on how the significant fluctuations in the ABP could be explained by the genetic makeup or profile of the Athlete. Despite Respondent's counsel requesting Dr Efremov's response, counsel for Appellant preferred to have Dr Sokolova answer the question.

c. ABP's inherent adaptation to genetics increasing HGB levels

190. Even if the Panel were to accept that the Athlete had erythrocytosis (*quod non*), one of the virtues of the ABP method is that the ADP inherently adapts to the increase of HGB levels due to genetic reasons, meaning that it would already take into account the Athlete's alleged genetic condition.

191. As is well known and not challenged by the Parties, the ABP involves regular monitoring of biological markers on a longitudinal basis to facilitate the indirect detection of prohibited substances and methods (i.e., it focuses on the effect of prohibited substances or methods on the body). The selected markers are monitored over a period of time and an individual longitudinal profile is created that establishes an athlete's own upper and lower limits within which the athlete's values are expected to fall. In other terms, in the ABP the athlete becomes his own point of reference, and each time a blood sample is recorded the Adaptive Model calculates where the reported HGB, RET% and OFF-score values fall within the athlete's expected distribution. In other words, the ABP adjusted the Athlete's limits over time based on his specific individual values.

192. Since the Athlete became his own point of refence in the ABP, the Panel finds that the ABP would already take into account the alleged hereditary erythrocytosis and the high HGB that comes with it. Therefore, even if the Panel were to accept that the Athlete suffers from hereditary erythrocytosis and that this caused the high levels of HGB, the ABP – which, as just stated, already takes into account the allegedly genetically induced high HGB values – still detected significant fluctuations and four samples falling outside of the Athlete's own individual limits for which there is no explanation.

iii. The alleged infection

193. The Panel finds that there is insufficient proof to find that an infection affected the recorded HGB value of Sample 1. The Panel rejects Dr de Boer's claim that the significantly lower HGB value of Sample 1 (15.4 g/dL on 24 January 2010), as compared to Sample 2 (17.6 g/dL on 28 January 2010, i.e. an increase in HGB of 14,2% just four days after Sample 1 and shortly before the start of the Vancouver Winter Olympics), occurred because of an infection. The Panel rejects this claim on the basis of (i) Prof. D'Onofrio's unrebutted expert testimony that he is unaware of any infection that could change to such a degree the HGB level of an individual, and (ii) the fact that Dr de Boer, when asked at the hearing by Respondent's counsel what type of infection the Athlete could have had to cause such a dramatic change, had no answer; Dr de Boer

only mentioned that, hypothetically, an athlete with hepatitis with certain complications could see his HBG lowered to that extent; however, it is undisputed that (a) the Athlete did not have that medical condition and that (b) a few weeks later he won an individual gold medal and a team bronze medal at the Vancouver Olympics (performances which would be very difficult to reconcile with a recent hepatitis with complications).

iv. Unreliability of samples not in the ABP

a. The Private Samples

194. Dr. Sokolova relies on the Private Samples to argue that "*the analysis of the dynamic control of peripheral blood indices for 2015, 2016, 2017, 2018, 2019 and 2020...ma[kes] clear the maintenance of high values of the red blood indices with fluctuations within the following limits: hemoglobin 166-185gm/l, erythrocytes 5.18-5.54x1012/l, hematocrit 47.2-52%...even after the Athlete's career ended in April 2014, his level of hemoglobin still remains increased*". However, as already held *supra* at para. 124, the Panel does not find these Private Samples – submitted by the Athlete to support his claim that he suffers from hereditary erythrocytosis – reliable since: (i) the samples were not collected and analysed using established anti-doping protocols and there is no guarantee that they truly belonged to the Athlete; (ii) the laboratories and their instruments, tests and personnel were not certified and validated by WADA as fit for anti-doping purposes and compliant with WADA standards; (iii) the samples were taken at the Athlete's discretion, which means that their collection could be timed to ensure that the recorded values could support the athlete's case; (iv) due to a lack of supervision by an independent authority and lack of anonymity, the samples could be altered or manipulated; and (v) there is no guarantee that the Athlete could have simply cherrypicked which samples to disclose, selecting only those that could be beneficial to his case.

195. Therefore, the Panel does not take the Private Samples into consideration in assessing the Athlete's case. In any case, even if the Panel were to take the Private Samples into account, they might only slightly increase the baseline of the Athlete, but would still not explain the fluctuations and high peaks in the Athlete's ABP during the period he competed.

b. The 2017 Samples

196. The Panel finds that the tests conducted and the samples collected in October and December 2017, which had HBG levels of 17.7g/dL and 18.5g/dL (the "2017 Samples"), do not have any meaningful relevance. Even if organized by the Respondent, these two samples are scarcely reliable in assessing the Athlete's case because they were not truly unannounced tests. The Athlete was warned that he would be tested out of competition during the three-month window from October to December of 2017, so he could have intentionally manipulated his HGB levels to support his case that he suffered from erythrocytosis.

197. In any case, the Panel finds that the 2017 Samples do not affect the abnormality of the values found in the period 2010-2014 and, in particular, fail to explain the HGB

fluctuations and high peaks in the Athlete's ABP and why they occurred right before or during the Winter Olympic Games of Vancouver and Sochi.

c. The Athlete's parents' samples

198. The Panel finds that any reports of the Athlete's parents hold scarce evidentiary value for the same concerns expressed *supra* (at para. 194) and because the Appellant has not submitted evidence to cure said concerns or, at the very least, a significant portion thereof. In any case, the Panel finds that the Athlete's parents' levels of HGB fail to explain the HGB fluctuations and high peaks in the Athlete's ABP and why they occurred right before very important competitions.

v. Circumstantial evidence supports an ADRV finding

199. There is some further evidence strongly and decisively corroborating the finding that the abnormal levels of HGB were caused by blood doping, and not a genetic condition.

200. First, the Panel observes that the peaks of HGB levels coincide with major competitions in which the Athlete participated. Indeed, the Athlete's Samples 1 and 2, which showed an increase in HBG of 2.2 g/dL in just four days, were taken a couple of weeks before the Vancouver Olympic Games (which started on 12 February 2010), and Samples 16, 17, 18 and 19, which show an increase in HGB of 2.8 g/dL in six weeks (from sample 16 to 19) and an increase in HGB of 2.0 g/dL in two weeks, were taken in the period leading up to the 2014 Sochi Olympic Games (with the last one collected during the Olympics). The Athlete, however, has not provided any explanation as to why his HGB levels would spike in such convenient moments. The Panel considers that statistically it is highly unlikely for an athlete to have such significant HGB spikes just before the two most important competitions that a biathlete can have.

201. Second, the Panel observes that the Athlete was one of the "protected athletes" in the Russian doping system, particularly on the occasion of the 2024 Sochi Winter Olympics, as shown *inter alia* by:

- Professor McLaren's reports of 18 July and 9 December 2016, in which he confirms the existence of a sophisticated doping and protection scheme involving the Russian anti-doping agency (RUSADA), the Moscow Laboratory, and individuals from the Ministry of Sport, the FSB (the Russian agency for security services) and the Centre for Sports Preparation (CSP). The scheme utilized the "Duchess cocktail" to dope athletes and employed anti-detection methodologies to undermine the anti-doping system in Russia, as confirmed by various CAS Panels (see e.g. CAS OG 16/09, CAS OG 16/012, CAS 2017/O/5039, CAS OG 18/03, CAS 2018/O/5666, CAS 2018/O/5667 and CAS 2018/O/5713).
- The testimony during the ADD proceedings of Dr Rodchenkov, former director of the Moscow Laboratory, who had direct knowledge of the Athlete's involvement in the aforementioned scheme and whom many CAS panels have found to be a very credible witness. Dr Rodchenkov testified that:
  (a) biathlon was one of the sports where doping was "*widespread and all of the athletes were carefully protected*", in particular at the 2014 Olympic Games;

(b) the Duchess Cocktail was used by the "*entire Russian National Biathlon Team [...] in the period before the Sochi Games*" and that, in April 2014, biathletes were injected rEPO to enrich their blood at the end of the season, so as to have it withdrawn and later available for transfusion for the Olympic season;

(c) in 2012, urine was collected from biathletes, including the Athlete, and recorded in a clean urine bank inventory;

(d) after the introduction of the ABP system, Dr. Rodchenkov reviewed ABPs that RUSADA had viewed as "terrible" and Dr. Rodchenkov found the Athlete's ABP to be "the worst"; and

(e) it is common practice of Russian athletes facing disqualification to quietly retire from competitions.

– The Laboratory Information Management System ("LIMS") from the Moscow Laboratory – revealed to WADA by a whistleblower in September 2017 and covering the results of analyses from the period 2012 to 2015 – which:

(a) confirmed that, using the so-called "Disappearing Positives Method", revealed by the already mentioned McLaren reports, hundreds of positive results were reported as negative, including four of the Athlete's samples, one of which (2808577) had tested positive for oxandrolone and led to the IBU ADHP finding him guilty of an ADRV in 2013 (see *supra* at para. 30); and

(b) identified the Athlete by name in the "general comments" section in what was supposed to be an anonymized database.

vi. Conclusion on the Athlete's commission of an ADRV

202. After carefully assessing the Parties' arguments and expert's testimony, the Panel finds that the Respondent has proven to the Panel's comfortable satisfaction that the Athlete committed an ADRV between January 2010 and April 2014 in violation of Article 2.2 of the 2009 IBU ADR Rules. Indeed, there are abnormalities in the Athlete's ABP and these abnormalities – in particular, the significant fluctuations in the levels of HGB – are not explained by the Athlete's alleged hereditary erythrocytosis or by an alleged infection. Further, the circumstantial evidence – specifically, the facts that the peaks of HGB levels coincide with major competitions and that the Athlete was a "protected athlete" by RUSADA prior to and during the 2014 Sochi Olympics – strongly and decisively supports this finding of an ADRV.

F. PERIOD OF INELIGIBILITY AND DISQUALIFICATION OF RESULTS

203. The Athlete has not challenged the period of ineligibility or disqualification of results ordered by the ADD Decision. Therefore, the Panel – which fully agrees and endorses the finding and reasoning of the ADD arbitrator on this point – confirms the sanction of four years starting from the date of the final ADD Decision and the disqualification of the Athlete's results obtained between 24 January 2010 until the end of the 2013-2014

season, with all resulting consequences (including forfeiture of medals, points and prizes).

G. FURTHER OR DIFFERENT MOTIONS

204. All further or different motions or requests of the Parties are rejected.

XII. COSTS

205. In accordance with Articles R65.1 and 2 of the CAS Code, since the present appeal is against a disciplinary decision of an international sports-body, the proceeding is free of charge for the Parties, except for the Court Office Fee, which the Appellant already paid and shall be retained by the CAS.

206. As for contribution towards legal fees and expenses, Article R65.3 of the CAS Code provides as follows: "*Each party shall pay for the costs of its own witnesses, experts and interpreters. In the arbitral award and without any specific request from the parties, the Panel has discretion to grant the prevailing party a contribution towards its legal fees and other expenses incurred in connection with the proceedings and, in particular, the costs of witnesses and interpreters. When granting such contribution, the Panel shall take into account the complexity and the outcome of the proceedings, as well as the conduct and financial resources of the parties*".

207. The Panel has taken all the factors identified in the relevant provision into account and has particularly considered the complexity and outcome of the proceedings. Indeed, the Appellant's submissions failed on three occasions:

(i) his challenge to the nomination as arbitrator of Mr Romano Subiotto KC was dismissed by the Order rendered on 14 January 2021 by the ICAS Challenge Commission (which stated that the "*costs of this Order shall be determined in the final award*");

(ii) his preliminary objections as to the lack of jurisdiction and irregular constitution of the ADD were dismissed by the Preliminary Award dated 8 April 2022 (which stated that "*the costs of this award, will be assessed and determined in the final award*");

(iii) his submissions on the merits are being dismissed by the present final Award.

208. In view of the above and of the consequent fact that the IBU had to spend considerable resources to defend its case, the Panel considers it appropriate to order the Appellant to pay a contribution of CHF 25,000 (twenty-five thousand Swiss Francs) to the Respondent as a contribution towards its legal fees and other expenses incurred in connection with the present arbitration proceedings.

TRIBUNAL ARBITRAL DU SPORT
COURT OF ARBITRATION FOR SPORT
TRIBUNAL ARBITRAL DEL DEPORTE

ON THESE GROUNDS

The Court of Arbitration for Sport rules:

1. The appeal filed by Mr. Evgeny Ustyugov on 13 November 2020 against the decision issued by the CAS Anti-Doping Division on 27 October 2020 is dismissed.

2. The decision issued by the CAS Anti-Doping Division on 27 October 2020 is confirmed.

3. The award is pronounced without costs, except for the Court Office fee of CHF 1,000 (one thousand Swiss Francs) paid by Mr. Evgeny Ustyugov, which is retained by the CAS.

4. Mr. Evgeny Ustyugov shall pay to the IBU an amount of CHF 25,000 (twenty-five thousand Swiss Francs) as a contribution towards its legal fees and other expenses incurred in connection with the present arbitration proceedings.

5. All further or different motions or prayers for relief are dismissed.

Seat of arbitration: Lausanne, Switzerland
Date: 18 November 2024

THE COURT OF ARBITRATION FOR SPORT

Massimo Coccia
President of the Panel

Pierre Muller
Arbitrator

Romano F. Subiotto
Arbitrator

Francisco A. Larios
Ad hoc Clerk