

**IN THE MATTER OF PROCEEDINGS BROUGHT UNDER THE ANTI-DOPING RULES
OF THE INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS**

Before:

Michael J Beloff QC (Chair)

Paul Ciucur

Dennis Koolaard

BETWEEN:

INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS ("IAAF")

Anti-Doping Organisation

- and -

ABRAHAM KIPTUM

Respondent

Decision of the Disciplinary Tribunal

A. INTRODUCTION

1. The International Association of Athletics Federations ("**IAAF**"), the international federation which governs the sport of athletics worldwide, on 3rd April 2019 through the Athletics Integrity Unit ("AIU") charged Mr. Abraham Kiptum ("**the Athlete**"), a 30-year-old distance runner from Kenya, and the former half-marathon world-record holder with an anti-doping rule violation ("**ADRV**") under the IAAF Anti-Doping Rules 2018 ("**ADR**") in connection with abnormalities in the haematological module of his Athlete Biological Passport ("**ABP**") that are alleged to indicate blood manipulation. The Athlete denies having used any Prohibited Substances or Methods that could have caused the abnormalities detected in his ABP and advances alternative explanations.
2. It is not in issue that:
 - (i) the ADR are applicable to the Athlete;
 - (ii) for the purposes of the ADR the Athlete is an International-Level Athlete, as defined in the ADR;
 - (iii) the AIU had jurisdiction for result management of the Athlete's Samples; and
 - (iv) the Tribunal has jurisdiction to determine the ADRV alleged against the Athlete.¹

B. Anti-Doping Rule Violations

3. Article 2.2 of the ADR specifies:

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

¹ The submission made at the directions hearing that the Chairman was obliged to recuse himself was dismissed in an interlocutory ruling SR/Adhocsport/132/2019 dated 5 July 2019.

2.1.1 *It is each Athlete's personal duty to ensure that no Prohibited Substance enters his body. Athletes are responsible for any Prohibited Substance or its Metabolites or Markers found to be present in their Samples. Accordingly, it is not necessary that intent, Fault, negligence, or knowing Use on the Athlete's part be demonstrated in order to establish an Anti-Doping Rule Violation for Use of a Prohibited Substance or a Prohibited Method.*

2.1.2 *The success or failure of the Use or Attempted Use of a Prohibited Substance or Prohibited Method is not material. It is sufficient that the Prohibited Substance or Prohibited Method was Used or Attempted to be Used for an Anti-Doping Rule Violation to be committed."*

4. Article 3.1 of the ADR specifies

"3.1 The IAAF or other Anti-Doping Organisation shall have the burden of establishing that an Anti-Doping Rule Violation has been committed. The standard of proof shall be whether the IAAF has established the commission of the alleged Anti-Doping Rule Violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation that is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt."

5. Article 3.2 of the ADR specifies that an ADRV may be established by "any reliable means [...]".

C. BLOOD DOPING AND THE ATHLETE BIOLOGICAL PASSPORT²

6. There are three 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 red blood cells); (ii) synthetic oxygen carriers (i.e., infusing blood substitutes such as a

² The propositions in this section of the Decision were not contested by the Athlete.

haemoglobin-based oxygen carrier ("**HBOC**") or perfluorocarbons ("**PFC**") to increase HGB 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).

7. rEPO is a Prohibited Substance and included in class "*S2. Hormones and related substances*" on the World Anti-Doping Code Prohibited List. Synthetic oxygen carriers and blood transfusions are Prohibited Methods under class "*M1. Enhancement of oxygen transfer*" on the World-Anti Doping Code Prohibited List.
8. The World Anti-Doping Agency developed and refined the concept of the ABP,³ which the IAAF formally introduced to its blood testing programme in 2009.
9. The ABP consists of an electronic record that compiles and collates a specific athlete's test results and other data over time and is unique to that particular athlete. The haematological module of the ABP records the values in an athlete's blood samples of haematological parameters that are known to be sensitive to changes in red blood cell production.
10. The values collected and recorded include haemoglobin concentration ("**HGB**")⁴ and percentage of immature red blood cells *viz.* reticulocytes ("**RET%**"). The ratio of the HGB and the RET% values is also used to calculate a further value, known as the OFF-score, which is sensitive to changes in erythropoiesis.
11. For example, if an athlete takes rEPO (thereby artificially simulating erythropoiesis) in the lead-up to a competition, there is an increase in the percentage of reticulocytes and then a rapid increase in the level of HGB. However, when the athlete suddenly stops taking the rEPO a number of days before the event to avoid detection at an in-competition doping control, the

³ WADA describes the "fundamental principle" of the ABP as being "*to monitor selected variables `biomarkers of doping` over time that indirectly reveal the effect of doping, as opposed to the traditional direct detection of doping by analytical doping controls*". See WADA Questions & Answers on the Athlete Biological Passport.

⁴ Haemoglobin is a molecular carrier in red blood cells transporting oxygen from the lungs to body tissue. As noted in paragraph 9.8 of the Arbitral Award in CAS 2010/A/2174 Francesco de Bonis v. CONI & UCI ("*de Bonis*"): "*The haemoglobin value shows the athlete's capacity to produce red blood cells and thus, his capacity concerning oxygen transfer. This value is - in the absence of specific pathological conductions - a very stable one and only subject to very minor changes.*"

stimulation of erythropoiesis will stop abruptly and, as a consequence, this will lead to a significant decrease of RET%. The combination of the high HGB and low RET% causes a high OFF-score.⁵

12. By way of further example, if an athlete extracts and then re-infuses his or her own blood, first the HGB decreases and the RET% increases, and then (when the blood is re-infused), the HGB increases and the RET% decreases.
13. The marker values from the blood samples collected in the ABP programme are fed into a statistical model, known as the "Adaptive Model". The Adaptive Model uses an algorithm that takes into account both (i) variability of such values within the population generally (i.e., blood values reported in a large population of non-doped athletes) and (ii) factors affecting the variability of the athlete's individual values (including gender, ethnic origin, age, altitude, type of sport, and instrument related technology).⁶
14. The selected biological markers are monitored over a period of time and a longitudinal profile that establishes an athlete's upper and lower limits within which the athlete's values would be expected to fall, assuming normal physiological conditions (i.e., the athlete is healthy and has not been doping) is created.
15. The Adaptive Model calculates the probability of abnormality of the sequence of values in the ABP profile. The upper and lower limits have been calculated, (as per the WADA ABP Operating Guidelines ("the **Guidelines**")) with a "specificity" of 99%. At the outset, the upper and lower limits are based on population norms

⁵ See the opinion of Professor d'Onofrio, as quoted in paragraph 114 of the arbitral award in CAS 2012/A/2773 IAAF v. SEGAS and Ms. Irini Kokkinariou ("*Kokkinariou*"): "...association of high haemoglobin with low reticulocytes is a strong evidence of artificial inhibition of reticulocyte formation caused by the suspension of an ESA [erythropoiesis stimulating agent] (or, less likely, by reinfusion of multiple blood bags). It is an indicator of the so-called OFF phase, which is seen when an ESA has been suspended one to three weeks before, such as is observed in doped athletes before important competitions. When the ESA is stopped, haemoglobin remains high for at least two to three weeks, depending on the dosage, which reticulocytes are reduced because the high haemoglobin inhibits endogenous EPO production."

⁶ See paragraph 85 of the Arbitral Award in CAS 2010/A/2235 v/ Tadej Valjavec & Olympic Committee of Slovenia ("*Valjavec*"): "This formula itself allows for variations which result either from ordinary biological variability or from imprecisions in sample analysis and provides a protection barrier of some fortitude against unwarranted investigation."

at this level of specificity, but over time, as samples are collected from the athlete, the limits become individualised based on the athlete's individual values.

16. The athlete becomes his/her own point of reference and each time a blood sample is recorded, the Adaptive Model calculates where the reported HGB, RET% and OFF-score values fall within the athlete's expected distribution. After each new test, a new range of expected results for the athlete is determined.⁷
17. It is now well settled in cases heard by CAS that the ABP model is a reliable means of establishing blood doping, i.e., the use of a Prohibited Substance or Prohibited Method.⁸ Another Panel of this Disciplinary Tribunal has previously reached the same conclusion.⁹
18. The IAAF implements the ABP in accordance with the ADR through a procedure designed to afford the athlete due process in establishing whether the doping regulations have been violated.¹⁰ In essence, the procedures consist of four steps, which were followed in the Athlete's case:

- (i) an assessment by the Adaptive Model to determine whether the athlete's blood profile is normal or abnormal;

⁷ See paragraph 9.8 of *De Bonis*: "The basic values for the calculation are based on the average values of the population which are part of the specifically designed software. With the first ABP values entered in the software this corridor basically reflects the individual specificities of the person being tested."

⁸ See for example paragraph 13 of *Kokkinariou*: "Systems which make use of these longitudinal profiles have evolved to become widespread and highly effective means of detecting EPO doping". Furthermore, in the case of *CAS 2014/A/3614 & 3561 IAAF & WADA v/ RFEA & Ms. Marta Dominguez ("Dominguez")*, the Panel stated that it was "convinced that the ABP Model is a reliable and a valid mean of establishing an ADRV." The Panel also noted that "numerous peer-reviewed applications have confirmed the ABP's reliability" (see paras. 278 and 279). Even more recently, the reliability of the ABP has been confirmed by the CAS in the following cases *inter alia*: *CAS 2016/O/4464 IAAF v/ ARAF & Sharmina*; *CAS 2016/O/4463 IAAF v/ ARAF & Ugarova*; *CAS 2016/O/4469 IAAF v/ ARAF & Chernova & CAS 2016/O/4481 IAAF v/ ARAF & Savinova-Farnosova*. See also *CAS 2018/O/5822 IAAF v. RUSAF & Mariya Ponomareva*, paragraph 86 "In a preliminary finding, the Sole Arbitrator accepts that the ABP is a reliable and accepted means of evidence to assist in establishing an anti-doping rule violation and feels comforted in this conclusion by CAS jurisprudence (see *CAS 2010/A/2174*, para. 9.8).

⁹ *IAAF v Bakulin SR/Adhocsport/95/2019* paras 51-52

¹⁰ See paragraph 8.10 of the ADR

(ii) if it is abnormal, an analysis of the athlete's ABP, together with other relevant information (e.g., whereabouts information and competition schedule) by three scientific experts who do not know the athlete's identity;

(iii) an opportunity for the athlete to challenge the expert's conclusions if the experts find indications of prohibited doping; and

(iv) the initiation of disciplinary proceedings against the athlete if the expert panel, upon consideration of the record (including the athlete's submissions) unanimously confirms its position that it is likely that the athlete had used a Prohibited Substance or Prohibited Method and it is highly unlikely that the profile is the result of any other cause.

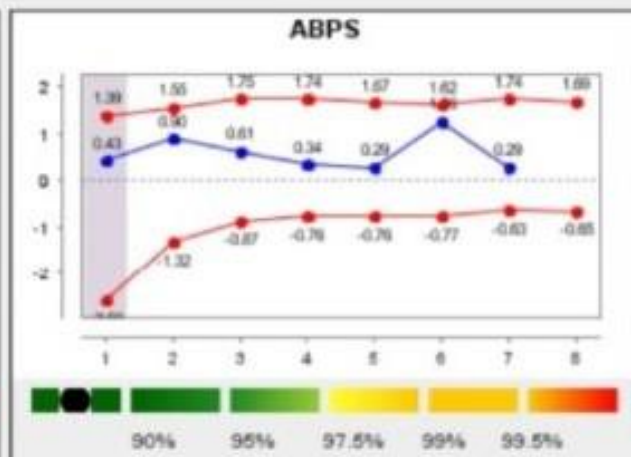
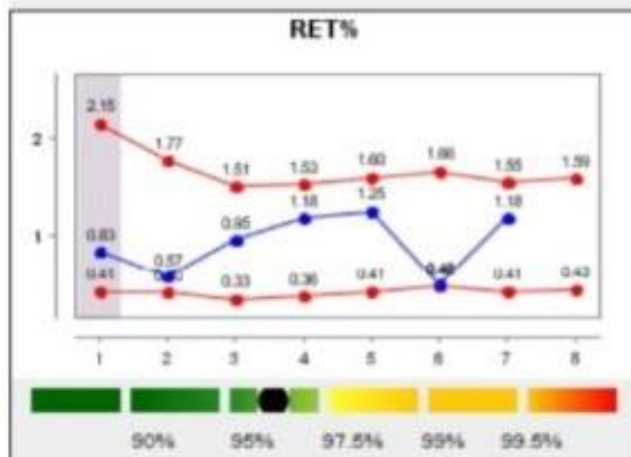
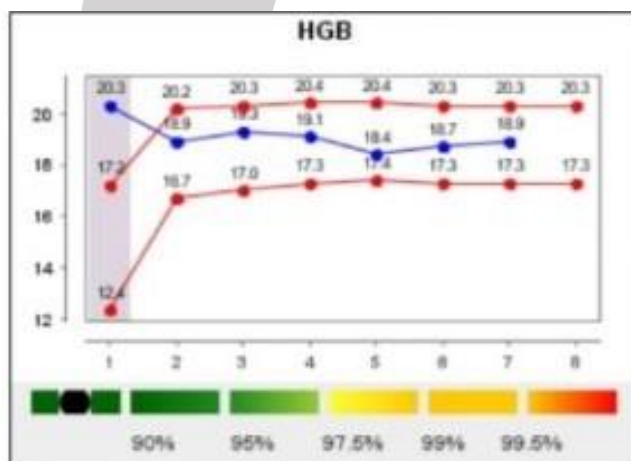
D. INITIAL REVIEW BY THE EXPERT PANEL

19. From 13 October 2018 to 25 December 2018 the IAAF collected seven (7) ABP blood samples from the Athlete.
20. Each of the samples was analysed by a WADA-accredited laboratory and logged in The Anti-Doping Administration & Management System ("ADAMS") using the Adaptive Model.
21. A summary table of the Athlete's ABP, showing the Athlete's HGB, RET% and OFF-scores for the seven (7) samples, is set out below:

No.	Date of Sample	HGB (g/dL)	RET%	OFF-score
1.	13 October 2018	20.3	0.83	148.30
2.	31 October 2018	18.9	0.57	143.70
3.	21 November 2018	19.3	0.95	134.52

No.	Date of Sample	HGB (g/dL)	RET%	OFF-score
4.	27 November 2018	19.1	1.18	125.80
5.	2 December 2018	18.4	1.25	116.90
6.	9 December 2018	18.7	0.48	145.40
7.	25 December 2018	18.9	1.18	123.80

22. 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:



23. The Athlete's ABP was submitted for review to a panel of experts comprised of three experts with knowledge in the field of sports science, laboratory medicine (assessment of quality control data, analytical and biological variability and instrument calibration), sports medicine and exercise physiology: Dr Paulo Paixao; Dr. Laura Garvican-Lewis and Dr Jakob Morkeberg (together the "**Expert Panel**").

24. The Expert Panel examined the Athlete's ABP (which was anonymised and identified by the code "**BP24DMR1**") and produced a joint opinion (undated) but received by the AIU on 25 February 2019 (the "**First Expert Panel Joint Opinion**").

25. The First Expert Panel Joint Opinion stated:

"In the automated analysis by the adaptive model, which determines whether fluctuations in the biomarkers of the Athlete Biological Passport are within the expected individual reference ranges for an athlete or not, the profile was flagged with a high haemoglobin concentration (Hb) and a high OFFscore in Sample 1, both values exceeding the respective upper 99.99% specificity level."

26. In its qualitative assessment of the ABP profile, the Expert Panel noted that the HGB values for the entire profile were "*extremely high*" and well above the upper limit of the reference populations for adult males and undoped athletes, even taking into account the Athlete's altitude residency. In its words:

"Considering the whereabouts information, and the information from the doping control form, it is evident that the athlete is an altitude resident, residing at an altitude of 2300 meters above sea level in Kenya. In general, the Hb values throughout the profile are extremely high (all values above 18.3 g/dL) and well above the upper limit of the reference populations for male adults and undoped athletes."

27. The Expert Panel noted that these HGB values reflected an increased HGB mass with "*massive erythrocytosis*" that exceeded pathological limits for the diagnosis

of polycythemia vera¹¹ or rare congenital erythrocytosis. The Expert Panel also noted that such conditions are typically associated with high percentage of reticulocytes counts (RET%) which are not observed in the Athlete's ABP profile; to the contrary, the Expert Panel considered the RET% values in the Athlete's ABP profile to be low.

28. The Expert Panel questioned the veracity of the information presented on the Athlete's Doping Control Forms ("**DCF**") from 13 October 2018 and 31 October 2018 concerning an alleged donation of blood given the values in the Athlete's ABP profile and his competition schedule.
29. The Expert Panel considered, however, that the Athlete's HGB values would have been even higher had the alleged blood withdrawal not occurred. In its words:

"In a clinical setting, the high values of hemoglobin would prompt an urgent diagnostic workup for polycythemia and urgent phlebotomy to reduce blood hyper-viscosity for the risk of cerebrovascular accidents and other types of thromboembolism. The information reported on the Doping Control Reports for Sample 1 and 2 indicates that previous phlebotomy of 450 mL of blood had been performed prior to sample collections, although there is conflicting information regarding the exact date of donation. Hence it is likely, if this information is correct, that the Hb would have been even higher if no phlebotomy had been performed. Nevertheless, the lack of erythropoietic response in Sample 1 and 2, which would typically manifest in an increased amount of immature red blood cells, reticulocytes, from the bone marrow, questions the correctness of this information. Additionally, it would be counterproductive in terms of performance to withdraw blood before a competition. Taking the competition schedule into consideration Sample 1 shows the highest Hb of the profile. The collection of this sample coincides with a competition in Ndalat, Kenya on the 13th of October 2018."

¹¹ A slow-growing blood cancer in which bone marrow produces too many red blood cells. These excess cells thicken the blood, slowing its flow and cause complications, such as blood clots, which can lead to a heart attack or stroke.

30. Referring to the reduction in RET% from Sample 1 (0.83%) to Sample 2 (0.57%), (the latter being collected three (3) days after the Athlete set a new world-record at the Valencia Half Marathon on 28 October 2018), the Expert Panel noted that the lower RET% value indicated bone marrow suppression due to a supraphysiological haemoglobin mass and therefore that the high HGB value in Sample 1 was more likely the result of blood doping. In its words:

"The following sample [Sample 2] collected 18 days later; 3 days after a competition in Valencia, Spain, shows bone marrow suppression evidenced by a low %ret indicating a supraphysiological hemoglobin mass. Hence it is more likely that the high Hb observed in Sample 1 is the result of blood doping resulting in a supraphysiological hemoglobin mass, which through a negative feedback mechanism reduces the release of reticulocytes into the circulation in the following weeks [...]."

31. Considering Sample 5 and Sample 6, collected around the time of the ADNOC Abu Dhabi Marathon on 7 December 2018, the Expert Panel also concluded that the increased RET% in Sample 5 (1.18% to 1.25%) on 2 December 2018 followed by the marked reduction in Sample 6 to the lowest value in the profile (0.48%) on 9 December 2018 (two days after competition) presented a pattern of bone marrow stimulation followed by a decrease in RET% close to competition that was a typical response to the administration of an ESA. In its words:

"In addition, five days prior to the next competition in Abu Dhabi there is a slight increase in %ret (sample 5, 1.25%) followed by a marked drop one week later (sample 6, 0.48%), hence two days after the competition. Again, the observed pattern of an increased bone marrow stimulation evidenced by an increase in the %ret and a subsequent decrease in %ret in close proximity to competition is a typical hematological response to the administration of an erythropoiesis-stimulating agent (ESA) e.g. erythropoietin [...]."

32. Having ruled out that the high HGB values in the profile could be the result of any physiological cause such as altitude training, hypoxic training or changes in plasma due to training/detraining, the Expert Panel also concluded that the

variation in RET% between Sample 5 and Sample 6 could not be explained by the short sojourn at sea level for the competition (4-7 December 2018) followed by a return to altitude two days prior to the collections of Sample 6 because the opposite effect (i.e., a decrease in RET%) would be expected. In its words:

"Further, it is unlikely that the variation in %ret, and resultant changes in OFF score (116.9 to 145.4) between samples 5 and 6 can be wholly explained by the short sojourn at sea level for competition, due to both the short time window (4 days) spent at sea level and subsequent return to altitude two days prior to collection, which typically exert opposite effects on %ret (6)."

33. Noting the magnitude of this change in the Athlete's RET% values in Sample 5 and Sample 6, the Expert Panel concluded:

"Indeed, the decrease in %ret is greater than 60% (percent change) – two-fold greater than typically observed within one week of descending from altitude [...]. Further, the probability of a male athlete recording an off score of 145, even in the worst case at altitude, is less than 1 in 10000 [...]."

34. The Expert Panel were of the *"unanimous opinion that in the absence of an appropriate physiological explanation, the likelihood of observing the described abnormalities assuming blood manipulation, namely the artificial increase of red cell mass using for examples ESAs, is high. On the contrary the likelihood of environmental factors or medical condition causing the described pattern is low"*.

35. The First Expert Panel Joint Opinion therefore concluded:

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

E. THE ATHLETE'S EXPLANATION FOR HIS ABNORMAL ABP PROFILE

36. On 25 February 2019, the AIU wrote to the Athlete on behalf of the IAAF notifying him of the abnormalities detected in his ABP profile and that the AIU was considering bringing charges against him. The Athlete was invited to provide explanations by 10 March 2019 for the abnormalities and was informed that any explanation would be sent to the Expert Panel for review before any charges were brought.
37. On 1 April 2019, the Athlete sent an e-mail to the AIU enclosing his explanations (the "**Athlete Explanation**") including that:
- (i) the Athlete had trained at altitude and then competed at altitude in Kenya on 13 October 2018 and that the Expert Panel had not explained or accounted for the significance of this training and competition at altitude in the First Expert Joint Opinion;
 - (ii) the analytical results for the quality control sample for Sample 1 were not reliable due to the HGB measurement of 610g/L against a target value of 62g/L;
 - (iii) the RET% values in Sample 5 and Sample 6 resulted from a physiological response to the Athlete's preparation for the competition and the immediate post-competition rest period;
 - (iv) the impact of a temperature of 9°C¹² for Sample 1 as a potential cause of error in the haematological values for this Sample.
38. The Athlete maintained that he had never used any Prohibited Substance or Prohibited Method and relied on his history of negative urine tests taken in the period of his ABP Review by the Expert Panel.

¹² See temperature recorded on the Anti-Doping Sample Reception Procedure Form at page 6 of 19 to the LDP for Sample 1 (257710).

F. THE SECOND EXPERT PANEL JOINT OPINION

39. On 25 April 2019, the Expert Panel issued a joint report that considered and dismissed the purported explanation set out in the Athlete Explanation (the **"Second Expert Panel Joint Opinion"**).
40. The Second Expert Panel Joint Opinion considered the technical issues raised in the Athlete's explanation as set out above.
41. As to the reliability of the analytical results, the Expert Panel noted that the HGB value of 610g/L referred to by the Athlete was not obtained from his Sample, but were the results of a proficiency test designed to ensure the reliability of the laboratory results by comparing data from a quality control sample analysed in the laboratory against data from the same quality control sample analysed in other laboratories.
42. Moreover the Expert Panel produced documentation from the laboratory confirming that the value "610g/L" was a recording mistake made by the analysing laboratory when converting the measured amount (6.1g/dL) to g/L and enclosed the underlying data from the laboratory's analysis which confirmed that the HGB measured in the quality control sample for Sample 1 was 6.1g/dL (i.e., 61g/L) against a target of 62g/L.
43. The Expert Panel also dismissed the Athlete's explanation for the variation in RET% between Sample 5 and Sample 6 being caused by his physiological response to preparation for competition and the immediate post-competition rest period. In its words:

"However, as detailed in our previous report "Evaluation of Blood Profile BP24DMR1 - Joint Expert Opinion", the increase in the reticulocyte% and the subsequent decrease in close proximity to competition is a typical hematological response to the administration of an erythropoiesis-stimulating agent (ESA), and the probability of a male athlete recording an off score of 145, even in the worst case at altitude, is less than 1 in 10,000 [...]."

44. As to the Athlete's argument that the temperature of Sample 1 on receipt by the laboratory was a contributory factor to the high level of HGB measured, the Expert Panel noted that this temperature was within the expected range for the transport of blood samples and that a sample would be stable at that temperature for up to 48 hours:

"The athlete mentioned the temperature of 9°C as a potential cause of analytical error. Actually, this temperature in [sic] within the expected range for the transport of samples, and further, a sample transported at 9°C is stable for up to 48 hours [...]."

45. The Second Expert Panel Joint Opinion accordingly confirmed the First Expert Panel Joint Opinion in the following terms:

"Conclusion

Therefore, considering the points raised in the document 'Athlete's Explanation BPID BP24DMR1' related to the ABP haematological profile BP24DMR1, we confirm our previous opinion that the features of the profile are typical of blood doping e.g. the use of an erythropoiesis stimulating agent. On the other hand, we find it highly unlikely that the profile is the result of analytical or confounding factors."

G. NOTICE OF CHARGE AND INITIATION OF DISCIPLINARY PROCEEDINGS

46. On 26 April 2019, the AIU issued the Athlete with a Notice of Charge by e-mail and in person in London, UK. The Notice of Charge informed the Athlete that the Expert Panel had maintained its unanimous opinion that it was highly likely that a Prohibited Substance or Prohibited Method had been used and highly unlikely that the abnormal variations in the Athlete's ABP were the result of any other cause.
47. The Notice of Charge confirmed the imposition of a Provisional Suspension upon the Athlete pending the determination of the charge for an alleged violation of

the IAAF Anti-Doping Rules and notified the Athlete of his right to admit the charge and/or to request a hearing before the Disciplinary Tribunal (“the **Tribunal**”) within 10 days.

48. On 4 May 2019, the Athlete sent a response to the Notice of Charge which repeated the arguments that the Athlete had set out in the Athlete Explanation (the “**Athlete’s response**”). The Athlete confirmed that he would not admit the charge and that he had no information to provide to the AIU for the purposes of Article 10.6.1.
49. The AIU replied to the Athlete the same day acknowledging his response and stating that he had until 6 May 2019 to confirm how he wished to proceed with his case. The Athlete responded requesting further time to respond to the Notice of Charge.
50. On 10 May 2019, the AIU wrote to the Athlete confirming receipt of his e-mail requesting further time to respond and provided the Athlete until 17 May 2019 to decide whether he would like to admit the charges and accept the mandatory consequences set out in the Notice of Charge or confirm that he wished for the charges and/or the consequences to be determined by the Tribunal.
51. On 15 May 2019, the Athlete wrote to the AIU by e-mail including *inter alia* that he wished for the charge and the consequences to be determined by the Tribunal.

H. THE HEARING

52. The hearing was held at the Sport Resolutions’ offices in London, UK, on 22 October 2019 before the Tribunal, composed of Michael J Beloff QC (Chair), Paul Ciucur and Dennis Koolgaard assisted by Kylie Brackenridge of Sport Resolutions.
53. The following were heard as witnesses: The Athlete on his own behalf, and Dr Morkeberg for the IAAF.

54. Mr Ross Wenzel, assisted by Mr Tony Jackson (AIU's Case Manager) appeared for the IAAF.
55. Mr Simon McCann (instructed by Mr Simon Eastwood) appeared for the Athlete pro bono, for which the Tribunal expresses its appreciation. The Athlete was also assisted by Mr Rugut, in Kenya, who acted as interpreter for the Athlete during the hearing.

I. THE IAAF'S POSITION

56. The IAAF's position as set out in the Notice of Charge, its brief filed on 31 July 2019 and its Counsel's oral submissions at the hearing is in essence as follows:
57. The Athlete's ABP profile constitutes clear evidence that the Athlete has committed an anti-doping rule violation in breach of Article 2.2 of the ADR. In particular:
 - (i) the "*extremely high*" HGB values in the profile, in particular in Sample 1, (collected prior to a competition in Valencia in which the Athlete established a new world-record in the half marathon) is characteristic of a supraphysiological increased circulating red-cell mass;
 - (ii) the increase in RET% in Sample 5 followed by the decrease in RET% in Sample 6 of around 60% at the time of the Abu Dhabi marathon is not explained by the Athlete's training and rest following the competition and is two-fold greater than the change typically observed within one week of descending from altitude;
 - (iii) the probability of a male athlete recording an OFFscore of 145, even in the worst case at altitude, is less than 1 in 10000 (i.e., 99.99% specificity).
58. The Athlete has purported to provide explanations for these abnormalities in his profile, viz. the analytical reliability of the data for Sample 1 and his training, competition and rest in relation to the RET% values in Sample 5 and Sample 6.

59. As to the reliability of the analytical data, the Expert Panel observed that the HGB values reported by the laboratory in the quality control data were 61g/L against a target of 62g/L, which confirmed that the analytical equipment was performing properly. The analytical results are demonstrably reliable.
60. In addition, the Expert Panel dismissed the Athlete's assertion that the temperature of Sample 1 measured on receipt by the laboratory (9°C) could have impacted the reliability of the HGB measurement of 20.3g/dL. There is no evidence that there are any temperature anomalies that could have had a confounding effect on the haematological values for Sample 1.
61. Furthermore, the Expert Panel has dismissed the Athlete's arguments about the RET% values in Sample 5 and Sample 6:
- (i) the decrease RET% values cannot be explained by the Athlete's short sojourn to sea level for competition, due to both the short time period of four (4) days and the return to altitude two days prior to collection of Sample 6.
 - (ii) the magnitude of the reduction in RET% is two-fold greater than is typically observed within one week of descending from altitude.
62. In view of the foregoing and, in particular, on the basis of the First Expert Panel Joint Opinion and the Second Expert Panel Joint Opinion, the AIU (on behalf of the IAAF) submits that the ABP profile of the Athlete constitutes reliable evidence of blood doping.

J. THE ATHLETE'S POSITION

63. The Athlete's position as set out in the Athlete Explanation dated 1 April 2019, the Athlete's response dated 4 May 2019, his emails to AIU dated 6 and 15 May 2019, his brief filed on 23 September 2019, and his Counsel's oral submissions at the hearing is in essence as follows:

64. The Athlete has been tested throughout his competitive career with uniformly negative results.
65. The Athlete lives and has always lived in Nandi County, where the typical elevation is between 2,000 and 2,300m above sea level. He trains and often races at such altitudes.
66. In 2018, after the Copenhagen Half Marathon (16 September 2018) and prior to the Valencia Half Marathon (28 October 2018), the Athlete raced in Nakuru (elevation 1,850m) twice and in the Ndalat-Gaa Cross Country on 13 October 2018. It was after the Ndalat-Gaa race that Sample 1 was taken.
67. The Athlete travelled to Valencia on or about 25 October 2018, competed in the Half Marathon on 28 October 2018, before returning to Kapsabet on 30 October 2018. He was tested for Sample 2 in his home on 31 October 2018.
68. In total, therefore, the Athlete had been at altitude for almost a month prior to Sample 1 being taken, then spent a further 12 days at altitude, before spending no more than 6 days at sea level and returning to altitude almost immediately thereafter.
69. The Athlete contends that the exposure to high altitude (and particularly high altitude training of the sort of duration and intensity he underwent) will have effects on haemoglobin, elevating the levels above the norm and any "reference population". The effect of short periods spent at sea level on a person in the Athlete's position, undergoing the same regime has not been the subject of specific study.
70. The IAAF's case is (i) founded entirely on an assumption – that the variations in the OFF-scores and RET%*s* are "typically" those seen in cases of blood doping (though there is no obvious pattern to the RET% fluctuations); (ii) devoid of any proper consideration of the effects on the prolonged exposure to altitude training, followed by the repeated "short sojourns" to sea level (the "key

features relied on”) followed by further altitude exposure.¹³ On the footing that the HGB levels are consistently high, and absent any single piece of evidence that explains the physiology, the Expert Panel concludes that there must have been blood doping but without any analysis at all of the effect of the key features relied on (“the **Athlete’s main argument**”).

71. Additionally, the IAAF is not confident in the assumptions it made, see e.g.:

*“Further, it is **unlikely** that the variation in %ret, and resultant changes in OFF score (116.9 to 145.4) between samples 5 and 6 **can be wholly explained** by the short sojourn at sea level for competition [...]” [emphasis added] (First Joint Expert Opinion, undated, page 3 of 4)*

72. Dr Morkeberg was similarly said to be not confident in his oral testimony.

73. The Athlete has also raised an issue with the validity of the analysis given what he has previously stated were anomalies with the machines used for testing and the storage temperature of Sample 1 (“the **Athlete’s subsidiary argument**”).¹⁴

74. The Athlete maintains his innocence and the Tribunal should accept his testimony.

K. ANALYSIS

75. The Tribunal takes note first of the Athlete’s consistent denial that he has ever used EPO and second of the fact that he has never tested positive for any prohibited substance.

¹³ For example, in paragraph 43 of the IAAF Brief, the Expert Panel is said to have ruled out the effects of altitude in contributing to the high HGB values, but no consideration is given to the unique features of this Athlete’s case. The case against the Athlete is said to be made solely by reference to an undefined population of adult males and undoped athletes – there is no reference to those in a similar position to the Athlete himself.

¹⁴ The argument was not pursued by the Athlete’s counsel, but also not explicitly withdrawn.

76. As to the first it has been frequently, if regretfully, observed that denial is the reaction of the innocent and guilty alike when confronted with charges of ADRVs: Moreover "*Common lawyers, as distinct from their civilian counterparts, traditionally place emphasis on the advantages of seeing and hearing witnesses, preferably in proximity; but, if only because experience tells that the most seemingly honest witnesses may be in fact accomplished liars and vice-versa, the advantages can be exaggerated.*"¹⁵

[...]

The Tribunal therefore endorses the proposition that "*Any proper adjudicative exercise axiomatically requires an holistic evaluation of all relevant and admissible evidence.*"¹⁶ Denials of guilt in particular must be assessed in context.

77. As to the second, negative urine tests do not preclude the administration of a prohibited substance such as EPO. Indeed, the very purposes of the ABP was to add to the mechanisms available to anti doping authorities to prove ADRVs.

78. The Tribunal cannot accept the Athlete's statement that all four of his explanations, in letter or email, were the product of his own untutored analysis or provided without the benefit of input from another person or persons. They could not recognize the Athlete, not fluent in English and without any background in medicine, biology or chemistry – and none was claimed by or for him – as the author of those detailed letters. However, apart from the fact that his credibility was undermined by his adherence to an untenable position, the Tribunal considered the authorship issue of little weight. Either the points made in the explanations were good, or they were not. It was their merit (or lack thereof) rather than their generation with which the Tribunal was concerned.

79. The Tribunal was in this context more influenced by the Athlete's claim that he had been a blood donor at a material time. His evidence both as to the date and

¹⁵ See the discussion in 'The Judge as Juror', Tom Bingham, Current Legal Problems, Vol.38, at pages 1-27, particularly at pages 9-12.

¹⁶ IAAF v Glory Nathaneil SR/AdHocSport/215/2018, para. 63)

donee of such alleged donations was inconsistent. In the Doping Control Form for the Sample collected on 13 October 2018, the Athlete remarked that he had given a blood transfusion of 1 pint to a sick friend in the hospital "10 days ago". In the Doping Control Form for the Sample collected from the Athlete on 31 October 2018, the Athlete however indicated that he had donated blood "around three months ago" and that it had been "around August", without identifying the donee of the transfusion. During the hearing, when confronted with the inconsistency of these declarations, the Athlete testified that the reference to "10 days ago" was correct and that he had donated blood to his sister who was pregnant at the time. The Tribunal finds that these inconsistent declarations cannot be squared with each other and doubts that a sister would be described merely as a friend in any language.

80. The Athlete produced, despite requests, no documentation to corroborate his claim, and his explanation that the Kabsabet County Hospital was too short staffed on his visits to assist him was unconvincing. The Tribunal was constrained to conclude that this unsubstantiated claim of blood donation was an attempt to muddy the waters by reference to an event which could have affected the analysis of his blood samples (in fact, as the expert panel noted,¹⁷ had he been such a donor his results would have been even more atypical but this is something of which he himself as an inexperienced layman would have been unaware).
81. The Athlete was disadvantaged by his inability through lack of means, to adduce any expert evidence in support of his case as to the cause of the diverging results of his samples. The Tribunal will not speculate as to why he did not (or could not) call as a witness the person who assisted him in his several communications with the IAAF. The Tribunal must perforce consider only the relevant and admissible evidence that it in fact had before it and nothing else.
82. The Tribunal recognized that it was for the IAAF to prove its case, not for the Athlete to disprove it. But the Tribunal was not persuaded by the submission that no specific research had been done into the effects on the blood of the

¹⁷ See paragraph 29 above.

movement of an athlete who lived and trained at altitude with short intermittent sojourns at sea level. Dr Morkeberg described studies of Kenyan athletes and Colombian cyclists whose living, training and competitive patterns were of a similar nature to those of the Athlete. It was suggested by the Athlete that his circumstances were "*unique*" or "*virtually unique*" but the Tribunal found that epithet unwarranted.

83. In the Tribunal's view ,given the thrust of the learning unsupportive of the Athlete's case, on the effects of altitude and departure from it on such sportspersons, it was for the Athlete to identify with precision how his case could be distinguished from theirs and in the Tribunal's view he failed to do so. He would additionally have needed expert evidence to illuminate the consequences of that distinction which, as noted, he did not have.
84. The Tribunal also recognised that the IAAF had to prove its case to the standard of comfortable satisfaction. 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. likelihood.
85. The Tribunal is hesitant to accept that Sample 1 in the Athlete's ABP comprised an Atypical Passport Finding ("**ATPF**"), justifying an initial review and evaluation by a single Expert based on the information available at that time (cf. Article 8.10(b) of the ADR), because the upper and lower limits within which the Athlete's values would be expected to fall for Sample 1, assuming normal physiological conditions (i.e., the athlete is healthy and has not been doping) had not yet been adjusted to the Athlete's individual values, but were merely based on population norms. The Athlete therefore had not yet formed his own point of reference as the Adaptive Model purports to do.
86. Be it as it may, the Tribunal is content to accept that, based on Article L.2.2.4 of the Guidelines, a "*Passport may also be sent for Expert review in the absence of an ATPF*" in case it shows any "*abnormal levels and/or variations of Markers*", which the Tribunal considers to be the case here.

87. The putative absence of an ATPF in the Athlete's ABP would not, however, be entirely irrelevant in a case where there is an ATPF present, the standard to be applied to come to the conclusion that there is "likely doping" is 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*" (cf. Article L.2.2.5.1 of the Guidelines), whereas in a case where there is an absence of an ATPF, the standard to be applied to come to the conclusion that there is "Likely doping" is that it must be "*highly likely that the Passport is the result of the Use of a Prohibited Substance or Prohibited Method and that it is highly unlikely that the Passport is the result of a normal physiological or pathological condition*" (cf. Article L.2.2.5.2 of the Guidelines). Accordingly, in the absence of an ATPF, the standard to be applied to come to a conclusion of "Likely doping" is higher.
88. The Tribunal notes again¹⁸ that the Expert Panel in fact applied such higher standard, as it concluded in the First Expert Panel Joint Opinion that it was "highly likely" that a Prohibited Substance or Prohibited Method was used, while concluding in the Second Expert Panel Joint Opinion that it was "highly unlikely" that the Athlete's profile was the result of analytical or confounding factors. Therefore, there was no need to explore further whether Sample 1 comprised on ATPF, since even if it did not, the regulatory requirements were satisfied.
89. Nor, despite Mr McCann's skilful cross-examination, did he elicit from Dr Morkeberg any concession that he was not comfortably satisfied with his and his colleagues conclusions or any retreat from or qualification of the adjectives deployed in their reports as to the degree of probability applied in them. Mr McCann appeared to the Tribunal in this context to be clutching at straws; and while bricks cannot, as the saying has it, be made without straws, straws are not in themselves sufficient to make bricks.
90. When questioned by the Tribunal as to how the appropriate standard of proof could have been met in this case Mr McCann responded that, in his submission more convincing expert testimony would be required. However, in the Tribunal's

¹⁸ see paragraph 83

opinion¹⁹, the Athlete's ABP represents - based on long-standing practice and case law, reflective of Article 3.2 of the IAAF Anti-Doping Rules in force - itself a reliable method of establishing facts and presumptions.

91. In the Tribunal's view, accordingly, the Athlete's ABP profile constitutes *prima facie* evidence that the Athlete has committed an anti-doping rule violation in breach of Article 2.2 of the ADR. It is telling that the Athlete's passport was considered blind by three independent experts from different but related disciplines; they did not know who the Athlete was and they did not know each other's opinions when each first opined that the Athlete's ABP constituted likely evidence of doping.
92. Moreover, the Expert Panel has unanimously confirmed its view of likely blood doping on two occasions after the Athlete's Explanations (albeit, not additionally after the Athlete's response).
93. The Tribunal noted the particular emphasis placed by the Experts on the high HGB values in the first sample and the sharp decline in RET% between the first and second samples and the fifth and sixth samples and the conclusions drawn, that this was indicative of blood doping.²⁰
94. The Tribunal was impressed by the coincidence of the change relied on by the experts in HGB and RET% with the Athlete's participation in two important races in his schedule, the Valencia half marathon and the Abu Dhabi Marathon. His case fits the template of the use of rEPO in the run up to races of this kind followed by its abandonment shortly before the race so to avoid detection (the half life of EPOs being so short). While Mr Wenzel did not suggest that this coincidence was essential to his case- reminding the Tribunal since EPO can be used to assist training and not only competition- this Tribunal found this coincidence to be highly significant in the primary, not the secondary sense of that word.

¹⁹ see again paragraph 88

²⁰ See paragraphs 30-35 above. (where the Expert Panel concluded that the pattern of an increase in RET% between Sample 5 and 6 and the subsequent decrease in RET% in close proximity to a competition is a typical hematological response to the administration of ESAs.)

95. Finally, the Tribunal considers that the Expert Panel addressed (and dismissed) the Athlete's main argument (see paragraphs 26, 32 and 43 above). The Athlete's subsidiary argument, in so far as pursued, was also dismissed by the Expert Panel ²¹ (and lacked any evidential foundation).

L. CONSEQUENCES FOR THE ANTI-DOPING RULE VIOLATIONS

a. PERIOD OF INELIGIBILITY

96. Article 10.2 of the ADR provides the consequences to be imposed for anti-doping rule violations under Article 2.2 as follows:

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

The period of Ineligibility to be imposed for an Anti-Doping Rule Violation under Article 2.1, 2.2 or 2.6 that is the Athlete or other Person's first anti-doping rule violation shall be as follows, subject to potential reduction or suspension pursuant to Article 10.4, 10.5 or 10.6:

10.2.1 The period of Ineligibility shall be four years where:

(a) The Anti-Doping Rule Violation does not involve a Specified Substance, unless the Athlete or other Person can establish that the Anti-Doping Rule Violation was not intentional."

97. The period of Ineligibility shall therefore be four years in circumstances where the ADRV is intentional and constitutes an athlete's first violation of the ADR.

98. The Athlete has failed to meet his burden to establish that his violation was not intentional (Indeed, unless an Athlete had injections administered when he or she was unconscious, injections must necessarily be intentional.) He must therefore be subject to the mandatory period of Ineligibility of four years in accordance with Article 10.2.1(a) of the ADR subject to credit against the period

²¹ see paragraphs 42 and 44 above

of Ineligibility for the period of Provisional Suspension served since 26 April 2019 pursuant to Article 10.10.2(a) of the ADR.

99. The period of Ineligibility will commence on the date of the Tribunal's award

b. DISQUALIFICATION OF RESULTS AND OTHER CONSEQUENCES

100. The AIU submits that the first evidence of an ADRV in the Athlete's ABP is in Sample 1 (13 October 2018).

101. Pursuant to Article 10.8 of the 2018 IAAF Rules, any competitive results obtained by the Athlete between this date and the date of his Provisional Suspension on 26 April 2019 must (unless the Tribunal determines that fairness requires otherwise) be disqualified with all resulting consequences, including the forfeiture of any medals, titles, ranking points and prize and appearance money. No submission was made that fairness required otherwise, and the Tribunal can see no reason why it should.

102. The AIU has absolute discretion (and the Tribunal has discretion where fairness requires) to establish an instalment plan for repayment of prize money forfeited pursuant to the above and/or for payment of any costs awarded by the Tribunal. The Tribunal is content to leave to the AIU the establishment of such an instalment plan.

103. Given that its decision has deprived the Athlete of his only known source of regular income for several years, the Tribunal will order only a token sum of USD 500 by way of costs to be paid by the Athlete to the IAAF to reflect the latter's forensic success.

ORDER

104. In the light of the foregoing the Tribunal:

- (i) finds that the Athlete has committed an anti-doping rule violation pursuant to Article 2.2 of the 2018 IAAF Rules for abnormalities in his ABP;
- (ii) imposes a period of Ineligibility of four (4) years upon the Athlete for the anti-doping rule violation, commencing on the date of the Tribunal's Award, subject to credit for the period of Provisional Suspension imposed on the Athlete from 26 April 2019 until the date of the Tribunal's Award against the total period of Ineligibility;
- (iii) orders the disqualification of any results obtained by the Athlete between 13 October 2018 and 26 April 2019 with all resulting consequences including the forfeiture of any titles, awards, medals, points and prize and appearance money pursuant to Article 10.8 of the ADR;
- (iv) awards the IAAF a contribution of USD 500 to its legal costs.

Michael J Beloff QC

Michael J Beloff QC (Chair)

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05 November 2019



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