

**IN THE MATTER OF PROCEEDINGS BROUGHT UNDER THE ANTI-DOPING RULES OF
WORLD ATHLETICS**

Before:

Dr. Tanja Haug (Chair)
Sètondji Roland Adjovi
Julien Berenger

BETWEEN:

WORLD ATHLETICS

Anti-Doping Organisation

and

Rhonex KIPRUTO

Respondent

DECISION OF THE DISCIPLINARY TRIBUNAL

A. INTRODUCTION

1. World Athletics (“**WA**”) is the international federation governing the sport of Athletics worldwide. It has its registered seat in Monaco.
2. World Athletics is represented in these proceedings by the Athletics Integrity Unit (“**AIU**”), which has delegated authority for Results Management and Hearings on behalf of World Athletics, pursuant to Rule 1.2 of the World Athletics Anti-Doping Rules, effective 31 March 2023 (“**2023 ADR**”).
3. The Respondent, Mr. Rhonex Kipruto (the “**Athlete**”), is a 24-year-old long-distance runner from Kenya. The Athlete has achieved considerable success in the U20 and men’s categories. Most notably, he is the current world-record holder for the 10km Road Race (achieved in Valencia, Spain on 12 January 2020) and achieved a bronze medal at the

2019 World Championships. The Athlete is an International-Level Athlete for the purposes of the World Athletics Anti-Doping Rules (“**ADR**”).

4. The Athlete has been charged by the AIU with an Anti-Doping Rule Violation (“**ADRV**”) in connection with abnormalities in the haematological module of his Athlete Biological Passport (“**ABP**”)(“**Charge**”). In particular, the matter concerns several abnormalities detected in blood Samples collected from the Athlete between 9 July 2018 and 15 March 2022 that are alleged to indicate blood manipulations.
5. The Athlete denied having used any Prohibited Substances or Prohibited Methods that could have caused the abnormalities detected in his ABP and advanced alternative explanations. The Athlete requested that the matter be determined by way of a hearing before the Disciplinary Tribunal.
6. It is not in issue that:
 - a) the ADR are applicable to the Athlete,
 - b) the AIU has jurisdiction for Results Management of the Athlete’s Samples, and
 - c) the Disciplinary Tribunal has jurisdiction to determine the ADRV alleged against the Athlete.
7. Hereafter, WA and the Athlete are referred to collectively as the “**Parties**”.

B. FACTUAL BACKGROUND

8. The relevant facts and allegations based on the Parties’ written submissions, pleadings, and evidence presented in these proceedings, as they concern the merits of this case, are summarised below. Additional facts and allegations found in the Parties’ written submissions, pleadings, and evidence may be set out, where relevant to the legal discussion that follows. While the Panel has considered all the facts, allegations, legal arguments, and evidence submitted by the Parties in these proceedings, it only refers to the submissions and evidence it deems necessary to explain its reasoning.

I. Blood Doping and the ABP

9. There are three (3) widely known substances or methods used for blood doping, namely: (i) administering recombinant human erythropoietin (“**rEPO**”) (administered by injection to trigger erythropoiesis, the stimulation of the production of red blood cells); (ii) synthetic oxygen carriers (i.e., infusing blood substitutes such as a haemoglobin-based oxygen carrier (“**HBOC**”) or perfluorocarbons (“**PFC**”) to increase haemoglobin well above normal levels; and (iii) blood transfusions (i.e., infusing a matching donor’s or the athlete’s own (previously extracted) red blood cells to increase the haemoglobin well above normal).
10. rEPO is a Prohibited Substance and is included in class S2. Peptide Hormones, Growth Factors, Related Substances, and Mimetics of the World Anti-Doping Code Prohibited List. It is a non-Specified Substance, prohibited at all times. Synthetic oxygen carriers and blood transfusions are Prohibited Methods under class M1. Manipulation of Blood and Blood Components on the World-Anti Doping Code Prohibited List. They are non-Specified Methods, prohibited at all times.
11. To combat blood doping, the ABP programme was developed and refined by the World Anti-Doping Agency (“**WADA**”) and formally introduced by World Athletics in 2009. It is an electronic record that monitors selected variables (i.e. biomarkers) from an athlete over a period of time that indirectly reveal the effect of doping. Thus, it *“compiles and collates a specific athlete’s test results and other data over time, and is unique to that particular athlete¹.”*
12. The specific values collected and recorded in the ABP include haemoglobin concentration (“**HGB**” or “**HB**”), a molecular carrier in red blood cells transporting oxygen from the lungs to body tissue, and the percentage of immature red blood cells viz. reticulocytes (“**RET%**”). The ratio of these two (2) values, the HGB and the RET%, is also used to calculate a further value, known as the “**OFF-score**”, which is sensitive to changes in erythropoiesis².
13. An electronic record of an athlete’s biomarker variables is maintained on WADA’s database known as the Anti-Doping Administration and Management System (“**ADAMS**”).

¹ World Athletics Brief, para 10.

² World Athletics Brief, para 11.

14. The biomarker values from the blood samples collected in the ABP programme are logged into a statistical model known as the **Adaptive Model**. The Adaptive Model uses an algorithm that takes into account (i) the variability of these values within the general population and (ii) factors affecting the variability of individual values, such as gender, ethnic origin, age, altitude, type of sport, and instrument-related technology.
15. These Markers are monitored over a certain time to create a longitudinal profile that establishes an athlete's upper and lower limits, to a specificity of 99%, within which the athlete's values are expected to fall, assuming normal physiological conditions. While the limits are initially set based on the general population, they become unique to the athlete's values over time. In other words, an athlete is his/her own point of reference every time a blood sample is collected.
16. However, an Atypical Passport Finding ("**ATPF**") flagged by the Adaptive Model itself is not a basis for a charge, instead it is merely the trigger for an expert interpretation.
17. World Athletics implements the ABP in accordance with the International Standard for Results Management ("**ISRM**") through a procedure that is designed to afford the athlete due process in establishing whether an ADRV has been committed. The procedural steps to review an athlete's passport are set out in Article C.1.3 ISRM and can be roughly summarised as follows: (1) Application of the Adaptive Model; if an ATPF is identified, then: (2) a review of the passport is conducted by a single expert; if the expert concludes that the reason for the ATPF is "*likely doping*", then (3) a review of the passport is conducted by three (3) experts, including the Expert who conducted the initial review (together the "**Expert Panel**"); if the Expert Panel's consensus is that the ATPF stems from "*likely doping*", then (4) an ABP Documentation Package is created and is reviewed by the Expert Panel; if their opinion is maintained that the ATPF resulted from "*likely doping*", then (5) the athlete is notified of the Adverse Passport Finding ("**APF**") and given the chance to respond; once the athlete's response is received, (6) the athlete's explanations are reviewed by the Expert Panel; if the Expert Panel maintains their unanimous conclusion that it is "*highly likely*" that the athlete Used a Prohibited Substance or a Prohibited Method, then (7) an ADRV is asserted.
18. With regard to the expert evaluation, Article C.2.2.5.1 ISRM provides:

“When evaluating a Passport, an Expert weighs the likelihood that the Passport is the result of the Use of a Prohibited Substance or Prohibited Method against the likelihood that the Passport is the result of a normal physiological or pathological condition in order to provide one of the following opinions: “Normal”, “Suspicious”, “Likely doping” or “Likely medical condition”. For a “Likely doping” opinion, the Expert shall come to the conclusion that the likelihood that the Passport is the result of the Use of a Prohibited Substance or Prohibited Method outweighs the likelihood that the Passport is the result of a normal physiological or pathological condition.”

II. The Athlete’s ABP

19. As an International-Level Athlete, the Athlete participated in WA competitions throughout the period covered by the ABP profile and was thus subject to the ADR and the Results Management of the AIU.
20. From 9 July 2018 until 15 March 2022, WA collected 32 ABP blood Samples from the Athlete.
21. Each of the Samples was analysed by a WADA-accredited laboratory and logged on ADAMS. Using the Adaptive Model, the Athlete’s longitudinal profile of haematological values was constituted and identified anonymously as BP36BWA3 (“**Passport**”).
22. 28 of these Samples were considered valid³ and used in the evaluation process of the Athlete’s ABP.
23. A summary table and graphs of the Athlete’s ABP, showing the Athlete’s HGB, RET% and OFF-scores for each of the 28 valid Samples, is set out below:

³ Samples No 3, 12, 14, and 28 were declared invalid.

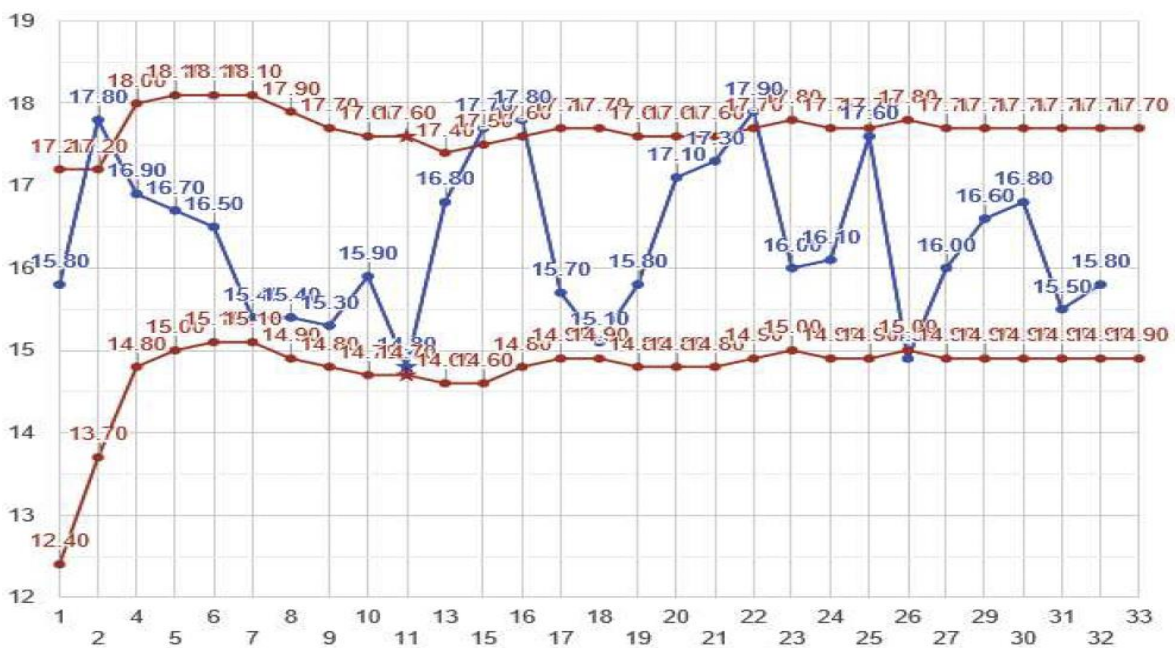
No.	Date of Sample	HGB (g/dl)	RET%	OFF-score
1	9 July 2018	15.8	0.86	102.4
2	2 September 2018	17.8	0.78	125.01
3	13 October 2018	invalid		
4	21 November 2018	16.9	0.83	114.3
5	9 January 2019	16.7	0.94	108.8
6	13 February 2019	16.5	0.79	111.7
7	28 March 2019	15.4	1.26	86.7
8	26 May 2019	15.4	1.27	86.4
9	11 September 2019	15.3	1.36	83
10	2 October 2019	15.9	1.29	90.85
11	6 October 2019	14.8	1.33	78.8
12	20 November 2019	invalid		
13	18 January 2020	16.8	0.97	108.91
14	16 March 2020	invalid		
15	27 May 2020	17.7	1	117
16	4 June 2020	17.8	0.92	120.5
17	12 July 2020	15.7	0.91	99.8
18	31 August 2020	15.1	1.95	67.2
19	17 November 2020	15.8	1.05	96.5
20	3 December 2020	17.1	1.42	99.5
21	14 December 2020	17.3	1.68	95.2
22	20 January 2021	17.9	1.68	101.2
23	27 April 2021	16	1.67	82.5

24	5 June 2021	16.1	1.65	83.9
25	16 June 2021	17.6	2.14	88.2
26	17 August 2021	14.9	1.72	70.3
27	2 September 2021	16	1.7	81.8
28	10 September 2021	invalid		
29	22 October 2021	16.6	1.52	92.03
30	13 November 2021	16.8	1.49	94.8
31	21 February 2022	15.5	2.32	63.6
32	15 March 2022	15.8	1.87	76

24. The Athlete's biological Markers (in blue) and the individualised upper and lower limits at a specificity of 99% (in red) are reflected as follows in the Athlete's ABP:

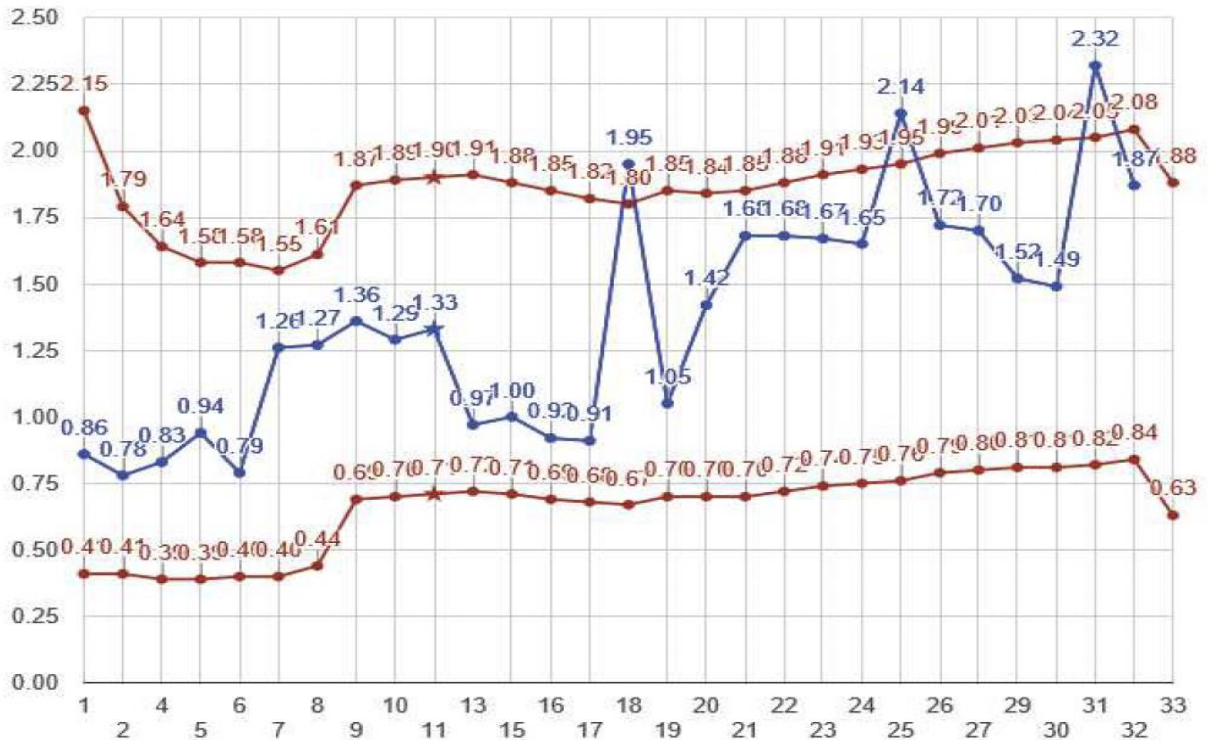
3.1.2 Full profile for haemoglobin (HGB)

HGB



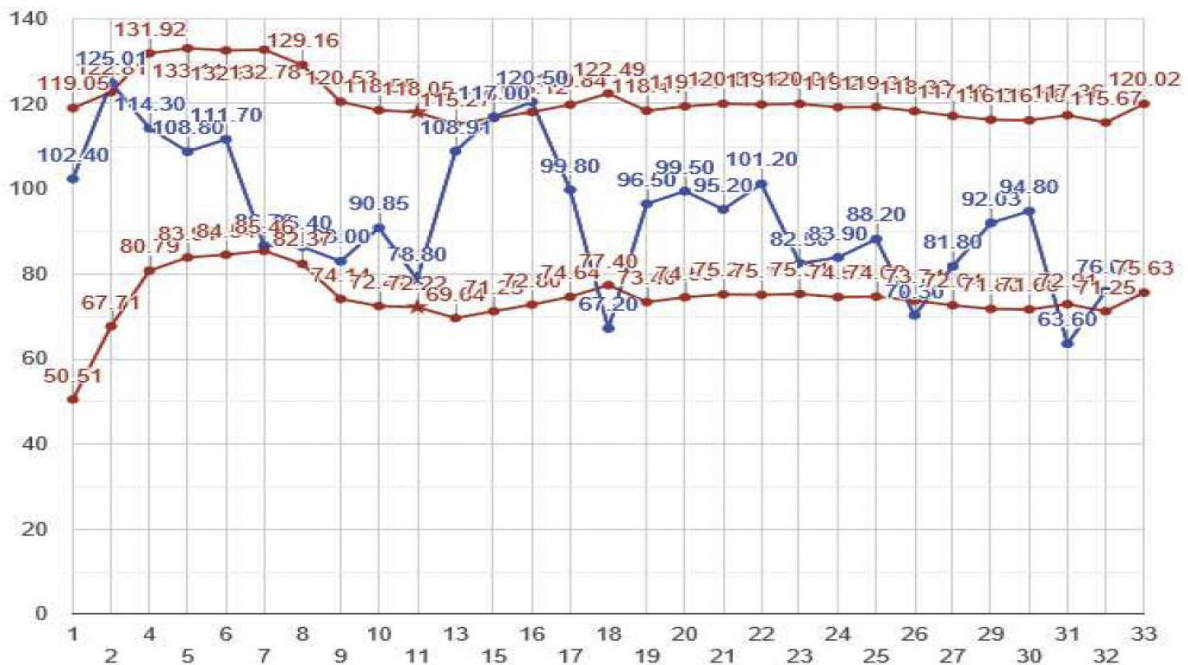
3.1.4 Full profile for reticulocytes (RET%)

RET%



3.1.3 Full profile for OFF-score

Off-score



25. The Passport was submitted for review to three (3) experts with knowledge in one (1) or more of the fields of clinical and laboratory haematology, sports medicine, or exercise physiology, as each applies to blood doping: Prof. Giuseppe d’Onofrio, Dr. Laura Lewis, and Dr. Jakob Sehested Mørkeberg (together, the Expert Panel). Each of the experts has vast expertise with the ABP: Prof. D’Onofrio is an expert haematologist and ABP expert for WADA and nine (9) Athlete Passport Management Units (“**APMUs**”); Dr. Laura Lewis is an expert sports scientist with particular expertise on the effect of altitude exposure and (de)training on haematological parameters and serves as an ABP Expert Panel member for (ten) 10 APMUs; Dr. Mørkeberg is an expert sports scientist and serves as a blood expert for 12 APMUs.
26. In addition to the Athlete’s ABP Documentation Package (which was anonymised and identified as ABP BP36BWA3), the Expert Panel received and reviewed the whereabouts of the Athlete (from 14 January 2019 to 30 June 2022) and the Athlete’s competition schedule (from June 2015 to March 2022). The Expert Panel was also informed that the Athlete had participated in the Kenyan Olympic Trials for the Tokyo 2020 Olympic Games from 17 to 19 June 2021.
27. On 25 April 2022, the Expert Panel issued a Joint Expert Panel Opinion (the “**First Joint Expert Opinion**”), highlighting a number of abnormal haematological patterns in several ABP Samples and confirming their unanimous opinion that doping was “*highly likely*”.
28. The Expert Panel invalidated Samples 12 and 14 due to missing data⁴. The Expert Panel also noted deviations from normal procedures in Samples 1, 2, 11, and 31, but concluded that the deviations had no effect on the respective Samples and were highly unlikely to affect the Sample integrity. The Expert Panel therefore maintained these Samples in the profile.
29. In its quantitative analysis of the ABP profile, the Expert Panel noted, “[t]he passport was flagged with high hemoglobin concentrations (Hb) in Samples 2, 15, 16 and 22 and a low Hb in Sample 26, high OFFscores in Sample 2, 15 and 16 and a low OFFscores in Sample

⁴ Samples 3 and 28 had already been deemed invalid and excluded from the evaluation.

18, 26 and 31 as well as high reticulocyte percentage (%ret) values in Sample 18, 25 and 31. [sic]"

30. In its qualitative assessment, the Expert Panel noted several abnormal patterns which are quoted or summarised below:

a) Sample 2 (collected on 2 September 2018, six (6) days before a competition): *"The sample displays a high Hb in tandem with a decreased immature reticulocyte fraction (IRF)⁵ indicating erythropoietic suppression. This combination of increased Hb and suppressed production of new red blood cells is characteristic of a discontinued use of an erythropoiesis-stimulating agent (ESA)"⁶.*

b) Samples 15-18: Several abnormal features were observed between May and August 2020. Sample 15 (27 May 2020) and Sample 16 (4 June 2020) *"shows elevated OFFscore values both driven by high Hbs but also relatively low %ret values"*. A follow-up Sample collected on 12 July 2020 (Sample 17), shows much lower HB, while Sample 18 (31 August 2020) has low HGB and elevated RET%, *"indicating an erythropoietic response to decreased hemoglobin mass"*.

The Expert Panel noted that the Athlete had been at altitude in Iten, Kenya for several weeks, but was in Nairobi for one (1) day on 26 August 2020. However, the Expert Panel stated: *"A brief descent from 2400 to 1500m such as occurs when moving between Iten and Nairobi is unlikely to stimulate such a large reticulocyte response in an altitude native upon return to his resident altitude. Low Hb in tandem with increased %ret is typically observed after accidental blood loss or the withdrawal of blood for subsequent reinfusion"*⁷.

c) Samples 20-22: Sample 20 (3 December 2020), collected one (1) day after arrival at sea level and three (3) days before the Valencia Half Marathon, shows elevated HGB. *"No plasma volume expansion is evident contrary to a normal adaptation for*

⁵ IRF is the subpopulation of reticulocytes that has been released from the bone marrow in the last few hours. Such cells have the highest content of RNA and appear more fluorescent than the remaining reticulocyte population. The IRF is a valid indicator of the state of erythropoiesis for anti-doping purposes.

⁶ ESA are medications which stimulate the bone marrow to make red blood cells, like rEPO or Methoxy polyethylene glycol-epoetin beta (CERA).

⁷ The Athlete had not disclosed any blood loss or donation in the previous three months on the Doping Control Form for Sample 18.

highlanders going to sea level and to the effect observed in Sample 11 collected before the World Championships in 2019 in Doha, Qatar. Furthermore, the sample is an evening sample. Usually, high Hb values are observed in morning samples due to diurnal plasma volume shifts”.

HGB remained stable in Sample 21 (14 December 2020) despite a return to altitude followed by a further increase to a very high HGB level (17.9 g/dL) in Sample 22 (20 January 2021).

- d) Samples 24-25: A relatively large increase in HGB and RET% values from Sample 24, collected in the morning of 5 June 2021, to Sample 25, collected in the evening 16 June 2021, a couple of days before the Athlete participated in the Kenyan Olympic Trials⁸. *“Such changes indicate the use of an ESA”.*
- e) Samples 30-31: A large increase in RET% and a decrease in HGB values from Sample 30 (13 November 2021), collected in Nairobi, at about 1700m above sea level, to Sample 31 (21 February 2022), collected in Iten, after 44 days at 2400m above sea level, when erythropoiesis (reflected by the RET% value) is expected to be normal. *“Hence withdrawal of blood to be reinfused for an upcoming event is a likely scenario”⁹.*

31. The Expert Panel concluded:

“In summary, the profile presents several abnormal features including many high Hb values. It is highly abnormal to observe such high values in a general population, but the values are also abnormal for the athlete considering the athlete's other values in the profile and the confounding factors such as altitude and diurnal plasma volume shifts. While tapering before a competition can lead to reductions in plasma volume and thus hemoconcentration with elevated Hb values, the atypical levels observed in the profile interpreted in the context of the %ret and IRF values and changes in altitude, are visible at variable time intervals from competitions and their magnitude goes beyond any possible

⁸ The Kenyan Olympic Trials took place from 17 to 19 June 2021 and determined which Kenyan athletes would participate in the Tokyo 2020 Olympic Games.

⁹ The Athlete had not disclosed any blood loss or donation in the previous three months on the Doping Control Form for Sample 31.

physiological explanation. In contrast, such changes are highly compatible with blood manipulation, in particular, the use of EPO.

Conclusion

We therefore conclude that it is highly likely that a prohibited substance and/or a prohibited method has been used and that it is unlikely that the passport is the result of any other cause."

III. Notice of an APF and Initial Explanation

32. On 4 May 2022, the AIU notified the Athlete of the abnormalities detected in his ABP profile, stating that the AIU was considering asserting an ADRV against him. The Athlete was invited to provide an explanation in response to the APF, by no later than 18 May 2022, and was informed that any explanation would be sent to the Expert Panel for review before charges would eventually be brought. The Notice of an APF included *inter alia* the ABP Documentation Package, the First Joint Expert Opinion, the Doping Control Forms, and the Laboratory Documentation Packages/Certificates of analysis.
33. An intense exchange between the Athlete and the AIU followed, regarding the provision of further information and the extension of the deadline.
34. On 17 June 2022, the Athlete, through his counsel, filed his initial response to the allegations against him, including an expert statement from Dr. Douwe de Boer, dated 16 June 2022, and two (2) medical reports, dated 11 January 2022 and 25 January 2020 ("**Initial Explanation**").
35. The Athlete denied any intentional ADRV and claimed that he had no knowledge of any inadvertent or coincidental ADRV and had never Used a Prohibited Substance or Prohibited Method.
36. As a plausible explanation for the abnormalities in the Passport, the Athlete provided a combination of three (3) main factors:
 - (1) Irregular and inconsistent training loads

The Athlete lost motivation during the COVID-19 pandemic and was only sporadically training from mid-March 2020 to late June 2020. In July 2020, he increased his training load and it was only in August 2020 that he started to train systematically. The period of light trainings was replaced by periods of no training and/or periods of extreme training.

Furthermore, the Athlete had to undergo police training in Nairobi, from 24 September 2021 to October 2021 and again from 1 November 2021 to 1 December 2021, causing a *“complete change to his daily schedule, living and training structure. The structure and volume of his physical workload was completely different from his normal training.”*

(2) Alcohol abuse and resulting dehydration

The Athlete claimed that he had *“a serious and regular drinking habit”* at least since the end of 2019. He maintained that his drinking habit intensified significantly following the onset of the COVID-19 pandemic (April 2020) and varied depending on his location. He concluded that his alcohol abuse since late 2019 and associated dehydration (which decreases plasma volume, decreases RET%, and increases HGB) *“was one of the major influences and a substantial factor on the Atypical Passport Findings”*. The Athlete also alleged that alcohol abuse was not uncommon in his family.

(3) Illness and gastric problems

The Athlete suffered from two (2) significant infections resulting in gastric problems in the relevant time period (June 2020 and January 2021). Due to the second infection, he did not train from 10 to 24 January 2021 and then suddenly started with a high volume of training (127 km/week). He argued: *“[s]uch a sudden change causes an increase plasma volume. It is known that the infectious disease decreases erythropoiesis and Hb mass. Once cured, we would see a sudden increase in erythropoiesis, especially in high altitude and more over with sudden high volume of training”*.

37. More specifically, the Athlete argued *inter alia* that (i) there are deficiencies in the doping scenario; (ii) Sample 2 should be invalidated due to numerous procedural irregularities, and would be too early in the Passport to be of significance; (iii) Sample 31 should be

invalidated because it would be “*impossible to check the status of this blood sample*”; (iv) Sample 20 was taken several hours after arrival at sea-level in Valencia, Spain, while Sample 11, which was used as a comparison in the First Joint Expert Opinion, was taken as an In-Competition test, four (4) days after arriving in Doha, Qatar and after the 10,000m final, which was run in warm and humid conditions; (v) Samples 15 and 16 were not taken while the Athlete prepared for the National Trials for the Tokyo 2020 Olympic Games (as assumed in the First Joint Expert Opinion) as shortly after the postponement of the Tokyo 2020 Olympic Games in March 2020, the Kenyan Olympic Trials were also postponed. Rather, the Athlete did not compete again until 6 December 2020 at the Valencia Half Marathon.

38. The Athlete also argued that there are no actual outliers in the Passport based on Dr. de Boer’s own developed model.

39. The Athlete further provided detailed information from his training diary for the period from mid-2018 to March 2022.

40. In summary, the Athlete’s position was that “[t]he likelihood that the Passport is the result of the Use of a Prohibited Substance or Prohibited Method **does not outweigh** the likelihood that the Passport is the result of an Athlete’s physiological condition described in the Explanation” and he asked not to declare an APF against him.

41. However, the Athlete also complained that, though he had requested it, not all necessary information was available to him and asked the AIU to provide him with all relevant and requested data, in order to allow him to fairly and transparently defend himself.

IV. Review of the Athlete’s Initial Explanation by the Expert Panel

42. On 24 August 2022, the Expert Panel, having considered the Athlete’s Initial Explanation, issued a second Joint Expert Panel Opinion (the “**Second Joint Expert Opinion**”), addressing the key statements of the Athlete. The Second Joint Expert Opinion can be summarised as follows:

- a) Regarding alcohol abuse, the Expert Panel noted that (i) alcoholic hepatitis is associated with anaemia (which results in the opposite of the high HGB found in the Passport), and (ii) the effects on plasma volume (i.e., dehydration) were generally mild and observed after acute alcohol intoxication.
- b) Sample 2 is valid. A reduction in training volume (after a high-volume training period from 30 July to 26 August 2018) could not explain the very high HGB (17.8 g/dL), especially when compared to the value in Sample 1, provided prior to the high-volume training period (15.8 g/dL). The Athlete's assertion that nothing could be inferred from a sample that was collected at the very beginning of the Passport must be rejected. Indeed, *"whilst it is only the second sample of the profile, the high Hb and off score are clearly anomalous when considered against the remainder of the profile."*
- c) With regard to Samples 15 and 16, it is acknowledged that inconsistent training and chronic alcohol consumption may contribute to an increased HGB concentration (due to plasma volume contraction and dehydration); however, it is highly unlikely to result in such extreme variation. Also, there is no evidence that the Athlete suffered from dehydration when Sample 16 was collected. To the contrary, while *"[t]he EtG levels reported in the urine sample collected on the 4th June [same day as Sample 16] are 100 ug/mL and may indicate chronic alcohol consumption [...] the specific gravity of the sample is normal (1.023) and does not support the dehydration hypothesis."* In addition, the low RET% values are inconsistent with a period of minimal training.
- d) The increased RET% in Sample 18 (RET% values being independent of any changes in plasma volume) cannot be attributed to the increasing and varied training load between June and November 2020 (following an infection in late June 2020), which the Athlete credited for the plasma volume fluctuations. Furthermore, there were minor HGB variations in Samples 17 to 19 notwithstanding the fact that the weekly mileage that the Athlete reported in this period varied significantly (64 km to 138km).
- e) The higher HGB value observed in Sample 20 may be caused by recent altitude exposure before compensatory acclimatisation has occurred. However, it does not explain the increase relative to Sample 19, collected on 17 November 2020 (i.e., about 2 weeks before Sample 20), after two (2) weeks at altitude (about 2400m).

- f) With regard to Samples 24 to 26, neither the fluctuations in HGB concentration nor the spikes in reticulocytes can be wholly explained by the changes in training load reported during this period around the Tokyo 2020 Olympic Games.
- g) The reduction in HGB concentration observed in Sample 31 may be explained by a large increase in training load (due to plasma volume expansion), but it is inconsistent with the increased RET% value. Indeed, RET% are not affected by changes in plasma volume and are usually suppressed during periods of heavy training. The Athlete's claim that Sample 31 should be invalidated (due to a discrepancy in the recorded data logger number) must be rejected since the Blood Stability Score was below 85.
- h) The Expert Panel also addressed the model of Dr. de Boer and noted that Dr. de Boer's claims *"that the flagged values of Hb and reticulocytes are not outliers is directly contradicted by his notion that such fluctuations can be attributed to the athlete's alcohol abuse."* The Expert Panel concluded: *"In summary, the alternative analysis of the abnormalities of the profile by the model developed by Dr. de Boer is unclear and not supported by any scientific publication. We therefore dismiss the claim that the samples identified as abnormal by the adaptive model used for the ABP are in fact not abnormal."*

- i) The Expert Panel's conclusion was:

"Based on the explanations provided by the athlete we confirm our previous opinion that it is highly likely that a prohibited substance or prohibited method has been used. The information provided to date does not explain the outlying reticulocyte values observed in samples 18, 25 and 31, the high Hb and low IRF in sample 2 and the changes in Hb and %ret from samples 24 to 25."

43. On 20 September 2022, the AIU invited the Athlete to submit supplementary information, strictly to the issues raised in the Athlete's Initial Explanation, as it considered, for reasons of procedural expedience, that the Expert Panel should be in possession of a complete explanation from the Athlete on all issues before it reaches its final determination.

V. The Athlete's Supplementary Explanation

44. On 31 January 2023, the Athlete submitted a supplementary explanation ("**Supplementary Explanation**").
45. The Athlete reiterated his explanation that his significant alcohol abuse was the cause of the changes in his APB, citing an attached expert opinion from Professor Martin Kuchař. It should also be taken into account that the Athlete claimed that he would be in "*a position of 'Beweisnotstand', since the information that would further support his alcohol abuse scenario are missing (i.e. information concerning CDT (carbohydrate deficient transferrin); phosphatidylethanol, folate; vitamin B12 and iron)*", thus, his burden of proof should be lowered.
46. Furthermore, the Athlete argued that the suggested doping scenario is not supported by a competition schedule of the Athlete, in that doping "**would make no sense at the time of collection of samples flagged as abnormal and/or irregular**" as he "**would not benefit from blood doping at times of collection of contested samples.**" In support of this argument, the Athlete held that: (i) in 2020, seven (7) out of ten (10) Samples contained Ethyl glucuronide ("**EtG**"), with five (5) Samples containing significant values; while in 2018 and 2019, only two (2) out of ten (10) Samples each contained EtG; (ii) Sample 15 (27 May 2020) and Sample 16 (4 June 2020) were both collected during the COVID-19 pandemic, at a time when the Athlete consumed alcohol in considerable amounts, failed to train, and his lifestyle deteriorated. It would therefore have made absolutely no sense for the Athlete to Use Prohibited Substances/Methods during this period; (iii) the Athlete suffered from an abdominal infection in June 2020, from which he never fully recovered, and which is why he only sporadically trained in the summer of 2020 and was not preparing for a competition at the time of the Sample 18 collection, on 31 August 2020; (iv) at the time of the collection of Sample 22, on 20 January 2021, the Athlete was only preparing for a local cross-country race, while the first international race was to take place in May 2021; (v) with regard to the values found in Sample 25, collected on 16 June 2021, ahead of the Kenyan Olympic Trials week, he referred to the expert report of Dr. de Boer; (vi) at the time of Sample 26, the Athlete did not participate in any competition, but was only preparing himself for a competition scheduled for one (1) month later; (vii) Sample 31 was collected on 21 February 2022, but the first race the Athlete was truly preparing for was

to take place in late April, whereas the New York Marathon he ran in mid-March was considered a training race, with no specific preparation or result importance for the Athlete.

47. With regard to Sample 2, collected on 2 September 2018, the Athlete stated that this would be *“the only contentious sample, where it would ‘make sense’ for the athlete to use prohibited substance/method [sic]”*, and that *“[t]he Athlete was not (likely) abusing alcohol at that moment”*, however Sample 2 must be invalidated, being only the second Sample in the Athlete’s ABP and thus not specific enough and not unique to the characteristics of the Athlete.
48. The Athlete concluded that *“the likelihood that the Passport is the result of the Use of a Prohibited Substance or Prohibited Method **does not outweigh** the likelihood that the Passport is the result of an Athlete’s physiological condition [sic]”* as described in the Initial and Supplementary Explanation. The Athlete therefore took the position that *“the Expert panel’s evaluation of the Atypical Passport Finding fails to reach a ‘comfortable satisfaction’ standard of proof”*.

VI. Review of the Athlete’s Supplementary Explanation by the Expert Panel

49. On 2 May 2023, the Joint Expert Panel issued a third Joint Expert Panel Opinion considering and dismissing the purported explanation set out in the Athlete’s Supplementary Explanation (the **“Third Joint Expert Opinion”**).
50. In relation to the hypothesis that alcohol abuse (and resulting dehydration) could explain the abnormalities in the Passport, the Expert Panel concluded as follows:

“[I]t is argued that the Athlete’s state of dehydration, presumably resulting from chronic alcohol intake can explain the increased Hb values. However, neither acute nor chronic studies have shown that alcohol intoxication in any species results in fluid and electrolyte depletion in the absence of vomiting and diarrhea (1), with acute or chronic alcohol actually resulting in an increase in Plasma Volume (that is, hemodilution, producing lower HB values), not a decrease (2-5). In general, the fluid volumes of alcoholics are higher than controls and the

'common presumption that all alcoholic patients are dehydrated... must be closely scrutinized.'

51. As to the alleged missing data regarding fluctuations in the Athlete's levels of iron, folate, and vitamin B12, the Expert Panel noted:

"Overall, Sullivan and Herbert's study suggests that anemia, leukopenia and thrombopenia may all occur in the alcoholic patient as a result of inadequate folate intake and ingestion of alcohol, yet there is no indication in the Athlete's blood values of any such deficiencies. From the standpoint of clinical hematology, it is absolutely obvious that lack of iron or vitamins in the body produces, after sufficient time, anemia with changes in the red blood cell volume: microcytic anemia, with low MCV [Mean Corpuscular Volume], is found in iron deficiency, while macrocytic anemia (with increased MCV) is observed in folate and B12 deficiency. On the other hand, an increased amount of any of such substances would not cause supernormal HB."

52. The Expert Panel also explained that the Athlete's alleged frequent undiagnosed gastric problems could not account for the abnormalities in the Passport:

"It has been shown that the fluid loss associated with gastroenteritis (of the severity requiring hospitalization) does not cause changes in an athlete's blood data to reach levels of abnormality that were suspicious of blood doping, with no values breaching the upper limits (7). Indeed, from a regulatory perspective, the intravascular compartment is 'protected' such that homeostasis works to keep blood volume stable. [sic]"

53. With regard to the Athlete's claim that the doping scenario presented in the First Joint Expert Opinion was deficient since there was no advantage to be gained by blood doping far outside of competition, the Expert Panel countered that an "[i]ncreased oxygen transport capability, produced by ESA stimulation and its effect on HB mass and, possibly, concentration, permits more intense training, in terms of exercise load and duration, and this has an obvious effect on performance even after a significant period of time." Moreover, the Expert Panel regarded the use of ESAs during training to be corroborated by the fact that, in recent years, many athletes, including in Kenya, had returned Adverse Analytical Findings for EPO far outside of competition.

54. The Expert Panel concluded in the Third Joint Expert Opinion:

“Based on the explanations provided by the Athlete we confirm our previous opinion that it is highly likely that a prohibited substance or prohibited method has been used. The explanations of the Athlete do not explain the outlying reticulocyte values observed in samples 18, 25 and 31, the high Hb and low IRF in sample 2 and the Hb and %ret values in samples 25 and 26.”

VII. Notice of Charge

55. On 11 May 2023, the AIU issued a Notice of Charge (“NoC”) to the Athlete. The Charge was based on alleged abnormalities in the Passport involving Use of a Prohibited Substances and/or Prohibited Method during the period of 2018 to 2022. Such alleged Use was in breach of Rule 2.2 ADR. The NoC enclosed multiple documents the AIU relies upon in support of the Charge.
56. The NoC confirmed the imposition of a Provisional Suspension upon the Athlete pending the determination of the Charge for an alleged violation of the ADR and notified the Athlete of his right to admit the Charge and/or to request a hearing before the Disciplinary Tribunal, by no later than 19 May 2023.
57. On 17 May 2023, the Athlete sent a response to the NoC. The Athlete confirmed that *“he has never committed or is aware of any ADRV and wishes to do everything he can to defend himself from the accusation of an ADRV and wishes to clear his name”*. The Athlete requested an extension of the deadline to formally respond to the Charge until 31 May 2023.
58. On 24 May 2023, the Athlete formally denied the Charge against him and exercised his right to a hearing before the Disciplinary Tribunal.

C. PROCEEDINGS BEFORE THE DISCIPLINARY TRIBUNAL

59. On 30 May 2023, the Chair of the Disciplinary Tribunal, Mr. Charles Hollander KC, appointed Dr. Tanja Haug as Chair of the Panel (the “Chair”) to hear this matter.

60. On 7 June 2023, a preliminary meeting was held via video conference between the Chair and the Parties in accordance with Rule 8.10 2023 ADR. The Parties agreed that the matter should be determined by a panel of three (3) members of the Disciplinary Tribunal. On the same day, the Chair issued procedural Directions on consent of the Parties, including that the Athlete shall submit a proposal for a procedural timeline in writing by 28 June 2023.
61. On 28 June 2023, the Athlete submitted a request to extend the time limit for his proposal for a procedural timeline until 14 July 2023. The Athlete justified his request by stating that his team was in the process of forming the methodology of a longitudinal study, which he would like to undergo, and still needed some time to form a group of experts, but *“once the team is formed and the methodology set, we should be able to propose a proper procedural timeline”*.
62. By Directions of 4 July 2023, the requested extension was granted.
63. On 6 July 2023, Mr. Sètonджи Roland Adjovi and on 11 July, Mr. Julien Berenger were appointed as members of the Panel in these proceedings.
64. On 14 July 2023, the Athlete submitted a request to suspend the proceedings pursuant to Rule 8.9.1(c) 2023 ADR until 31 December 2023, in order to be *“able to adduce fundamental evidence on which he wishes to rely and build up his defense”*, specifically to perform examinations on the Athlete and a subsequent longitudinal study.
65. On 20 July 2023, the AIU informed the Panel, that it considered the requested investigations to be irrelevant and opposed the suspension of the proceedings.
66. On 24 July 2023, after having considered the Athlete’s request and the AIU’s position, the Panel rejected the request for suspension of the proceedings on the basis of the information submitted. The Athlete was invited to submit further information, if he wished to maintain his request for a suspension of the proceedings. In particular, he was asked to provide: (i) the names and expertise of the experts forming the **“Expert Team”** that the Athlete claims to have set up; (ii) a summary statement by a member of the Expert Team setting out in more detail the intended procedure and steps of the planned examinations and the longitudinal study, including the envisaged timetable and expected findings; (iii) a

statement of whether (and, if so, which) specific examinations and/or steps of the longitudinal study could potentially conflict with the applicable WA Rules and/or ethical principles; (iv) a brief outlook on how, from the Athlete's perspective, the expected results of the longitudinal study could support the Athlete's defence; (v) an explanation as to why so much time had elapsed without any steps being undertaken, given that the Athlete was notified of the allegations in May 2022 and had announced that he intended to have a longitudinal study conducted in, as early as, mid-November 2022. The deadline to submit the additional information was set for 3 August 2023.

67. On 3 August 2023, the Athlete submitted a first response, including the names of five (5) experts forming his Expert Team, who were to be additionally reinforced by an *"internationally renowned expert team"*. However, the additional team could not be disclosed yet, *"as they are still reviewing the information and documents provided but who has formally agreed to be part of the team"*. The Athlete further informed that there had been an error in the transmission of the Panel's Directions of 24 July 2023, which is why he did not receive them until 2 August 2023. Upon his request, he was granted an extension of time until 12 September 2023 to provide his response.
68. On 12 September 2023, the Athlete submitted further information, but was not able to provide a full response to the Panel's questions, set out in the Directions of 24 July 2023. The main reason given for the incomplete response was that the *"internationally renowned expert team"*, now disclosed by the Athlete, was to take the lead of the longitudinal study and had only recently been instructed. Therefore, the Athlete requested a further extension of the deadline to provide a full response to the Panel's questions until 31 October 2023.
69. On 18 September 2023, the AIU submitted that WA's position of 20 July 2023 remains unchanged and that it considers *"that the Athlete has, once again, not provided sufficient details in relation to the study to properly assess the proposed timelines."*
70. On 27 September 2023, after having considered the Parties' positions, the Panel dismissed the Athlete's requests (i) to extend the deadline to provide a full response to the questions set out in the Panel's Directions of 24 July 2023, until 31 October 2023; and (ii) to suspend the proceedings before the Disciplinary Tribunal, until 31 December 2023.

The Panel noted that, as late as 12 September 2023, the Athlete was unable to fully answer the questions set out in the Panel's Directions of 24 July 2023, despite having been given sufficient time to do so and despite the Panel having expressly stated that it considered the answers to be necessary for a decision on the Athlete's request to suspend the proceedings before the Disciplinary Tribunal based on Rule 8.9.1(c) 2023 ADR. The Panel was therefore not convinced that a further extension of the deadline to provide a response to the Directions of 24 July 2023 would be appropriate and proportionate. Furthermore, based on the information provided by the Athlete in his submissions of 28 June 2023, 14 July 2023, 3 August 2023, and 12 September 2023, the Panel was not satisfied that fairness would require a suspension of the proceedings before the Disciplinary Tribunal in accordance with Rule 8.9.1(c) 2023 ADR. The Panel also stressed that all requests for further extensions of time would require a valid justification.

71. On 9 October 2023, the Athlete filed his proposed procedural timetable.
72. On 13 October 2023, the AIU submitted its comments on the Athlete's proposed timetable and filed the World Athletics Brief, as well as an accordingly adjusted procedural timetable.
73. On 22 October 2023, the Athlete submitted an amended proposed timetable.
74. On 9 November 2023, the AIU submitted its response.
75. On 11 November 2023, the procedural calendar was set and the hearing, to be held via video conference, was directed to be scheduled during the period between 1 and 8 March 2024, at a time suitable to the Panel, Parties and witnesses. *Inter alia*, the Panel directed that "By 5pm GMT on Tuesday 2 January 2024, the Athlete shall submit his answer brief, addressing World Athletics' arguments and setting out argument on the issues that the Athlete wishes to raise at the hearing, as well as written statements from the Athlete and from each witness (fact and/or expert) that the Athlete intends to call at the hearing, setting out evidence that the Athlete wishes the Disciplinary Tribunal to hear from the witnesses, and enclosing copies of the documents that the Athlete intends to introduce at the hearing". Further, "The Panel will not accept any further submission from the parties unless it varies these directions. [...] Each party shall have liberty to apply (on notice) to vary these Directions."

76. On Saturday 23 December 2023, the Athlete requested to extend the deadline to submit his answer brief by one (1) month. The Athlete based his request on the need (i) to extend the sample collection time for the medical examination/study on the effect of alcohol use on his blood parameters until 5 January 2024, and (ii) to examine “*further factors*” which have been revealed only very recently, in particular a “*G-6-PDH (glucoso-6-phosphate) deficiency*” and “*Suspected Primary Familial and Congenital Polycythemia*” (“**PFCP**”).
77. It should be noted that this request was submitted after close of business for the festive period, at a time when the offices of Sport Resolutions, acting as Secretariat in this matter, were officially closed until 2 January 2024 – the date on which the deadline set for the Athlete expired. The fact that this request could be dealt with before 2 January 2024 was due to the exceptional efforts of the Sport Resolutions team, for which the Panel is very grateful.
78. On 28 December 2023, the Chair rejected the requested extension by one (1) month on the grounds that mere mention of findings or assumptions – without further explanation or substantiation – cannot be regarded as a valid justification, especially in light of the proceedings to date. She also noted that no explanation was given as to why this request could not have been submitted earlier and that no plausible reason was given as to why the examinations/analyses now required could not have been done in the previous months, as most of them had been mentioned well in advance. However, in order to allow the Athlete to evaluate the results of the sample collection planned for 5 January 2024, the deadline was extended until Monday 8 January 2024, 8:00 a.m. GMT, and the procedural calendar was adjusted accordingly.
79. On 4 January 2024, the Athlete submitted a further request to suspend the proceedings before the Disciplinary Tribunal on mutually agreed terms and/or to extend the deadline to submit his Answer Brief until 4 March 2024. An expert statement of Prof. Dr. Jaroslav Čermák and Dr. Miloslav Bohoněk, dated 4 January 2024, indicating that further investigations were required in relation to alcohol and neutropenia, G-6-PDH deficiency, PFCP, and dehydration, was appended. The Athlete asserted that “[t]he current expert team, and in particular Dr. Bohoněk, was mandated only on December 5, 2023. Due to their extreme professional workload and medical responsibilities, they have been able to start working on the case only in the middle of December”.

80. On 5 January 2024, the AIU informed that “*the AIU does not agree to a blanket stay of the proceedings in view of the procedural history in the case to date and the above-mentioned timeline.*”
81. On 8 January 2024, the Chair rejected the request to suspend the proceedings and the requested extension of time. The Chair determined that, based on the information provided by the Athlete and the proceedings to date, she was not satisfied that fairness would require a suspension of the proceedings before the Disciplinary Tribunal under Rule 8.9.1(c) 2023 ADR.
82. On 8 January 2024, the Athlete filed his Answer to the World Athletics Brief. Firstly, he noted that he did not have enough time to prepare the Answer Brief due to the circumstances raised in the Athlete’s submission of 4 January 2024, and that he – due to the lack of time – is only addressing new issues that have not been addressed in his previous submissions before the AIU, but “***wishes that all submissions provided earlier to AIU in this matter (in particular Explanation dated 17 June 2022 including its appendices and Explanation dated 31 January 2023 including its appendices) are taken into account and that these submissions are part of the file.***”
- a) In addition to the explanations given previously, the Athlete submitted further arguments:
- (i) Neutropenia and G-6-PDH deficiency: the Athlete suffers from neutropenia and G-6-PDH deficiency, “*which may very well affect his blood parameters*”.
 - (ii) Reliance on alcohol study and private testing to support his theory about alcohol abuse: a private alcohol study was performed on the Athlete (sample collection took place from 20 November 2023 to 5 January 2024), but the results could not have been interpreted within the given deadline. However, a preliminary summary of the results of the study was provided, which, “*prove a huge variability in the Athlete’s blood parameters*”. Some values would have reached the upper threshold of the data contained in the Passport, which, in itself, would show that “***the claimed abnormalities in the Athlete’s passport are simply not a result of doping, but due to natural and specific characteristics of the Athlete’s body and other circumstances raised in this Answer Brief***”.

(including alcohol consumption and medical conditions of the Athlete)!"

The Athlete further mentioned that he *"was under supervision for the whole period of the study and all sample collections were video recorded"*, all urine samples are stored at the laboratory in Eldoret and could be tested by a WADA-accredited laboratory, and that he would be willing to submit himself to DNA testing as an additional proof that these samples are indeed his.

(iii) Suspected PFCP: *"the Athlete probably suffers from Suspected Primary Familial and Congenital Polycythemia (PFCP) which may very well affect his blood parameters"*.

- b) Several documents were appended, including expert reports from Dr. Hemant Saha (medical record diagnosing neutropenia, dated 16 October 2023), Dr. Ihar Nakrasevich, Morgan Sports Law (Analysis of the results of the alcohol study, dated 7 January 2024), and Prof. Čermák (setting out Czech testing results regarding neutropenia and G-6-PDH deficiency, dated 5 August 2023).
- c) In addition to his experts, the Athlete also called Mr. Colm O'Connell, the Athlete's coach, and Mr. Davor Savija, the Athlete's manager, as witnesses. However, no witness statement or any summary of what their evidence would relate to or any other further information in this regard was provided.
- d) The Athlete further noted that he could not agree with the reasoning of the Direction rejecting the extension of the deadline to file his Answer Brief, and that *"the Athlete will respond to the Directions by a separate filing as soon as possible in the following days in which the Athlete will explain again in detail all material circumstances of his cooperation with the expert team and its efforts in the past weeks. For all these reasons (that will be further explained and specified in a separate filing we refer to in the previous sentence), the Athlete wishes to reserve his right to supplement all arguments, reasoning and evidence presented so far until the date of the hearing."*

83. On 23 January 2024, the Athlete submitted a supplementary explanation ("**Supplementary Explanation**"), claiming that he never intended to delay the proceedings, but that the delays were solely due to factual problems in the conduct of the medical examinations and to the workload and availability of the experts who were to

analyse the results. He concluded, “[t]he Athlete is therefore of the view that he must be given a chance to supplement his Answer Brief with any new evidence that will come into light after he undergoes further proposed examinations.”

84. On 19 February 2024, the AIU filed its Reply Brief rebutting the Athlete’s arguments and adding a Fourth Joint Expert Panel Report (the “**Fourth Joint Expert Opinion**”), which considered the Athlete’s new explanations.

85. In the Fourth Joint Expert Opinion, the Expert Panel dismissed the new explanations, and noted *inter alia*:

a) As to the neutropenia and G-5-PDH (glucose-5-phosphate) deficiency: neutropenia is a common and transitory condition with many causes. It has been documented in endurance athletes, and “*Ethnic Neutropenia’ in healthy athletes is considered by sports physicians to be ‘benign, but inborn, lifelong, and beneficial’*”. With reference to Dr. Saha’s report, which diagnosed the Athlete as suffering from (asymptomatic) neutropenia not requiring treatment, the Expert Panel concluded:

“It is also the personal experience of the ABP Experts in this Panel that neutropenia is a common finding in Passports from African athletes living at altitude, in the absence of health complaints or explanation of abnormalities, due to it being a common and often transitory condition. Therefore – and also considering that neutrophil production and erythropoiesis, even deriving from a common multipotent progenitor, follow separate maturative pathways in the bone marrow, and are influenced by different stimulation factors (e.g., EPO for erythropoiesis, and Granulocyte/Macrophage Growth Factors for neutrophils) – we exclude that neutropenia of any origin, whether familial or not, has any relationship with the Athlete’s ABP erythropoietic markers and anomalies.”

b) As to the G-6-PDH deficiency explanation: G-6-PDH deficiency is the most common human enzyme defect affecting approximately 400 million people worldwide. The most frequent clinical manifestation of G6PDH deficiency is acute haemolytic anaemia, but by contrast the main abnormality in the Athlete’s profile is the high HGB values (i.e. the opposite of anaemia), often with high RET%, in several Samples.

In the report of Dr. Saha, the Athlete's G-6-PDH deficiency is described as mild, with all other haematological studies normal for "*hemolysis / sepsis / coagulopathy.*" His report also states that both iron studies and folate are normal, contrasting with previous explanations related to iron and folate deficiency. "*Neither hemolytic episodes nor chronic anemias have been observed or described in the Athlete's history and they are also absent throughout the Athlete's passport. Therefore, we exclude that mild G6PDH deficiency in the Athlete can explain the abnormalities observed in his ABP*".

- c) As to the PFCP (i.e. erythrocytosis) explanation: the marked variation in the ABP haematological parameters over a number of years is inconsistent with a genetic origin.

"As far as the Athlete's passport is concerned, congenital forms of primary or secondary erythrocytosis can be straightforwardly excluded by the striking variability of the Athlete's ABP markers over time (HGB average ~16.4 g/dL with only a few peaks above 17.5 g/dl; reticulocytes ~1.54% (XN measurements) and peaks at 1.9-2.3%) without the necessity for further medical or genetic tests".

- d) With regard to the alcohol study, the Expert Panel pointed out that the implementation was not compliant with the WADA ABP Operating Guidelines, which require two (2) consecutive analyses. For this reason alone, the alcohol study values obtained from single instances of sample analysis cannot be directly compared with the ABP values. Moreover, since the Athlete was aware of the study protocol and hypothesis, sample manipulation cannot be excluded. For example, ESA could be used to enhance RET%, whilst plasma volume could be manipulated to artificially increase HGB.
- e) The Expert Panel concluded:

"None of the specific explanations provided by the athlete can explain the severe haematological abnormalities observed. Therefore, we confirm our previous opinion that it is highly likely that a prohibited substance or prohibited method has been used and that it is highly unlikely that the passport is the result of any other cause."

86. After numerous correspondences caused by the different availability of the experts, but also of the Parties, 22 April 2024 was finally agreed as the date for the hearing between the Parties and approved by the Panel.

87. On 17 April 2024, at 10:45 p.m. BST, the Athlete filed a supplementary Answer Brief (the “**Supplementary Answer Brief**”), which was accompanied by expert statements of Prof. Čermák and Dr. Bohoněk (dated 16 April 2024) and of Dr. de Boer (dated 17 April 2024), as well as various medical/examination reports on the results of the examinations the Athlete had undergone (all dated between 14 and 16 February 2024), and a report on the Athlete’s father relating to polycythaemia (dated 19 February 2024). The Athlete submitted these documents with reference to his Answer Brief and Supplementary Explanation in which he had “*reserved the right to supplement his Answer Brief with any new evidence that will come into light after he undergoes examinations*”. He also noted that:

“[e]ven though we are fully aware of the fact we are submitting the attached evidence closely to the date of the Hearing, we are strongly persuaded that the evidence we are presenting in this Supplementary Answer Brief is of such importance that the Disciplinary Tribunal must have access to it to make a fully informed and fair decision. The evidence attached here to was not available until today.” In his view, “[t]he findings of the examinations present material evidence to the case, especially regarding the long-term medical condition of the Athlete. Therefore, we consider this Supplementary Answer Brief and its exhibits as necessary to be evaluated by the Disciplinary Tribunal as it presents undeniable evidence of incipient hematopoietic disorder of the Athlete. These findings will be further discussed, explained and supported by the Athlete during the Hearing.”

88. On 22 April 2024, a hearing was held by video conference. The Panel, composed of Dr. Tanja Haug (Chair), Mr. Julien Berenger, and Mr. Sètondji Roland Adjovi was assisted by Ms. Astrid Mannheim, Senior Case Manager at Sport Resolutions. Ms. Freya Pock, Case Manager at Sport Resolutions, attended as an observer. The Panel is very grateful for the effective support and assistance by Sport Resolutions.

89. The following individuals attended the hearing:

For the AIU:

- a) Mr. Adam Taylor, WA counsel;
- b) Mr. Tony Jackson, AIU Deputy Head of Case Management;
- c) Prof. Giuseppe d'Onofrio, Professor in Clinical and Laboratory Hematology and in Clinical Pathology, Member of the Expert Panel;
- d) Dr. Laura Lewis, Director of Science, United States Anti-Doping Agency, Member of the Expert Panel;
- e) Dr. Jakob Sehested Mørkeberg, Senior Science Manager, Anti-Doping Denmark, Member of the Expert Panel.

For the Athlete:

- a) Mr. Rhonex Kipruto, Athlete;
- b) Mr. Jan Krabec, Athlete's counsel;
- c) Prof. Jaroslav Čermák, Head of EuroBloodNet Center for rare hematological disorders, Institute of Hematology and Blood Transfusion, Prague, Member of the Expert Team;
- d) Dr. Milos Bohoněk, Head of the Department of Hematology and Blood Transfusion, Military University Hospital Prague, Member of the Expert Team;
- e) Dr. Douwe de Boer, Head of the Department of Cluster 'Protein Chemistry', Central diagnostic Laboratory, Maastricht University Medical Centre and owner of 'Fair Drugtesting', Member of the Expert Team;
- f) Mr. Colm O'Connell, Athlete's coach, observer;
- g) Mr. Davor Savija, Athlete's manager, observer.

Other:

- a) An interpreter of Swahili to English was present throughout the opening and the Athlete's evidence to assist the Athlete, as needed.

90. At the outset of the hearing, the Chair sought the Parties' consent on a few procedural matters including the applicability of the 2023 ADR, the jurisdiction of the Disciplinary Tribunal to hear this matter, and the Parties' acceptance of the composition of the Panel. All these matters were consented to by both Parties. Further, the Parties accepted that the ABP procedure and the Adaptive Model is, in general, a reliable means of establishing blood doping.
91. The Panel also heard brief remarks from the Parties with respect to the calling of Mr. O'Connell and Mr. Savija as factual witnesses and the admission of the Supplementary Answer Brief, filed by the Athlete on 17 April 2024. The Panel, upon hearing the submissions from both Parties, declined to hear from Mr. O'Connell and Mr. Savija as witnesses, but accepted the reports submitted with the Supplementary Answer Brief for consideration in the hearing. The AIU was given the opportunity to submit a written response, restricted to the issues of the Supplementary Answer Brief, within two (2) weeks after the hearing. The reasons for these procedural decisions are set out below.
92. During the hearing, the Athlete gave evidence.
93. As proposed by the Tribunal and agreed by the Parties, expert evidence was given in an Expert Witness Conference ("a hot-tub session"), where both the Expert Panel and the Expert Team were present at the same time. General rules for the handling of the Expert Witness Conference and an agenda for dealing with the individual issues, which was based on the lists of issues submitted by the Parties, were communicated by the Panel to the Parties in advance of the hearing and accepted by them. Counsels for both Parties had the opportunity to question the experts for their qualifications and expertise, and, consequently, to question the experts on the agreed topics, whereby they were free to choose which expert they questioned on which issue. There was also the opportunity for any of the experts to indicate at any time when they wanted to raise a point or to put a question to one (1) of the other experts.
94. On 1 May 2024, the AIU informed the Panel that it did not wish to exercise the right granted to it to comment subsequently on the scientific evidence submitted by the Athlete in his Supplementary Answer Brief of 17 April 2024.

D. SUBMISSIONS OF THE PARTIES

I. WA's position

95. WA's position as set out in the NoC, its Brief filed on 13 October 2023, its Reply Brief filed on 19 February 2024 and its Counsel's oral submissions at the hearing is in essence as follows:
- a) The case involves a current World Record holder, Diamond League meeting winner, and World Championship bronze medallist. The case concerns a Rule 2.2 ADR ADRV of Use, relating to Samples collected between 9 July 2018 and 15 March 2022.
 - b) The Athlete's ABP profile constitutes clear evidence that the Athlete committed an ADRV in breach of Rule 2.2 ADR. There are multiple abnormalities in the ABP, in particular: (i) Sample 2 with High HGB and low IRF, (ii) Samples 15 and 16 with high HGB, high OFF-score, and a low %RET, (iii) Samples 20 to 22 with high HGB, (iv) Samples 18, 25, and 31 with outlying %RET values, (v) Samples 24 to 25 showing a large increase in HGB and %RET values, and (vi) Samples 30 to 31 showing a large increase in %RET values and a decrease in HGB values.
 - c) All flagged Samples point to ESA stimulation or recently discontinued Use of an ESA (Sample 2).
 - d) A 'doping scenario' has been shown and the Expert Panel was even able to link some of the abnormal values in the Passport to important competitions, in particular Sample 20, taken three (3) days before the Valencia Half Marathon, where the Athlete finished third, and Samples 24 and 25, taken shortly before the Kenyan Olympic Trials, which determined those Kenyan athletes who would participate in the Tokyo 2020 Olympic Games.
 - e) The Passport has been assessed by a panel of experts with significant and long-standing experience, each of whom works for various APMUs and has provided numerous reviews and expert opinions. Each expert examined the ABP independently and concluded "*likely doping*". Only then, the experts formed a joint Expert Panel and considered the Passport as a group, resulting in the conclusion of "*highly likely*" doping.

- f) To date, the Athlete has put forward about six (6) different explanations, including that he – someone who is so successful – is, in some regard, a long-term abuser of alcohol. The Athlete has also relied on training loads, dehydration, neutropenia, G-6-PDH deficiency, and PFCP. He appears to be considering every possible explanation to see what may work. And even though a specific cause remains elusive, he argues these possibilities should be considered as causes.
 - g) The Athlete did not provide any factual evidence to underpin any of his explanations. And even if there was such evidence, the explanation does not scientifically justify the abnormalities in the specific Samples. There have been only limited attempts to apply any of the initial theories to individual Samples, but none of the further evidence relied upon by the Athlete relates to any of the Samples identified as abnormal in the ABP. None of the new expert evidence addresses the alleged effects of a medical condition on a particular Sample.
 - h) The Expert Panel dismissed each of the explanations given by the Athlete and maintained its opinion of “*highly likely*” doping throughout its four (4) Joint Expert Opinions.
 - i) In view of the foregoing and, in particular, on the basis of the four (4) Joint Expert Opinions, WA submits that the ABP profile of the Athlete constitutes reliable evidence of blood doping, and that WA has proved the ADRV to the comfortable satisfaction standard.
96. Furthermore, WA argued that there are three (3) categories of aggravating circumstances that apply, namely: (i) the Expert Panel’s Joint Expert Opinions show several instances of blood doping across an extended period of more than three (3) years, thus the Panel can be comfortably satisfied that the Athlete used a Prohibited Substance/Method on multiple occasions; (ii) an ESA is only taken in injectable form and is recognised to be difficult to detect by anti-doping laboratories, which would present compelling evidence that the Athlete engaged in a deliberate and sophisticated doping regime; and (iii) the Athlete’s blood doping observed around Sample 25, collected on 16 June 2021, was targeted to assist the Athlete in qualifying for the rescheduled Tokyo 2020 Olympic Games, therefore

the Athlete employed a sophisticated doping regime that was targeted towards the qualification for the very pinnacle of Athletics competitions, the Olympic Games.

97. WA requests (i) to impose a period of ineligibility of six (6) years upon the Athlete for an intentional violation of Rule 2.2 ADR¹⁰; (ii) to give credit for the period of Provisional Suspension imposed on the Athlete from 11 May 2023; (iii) to order Disqualification of any results obtained by the Athlete between 2 September 2018 and 11 May 2023, with all resulting Consequences, pursuant to Rule 10.10 ADR¹¹; and (iv) to award WA a contribution to its legal costs and expenses incurred in relation to this matter.

II. The Athlete's position

98. The Athlete's position, as set out in the Initial Explanation dated 17 June 2022, the Supplementary Explanation dated 31 January 2023, the Answer Brief filed on 8 January 2024, the Supplementary Answer Brief filed on 17 April 2024, and his Counsel's submissions at the hearing can be summarised as follows:

- a) The Athlete is a unique talent and has never used any Prohibited Substance or any Prohibited Method, such as blood transfusions. He is a clean athlete.
- b) This is a very complex case, and the Athlete was under great pressure to find explanations. The Athlete has obviously developed a condition that severely affects his health and to understand the medical conditions, the Athlete had to undergo several examinations during which time the medical case and, accordingly, the defence, evolved. He therefore strongly objected to the insinuation, raised by WA, that he was fishing for explanations. It is true that the examinations were not yet completed, and some of the results were still to be received. However, the Athlete already knew that this condition, however it will evolve, has been there for years. This is a long-term condition and all of the fluctuations in the Athlete's blood may be explained and are likely to be explained by this condition. The Athlete was already

¹⁰ Pursuant to 2018 ADR, 2020 ADR, and 2021 ADR.

¹¹ Pursuant to 2018 ADR (Rule 10.8), 2020 ADR (Rule 10.8), and 2021 ADR.

able to prove, on the balance of probabilities, that the fluctuations in the ABP were caused by these diagnoses that had been found in recent weeks.

c) It is important to bear in mind that the relevant period spanned several years and that the various causal factors had become intertwined. The Athlete could therefore not single out any of the several diagnoses as the predominant cause for the outliers in the ABP; rather he requested that the Panel take all of the factors and their influence on each other into account.

d) His explanation was corroborated by scientific evidence. In particular, by the alcohol study and the testimony of the Athlete's Expert Team who demonstrated how the Athlete's medical conditions explained the fluctuations that had been present for years. Furthermore, Sample 2 must be invalidated given that it was "*too early in the passport*" and thus could have no relevance to the overall ABP.

99. The Athlete submits that, considering the standard of proof required on the part of the Athlete, being on the balance of probabilities, and "*as the case stands now, it is more likely that the abnormalities identified in his biological passport are not the cause of use of prohibited substances/prohibited methods, but are caused by the specific and unique characteristics of the Athlete, his medical conditions and his alcohol abuse problem.*"

100. The Athlete requests (i) not to declare an ADRV on the Athlete; (ii) to set aside all other Consequences that have been imposed by the AIU; and (iii) that the AIU be ordered to pay all legal, expert, and medical testing costs incurred by the Athlete.

E. APPLICABLE LAW

101. The Athlete was charged on 11 May 2023 with an ADRV based on ABP Samples collected between 9 July 2018 and 15 March 2022. The applicable rules in force at the time the NoC was issued were the 2023 ADR (in force from 31 March 2023), which provide as follows:

"1.7.2 (b) Any anti-doping rule violation case that is pending as of the Effective Date or is brought after the Effective Date but based on an anti-doping rule violation that occurred prior to the Effective Date, shall be

governed by the substantive anti-doping rules in effect at the time the alleged anti-doping rule violation occurred and not by the substantive antidoping rules set out in these Anti-Doping Rules, unless the hearing panel determines that the principle of lex mitior appropriately applies under the circumstances of the case, and with respect to procedural matters by these Anti-Doping Rules [...].”

102. Therefore, as also accepted by the Parties, with respect to procedural matters, the present case is governed by the 2023 ADR, and with respect to substantive matters, by the ADR in force at the time of the respective Sample collection. In that respect, the applicable ADR in force at the material times are as follows:

- a) Samples 2 - 4: ADR in force from 6 March 2018 (“2018 ADR”)
- b) Samples 5 - 14: ADR in force from 1 January 2019 (“2019 ADR”)¹²
- c) Samples 15 - 21: ADR in force from 1 April 2020 (“2020 ADR”)
- d) Samples 22 - 32: ADR in force from 1 January 2021 (“2021 ADR”).¹³

F. JURISDICTION

103. The Disciplinary Tribunal is constituted in accordance with Rule 1.3 2023 ADR to hear alleged ADRVs and other breaches of these ADR.

104. Pursuant to Rule 8.2(a) 2023 ADR, the Disciplinary Tribunal has jurisdiction to hear and determine all matters in which an ADRV is asserted by the AIU against an International-Level Athlete. The AIU’s responsibility for the Results Management for potential violations in connection with any testing conducted by WA or the AIU under the ADR is set out in Rule 7.1.3 2023 ADR.

¹² On 1 November 2019, the International Association of Athletics Federation (“IAAF”) was renamed WA and new ADR were adopted. Both versions of the 2019 ADR shall be covered by this reference.

¹³ It is important to note that no material changes have been made to the relevant provisions in the applicable versions of the ADR. In order to avoid repetition, reference is therefore usually made to 2021 ADR without, however, calling into question the applicability of the respective rules at the time of Sample collection.

105. The Athlete has not challenged the application of the ADR, the jurisdiction of the AIU, or that of the Disciplinary Tribunal.

G. BURDEN AND STANDARD OF PROOF

106. WA bears the burden of establishing that an ADRV has been committed, pursuant to Rule 3.1 2023 ADR:

“The Integrity Unit or other Anti-Doping Organisation will have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof will be whether the Integrity Unit or other Anti-Doping Organisation has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation that has been made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt. Where these Anti-Doping Rules place the burden of proof upon the Athlete or other Person alleged to have committed an anti-doping rule violation to rebut a presumption or establish specified facts or circumstances, except as provided in Rules 3.2.3 and 3.2.4, the standard of proof will be by a balance of probability.”

107. In brief, WA must establish that the ADRV was committed to the "*comfortable satisfaction*" of the Panel and that this standard of proof is "*greater than a mere balance of probability but less than proof beyond a reasonable doubt.*"

108. Rule 3.2 ADR provides that an ADRV may be established by "*any reliable means, including admission.*" It has been well settled in Court of Arbitration for Sport ("**CAS**") jurisprudence¹⁴ and accepted by the Parties that the ABP is a reliable means. However, an APF flagged by the Adaptive Model itself is not a basis for a charge; instead it is merely the trigger for an expert interpretation¹⁵.

109. For the evidential assessment of the Expert Panel's conclusion that it is "*highly likely*" that the abnormal values are due to blood doping, and that any other explanation is unlikely to

¹⁴ See e.g. CAS Ivanov v. RUSADA, CAS 2019/A/6254.

¹⁵ See Taylor/Lewis, Sport: Law and Practice, C.7.6.

be correct, the Panel agrees with the Panel in *IAAF v Kiptum* (SR/Adhocsport/95/2019): “The vocabulary of ‘highly likely’ which the Experts deployed was taken from the Guidelines. In the Tribunal’s view it was synonymous with ‘comfortable satisfaction’ on its face because of its use of the adverb ‘highly’ it posited a higher standard than one of mere probability, i.e. likelihood¹⁶.”

H. MERITS

I. Procedural Issues

110. Before turning to the merits, the Panel will address the two (2) procedural issues that arose in the run-up to the hearing.

1. Factual witnesses

111. As noted above, the Athlete submitted the wish to call his coach, Mr. O’Connell, and his agent, Mr. Savija, as factual witnesses in his Answer Brief. This nomination was not accompanied by any witness statement or any summary of what their evidence would relate to.

112. WA objected to the call of these two (2) witnesses in its Reply Brief and reiterated this objection at the hearing, relying on the lack of information on the requested testimony, which would also be in contradiction to the Panel’s Directions of 11 November 2023.

113. The Panel, upon hearing the submissions from both Parties at the outset of the hearing, declined to hear from either Mr. O’Connell or Mr. Savija as witnesses because their unsubstantiated call did not allow WA to properly prepare for the witness examination and, moreover, was contrary to the Panel’s Directions of 11 November 2023, which stipulated *inter alia*: “By 5pm GMT on Tuesday 2 January 2024, the Athlete shall submit his answer brief, addressing World Athletics’ arguments and setting out arguments on the issues that the Athlete wishes to raise at the hearing, as well as written statements from the Athlete and from each witness (fact and/or expert) that the Athlete intends to call at the hearing,

¹⁶ *IAAF v Kiptum*, Disciplinary Tribunal SR/Adhocsport/95/2019, para 84; cited and followed in *WA v Chani*, Disciplinary Tribunal SR/078/2020, para 71.

setting out evidence that the Athlete wishes the Disciplinary Tribunal to hear from the witnesses, and enclosing copies of the documents that the Athlete intends to introduce at the hearing.”

114. Furthermore, the Panel also took into account that the Athlete, although he must have been aware of WA’s objection in the Reply Brief, did not endeavour to submit any witness statements or any other relevant explanation in the following two (2) months until the date of hearing, so that neither WA nor the Panel knew what to expect in relation to this witness evidence.
115. The Panel did not accept the Athlete's argument that he was caught off guard because the two (2) witnesses were listed in the first draft hearing schedule, which was circulated for consultation between the Parties, and he only learnt of WA objection on Friday 19 April 2024, after notification was sent by Sport Resolutions on behalf of the Panel. No legitimate expectation can arise on the basis of such administrative steps alone, particularly as the Panel’s position, as well as that of WA, had been expressed by the clear guidance in the Directions of 11 November 2023 and the objection in the Reply Brief, respectively.

2. Supplementary Answer Brief

116. The Supplementary Answer Brief was filed by the Athlete in the late evening of 17 April 2024, thus two (2) working days before the hearing, without any request to the Panel as to whether this would be accepted.
117. WA objected to the submission of the Supplementary Answer Brief as it was contrary to the Panel’s Directions of 11 November 2023.
118. The Panel considers the late submission without a prior request to vary the Panel’s Directions to be a clear procedural failure and also refers to the CAS case law, according to which “[a] party has no vested right to ‘reserve’ any right that is not granted to it under the CAS Code and such ‘right’ cannot be artificially created by a self-declaration of an alleged preservation of a ‘right’”¹⁷. In the Panel’s view, this principle must also be applied to the present proceedings, thus such a ‘reservation’ has no effect per se.

¹⁷ CAS 2011/A/2681, KSC Cercle Brugge v. FC Radnicki, para 80.

119. However, the Panel was also guided by the objective of guaranteeing a fair hearing to the Parties. In rejecting the submission of the Supplementary Answer Brief and appended expert reports, the Panel considered whether procedural fairness would be jeopardised. Detrimental to WA was that the evidence presented in the Supplementary Answer Brief related to issues that had been previously introduced and were now being addressed by way of the findings. It would therefore have been difficult to prevent the mention of the new evidence in subsequent discussions by ambush, so to speak, without giving WA the opportunity to formally respond. Furthermore, the Panel would not have considered it fair to the Athlete personally to disregard the results of the examinations, which he had undergone at great effort in the previous months and the results of which were now to be presented in this evidence, only because of a procedural failure on the part of his legal team. Given these exceptional circumstances, the Panel deemed it appropriate to allow this evidence to be considered at the hearing, especially as the Panel was confident that the Expert Panel would be able to discuss this evidence without intensive preparation, as it related to issues that were already the subject of the proceedings. In addition, the AIU was granted the opportunity to respond to the Supplementary Answer Brief in writing within two (2) weeks after the hearing.

II. Has the Athlete committed an ADRV?

1. Legal basis

120. The Athlete is charged with an ADRV based on Rule 2.2 ADR¹⁸:

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

2.2.1 It is the Athlete’s personal duty to ensure that no Prohibited Substance enters their body and that no Prohibited Method is Used. Accordingly, it is not necessary to demonstrate intent, Fault, Negligence or knowing Use on the Athlete’s part in order to

¹⁸ 2018 ADR, 2019 ADR and 2021 ADR respectively, see above.

establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method.

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

2. Burden of proof

121. As set out above, WA has the burden of establishing that the ADRV, in this case the Use or attempted Use of a Prohibited Substance or Prohibited Method, has occurred to the comfortable satisfaction of the Panel.

3. Evidence before the Disciplinary Panel

122. The Panel takes note of the Athlete's consistent denial that he ever Used a Prohibited Substance or Prohibited Method.

123. However, when athletes are confronted with an ADRV, the denial of wrongdoing can unfortunately be regularly observed in practice, regardless of whether a doping offence was knowingly committed or not. In the Panel's view, a reliable conclusion cannot therefore be drawn from a denial alone. Rather, the denial, like all other evidence, must be assessed on the basis of the relevant and admissible evidence and in the overall context, which is thus left to the Panel's final assessment.

a. ABP Blood Profile

124. The analysis of the ABP profile by the Expert Panel revealed *inter alia*:

a) The Passport was flagged with:

(i) high HGB: Samples 2, 15, 16, and 22;

(ii) low HGB: Sample 26;

(iii) high OFF-scores in Samples 2, 15, and 16;

(iv) low OFF-scores in Samples 18, 26, and 31; and

- (v) high RET% values in Samples 18, 25 and 31.
- b) The spikes in the Athlete's HGB values coincided with major sporting competitions, e.g. the Valencia Half Marathon and the Kenyan Olympic Trials.
 - c) The flagged haematological abnormalities are not compatible with normal physiology, altitude, or intense exercise.
 - d) The specific explanations provided by the Athlete, which included the influence of alcohol abuse, were evaluated on the primary parameters of the ABP, but it was the Expert Panel's unanimous opinion that the explanations provided by the Athlete did not explain the abnormalities of the profile, particularly *"the outlying reticulocyte values observed in samples 18, 25 and 31, the high Hb and low IRF in sample 2 and the Hb and %ret values in samples 25 and 26"*.¹⁹
 - e) The Athlete's experts were not able to link their explanation to any specific Sample as to provide alternative justification than a doping scenario.
 - f) With regard to the data from the study conducted on the Athlete to determine the effect of alcohol on his blood values, it was noted that even according to the admission of the Athlete's counsel²⁰ and the report of Dr. Nakrashevich, *"the ABP values cannot be directly compared to the study and pre-study data (due to differences in testing processes, instrumentation used etc.)"*. Furthermore, the WADA ABP Guidelines, which set strict analytical requirements and require two (2) consecutive analyses, are not met, as it is evident from the raw data provided from the test on 5 January 2024 that only one (1) analysis was performed. *"Therefore, whilst the athlete made considerable efforts to standardize the collection procedure (as evidenced by the signed documentation relating to pre-collection requirements), the single instance of analysis (and therefore also the lack of potential for standardization) prevents any meaningful interpretation. Further, since the athlete was aware of the study protocol and hypothesis, sample manipulation cannot be excluded, for example ESA could be*

¹⁹ Third Joint Expert Opinion, page 4.

²⁰ Answer Brief, para 24.

used to enhance %ret, whilst plasma volume could be manipulated to artificially increase HGB.²¹

- g) It can be excluded that neutropenia of any origin, whether familial or not, has any relationship with the Athlete's ABP erythropoietic Markers and anomalies.
- h) The mild G-6-PDH (glucoso-S-phosphate) deficiency, which was attested in Dr. Saha's medical report, cannot explain the abnormalities observed in the Athlete's ABP.
- i) Based on the current knowledge about erythrocytosis, the Athlete's PFCP argument does not make any sense in the present case, due to the marked variation of haematological parameters over a number of years (being inconsistent with a genetic origin), and due to the fact that he has not even appropriately explored possible justifications for the Passport anomalies. Therefore, *"as far as the Athlete's passport is concerned, congenital forms of primary or secondary erythrocytosis can be straightforwardly excluded by the striking variability of the Athlete's ABP markers over time (HGB average ~16.4 g/dL with only a few peaks above 17.5 g/dl; reticulocytes ~1.54% (XN measurements) and peaks at 1.9-2.3%) without the necessity for further medical or genetic tests"*.

125. In short: *"None of the specific explanations provided by the athlete can explain the severe haematological abnormalities observed. Therefore, we confirm our previous opinion that it is highly likely that a prohibited substance or prohibited method has been used and that it is highly unlikely that the passport is the result of any other cause."²²*

126. In the Expert Witness Conference, Prof. Giuseppe d'Onofrio gave further context to the ABP programme. He explained that the blood passport was developed as a means to indicate cases in which there was a high probability of blood manipulation. Based on software that works with a Bayesian algorithm, it sets an individual upper and lower limit for the results to be expected in the next samples, so that the limit values, which are initially still based on the general population, become increasingly individualised. In the ABP, HGB and RET% are chosen as the main Markers because of their stability and

²¹ Forth Joint Expert Opinion, page 4 (iii).

²² Fourth Joint Expert Opinion, page 4.

robustness in healthy subjects. And if there are high HGB with low RET%, then this is an indicator of blood doping.

127. Turning to the specific values of the Athlete's ABP profile, Prof. d'Onofrio, said that the Passport *"is characterised by marked fluctuations in the blood values, especially haemoglobin"*. Some Samples in this Passport were more atypical than others, in particular, Sample 2 shows a high HGB compared to the previous Sample, but also to many other values, as well as decreased reticulocytes, in a range that is low for both the Athlete and the general population. This is reflected in the high OFF-score of 125. In this case, both HGB and OFF-score are outliers, which means that they are above the threshold set by the system. *"This is a major deviation and falls into the typical pattern"* that can happen, e.g. after cycles of ESA, erythrocyte stimulating substances like EPO, or even after a transfusion of blood. Prof. d'Onofrio considered this to be the most typical abnormality in the Athlete's ABP and pointed out that this is very interesting because such an abnormality was found much more frequently in the past, but nowadays cheating athletes usually avoid this picture by using some techniques to increase their reticulocyte count or decrease their volume, for example. He pointed out that a similar pattern can be seen in other Samples, such as in Sample 16, and a different pattern in other Samples. *"But the characteristic of this passport is that there are fluctuations. You have high outliers and also low outliers, which is really unusual."*
128. Dr. Lewis added that the upper and lower limits are fairly wide in the Passport, which accounts for a degree of variation. *"But when you see markers that exceed the upper or lower limits with the magnitude that we see here, that is flagged by the model and raises alarm bells because of the degree of the magnitude. So, you know, we're accepting or not expecting a perfectly flat line between the two upper and lower limits, but you'll notice there are there are large peaks and troughs in the profile."*
129. In order to better understand the upper and lower levels, Dr. Mørkeberg supplemented that these are *"actually set at a 99% specificity level, which actually means that if in a non-doped population, only 1 out of 100 would exceed that threshold by chance."* With regard to the variability of the Athlete's ABP, he noted, *"if we look at the HGB graph in this Passport, we have 32 Samples and we actually have five outliers here, so in a non-doped"*

population only 1 in 100 would fall outside. Here we have five (5) in 32 Samples. And it's the same, almost the same for the OFF-score and for the RET%.”

130. With regard to the population referenced, Dr. Mørkeberg added that the initial thresholds (before being adjusted more individually to an athlete’s personal values) were also based on background variability collected from an athlete population, i.e. a group of athletes that trains, competes, and also has periods with lower activity, so such impacts to an athlete’s daily life have been taken into account in the algorithm.
131. When Prof. Čermák was asked whether he had drawn any conclusions or analysed how the changes in the Passport and, in particular, the Samples and between particular Samples, have occurred, he stated that he was not in a position to make any hypothesis, but that his task was to confirm whether or not the values were caused by EPO. He also admitted that he has never worked with or looked at or engaged with an ABP before this case.

b. The Athlete’s explanations

132. The Athlete claimed that that the abnormalities in his Passport are due to natural and specific characteristics of the Athlete’s body and other circumstances like alcohol consumption and medical conditions. In the hearing, the Athlete specifically relied upon the following grounds: (i) validity of Sample 2, (ii) genetic disorder (iii) alcohol abuse, and (iv) the model of Dr. de Boer.

(i) Validity of Sample 2

133. The Athlete questioned the validity of Sample 2 with the argument that *“it is not possible to infer anything from the initial sample that was collected only at the very beginning of the Athlete’s ABP,”* since it is *“not specific enough”*, and *“not unique to the characteristics of the Athlete.”*
134. The Expert Panel rebutted this argument with reference to the Disciplinary Tribunal in *UK Anti-Doping v. J. Tiernan-Locke*, which held that: *“[t]here is no logical difference between an abnormal value detected in the first of a series of tests and an abnormal value detected at the end of series of tests, by which time the model will have been fully adapted. In each case the abnormality will be assessed against a reliable series and to a very high degree*

*of probability*²³.” Accordingly, the Expert Panel concluded that “*whilst it is only the second sample of the profile, the high Hb and off score are clearly anomalous when considered against the remainder of the profile*²⁴.”

135. In his evidence, Prof. d’Onofrio, added that there were no gaps in the Passport, which began with Sample 1 in July 2018. In 2018, a total of four (4) Samples were taken in accordance with the WADA guidelines, one (1) of which was declared invalid, so there were three (3) valid Samples in 2018, which is the average for all Passports. In his opinion, “*Sample 2 is perfectly valid and consistent with the rest of the passport*”, it just shows a different picture, which is important in this context. Prof. d’Onofrio concluded, “*there is no reason to invalidate this sample which was really in line with the rest of the passport. It’s not early at all.*”
136. Dr. Mørkeberg advised that for the question of whether the values from Sample 2 could be trusted, one should look at the actual values, which in Sample 2 was 17.8 for HGB and exceeded the upper threshold value. He pointed out that there were also subsequent Samples in the ABP with values of 17.8, 17.7, and 17.9 that had been collected much later. These also exceeded the threshold. The value obtained in Sample 2 would therefore have also been flagged at a later point in time, when many other Samples were already available as a reference.
137. When asked whether he agreed with Prof. D’Onofrio, Dr. de Boer did not give a clear answer in relation to Sample 2, but rather pointed out that in his view the Athlete’s alcohol consumption and genetics conditions should be taken into account in order to determine the Athlete’s basic values.
138. The Panel cannot accept the Athlete’s argument that Sample 2 cannot be considered valid solely based on the fact that it is the second Sample from the Passport. As credibly explained by the Expert Panel, the ABP programme is designed in such a way that initial Samples also provide the necessary certainty of evidence. Dr. Mørkeberg was particularly convincing when he pointed out that similar values had also exceeded the respective thresholds of the Passport at a much later date. Thus, it was not the construction of the

²³ SR/0000120108 UK Anti-Doping v. J. Tiernan-Locke, para 47.

²⁴ Third Joint Expert Opinion, page 3, marginal note 45.

ABP model or the early point in time that caused Sample 2 to be flagged; rather such values would also have been flagged at a later time, with many more Samples in the Passport as a reference base. The Panel therefore agrees with Prof. d'Onofrio: "*Sample 2 is perfectly valid and consistent with the rest of the passport.*"

(ii) Genetic disorder

139. In their evidence, Prof. Čermák and Dr. Bohoněk explained the approach, objectives, and processes of the examinations carried out by them, including molecular genetics and bone marrow trepanobiopsy. According to Prof. Čermák, these examinations have so far led to two (2) or three (3) diagnoses, although some test results are still pending and further tests are planned. Their diagnosis identified: (a) G-6-PDH deficiency, (b) neutropenia, and (c) 'a third disease', based on the Athlete's very low level of erythropoietin.
140. When asked whether these investigations had included analysis or conclusions as to how the particular Samples and changes in the Passport could be specifically explained, Prof. Čermák replied that this had not been their role; rather their task had been to confirm "*that this was caused by EPO or not*". Thus, they examined the patient, collected more data, and performed deeper tests when there was a medical suspicion.
141. Before turning to the individual potential causes put forward by the Expert Team, it is worth noting Prof. d'Onofrio's reaction to Prof. Čermák's introductory remarks, as outlined in the paragraph, above: "*I'm very embarrassed because I totally disagree from what has been said by Professor Čermák. I think that they are trying to transform a doping case into a clinical case and I don't really see why. We don't have any abnormality which required complete haematological, diagnostic set and especially the bone marrow aspiration which was carried out is really the first time I see it in a passport case. Why? I've been carrying out bone marrow biopsies all my life and I know how invasive the test is.*"
- a) G-6-PDH deficiency
142. With regard to G-6-PDH deficiency as a possible causal factor for the ABP values, Prof. Čermák confirmed that the Athlete's G-6-PDH deficiency is not heavy, but "*probably mild*", and that a G-6-PDH deficiency was taken into account, when they evaluated the results of the laboratory investigation. As a result, Prof. Čermák summarised: "*We don't say that*

it's caused by G-6-PDH deficiency, but we have to know that the patient has such a disease, maybe mild, and that the results may be affected.”

143. By contrast, the Expert Panel ruled out G-6-PDH as a potential cause of the abnormality in the Passport and pointed out that the most frequent clinical manifestation of a G-6-PDH deficiency is acute haemolytic anaemia, while the main abnormality in the ABP profile is the high HGB values (i.e. the opposite of anaemia), often with high RET%, in several Samples. The Expert Panel also referred to the report of Dr. Saha, who not only described the Athlete's G-6-PDH deficiency as mild but confirmed that all other haematological studies, as well as iron studies and folate, are normal. The Expert Panel also noted that neither haemolytic episodes nor chronic anaemia have been observed or described in the Athlete's history and they are also absent throughout the Passport.

144. The Panel is not persuaded by the evidence of the Athlete's Expert Team. Prof. Čermák's statement, in particular, speaks for itself. If the experts themselves – after months of investigations – are not sure and can only assert that *“the results may be affected”*, then this cannot be convincing evidence. The Expert Panel, in contrast, was able to exclude a G-6-PDH deficiency as a possible cause in a reliable and well-founded manner. It therefore does not matter whether the Athlete was reliably diagnosed with G-6-PDH because the Panel is convinced that, even if the Athlete suffered from a G-6-PDH deficiency, the abnormalities found in the Passport could not, in any case, be attributed to it.

b) Neutropenia

145. With reference to the reports of Prof. Čermák, dated 5 August 2023, and Dr. Saha, dated 16 October 2023, the Athlete asserted that he has been diagnosed with neutropenia. In his evidence, Prof. Čermák reported that he and Dr. Bohoněk were *“very surprised”* that the Athlete had significant changes in his white blood cell count. *“He has a very low neutrophil count and we don't know why”*. No reason has been found yet, despite the bone marrow and chromosomal nuclear genetics tests. However, this could also have affected the values found in the Passport.

146. The Expert Panel agreed that the Athlete has a low neutrophil count, that has persisted since the beginning of the Passport and is present in many Samples. They also noted that

neutropenia, a common and transitory condition, has been documented in endurance athletes, and that “*Ethnic Neutropenia’ in healthy athletes is considered by sports physicians to be ‘benign, but inborn, lifelong, and beneficial’*”. In his evidence, Prof. d’Onofrio further explained that this is a clinical condition which is not related to disorder, but to the distribution of malaria around the world. Furthermore, with reference to Dr. Saha’s diagnosis, the Expert Panel had concluded, in its Fourth Joint Expert Opinion: “*It is also the personal experience of the ABP Experts in this Panel that neutropenia is a common finding in Passports from African athletes living at altitude, in the absence of health complaints or explanation of abnormalities, due to it being a common and often transitory condition. Therefore – and also considering that neutrophil production and erythropoiesis, even deriving from a common multipotent progenitor, follow separate maturative pathways in the bone marrow, and are influenced by different stimulation factors (e.g., EPO for erythropoiesis, and Granulocyte/Macrophage Growth Factors for neutrophils) – we exclude that neutropenia of any origin, whether familial or not, has any relationship with the Athlete’s ABP erythropoietic markers and anomalies.*”²⁵

147. The Panel notes that the Athlete has not called Dr. Saha, who diagnosed the neutropenia, to give oral expert evidence in the hearing and to be tested in cross-examination. It also notes that Dr. Saha only refers to the possibility of alcohol-induced bone marrow suppression, and otherwise gives no explanation or reason for the supposed neutropenia. Ultimately, however, it is not decisive whether the Athlete was properly diagnosed with neutropenia. In fact, the Panel is comfortably satisfied that neutropenia of any origin cannot be considered as the cause of the abnormalities found in the Passport. It follows the convincing reasoning of the Expert Panel, which, with reference to literature and their own experience, unanimously and unequivocally ruled out neutropenia as a cause. Against this, the statements of Prof. Čermák, who himself considers neutropenia to be only a possible cause of the Athlete's blood values and does not explain the significance of low white blood cells in the case of a red blood cell haemoglobin, in particular how low white blood cells can cause increased HGB values, appear to be unfounded, unsubstantiated, and unconvincing.

²⁵ Fourth Joint Expert Opinion, page 4.

c) Third haematological disorder

148. The basis for the assumption of a further haematological disorder was the Expert Team's observation that the Athlete has significant changes in white blood cell counts. Prof. Čermák explained in his evidence: *"We have to wait for the results of very rare deficiency of some EPO receptors what is connected with very high haemoglobin level and with low serum EPO level. We still don't know why the patient has very low erythropoietin level. So, we don't know why and if the patient has some changes in EPO receptor, which is contributing to a high level and high erythropoiesis, it may be, probably, some evidence that we should take in consideration this factor when we are evaluating the results of the tests. [...] I don't say that it's probable, but it may be and it may be interesting for us too [sic]."*

149. Prof. d'Onofrio not only replied that the measurement of serum EPO in 2024 had nothing to do with the measurement what the EPO in serum was in 2018, 2019, and 2020, but also questioned: *"How can you say that the Athlete can have a general, in general haematologic disorder without a diagnosis?"*

d) Conclusion with regard to arguments of a genetic disorder

150. Overall, in consideration of the medical examinations presented by the Athlete's Expert Team, Prof. d'Onofrio subsumed as follows: *"[s]o I think that this attempt to transform the case into a clinical case is, it's wrong. It's in the interests of the athlete. While the passport was formed, the athlete was competing at a very high level. He had a world record in some type of competition. And so it's really unbelievable that you try to make of this athlete a sick person, a patient. And I really wonder why he had to receive a bone marrow exam just to find anything. I think you did a correct search, for example, for genetic problems. And you found that the EPO receptor was not mutated. That was an important finding because excludes the primary polycythaemia that we have been discussing in previous reports. But at this point, I think that you could also think about exactly what is the diagnosis you can do in this athlete, which is completely healthy from a point of view, from a haematological point of view, except for abnormal increased haemoglobin in some samples and the neutropenia, which is a constitutional feature of this person."*

151. With reference to the expert report of Prof Čermák and Dr. Bohoněk, dated 16 April 2024, Prof. d'Onofrio also stated: *"it very clearly states that the bone marrow show only reactive changes which are not a disease and the immunophenotyping by flow cytometry shows no evidence of haematological malignancy. That is where I see a haematological diagnosis, so which is of a normal bone marrow, normal immunophenotype. There are no lymphoma cells in this test."*
152. In their expert report of 16 April 2024, Prof. Čermák and Dr. Bohoněk concluded: *"The results of the examination show, among other things, that the observed non-standard fluctuations in hemoglobin values in the so-called biological passport of the patient in the years 2020 - 2022 are likely caused by a primary disorder of hematopoiesis, i.e. a primary haematological disease and not by external interventions. Influence of secondary factors such as alcohol abuse of the patient to the fluctuations of the haematological values of the patient cannot be ruled out²⁶."*
153. When asked at the end of the Expert Witness Conference to summarise his arguments, Prof. Čermák resumed: *"[w]e performed a lot of investigations, and we found out that a patient has inherited haemolytic anaemia, G-6-PDH deficiency, which is probably mild, it's not heavy, and the patient may also have another haematological disorder, and it's still under investigation because we don't have all the results of molecular genetics. And I think our conclusion is that these two things, at least the G-6-PDH deficiency, should be taken in account when we evaluate the results of the laboratory investigation. That was our tasks and what we did. We don't say that it's caused by G-6-PDH deficiency, but we have to know that the patient has such a disease, maybe mild, and that the results may be affected."*
154. The Panel notes that the Athlete's Expert Team have neither provided a concrete diagnosis nor an explanation as to how the abnormalities in the Passport can be attributed to the causes they have assigned. Even after months of investigation, it appears that the Expert Team is unable to present any concrete findings that could provide an answer to the relevant questions. The doubts that can be heard from the Expert Team's statements speak for themselves.

²⁶ Čermák/Bohoněk Medical Report of 16 April 2024, page 3.

155. Taking this into account, including the statements made by the Expert Panel, in its four (4) Joint Expert Opinions and the Expert Witness Conference, which refuted in detail and with evidence all of the Athlete's medical explanations put forward in the course of these proceedings, the Panel can only conclude that the Athlete's argument of a genetic cause must be rejected. The Panel is comfortably satisfied that none of the disorders put forward can be considered as a possible cause of the abnormalities found in the Passport.

(iii) Alcohol Abuse

156. The Athlete submits that he started drinking alcohol at the end of 2019, with a significant increase after the start of the COVID-19 pandemic, and that his state of dehydration, presumably resulting from chronic alcohol intake was one (1) of the major influences and a substantial factor on the APF and can explain the increased HGB values.

157. In his evidence, the Athlete informed the Panel that he had a serious alcohol problem during the time of the COVID-19 pandemic, which also led to stomach problems for which he had to seek medical treatment in hospital. However, he never drank when he was in the training camp (from Monday to Friday) or when he was travelling abroad and competing. When asked to explain all the periods when he had drunk significant amounts of alcohol, the Athlete referred to his counsel, saying that he had forgotten the other times, but his counsel would know when he had drunk alcohol. He could also not remember what had caused him to drink significant amounts during periods other than during the COVID-19 pandemic, as this had been a while ago.

158. The Athlete relied *inter alia* upon the EtG values in his Samples and an alcohol study that was performed on the Athlete between November 2023 and January 2024.

a) EtG values

159. Upon request of the Athlete, the AIU had contacted all WADA-accredited laboratories that analysed the Athlete's urine Samples for confirmation whether EtG had been detected. The replies were compiled in a table, which was sent to the Athlete on 22 December 2022. The table included 45 Samples (dated from September 2017 to October 2022). In 17 Samples EtG was detected, eight (8) of these had EtG values above 5 µg/mL. Two (2)

Samples with very high EtG values (70 µg/mL and above), which had been collected on 4 June 2020 and 14 December 2020, stood out the most.

160. The position of WA is that the alcohol abuse and resulting dehydration could not explain the abnormalities in the Passport.

161. The experts provided *inter alia* the following opinions:

- a) In his evidence, Prof. Čermák stated that alcohol as a cause of the abnormalities *“cannot be completely excluded, but we don't have enough data, that this could be so. What we know is that the ethanol will provoke some haemolysis in G-6-PDH. It's probably individual in each case.”* When asked which of the Samples could not completely exclude the causative relevance of alcohol as a causative factor, Prof. Čermák was not able to give an answer, but explained that he had not evaluated any Sample and was therefore not talking about specific Samples, but *“talking about the ethanol test, which was performed and activated by Dr. de Boer.”*
- b) Dr. de Boer suggested that alcohol can have a major effect on blood levels, especially in stressful situations caused by alcohol. In a healthy person such fluctuations would probably not be seen, but *“alcohol consumption together with the genetic constitution of the Athlete can explain it and it is also unpredictable, because the oxidative stress can also be influenced by other things that we didn't know, but yes, I'm becoming more convinced.”*
- c) Dr. de Boer confirmed in the hearing that a potential combination of alcohol and G-6-PDH deficiency is the full extent of his expert opinion as to the cause of the ABP abnormalities.
- d) Dr. Lewis confirmed that the EtG values certainly tell that alcohol was consumed by the Athlete, but that it's impossible for the experts to know the exact amount and timing of the consumption. Dr. Lewis also turned to the two (2) Samples with high amounts of EtG and compared them to the Athlete's ABP, noting that the HGB values in these Sample are *“quite different”*. In her view, *“it's very hard to link the EtG to any pattern in the HGB concentration”*. She also pointed out that, contrary to Dr. de Boer, she believes that when considering stress and rebound of alcohol intake, it should not

be forgotten that this Athlete also trained at a very high level and was able to perform at a high level around some of the times when alcohol was allegedly consumed.

e) In the Second Joint Expert Opinion, the Expert Panel submitted that “[e]ffects on plasma volume, i.e. dehydration, are generally mild and observed after acute alcohol intoxication”²⁷, which is supplemented in the Third Joint Expert Opinion: “However, neither acute nor chronic studies have shown that alcohol intoxication in any species results in fluid and electrolyte depletion in the absence of vomiting and diarrhea (1), with acute or chronic alcohol actually resulting in an increase in Plasma Volume (that is, hemodilution, producing lower HB values), not a decrease (2-5)”²⁸.

f) Prof. d’Onofrio confirmed that following acute alcohol intoxication, haemoconcentration can occur, during a hangover, for a few hours due to vomiting and dehydration. However, this would only apply to the acute phase; the consequences for chronic alcoholics would not fit the pattern seen here. Prof. d’Onofrio went on to report that he had also looked at the liver values of the Athlete, who had at least one (1) ultrasound sonography, where the liver was described as ‘normal’, with no steatosis or fat transformation, which is very common in people who drink too much. The liver enzymes, which were tested several times, were also always ‘normal’. So as far as he can see, there are no signs of a health problem due to alcohol.

b) Alcohol study

162. The Athlete further relies on an “expert study” performed on the Athlete to see how his blood parameters are being influenced by drinking or not drinking alcohol (“**Alcohol Study**”). It was reported that 12 blood samples were collected from the Athlete between 20 November 2023 and 5 January 2024, all tested privately. It was alleged that the Athlete abstained from alcohol consumption for the first week (and the week before), consumed the equivalent of 436mL of pure alcohol per week in weeks two (2) and three (3), and

²⁷ Second Joint Expert Opinion, page 2, lines 34-35.

²⁸ Third Joint Expert Opinion, page 2, lines 23-27.

abstained again for weeks four (4) to seven (7). It was claimed that the “*The Athlete was under supervision for the whole period of the study*²⁹.”

163. In his expert report of 17 April 2024, Dr. de Boer evaluated the Alcohol Study, which he described as a “*simulation experiment*”. He opined that “*all available evidence clarifies that the fluctuations as well as the overall changes in the athlete’s ABP indeed must be attributed mainly to his alcohol abuse problem combined with secondary factors*³⁰.” This opinion was in line with the conclusions of Prof. Čermák and Dr. Bohoněk in their expert report of 16 April 2024: the “[i]nfluence of secondary factors such as alcohol abuse of the patient to the fluctuations of the haematological values of the patient cannot be ruled out³¹”.
164. However, in relation to the performance of the experiment, Dr. de Boer also confirmed that “[a]s an expert I did not supervise the simulation experiment of ethanol intake. Also, no official doping control was applied to verify and exclude the possible manipulation by the use of forbidden substances and/or application of forbidden methods. I evaluated the results assuming that no manipulation occurred and I also have no reason to believe that manipulation did occur³².”
165. When asked at the hearing on what basis he had made his evaluation, Dr. de Boer replied that he had not spoken to the Athlete, but that the Athlete’s manager had provided him with information, sent in several emails, which he had not attached to his expert report, but which would form part of his expert opinion. Furthermore, he had relied on the report provided by Dr. Nakrasevich, dated 7 January 2024 (entitled “*Preliminary Summary*”), but admitted that he was not involved in the implementation of the Alcohol Study at all.
166. When asked, Professor Čermák confirmed that he had not been involved in the Alcohol Study either.

²⁹ Answer Brief, para 25.

³⁰ De Boer Expert Report of 17 April 2024, page 6, para 5.

³¹ Čermák/Bohoněk Medical Report of 16 April 2024, page 3

³² De Boer Expert Report of 17 April 2024, page 4.

167. This information matched the evidence given by the Athlete that he had carried out the Alcohol Study, in particular the intake of alcohol, on the instructions of his "entire team", which he specified by naming his manager, Mr. Savija.
168. The position of WA is that the Alcohol Study is not reliable, and no conclusion can be drawn from it. WA refers to the Fourth Joint Expert Opinion, which points out that single instances of sample analysis are non-compliant with the WADA ABP Operating Guidelines, which require two (2) consecutive analyses, and that the ABP values cannot be directly compared to the study values. Moreover, since the Athlete was aware of the study protocol and hypothesis, sample manipulation cannot be excluded. For example, ESA could be used to enhance RET%, whilst plasma volume could be manipulated to artificially increase HGB.
169. The Panel is not prepared to accept the results of this Alcohol Study, its evaluation, or the conclusions drawn from it. Although it recognises the Athlete's efforts to strengthen his explanations through the Alcohol Study, it has to conclude that, besides the fact that its implementation doesn't meet the requirements of the WADA ABP Operating Guidelines, no reliable precautions were taken to ensure the authenticity of the underlying parameters and its findings, especially to rule out the possibility of manipulation through the use of Prohibited Substances/Methods during the test period. It is telling that the Alcohol Study was not carried out by any of the experts called by the Athlete in the hearing and that none of the experts obviously had further knowledge of the specifications, procedures, and supervision of the Alcohol Study. The Panel also considers it questionable that Dr. de Boer stated that "*[a]s an expert I did not supervise the simulation experiment of ethanol intake. Also no official doping control was applied to verify and exclude the possible manipulation by the use of forbidden substances and/or application of forbidden methods. I evaluated the results assuming that no manipulation occurred and I also have no reason to believe that manipulation did occur³³*", but nevertheless saw himself in a position to write an expert report on the results of the Alcohol Study, though, as a scientist, he must have been aware that the Alcohol Study has no scientifically justifiable and reliable basis whatsoever.

³³ De Boer Expert Report of 17 April 2024, page 4, para 3.

The Panel does not speculate as to why Dr. de Boer submitted his expert report without disclosing that he had not even spoken to the Athlete or the person implementing the Alcohol Study, only admitting when asked at the hearing that he had solely relied upon the information provided by the Athlete's manager (in various emails), as well as Dr. Nakrasevich's report of 7 January 2024 (entitled "*Preliminary Summary*"), who had expressly noted: "*My understanding is that Mr. Rhonex Kipruto was the subject of a study*³⁴", "[...] *I have assumed that Mr. Kipruto was not doping over the period in which the samples were collected*³⁵", and "[...] *the ABP values cannot be directly compared to the Study and pre-Study data (due to differences in testing processes, instrumentation used etc.)*³⁶", thus indicating that he was not directly involved in the implementation of the Alcohol Study, either, and had his own doubts about the reliability and usability of the data collected. The Panel regards such behaviour as scientifically dubious and untenable. In conclusion, the Panel therefore considers neither the Alcohol Study nor the corresponding expert report by Dr. de Boer to be reliable and legally sound, which is why further discussion of the conclusions drawn from it is redundant.

170. Based on the EtG values and the Athlete's testimony, the Panel accepts that the Athlete consumed alcohol, especially after the outbreak of the COVID-19 pandemic, and that he sometimes did so in significant quantities. However, the Panel also notes that the EtG values found alone do not allow for a reliable conclusion to be drawn as to how much and how continuously alcohol was consumed. The Panel also notes that, according to his own statements, the Athlete only consumed alcohol at weekends, but never during his time at the training camp or when travelling or competing. Based on these statements, the liver values found, and the corresponding assessment by Prof. d'Onofrio, the Panel does not assume that the Athlete consumed alcohol chronically. It also notes that the two (2) high EtG values found were actually detected in flagged Samples (Samples 16 and 21), but no EtG value was reported in other flagged Samples.

Against this background and in the absence of convincing arguments from the Athlete with regard to a concrete causal link between alcohol consumption and resulting dehydration with the ABP values, not taking into account – as set out above – any specific

³⁴ Nakrasevich report of 7 January 2024, page 1, para 1.1.

³⁵ *Ibid.*, page 1, para 2.1.

³⁶ *Ibid.*, page 3, para 3.1 (c).

conclusion drawn from the Alcohol Study, the Panel is not convinced that the Athlete's alcohol consumption, even in combination with possible genetic peculiarities, can explain the abnormalities found in the Athlete's ABP.

(iv) Model of Dr. de Boer

171. Furthermore, the Athlete also argued that there are no actual outliers in the Passport based on the model developed by Dr. de Boer.

172. In his expert statement of 16 June 2022, appended to the Athlete's Initial Explanation, Dr. de Boer described that, because the software used for the adaptive Bayesian model and the ABP algorithm was not available for him, he made use of a common statistical approach based on a statistical approach SigmaPlot software to evaluate the analytical and biological variation of haematological parameters. According to him, the strength of the biological variation approach for haematological parameters lies in the fact that a more dynamic approach is used over time. This makes it possible to calculate the biological variation over a longer period of time after polynomial fitting. However, Dr. de Boer stated that his model only works when a robust amount of data is available, it is a so-called "*retrospective approach*", whereas he sees the strength of the adaptive Bayesian model in the fact that it is a prospective model that can be applied even when only a limited amount of data is available.

173. In his evidence, Dr. de Boer confirmed that he had enough data points to use his method in the present case. After applying his model, he concluded *inter alia*, "[t]he apparent fluctuations of the concentration of hemoglobin as observed are not outliers if the biological variation is taken into consideration. Therefore, the concentration of hemoglobin is not in an uncommon range according to the overall athlete's profile, especially in combination with slight dehydrations due to alcohol abuse".

174. However, Dr. de Boer conceded that the Passport would show irregularities even when his model was applied, the cause of which he could not initially explain. He had no expertise in genetics.

175. When asked, Dr. de Boer said he accepts the ABP and the way it works, he would just look at the problem in a different way. He explained, "*if you look at the biological variation,*

you do it more or less in the same as the ABP does. Only the way that I do it, it requires a lot of data points, a significant number of data points. And then for doping control that is not always easy because, especially in the beginning of a biological passport, you do not have enough data points to do look carefully at the biological variation the way that I do. Therefore, I think that the approach by the anti-doping organisations and their model is, in principle good, because using that model, even with a limited number of data points, you can also do a statistical analysis. But in those cases where you have enough data points, you can also look at the problem in a different way. [sic]"

176. The Panel does not consider it necessary to set out the further findings that Dr. de Boer obtained by applying his model, nor the dismissive position of the Expert Panel, as it understands Dr. de Boer's statement to mean that he himself accepts the ABP model and the conclusions drawn from it. He does not question them, but looks at the case "*from a different angle*" and therefore draws different conclusions, which he himself does not see as contradicting the findings of the ABP.

It should further be noted that the ABP programme is part of the anti-doping model recognised by sporting organisations worldwide and enshrined in the rules that every participant in that sport submits to. Its application is therefore binding on the participants and cannot simply be overridden by the results from another model that is neither accepted nor certified. The acceptance and binding nature of the ABP model is also enshrined in the regulatory framework of WA, to which the Athlete is bound.

Therefore, the fact that Dr. de Boer came to a different conclusion when looking at the values from a different perspective cannot have any effect on the assessment of this case.

4. Conclusion

177. Having reviewed and considered carefully the totality of the Athlete's evidence, the Panel is comfortably satisfied that WA has discharged its burden of proof and established that the Athlete has committed an ADRV. In the Panel's view, the Athlete's ABP profile considered in connection with the Expert Panel's Joint Expert Opinions and evidence, all lead the Panel to conclude that the cause for the abnormalities in the ABP is more likely to be due to blood manipulation, such as rEPO, rather than from environmental or medical

factors. Thus there is no other plausible explanation for the abnormal values in the Passport.

178. It is convincing that the Passport was initially considered blind by three (3) independent experts from different but related disciplines, and all came to the same conclusion of '*likely doping*'. This assessment was again confirmed during the course of the reassessments in four (4) Joint Expert Opinions, for which the Expert Panel thoroughly analysed all arguments put forward by the Athlete and clearly demonstrated each time, by presenting supporting scientific evidence, why the Athlete's arguments could not explain the abnormalities in the Passport. These clear, documented, and compelling statements convinced the Panel more than the statements of the Athlete's Expert Team, who provided more global, sweeping statements about different medical conditions and mainly expressed themselves in the conditional when it came to the question of whether their explanations could explain the specific deviations in the Passport.
179. It was also significant that the Athlete only initially tried to relate his original explanations to the deviations in the flagged Samples. In subsequent medical explanations, the Athlete's Expert Team did not even attempt to make this reference and thus explain the specific spikes (and troughs) in the Passport. Instead, the experts exhausted themselves in general potential explanations as to what could be considered a plausible explanation. This lack of focussed evidence, which is an essential part of the evidence in ABP proceedings, may have been due to the Athlete's Expert Team lacking experience with the ABP procedure, however, it was certainly not purposeful. The Panel agrees with Prof. d'Onofrio's assessment that the Athlete's Expert Team attempted to turn a doping case into a medical case and considers it highly questionable that the Athlete was subjected to such intrusive medical examinations for which, in Prof. d'Onofrio's opinion, there was no justified reason.
180. The same applies to the Alcohol Study, which – contrary to the Athlete's previous statements – was not scientifically monitored. The authenticity of the Alcohol Study and consequently, the reliability of the results were not assured. In particular, potential manipulation could not be ruled out. Such experiments are not suitable as evidence to convince the Panel. The pursuits subjected on the Athlete also raise serious ethical issues which the Athlete's manager and his legal counsel do not seem to have considered.

181. WA did not have the burden to prove whether the Athlete manipulated his blood values either by Use of an ESA or by physically manipulating his blood, nor that the Athlete intended to cheat, as WA has proved to the Panel's comfortable satisfaction that the values in the Athlete's Samples fit a '*doping scenario*'. The Panel is persuaded by the Expert Panel's reasoning that blood doping outside of competitions can also be used to gain an advantage as "[i]ncreased oxygen transport capability, produced by ESA stimulation and its effect on HB mass and, possibly, concentration, permits more intense training, in terms of exercise load and duration, and this has an obvious effect on performance even after a significant period of time", which is corroborated by the fact that in recent years many athletes have been found positive for EPO far outside of competition. Moreover, the Expert Panel has linked several abnormal Samples to important competitions. For example, Sample 20 was collected on 3 December 2020, three (3) days before the Valencia Half Marathon, in which the Athlete performed excellently, while Samples 24 and 25 were collected in the run-up to the Kenyan Olympic Trials leading up to the postponed Tokyo 2020 Olympic Games, and which showed a relatively large increase in HGB and RET%, indicating the Use of an ESA.

182. In summary, the Panel is comfortably satisfied that the Athlete has committed an ADRV in breach of Rule 2.2 ADR.

III. Consequences for the ADRV

1. Period of Ineligibility

183. Having found that the Athlete has committed an ADRV, the Panel must now decide what is the appropriate sanction that should be imposed.

184. Rule 10.2 2021 ADR provides:

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

The period of Ineligibility for a violation of Rule 2.1, Rule 2.2 or Rule 2.6 will be as follows, subject to potential elimination, reduction or suspension pursuant to Rules 10.5, 10.6 and/or 10.7:

10.2.1 Save where Rule 10.2.4 applies, the period of Ineligibility shall be four years where:

- (a) *The anti-doping rule violation does not involve a Specified Substance or a Specified Method, unless the Athlete or other Person can establish that the anti-doping rule violation was not intentional.*

[...]"

185. WA submits that the Athlete has failed to meet his burden to establish that his ADRV was not intentional, and in any event that any form of blood manipulation is necessarily intentional. The fact that blood can only be manipulated intentionally due to its form of administration by injection or blood withdrawal is also recognised in various arbitral decisions³⁷ and the Panel agrees.

186. Rule 10.4 2021 ADR specifies:

“10.4 Aggravating Circumstances that may increase the period of Ineligibility

If the Integrity Unit or other prosecuting authority establishes in an individual case involving an anti-doping rule violation other than violations under Rule 2.7 (Trafficking or Attempted Trafficking), Rule 2.8 (Administration or Attempted Administration), Rule 2.9 (Complicity or Attempted Complicity) or Rule 2.11 (Acts by an Athlete or other Person to discourage or retaliate against reporting) that Aggravating Circumstances are present which justify the imposition of a period of Ineligibility greater than the standard sanction, then the period of Ineligibility otherwise applicable will be increased by an additional period of Ineligibility of up to two (2) years depending on the seriousness of the violation and the nature of the Aggravating Circumstances, unless the Athlete or other Person can establish that they did not knowingly commit the anti-doping rule violation.”

³⁷ See e.g., CAS 2020/A/7377 *EI Mahjoub Dazza v WA*, the Panel concluded that since “*the use of erythropoietic stimulant (rEPO) or a blood transfusion can exclusively be done by injections, the ADRV at hand has, in the Panel’s view, to be considered as having been committed intentionally*” (para 94).

187. Aggravating Circumstances are defined in the Rules as follows:

***“Aggravating Circumstances:** Circumstances involving, or actions by, an Athlete or other Person that may justify the imposition of a period of Ineligibility greater than the standard sanction. Such circumstances and actions include, but are not limited to: the Athlete or other Person Used or Possessed multiple Prohibited Substances or Prohibited Methods, Used or Possessed a Prohibited Substance or Prohibited Method on multiple occasions or committed multiple other anti-doping rule violations; a normal individual would be likely to enjoy the performance-enhancing effects of the anti-doping rule violation(s) beyond the otherwise applicable period of Ineligibility; the Athlete or other Person engaged in deceptive or obstructive conduct to avoid the detection or adjudication of an anti-doping rule violation; or the Athlete or other Person engaged in Tampering during Results Management. For the avoidance of doubt, the examples of circumstances and conduct described herein are not exclusive and other similar circumstances or conduct may also justify the imposition of a longer period of Ineligibility.”*

188. The Panel is comfortably satisfied that the Athlete Used Prohibited Substances or Prohibited Methods on multiple occasions between 2 September 2018 and 21 February 2022.

189. It must be noted that blood doping with an ESA, such as rEPO, requires repeated administration by injection over a period of time and that blood doping by autologous transfusion requires both collection and re-administration of the blood. The Panel agrees with WA that this presents compelling evidence that the Athlete engaged in a deliberate and sophisticated doping regime. Furthermore, on the basis of the impressions gained in these proceedings, it is not credible for the Panel that the Athlete practised blood doping independently and alone, i.e. without assistance, over a period of more than three (3) years. It therefore assumes that the Athlete received respective support from third parties.

190. The Expert Panel concluded that several abnormalities found in the Athlete's ABP can be linked to important competitions, including the Kenyan Olympic Trials which served as a qualifying competition for the postponed Tokyo 2020 Olympic Games. WA submits that the Athlete's blood doping observed around Sample 25 (collected on 16 June 2021, one (1) day before the start of the Kenyan Olympic Trials) was targeted to assist the Athlete

in qualifying for the rescheduled Tokyo 2020 Olympic Games, thus “[t]he Athlete employed a sophisticated doping regime that was targeted towards his qualification for the very pinnacle of Athletics competitions, the Olympic Games, which plainly constitutes further clear and substantially Aggravating Circumstances in this case³⁸.”

191. Concluding, WA submits that “the Athlete’s repeated violations in the circumstances could not be more egregious or serious in nature and they are deserving of the maximum penalty that can be imposed under the ADR³⁹.”

192. In view of the evidence provided to the Panel, it is difficult to draw any other conclusion than that the Athlete was involved in a doping regime over a long period of time in order to artificially enhance his performance through doping, and thereby – not least – to qualify for the Tokyo 2020 Olympic Games. The Panel recognises that the “*intent to unlawfully enhance performance at major international competitions may be considered particularly reprehensible given the utmost respect accorded to these events and has been an aggravating factor*” in various CAS cases.⁴⁰ The Panel also notes that the Use ‘on multiple occasions’ constitutes a specific example of Aggravating Circumstances per the definition set out in the ADR.

193. In light of these aggravating circumstances, the maximum period of Ineligibility of six (6) years is imposed.

2. Commencement of the period of Ineligibility

194. WA requests that, in accordance with Rule 10.13 2021 ADR, the period of Ineligibility should commence on the date of the Panel’s award. However, WA accepts that the Athlete may gain credit for the period of Provisional Suspension served since 11 May 2023 against the period of Ineligibility imposed, pursuant to Rule 10.13.2(a) 2021 ADR, provided it has been effectively served.⁴¹

³⁸ Reference was made to CAS 2018/O/5667 IAAF v. RUSAF & Svetlana Shkolina, para 212 and CAS 2018/O/5668 IAAF v. RUSAF & Ivan Ukhov, para 223.

³⁹ WA Brief, para 54.

⁴⁰ See CAS 201/ADD/6 IBU v. Evgeny Ustyugov, para 216, with further reference to CAS 2018/O/5667 and 5668.

⁴¹ WA Brief, para 55.

195. The Panel has no evidence on the record that the suspension has not been served by the Athlete. Therefore, in accordance with Rule 10.13.2(a) 2021 ADR, the six (6)-year period of Ineligibility shall run from 11 May 2023, and end on 10 May 2029.

3. Disqualification of Results and Other Consequences

196. WA has requested that, pursuant to Rule 10.10 2021 ADR, the Athlete's competitive results from 2 September 2018 (the date of collection of Sample 2) to 11 May 2023 (the date of his Provisional Suspension) should be Disqualified.⁴²

197. Rule 10.10 2021 ADR provides as follows:

"[i]n addition to the automatic Disqualification of the results in the Competition that produced the positive Sample under Rule 9, all other competitive results obtained by the Athlete from the date a positive Sample was collected (whether In-Competition or Out-of-Competition) or other anti-doping rule violation occurred through the commencement of any Provisional Suspension or Ineligibility period, will, unless fairness requires otherwise, be Disqualified with all of the resulting Consequences including forfeiture of any medals, titles, points, prize money, and prizes."

198. The first evidence of an ADRV in the Passport is Sample 2. The Athlete has not put forward any argument to prove to the Panel's satisfaction that fairness would require that not all of his results since the date of the collection of Sample 2 be Disqualified.

199. Consequently, the Athlete's results from 2 September 2018 to 11 May 2023 will be Disqualified with all of the resulting Consequences.

4. Costs

200. WA has requested that it should be awarded a contribution to its legal costs and expenses incurred in relation to this matter.

201. Costs are a matter for the Panel's discretion, pursuant to Rule 8.9.1(j) 2023 ADR, taking into account the principle of proportionality, in accordance with Rule 10.12.1 2023 ADR.

⁴² WA Brief, paras 56-57.

202. In the present case, the Panel is concerned by the strategy for the defence of the Athlete and the extraordinary costs that this could entail for the Athlete. The proceedings were characterised by numerous delays due to the frequently changing defence strategy with ever new explanations and requests. Although the Panel acknowledges the Athlete's position that he sought his own explanations and tried to prove them scientifically, it must unfortunately be noted in retrospect that the defence strategy was not oriented towards the concrete requirements of proceedings based on the applicable ADR. It was particularly alarming that the Alcohol Study did not even meet the required scientific monitoring and standards, despite assurances to the contrary. The Panel doubts as to whether the Athlete himself was fully aware of these circumstances and their implications for the case.

In view of this, the Panel refrains from imposing further costs on the Athlete and leaves it to each party to bear its own costs.

IV. ORDER

203. For the reasons set out above, the Panel rules the following:

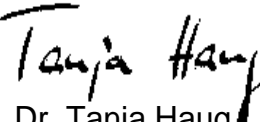
1. The Disciplinary Tribunal has jurisdiction to decide on the subject matter of this dispute.
2. The Athlete has committed an ADRV pursuant to Rule 2.2 ADR in force between September 2018 and March 2022 (2018, 2019, and 2021 ADR).
3. A period of Ineligibility of six (6) years is imposed upon the Athlete for the ADRV, commencing on the date of the Disciplinary Tribunal's Award.
4. The period of Provisional Suspension imposed on the Athlete from 11 May 2023 until the date of this decision shall be credited against the total period of Ineligibility.
5. All competitive results obtained by the Athlete from 2 September 2018 to 11 May 2023 shall be Disqualified with all resulting Consequences, including forfeiture of any titles, prizes, medals, points and prize and appearance money, pursuant to Rule 10.10 ADR.

6. Each party shall bear its own legal costs and expenses incurred in connection with these proceedings.
7. All other motions or prayers for relief are dismissed.

V. Right of Appeal

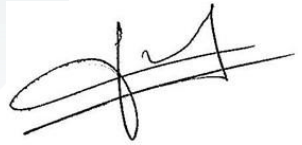
204. This decision may be appealed to the Court of Arbitration in Sport (“CAS”), located at Palais de Beaulieu, Av. des Bergières 10, CH-1004 Lausanne, Switzerland (procedures@tas-cas.org), in accordance with Rule 13 ADR.

205. In accordance with Rule 13.6.1(a) ADR, the deadline for filing an appeal with the CAS is 30 days from the date of receipt of this decision.


Dr. Tanja Haug



Sètondji Roland Adjovi



Julien Berenger

On behalf of the Disciplinary Tribunal

London, UK
28 May 2024

1 Paternoster Lane, St Paul's London EC4M 7BQ resolve@sportresolutions.com 020 7036 1966

Company no: 03351039 Limited by guarantee in England and Wales
Sport Resolutions is the trading name of Sports Dispute Resolution Panel Limited

www.sportresolutions.com



ENABLING FAIR PLAY