

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

Before:

The Honorable L. Yves Fortier, CC, QC

BETWEEN:

International Association of Athletics Federations (IAAF)

Anti-Doping Organisation

-and-

Sarah Chepchirchir

Respondent

DECISION OF THE DISCIPLINARY TRIBUNAL

I. INTRODUCTION

1. The Claimant, the International Association of Athletics Federation ("IAAF"), is the international federation governing the sports of athletics.
2. The Respondent, Ms. Sarah Chepchirchir (the "Athlete"), is a long-distance runner from Kenya and an International-Level athlete pursuant to Article 1.9 of the IAAF Anti-Doping Rules¹.

¹ Article 1.9:

APPLICABLE LAW

1. Applicable Rules

3. This case relates to an asserted anti-doping rule violation (“ADRV”) under Article 2.2 of the 2018 IAAF Anti-Doping Rules (the “2018 IAAF Rules”). The Claimant submits that the abnormal features of the Athlete’s Biological Passport (“ABP”) evidence this ADRV.
4. The 2018 IAAF Rules, effective from 6 March 2018, are applicable, as they were in force at the time that the abnormal samples were collected.
5. The Athletics Integrity Unit (the “AIU”) was delegated the implementation of the Anti-Doping Rules, including results management, hearings, sanction and appeals.²
6. The 2018 IAAF Rules apply to athletes who are members of a National Federation as well as those who participate in IAAF competitions.³

Within the overall pool of Athletes set out above who are bound by and required to comply with these Anti-Doping Rules, each of the following Athletes shall be considered to be an International-Level Athlete (“International-Level Athlete”) for the purposes of these Anti-Doping Rules and therefore the specific provisions in these Anti-Doping Rules applicable to International-Level Athletes shall apply to such Athletes.

² Article 1.2 of the 2018 IAAF Rules provides:

In accordance with Article 16.1 of the IAAF Constitution, the IAAF has established an Athletics Integrity Unit (“Integrity Unit”) with effect from 3 April 2017 whose role is to protect the Integrity of Athletics, including fulfilling the IAAF’s obligations as a Signatory to the Code. The IAAF has delegated implementation of these Anti-Doping Rules to the Integrity Unit, including, but not limited to the following activities in respect of International-Level Athletes and Athlete Support Personnel: Education, Testing, Investigations, Results Management, Hearings, Sanction and Appeals. The references in these Anti-Doping Rules to the IAAF shall, where applicable, be references to the Integrity Unit (or to the relevant person, body or functional area within the Unit).

³ Article 1.7 provides:

These Anti-Doping Rules also apply to the following Athletes, Athlete Support Personnel and other Persons, each of whom is deemed, by condition of his membership, accreditation and/or participation in the sport, to have agreed to be bound by these Anti-Doping Rules, and to have submitted to the authority of the Integrity Unit to enforce these Anti-Doping Rules:

- a) *all Athletes Athlete Support Personnel and other Persons who are members of a National Federation or of any affiliate organisation of a National Federation (including any clubs, teams associations or leagues);*
- b) *all Athletes, Athlete Support Personnel and other Persons participating in such capacity in Competitions and other activities organized, convened, authorized or recognized by (i) the IAAF (ii) any National Federation or any member or affiliate organization of any National Federation (including any clubs, teams, associations or leagues) or (iii) any Area Association, wherever held;*
- c) *all Athlete Support Personnel and other Persons working with, treating or assisting an Athlete participating in his sporting capacity; and any other Athlete, Athlete Support Person or other*

7. In 2018, the Athlete was a member of Athletics Kenya, an IAAF Member Federation. She also competed in the Shanghai International Marathon on 18 November 2018. She is therefore subject to the 2018 IAAF Rules.

2. Jurisdiction for Results Management

8. The AIU is conferred jurisdiction for results management according to Article 7.2 of the 2018 IAAF Rules, including:

7.2.2 For investigations conducted by the Integrity Unit in accordance with Articles 7.3, 7.4 and 7.5 where the IAAF is the Testing Authority or has been delegated results management authority.

9. Article 7.5 of the 2018 IAAF Rules provides for the review of Adverse Passport Findings:

Results management in respect of the Athlete Biological Passport programme of the Integrity Unit shall be conducted in accordance with the procedures set out in the Anti-Doping Regulations. At such time as the Integrity Unit is satisfied that an Anti-Doping Rule Violation has been committed, it shall send the Athlete a Notice of Charge in accordance with Article 8. Other Anti-Doping Organisations shall be notified as provided in Article 14.1.2.

10. The 2018 IAAF Anti-Doping Regulations provide that the IAAF (or the Athlete Passport Management Unit ("APMU")), has responsibility for results management in this matter.⁴

Person who, by virtue of an accreditation, licence or other contractual arrangement, or otherwise, is subject to the jurisdiction of the IAAF, of any National Federation (or any member or affiliate organization of any National Federation, including any clubs, teams, associations or leagues) or of any Area Association, for purposes of anti-doping.

⁴ IAAF Anti-Doping Regulation, paras 8.8 - 8.50.

3. Jurisdiction of the Disciplinary Tribunal

11. The Disciplinary Tribunal is constituted in accordance with Article 1.5 of the 2018 IAAF Rules to determine alleged ADRVs under the rules.
12. The Tribunal has jurisdiction over all matters in which an ADRV is asserted by the AIU against an International-Level Athlete, pursuant to Article 8.1(a).
13. The Claimant submits that the Tribunal therefore has jurisdiction to hear and determine the alleged ADRV against the Athlete, as the Athlete is an International-Level Athlete.
14. The Athlete has not challenged the application of the Rules, the jurisdiction of the AIU or that of the Disciplinary Tribunal.
15. Accordingly, I find that the Disciplinary Tribunal has jurisdiction in this matter.

BURDEN AND STANDARD OF PROOF

16. The IAAF bears the burden of establishing that an ADRV has been committed, pursuant to Article 3.1 of the 2018 IAAF Rules:
 - 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.
17. In brief, the IAAF 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.*⁵

18. Article 3.2 provides that an ADRV may be established by "*any reliable means [...]*". The Claimant submits that the Athlete Biological Passport is one such reliable means.

19. The Claimant submits that it has discharged its burden and that the Panel should be comfortably satisfied that the Athlete committed an ADRV.

20. The Athlete submits, to the contrary, that the Claimant has not discharged its burden and that she has not have committed an ADRV.

BLOOD DOPING AND ATHLETE BIOLOGICAL PASSPORT

21. Recombinant human erythropoietin, better known through its recognized acronym "rEPO", is a method for blood doping. It is administered by injection to trigger erythropoiesis, ie. to stimulate red blood cells. It is listed as a class S2 prohibited substance and a class M1 prohibited method in the World-Anti-Doping Code Prohibited List. (emphasis added)

22. The Athlete Biological Passport ("ABP") was developed by the World Anti-Doping Agency ("WADA") and introduced by the IAAF in 2009. It is 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*".⁶

23. Specific values are collected and recorded in the ABP. They include haemoglobin concentration ("HGB") and percentage of immature red blood cells viz. reticulocytes ("RET%"). The ratio of these two values, the HGB and the RET%, is then calculated to produce the OFF-score, which is sensitive to changes in erythropoiesis.

⁵ See Transcript p. 4.

⁶ IAAF Brief, para 26.

24. The ABP's purpose, as described by WADA, is *"to monitor selected variables (...) over time that indirectly reveal the effect of doping, as opposed to the traditional direct detection of doping by analytical doping controls"*.⁷

25. Values from the blood samples collected for the ABP are logged into the *"Adaptive Model"*. Its algorithm takes into account (i) the variability of these values within the general population and (ii) factors affecting individual values, such as gender, ethnic origin, age, altitude, type of sport, and instrument related technology.⁸

26. These markers are monitored over a certain time to establish the athlete's upper and lower limits, within which its values are expected to fall. While the limits are initially set based on the general population, they become unique to the Athlete's values over time.

27. The review process for the determination of an ADRV, provided in paragraph 8.10 of the 2018 IAAF Anti-Doping Regulations and summarized by the Claimant as a four-step process, was followed in the present case:

- i. the assessment of the Adaptive Model to determine whether the blood profile is normal or abnormal;
- ii. if abnormal, an anonymous analysis of the athlete's ABP is conducted by three experts;
- iii. if the experts find indications of an ADRV, the athlete is afforded an opportunity to provide an explanation; and
- iv. if the experts confirm their first report after considering the athlete's explanations and the entire record, disciplinary proceedings against the athlete are initiated.

⁷ IAAF Brief, para 25.

⁸ IAAF Brief, para 30.

INITIAL REVIEW BY THE EXPERTS: FIRST JOINT REPORT

28. The Athlete was included in the IAAF Registered Testing Pool on 10 January 2017.⁹

29. According to the Claimant, fifteen blood samples were collected from the Athlete for her ABP, of which fourteen were valid. They were analyzed and logged in the Adaptive Model, between 23 February 2017 and 12 September 2018.¹⁰

30. The Athlete's ABP profile is as follows¹¹:

	Date of Sample	HGB (g/dL)	RET%	OFF-score
1.	23 February 2017	15.0	0.79	96.67
2.	21 March 2017	13.5	1.41	63.80
3.	2 April 2017	13.9	1.23	72.46
4.	7 September 2017	15.3	1.17	88.10
5.	22 November 2017	13.0	1.71	51.50
6.	11 December 2017	14.5	1.66	67.70
8.	17 March 2018	14.9	1.70	70.80
9.	11 April 2018	15.7	3.07	51.90
10.	25 April 2018	16.3	2.69	64.60
11.	21 May 2018	15.2	1.09	89.36
12.	6 June 2018	15.7	1.47	84.30
13.	1 July 2018	15.5	1.40	84.01
14.	8 August 2018	15.9	1.03	98.11
15.	12 September 2018	15.0	1.06	88.23

⁹ IAAF Brief, para 14, Exhibit 2.

¹⁰ IAAF Brief, para 39. Sample 7 was considered invalid, Exhibit 6. The profile can be found at pp. 235-236 of the Hearing bundle.

¹¹ IAAF Brief, para 39. See also Hearing bundle pp. 235-236.

31. A panel of experts (the “Expert Panel” or “the experts”) was then asked to anonymously review the Athlete’s ABP. The Expert Panel’s first joint report (the “First Report”) noted multiple abnormalities in the values.¹²

32. Samples 9 and 10 were flagged for high RET% and high HGB, suggesting ongoing erythropoietic stimulation, of a higher degree than expected on the basis of altitude 1-2 (she appears to live at 1900m and had stayed at Kapsabet for several months). High haemoglobin and high reticulocytes seen in the same samples is contrary to the physiological regulation, and therefore provides evidence of additional erythropoietic stimulation.¹³

33. The report noted that the decrease in RET% between Sample 10 and Sample 11 was consistent with an “Off-phase”.

34. The report also found low and high OFF-scores in Samples 5 and 14.

35. The experts found that the likelihood of the abnormalities due to blood manipulation such as rEPO was high, and that environmental or medical factors which would have caused them were low. The experts concluded it was “[...] *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*”.¹⁴

THE ATHLETE’S EXPLANATIONS FOR HER ABP

36. The AIU notified the Athlete on 19 December 2018 of the abnormalities in her ABP and that the AIU was considering bringing charges against her. The Athlete was invited to provide explanations and informed that her explanations would be sent to the Expert Panel for review before any charges were brought.

¹² Received 19 November 2018 by the AIU.

¹³ First joint expert report, p. 1.

¹⁴ First joint expert report, p.2

37. The Athlete, on 28 December 2018, explained that the abnormalities in her ABP were caused by (i) irregular menstruation; and/or (ii) use of iron supplements; and/or (iii) other supplements, both usually disclosed on her Doping Control Forms ("DCFs").¹⁵

38. The Athlete stated that she had never used any prohibited substance and had never tested positive in or out of competition.

REVIEW OF THE ATHLETE'S EXPLANATIONS: SECOND JOINT REPORT

39. On 31 January 2019, the Expert Panel issued a second joint report (the "Second Report") having considered the Athlete's explanations.

40. The experts noted that the haematological values did not display symptoms associated with iron deficiency and rejected the Athlete's explanations with respect to iron supplementation. The Athlete, according to the experts, was neither anemic nor iron deficient, which could have caused an increase in RET%.

41. Iron supplementation, wrote the experts, could not have increased haemoglobin when the athlete resided at the same altitude. Finally, the experts confirmed that no other legal supplements could produce the abnormal ABP values.

42. This Second joint report, submitted the Claimant, confirmed the conclusion of the First joint report that the likelihood of blood manipulation was high, and the probability that this would be caused by a medical condition, very low.¹⁶

NOTICE OF CHARGE AND DISCIPLINARY PROCEEDINGS

43. On 6 February 2019, the AIU informed the Athlete of the Second joint report's conclusions and issued a Notice of Charge.¹⁷

¹⁵ IAAF Brief, para 51, Exhibit 11.

¹⁶ Second joint expert report, p. 2.

¹⁷ IAAF Brief, Exhibit 13.

44. The Athlete was provisionally suspended as of that date pending determination of the alleged ADRV and notified of her right to admit the charge and/or request a hearing before the Disciplinary Tribunal.
45. On 13 February 2019, the Athlete responded and denied the allegations. She submitted that the abnormalities in her ABP were caused by changes of training regions and altitudes, peptic ulcers and the fact that she was prone to colds.¹⁸
46. On 19 February 2019, the AIU replied to the Athlete and confirmed that, as she continued to deny the charges against her, the matter would be referred to a Disciplinary Tribunal.¹⁹
47. On 27 February 2019, I was informed by Ms. Kylie Brackenridge of Sport Resolutions that Michael Beloff QC, Chairperson of the Disciplinary Tribunal wanted to appoint me as Panel member in this matter. I completed a conflicts of interest declaration. On 28 February 2019, I received my letter of appointment and the case material.
48. On 5 March 2019, Ms. Brackenridge wrote that the Athlete was now represented by counsel, Mr. Matthew D. Kaiser of Global Sport Advocates in Portland, Maine.²⁰ The Claimant agreed that the Athlete could receive the medical records the IAAF held in relation to her APB.
49. On 7 March 2019, a preliminary meeting was held between the Panel and the parties. The parties agreed that I could determine the matter as Sole arbitrator and that the Athlete would be afforded the opportunity to submit a further detailed submission for review by the Expert Panel.
50. On 26 April 2019, the Athlete filed an Additional explanation, including a First report by her expert Dr. Nirmish Shah. The report noted a temperature anomaly in

¹⁸ IAAF Brief, Exhibit 14.

¹⁹ IAAF Brief, Exhibit 15.

²⁰ IAAF Brief, Exhibit 16.

Sample 10, as well as abnormal values in the Samples due, in the opinion of Dr. Shah, to the Athlete's residence at high altitude and iron supplementation.

51. Dr. Shah also noted the absence of a blood stability score for Sample 10.

52. Dr. Shah emphasized that, in his opinion, the variations of the ABP's values were not clearly indicative of rEPO. Rather, opined Dr. Shah, several factors could explain these variations, such as the altitude of residence and training, iron supplementation, the frequency of the testing and the lack of *"additional testing such as EPO, VO2 max and HCG"*.

53. Dr. Shah found the ABP values inconclusive of EPO. In his opinion, the Athlete's blood levels were not indicative of an ADRV.²¹

54. Dr. Shah concluded that *"although it is possible there was exogenous stimulation of erythropoiesis, it is more likely than not that this is an anomalous reading."*²²

55. On 2 May 2019, the AIU referred the Athlete's Additional Explanation and Dr. Shah's expert report to the Expert Panel for their review.

REVIEW OF THE ATHLETE'S ADDITIONAL EXPLANATION AND DR. SHAH'S REPORT BY THE EXPERT PANEL

56. The report of the Expert Panel, submitted on 27 June 2019, first addressed the argument of Dr. Shah in respect of temperature anomaly.

57. As noted earlier, Dr. Shah opined that a temperature above 12°C for 23 hours and 15 minutes could have contributed to the haematological values in Sample 10.

58. The Expert Panel confirmed that the temperature was within WADA's prescribed parameters. It also affirmed that a sample affected by the temperature would have resulted in a decrease of the RET%, not an increase.

²¹ Athlete's Answer of 9 September 2019, para 18. First expert report of Dr. Shah of 26 April 2019, Exhibit 6.

²² Ibid.

59. The experts also pointed out that the blood stability score for Sample 10 was available in the file, contrary to what the Athlete claimed, and that it was within the prescribed WADA limits.

60. They also opined that the RET% results were outside the Athlete's individual reference ranges for her ABP and, in their opinion, were indicative of erythropoietic stimulation.

61. The Expert Panel did not agree with Dr Shah's observation that the RET% decrease below the baseline was not observed after Sample 10.

62. In this regard, they added the following:

the marked reduction in RET% from 2.69% in Sample 10 to 1.09% less than 4 weeks later in Sample 11, followed by a slight increase in Sample 12 to 1.47%, coupled with the reduction of the Immature Reticulocyte Fraction ("IRF") from 19.0% in Sample 10 to 3.2% in Sample 11 indicated, in their opinion, suppressed erythropoiesis as a suspicious feature of this profile.²³

63. The experts rejected Dr. Shah's opinion that iron supplementation could cause those abnormal values.

64. They reaffirmed their opinion in their Second report that iron supplementation is unlikely to increase the RET% and HGB to higher levels, as supplemental iron does not increase erythropoiesis in the absence of an iron deficiency.

65. The experts concluded that the Athlete's response and Dr. Shah's expert report did not provide a suitable explanation for the abnormal values.

66. They reiterated the conclusion of their First and Second reports, namely that the likelihood that the value abnormalities were caused by blood manipulation was high, whereas the likelihood that they were caused by a medical condition was very low.

²³ IAAF Brief of 19 August 2019, para 73, Exhibit 20, para 1.3.

67. On 10 July 2019, the Athlete confirmed that she wished to proceed to a hearing before the Panel.

68. Following a conference call with the Panel on 18 July 2019 and pursuant to the directions issued:

- The Claimant submitted its Brief on 19 August 2019;
- The Athlete submitted her Answer on 9 September 2019, including a second report by Dr. Shah; and
- The Claimant submitted its Reply on 30 September 2019.

69. A hearing was held by videoconference on 9 October 2019. The following persons participated in the videoconference:

- Mr. Tony Jackson, Athletics Integrity Unit
- Mr. Ross Wenzel, Counsel for the Claimant
- Dr. Olaf Schumacher, Expert for the Claimant
- Mr. Matthew D. Kaiser, Counsel for the Athlete
- Ms. Sarah Chepchirchir, Athlete
- Dr. Nirmish Shah, Expert for the Athlete
- Ms. Kylie Brackenridge, Sport Resolutions
- The Hon. L. Yves Fortier, QC, Arbitrator
- Ms. Laurence Marquis, Cabinet Yves Fortier, Lawyer
- Ms. Lucia Ondoli, Cabinet Yves Fortier, Quebec Bar Trainee

70. During his testimony, Dr. Schumacher referred to the Garvican-Lewis study in which he had participated. I granted permission to the Claimant to file a copy of that study into the record.

71. The final print version of that study was filed by the Claimant on 14 October 2019 with comments by Dr. Schumacher in respect of the study.

72. On 15 October 2019, the Athlete's counsel objected to these comments and requested that the Panel strike from the record Dr. Schumacher's additional comments.

73. I rejected Mr. Kaiser's request but granted leave to Dr. Shah to submit a response to Dr. Schumacher's additional comments.

74. On 16 October 2019, the Athlete submitted a report by Dr. Shah in respect of the Garvican-Lewis study. He also submitted a copy of the *Kreuziger* case which had been referred to during the hearing.

75. Dr. Shah did not address in his response Dr. Schumacher's additional comments in respect of the Garvican-Lewis study.

76. On 18 October 2019, the parties submitted their closing submissions.

THE EXPERTS' TESTIMONIES AND POST-HEARING SUBMISSIONS

77. At the hearing, Dr. Olaf Schumacher, on behalf of the Expert Panel, and Dr. Nirmish Shah, on behalf of the Athlete, gave evidence. Their testimonies addressed three principal issues, (1) training at high altitude, (2) iron supplementation and (3) temperature of Sample 10.

1. Training at high altitude

78. Dr. Shah argued that the abnormal values could be caused by the fact that the Athlete resided at a high altitude and trained at a different high altitude.

79. He maintained that the Haile study, relied upon by the Claimant, should not be considered by the Panel as the conditions under which the athletes were tested in that study were altogether different from those of the Athlete.

80. I recall that, in the Haile study, a group of Kenyan athletes living at an altitude of approximately 2150 meters for four weeks received EPO every second day.²⁴

²⁴ IAAF Reply Brief, Exhibit 22.

81. Dr. Shah maintained that these conditions did not resemble in any way those of the Athlete. For example, these athletes received regular iron supplementation whereas the Athlete's intake was irregular.
82. Dr. Shah also contested the Claimant's overlay of the Athlete's data from her ABP to those athletes' data. He argued that this was contrary to any scientific protocol and should not be accepted by the Panel.
83. The Claimant's expert Dr. Schumacher testified that, to the contrary, the overlay was meant to illustrate that the Athlete's ABP data was closely following that of the Haile study.
84. The altitude variations which could reflect a change in the values, according to Dr. Schumacher, started with a difference of 2000m. The variation of approximately 150/200 meters between the Athlete's residence and her training would not be sufficient to account for the change in her values.
85. Dr. Schumacher confirmed that altitude had been considered by the experts as a possible explanation for the Athlete's abnormal values and had been discarded.
86. He explained that in the case of an increase or decrease of altitude, the values might change. The body and values would adapt to the change of altitude within a few days. As the Athlete remained at more or less the same altitude, he testified that he would not have expected to see sudden variations in the values of the magnitude present in her ABP.²⁵
87. Dr. Shah, on the other hand, referred to the change in altitude as being itself the cause for the abnormal values of the Athlete.
88. Finally, Dr. Shah concluded his testimony by noting the lack of testing, such as VO2 max, to establish the EPO levels.

²⁵ Hearing transcript, p. 18.

2. Iron supplementation

89. Dr. Shah testified that, in his opinion, the combined effects of altitude and iron supplementation could impact the blood values. He said he was not aware of any study that had examined such a situation.

90. In response, Dr. Schumacher referred to the Garvican-Lewis study, a recent study in which he had participated.²⁶

91. The athletes in the Garvican-Lewis study were subject to acute altitude exposure. They lived at 3000 meters and trained at 600 meters. They were also administered short-term iron supplementation.²⁷

92. These conditions, according to Dr. Schumacher, were altogether different from those of the Athlete who resides and trains at different minor altitude levels (in the order of 100-200m) and was apparently taking iron supplements irregularly.

93. Thus, in Dr. Schumacher's opinion, this study "*confirms the Expert Panel reports that ABP markers can be materially affected by iron supplementation and altitude only where there is an underlying iron deficiency and/or the athlete is newly exposed to a significant change in altitude.*"²⁸

94. On the other hand, Dr. Shah, in his report of 16 October 2019, opined that this study supported the variation of abnormal values in the Athlete's ABP, as conditions of those athletes were similar to hers, both with respect to altitude and iron supplementation. He also noted that the study had not focused on the level of altitude change needed to explain the variation in values, and that no conclusions could be drawn in that regard.

²⁶ Garvican-Lewis et al, Influence of combined iron supplementation and simulated hypoxia on the haematological module of the Athlete Biological Passport, Drug Testing and Analysis, 2017. As noted earlier, this study was filed into the record following the hearing, and I gave Dr. Shah an opportunity to comment on this study. See Dr. Shah's report of 16 October 2019, Athlete's Exhibit 28.

²⁷ IAAF Brief, Exhibit 22.

²⁸ Claimant's email of 14 October 2019 with Dr. Schumacher's additional comments.

3. Temperature of Sample 10

95. Dr. Shah testified that the temperature difference noted for Sample 10 could explain the variations in value in that sample.

96. Dr. Schumacher, on the other hand, noted that the temperature difference remained within the WADA parameters. If the difference had any effect, he testified, it would have been in favor of the Athlete.

THE ATHLETE'S TESTIMONY

97. The Athlete testified with respect to her intake of iron supplements. She confirmed that she took 10mg doses. She took one to three doses on each training day, depending how hard she was training.

98. The Athlete reaffirmed that she had never tested positive nor missed a test.

99. The Athlete also testified regarding her Doping Control Forms. She repeatedly stated that she signed the forms as presented and completed by the officers. She did not read them.²⁹

100. After the experts' evidence was terminated, I asked the Athlete if she wished to make a statement. She declined.

ANTI-DOPING RULE VIOLATIONS

101. Article 2.2 of the 2018 IAAF Rules provides as follows:

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

2.2.1 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

²⁹ She confirmed for the Panel her understanding of English.

is not necessary that intent, Fault, negligence, or knowing Use on the Athlete's part be demonstrated in order to establish an Anti-Doping Rule Violation for Use of a Prohibited Substance or a Prohibited Method.

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

CONSEQUENCES FOR THE ANTI-DOPING RULE VIOLATIONS

1. Period of Ineligibility

102. The period of Ineligibility to be imposed for an ADRV is set out in Article 10.2 of the 2018 IAAF Rules, which reads 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 antidoping 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:

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.

103. As rEPO can only be administered by injection, the Claimant submits that the ADRV can only be intentional. As this would be a first violation for the Athlete, the period of Ineligibility under the Rules is four years.

104. The Claimant requests that the Athlete's period of Ineligibility commence on the date of the Panel's award.³⁰

³⁰ Pursuant to Article 10.10.2(a).

105. However, the Claimant accepts that the Panel should *"give credit for the period of provisional suspension imposed on the Athlete from 6 February 2019 until the date of the Tribunal's Award against the total period of ineligibility, provided that it has been effectively served by the Athlete"*.³¹

106. The Athlete, on the other hand, submits that the Panel should declare that Ms. Chepchirchir is immediately eligible to compete.

107. The Athlete also requests that any period of Ineligibility imposed on her should commence on 11 April 2018, giving the Athlete credit for the time she has served during her provisional suspension.³²

2. Disqualification of Results and Other Consequences

108. The Claimant submits that the first evidence of an ADRV in the Athlete's ABP is in Sample 9, collected on 11 April 2018.

109. Article 10.8 of the 2018 IAAF Rules provides that any competitive results obtained by the Athlete between this date and the date of her provisional suspension, 6 February 2019, should be disqualified with all resulting consequences. This includes forfeiture of medals, titles, ranking points and prize and appearance money, unless the Panel should find that fairness requires otherwise.

110. The Claimant notes that the AIU has absolute discretion to establish an instalment plan for repayment of prize money forfeited and/or for payment of any costs awarded by the Panel, if it finds that fairness so requires.

111. The Claimant asks that the Panel order the disqualification of any results obtained by the Athlete between 11 April 2018 and 6 February 2019, including forfeiture of any titles, awards, medals, points and prize and appearance money.³³

³¹ IAAF Brief, para 93, para 100(iii).

³² Athlete's Answer, p. 15.

112. The Athlete requests that the Panel should find that fairness requires that the Athlete's results outside of April 2018 should be preserved.³⁴

REQUESTS FOR RELIEF

113. The IAAF asks the Panel to:

- (i) rule that the Disciplinary Tribunal has jurisdiction to decide on the subject matter of this dispute;
- (ii) find that the Athlete has committed an anti-doping rule violation pursuant to Article 2.2 of the 2018 IAAF Rules for abnormalities in her ABP;
- (iii) impose a period of ineligibility of four (4) years upon the Athlete for the anti-doping rule violation, commencing on the date of the Panel's Award;
- (iv) give credit for the period of provisional suspension imposed on the Athlete from 6 February 2019 until the date of the Panel's Award against the total period of ineligibility, provided that it has been effectively served by the Athlete;
- (v) order the disqualification of any results obtained by the Athlete between 11 April 2018 and 6 February 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 2018 IAAF Rules; and
- (vi) award the IAAF a contribution to its legal costs.³⁵

114. The Athlete asks the Panel to:

- (i) find the IAAF has failed to prove by comfortable satisfaction that Ms. Chepchirchir has committed an anti-doping rule violation;
- (ii) declare Ms. Chepchirchir immediately eligible to compete;

³³ IAAF paras 94-96.

³⁴ Athlete's Submission, p. 15.

³⁵ IAAF Brief, para 100.

- (iii) decide that any period of ineligibility imposed must start on 11 April 2018 and give Ms. Chepchirchir credit against the period of ineligibility for the time she has served her provisional suspension;
- (iv) find that fairness requires Ms. Chepchirchir's results outside of April 2018 to be preserved;
- (v) order any other relief for Ms. Chepchirchir that this Panel deems to be just and equitable including an award of fees and costs in part or in whole.³⁶

II. ANALYSIS

A. The Athlete Biological Passport

115. This case rests on the ABP and its interpretation.

116. The Claimant alleges that it evidences the ADRV committed by the Athlete. The Athlete disputes this.

117. There is agreement between the parties with respect to the following:

- The ABP is a reliable and accepted means of evidence to assist in establishing an ADRV³⁷;
- Abnormal values are, for the purposes of the ABP, a necessary but not sufficient proof of an ADRV;
- In other words, a distinction must be made between a "quantitative" and a "qualitative" assessment of the evidence.³⁸

118. The Athlete's counsel relied on two cases with regard to this central issue.

³⁶ Athlete's Submission, p. 15.

³⁷ IAAF Brief, para 35.

³⁸ Athlete's Answer, p. 9, Hearing Bundle, p. 797.

119. Firstly, the Athlete's counsel referred to the *Ugarova* award.³⁹ In this case, the athlete attempted to explain her abnormal ABP results by the fact that she was training at a high altitude.⁴⁰

120. The Arbitrator in that case stated:

the mere fact that an athlete cannot provide a credible explanation for the deviations in his or her ABP it cannot automatically be deduced that an anti-doping rule violation has been committed. Rather, the deviations in the ABP are to be interpreted by experts called to put into the balance various hypothesis that could explain the abnormality in the profile values, ie a distinction made between a "quantitative" and a "qualitative" assessment of the evidence.⁴¹

121. I agree with this statement.

122. Secondly, the Athlete referred to the *Kreuziger* case.⁴² The Arbitration Committee, in this case, found that the Athlete had not committed an ADRV. It did not accept the experts' conclusions that it was highly likely the Athlete had committed an ADRV.

123. The Committee found that the ABP values in that case never went beyond the lower and upper limits of the ABP. In fact, the Athlete's HGB and RET% "*did not even come close to the baseline values set in the Athlete's ABP*".⁴³ The Arbitration Committee took into account this factor for its decision that the ABP "*cannot be considered a proof*" of the ADRV.⁴⁴

124. In the present case however, the Athlete's ABP values went beyond the lower and upper limits of her ABP. Accordingly, the *Kreuziger* decision cannot assist me.

³⁹ IAAF v. ARAF & Kristina Ugarova, award of 29 November 2016 (Ugarova), para 94, Exhibit 22.

⁴⁰ Ugarova, para 65-75.

⁴¹ Ibid, para 95.

⁴² Exhibit 29.

⁴³ Kreuziger, para 6.4.

⁴⁴ Kreuziger, para 6.4.

125. I now turn to the experts' assessment of the abnormalities in the Athlete's ABP in order to address its qualitative value.

B. ANALYSIS OF THE EXPERT REPORTS AND POSITION OF THE PARTIES

126. Dr. Shah testified that the "*compounded factors*" had to be taken as a whole. The "*compounded factors*" refer to the Athlete's explanations regarding altitude and iron supplements.

127. Mr. Kaiser summarized Dr. Shah's evidence very well when he submitted the following:

The IAAF experts continuously dismiss each of the factors that ... Dr Shah has laid out. Saying that each one itself could not cause the levels seen in an athlete biological passport. However, that's never been the stance of Dr Shah. His stance from the beginning is there's (sic) a bunch of factors that work together that can affect one another. It's not each one (sic) could've caused this pattern seen today. And instead it's all these factors working together that have created the pattern seen today, and as a result, are not from the use of exogenous EPO.⁴⁵

128. Dr. Schumacher, for the Claimant, addressed the factors both separately and together.

129. In view of Dr. Shah's testimony, I will first address the "*compounded factors*". I will then assess them separately.

The combined effect of altitude and iron supplementation

130. The Athlete resides at approximately 2000 meters, in Kapsabet. She trains in Kapsabet, the Nandi Hills (2040 meters) and Iten (2400 meters).⁴⁶

131. She was not able to recall precisely where she was training in April 2018.⁴⁷

⁴⁵ See Transcript p. 7.

⁴⁶ Athlete's Submission, para 15.

132. I note that the Athlete never claimed that the increase or decrease of altitude between her residence and training location were significant. She submitted that it was the fact that she lived and trained at high altitude which could impact her markers.

133. The Haile study, submitted by the Claimant, examines the effect of training at high altitude. The athlete control group in this study also received iron supplementation. The change of altitude was not a factor.

134. Iron supplementation was submitted as a compounding factor for the Athlete's ABP's abnormal values according to Dr. Shah.⁴⁸

135. I recall that the Athlete also stated that her abnormal values could be due to irregular menstruations, as well as the taking of other supplements.⁴⁹ In her explanations, she also referred to her diagnosis of a peptic ulcer and the fact that she was prone to colds.⁵⁰

136. She confirmed that she did not suffer from anemia or other iron deficiency. Her counsel nevertheless submitted that she could "*be suffering from subclinical iron deficiency*", unbeknownst to her, as no formal iron studies were conducted.⁵¹ This could have an impact on her values and "*make interpreting her ABP more difficult*".⁵²

137. Dr. Shah, in his first report of 26 April 2019, stated that the interpretation of the Athlete's results was "*further complicated by the fact that she is on oral iron*". He mentioned iron supplementation in the list of "*various reasons which are difficult to interpret*".⁵³

⁴⁷ Ibid.

⁴⁸ See Transcript p. 7.

⁴⁹ Athlete's explanation of 28 December 2018, IAAF Brief, Exhibit 11.

⁵⁰ Explanation dated 26 April 2019, submitted by Mr. Kaiser.

⁵¹ Athlete's submission, p. 12, c).

⁵² Ibid.

⁵³ Athlete's List of Exhibits, Exhibit 6.

138. On the other hand, the Expert Panel's First and Second Reports concluded that the haematological values of the Athlete did not display symptoms associated with iron deficiency or anemia, which could have caused an increase in RET%.

139. Dr. Schumacher testified that iron supplementation would only have a visible effect if there was iron deficiency. This did not mean however that there was no effect on an Athlete who had no iron deficiency. He only meant that the effect in that case would be very minimal.

140. The Athlete testified that she took a 10mg dose of iron supplement, one to three times a day.

141. I recall again that Dr. Shah testified that his conclusions were valid only if altitude and iron supplementations were considered together.

142. In his reply, Dr. Schumacher referred to the Garvican-Lewis study which had considered these factors together.

143. Dr. Schumacher opined that it was the significant change in altitude which was found to impact the RET% and HGB levels. In his view, the fact that the Athlete resided and trained at high altitude was not sufficient to explain any one of her abnormal ABP values.

144. Dr. Shah, in his reply report of 16 October 2019, stated that the Garvican-Lewis study actually supported the variation of abnormal values in the Athlete's ABP. The conditions of the study, he opined, were similar to hers, both regarding altitude and iron supplementation.

145. He also noted that the study had not focused on the level of altitude change needed to provoke the variation in values, and that no conclusions could be drawn in that regard.

146. The evidence before me is that the Athlete lives and trains at high altitude but that she was not exposed to a significant change in altitude between the two locations.

147. Having reviewed and considered carefully the evidence of all experts, I accept Dr. Schumacher's testimony confirmed by the Garvican-Lewis study *"that ABP markers can be materially affected by iron supplementation and altitude **only** where there is an underlying iron deficiency and/or the athlete is newly exposed to a significant change in altitude."*⁵⁴ (Emphasis added)

148. This is not the situation in the present case.

149. Accordingly, I am comfortably satisfied that abnormalities in Samples 9 and 10 could not have been caused by her residence and training at high altitude, with iron supplementation, whether considered *"as a whole"* or separately.

Temperature of Sample 10

150. The alert triggered by the temperature of Sample 10 during transportation was raised by the Athlete's expert as one of the compounding factors which could cast doubt on her alleged ADRV.

151. At the hearing, Dr. Schumacher stated that the temperature increase always remained within the WADA approved limits.

152. He also confirmed that any increase in temperature would have benefitted the Athlete. An increase in temperature would only lower the number of red blood cells, and negatively impact the RET%. In simpler terms, the RET% would have decreased, rather than increased. The HGB would not suffer from a change of temperature.

153. Dr. Shah did not contest this explanation of Dr. Schumacher.

⁵⁴ Claimant's email of 14 October 2019 with Dr. Schumacher's additional comments.

154. Accordingly, I do not accept this submission made on behalf of the Athlete.

Conclusion

155. The Expert Panel joint reports and Dr. Schumacher's evidence all concluded that the likelihood of the abnormalities in the Athlete's biological passport being due to blood manipulation such as rEPO was high, and that environmental or medical factors causing them were low. They found that it was "[...] *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*".⁵⁵

156. Having reviewed and considered carefully the totality of the Athlete's evidence, I am comfortably satisfied that the Claimant has discharged its burden of proof and established that the Athlete has committed an ADRV.

157. This is clearly a case where my qualitative assessment of the evidence confirms the quantitative abnormalities in the ABP.

158. I now turn to the Athlete's applicable period of Ineligibility.

C. CONSEQUENCES FOR THE ANTI-DOPING RULE VIOLATIONS

1. Period of Ineligibility

159. Having found that the Athlete has committed an ADRV, I must now decide what is the appropriate sanction which should be imposed. I have no discretion in the matter.

160. Article 10.2 provides that an initial suspension for an ADRV pursuant to Article 2.2 shall be four years where it does not involve a Specified Substance, unless it is proven that it was done unintentionally.

⁵⁵ First joint expert report, p.2

161. The Claimant submits that blood manipulation is necessarily intentional.

162. I agree with the Claimant.

163. As this is a first violation for the Athlete, the period of Ineligibility under the Rules is four years.

164. The Claimant requests that the period of Ineligibility commence on the date of the Panel's award.⁵⁶

165. The Claimant agrees however that the Panel can give credit to the Athlete for the period of provisional suspension imposed on the Athlete from 6 February 2019 until the date of the Panel's Award against the total period of Ineligibility, *"provided that it has been effectively served by the Athlete"*.⁵⁷

166. Should a period of ineligibility be imposed, counsel for the Athlete prays that it should start on 11 April 2018, the Panel having discretion to order that the period of ineligibility begin as early as the date of her ADRV.⁵⁸

167. I have determined that the Athlete has committed an ADRV and that it can only have been intentional.

168. As rEPO is not a specified substance but rather a prohibited method, the applicable period of the Athlete's Ineligibility shall be four years.

169. The Claimant has requested that the Athlete be credited for the period of provisional suspension effectively served from 6 February 2019.

⁵⁶ Pursuant to Article 10.10.2(a).

⁵⁷ IAAF Brief, para 100 (vi). I have no reason to doubt that the Athlete has effectively been suspended since 6 February 2019.

⁵⁸ Athlete's Answer, p. 13, III.

170. The Athlete requested that her ineligibility should start on 11 April 2018, the date of collection of Sample 9 as *"there have been substantial delays in the hearing process not attributable to Ms. Chepchirchir"*.⁵⁹

171. Article 10.10(2)(c) provides that:

where there have been substantial delays in the hearing process or other aspects of Doping Control not attributable to the Athlete or other Person, the period of Ineligibility may be deemed to have started at an earlier date, commencing **as early as the date the Anti-Doping Rule Violation last occurred (e.g., under Article 2.1, the date of Sample collection)**. All competitive results achieved during the period of Ineligibility, including retroactive Ineligibility, shall be Disqualified. (Emphasis added)

172. I find no evidence on the record that there have been substantial delays in the hearing process attributable or not to the Athlete or to the Claimant.

173. The date of the Athlete's provisional suspension is the date from which the Athlete's period of Ineligibility is to start, pursuant to Article 10.10.2(a).

174. Therefore, in accordance with Article 10.10.2(a) of the 2018 IAAF Rules, the four-year period of Ineligibility shall run from 6 February 2019, the date of the Athlete's provisional suspension.

2. Disqualifications of Results and Other Consequences

175. As noted earlier, the Claimant has requested that the Athlete's results from 11 April 2018 (the date of collection of Sample 9) to 6 February 2019 (the date of her provisional suspension) should be disqualified.⁶⁰

176. The Athlete on the other hand prays that, in the event that the Athlete is sanctioned, the Panel must preserve the Athlete's results and prizes subsequent to

⁵⁹ Athlete's Answer, p. 13, II.

⁶⁰ IAAF Brief, paras 94-96.

the date she is alleged to have committed an ADRV "*because fairness requires*" it, pursuant to Article 10.8 of the 2018 IAAF Rules.

177. Article 10.8 provides as follows:

10.8 Disqualification of Results in Competitions Subsequent to Sample Collection or Commission of an Anti-Doping Rule Violation

In addition to the automatic Disqualification, pursuant to Article 9, of the results in the Competition that produced the Adverse Analytical Finding (if any), all **other competitive results of the Athlete obtained from the date the Sample** in question was collected (whether In-Competition or Out-of-Competition) or other **Anti-Doping Rule Violation occurred through to the start of any Provisional Suspension or Ineligibility period shall be Disqualified** (with all of the resulting consequences, including forfeiture of any medals, titles, ranking points and prize and appearance money), **unless the Disciplinary Tribunal determines that fairness requires otherwise.** (Emphasis added)

178. The Athlete's prayer is based on cases where Tribunals have held that it would be "*disproportionate and unfair to disqualify results that have not been part of the alleged doping scheme*".⁶¹

179. Obviously, the Athlete has the burden of proving to my satisfaction that fairness requires that not all her results be disqualified.⁶²

180. The Athlete has not discharged her burden of proving that her results should not all be disqualified. Therefore, I am not minded to grant her request in this regard.

181. Consequently, the Athlete's results from 11 April 2018 to 6 February 2019 will be disqualified.

⁶¹ Athlete's Answer, p. 14. See Brent Nowicki & Markus Manninen, « Unless Fairness Requires Otherwise: A Review of Exceptions to Retroactive Disqualification of Competitive Results for Doping Offenses », Exhibit 27, pp. 14-16.

⁶² Exhibit 27, p. 11.

3. Costs

182. The Claimant has requested an award for its legal costs.⁶³

183. The Athlete has requested an order for any other relief that I deem to be just and equitable *"including an award of fees and costs in part or in whole."*⁶⁴

184. I accept that the Athlete has limited financial means. She submits that it would be grossly unfair and inequitable for her to support the Claimant's fees.

185. I agree.

186. Article 8.9.3 of the 2018 IAAF Rules provides:

The Disciplinary Tribunal has the power to make a costs order against any party, where it is proportionate to do so. If it does not exercise that power, each party shall bear its own costs, legal, expert and otherwise. No recovery of costs may be considered a basis for reducing the period of Ineligibility or other sanction that would otherwise be applicable.

187. The Athlete was very well represented in this matter by pro-bono counsel. Consequently, she did not incur any legal fees.

188. I have decided that it would not be proportionate for me to make a cost order against either party in this arbitration.

189. Accordingly, each party shall bear its own costs.

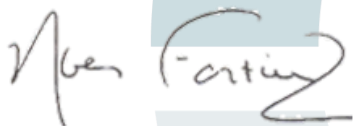
ORDER

190. Having examined and weighted the totality of the evidence, I find that:

⁶³ IAAF Brief, para 100 (vi).

⁶⁴ Athlete's Answer, para 15.

- (i) I have jurisdiction to decide the subject matter of this dispute;
- (ii) The Athlete has committed an anti-doping rule violation, pursuant to Article 2.2 of the 2018 IAAF Rules;
- (iii) The Athlete is ineligible for four (4) years, commencing on the date of the present award;
- (iv) The provisional suspension imposed on the Athlete as of 6 February 2019 should be taken in consideration and given as credit towards the Athlete's period of ineligibility;
- (v) Results obtained by the Athlete from 11 April 2018 to 6 February 2019 are disqualified 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 2018 IAAF Rules; and
- (vi) Each party shall bear its own costs.



The Hon. L. Yves Fortier, QC

28 November 2019

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