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

CAS 2024/A/10291 US Anti-Doping Agency (USADA) v. James 'Michael' Brinegar

ARBITRAL AWARD

delivered by the

COURT OF ARBITRATION FOR SPORT

sitting in the following composition:

President:	Dr Georgios Petrochilos KC, Barrister in London, United Kingdom, and Attorney-at-Law in Paris, France
Arbitrators:	Mr Luigi Fumagalli, Professor and Attorney-at-Law in Milan, Italy
	Mr Jeffrey Benz, Barrister in London, United Kingdom, and Attorney-at-Law in Los Angeles, United States of America
Ad hoc Clerk:	Ms Camelia Aknouche, Attorney-at-Law in Paris, France

in the arbitration between

US Anti-Doping Agency (USADA), United States of America

Represented by Mr Jeff T. Cook (USADA General Counsel) and Mr Spencer Crowell (USADA Olympic and Paralympic Counsel), Attorneys-at-Law in Colorado Springs, CO, United States of America

Appellant

and

James 'Michael' Brinegar, United States of America

Represented by Mr Howard L. Jacobs and Ms Katlin N. Freeman (Law Offices of Howard L. Jacobs), Attorneys-at-Law in Westlake Village, CA, United States of America

Respondent

I. PARTIES

1. The Appellant, the US Anti-Doping Agency ("**USADA**"), is the WADA-recognised anti-doping organization for Olympic, Paralympic, Pan American and Parapan American sports in the United States of America. It is seated and headquartered in Colorado Springs, Colorado, United States of America.

2. The Respondent, Mr James 'Michael' Brinegar (the "**Athlete**"), is a 24-year-old elite-level international swimmer from the United States of America. He specialises in long-distance freestyle and open-water swimming. He was a member of the 2021 US Olympic Team in the 1500 and 800-metre freestyle events.

3. USADA and the Athlete are jointly referred to as the "Parties".

II. OVERVIEW

4. In these proceedings, USADA appeals against an arbitral decision issued on 26 December 2023 by Ms Haydeé Rosario, Esq. of New Era Arbitration (Case No 2023082801) (the "**Appealed Decision**"). The sole arbitrator held that USADA had failed to establish to the applicable evidential standard that the Athlete had committed an anti-doping rule violation ("**ADRV**").

5. USADA seeks an award from the Court of Arbitration for Sport ("**CAS**") reversing the Appealed Decision, declaring that the Athlete committed an ADRV, and ordering certain sanctions in consequence.

III. FACTUAL AND PROCEDURAL PREDICATE

6. The Parties adduced extensive evidence and submissions in support of their respective positions in this appeal. This section contains a summary of the relevant facts and allegations, based on the Parties' written submissions, pleadings and evidence, as well as the testimonial evidence and argument adduced at hearings (via video-conferencing) before the Panel on 20 May and 3 June 2024. Additional facts may be set out, where relevant, in connection with the legal analysis that follows in Section X. While the Panel has considered all the facts, allegations, legal arguments, and evidence submitted by the Parties, it refers only to the evidence and arguments it considers necessary as part of its reasoning.

A. Background Facts

7. At the centre of this dispute are the results of certain blood tests conducted for the Respondent's Athlete Biological Passport ("**ABP**"). The ABP is an electronic system

that compiles and monitors an athlete's test results and other data over time. Initially, the athlete's results are compared to a reference population, but as more data are collected, through the use of an algorithm called the "Adaptive Model" the ABP becomes increasingly tailored to the athlete's unique physiological profile. As discussed below, variations from this self-established profile are reviewed as potentially providing evidence of an anti-doping rule violation. Specifically, blood samples of the Athlete collected on 20 July 2022 ("**Sample 9**") and 27 September 2022 ("**Sample 11**") were flagged by USADA as presenting abnormalities suggesting blood doping.

8. Blood doping is a prohibited practice which enhances performance by increasing the blood's oxygen-carrying capacity. Two common forms are (i) injecting an erythropoietic stimulating agent ("**ESA**"), such as erythropoietin ("**EPO**"), to stimulate red blood cell production and (ii) performing blood transfusions, either using a donor's matching blood or the athlete's own previously extracted red blood cells after the athlete has replaced the blood volume of that prior extraction (this latter method being one of the oldest forms of cheating documented in sport). Both ESAs and blood transfusions are listed on the Prohibited List of the World Anti-Doping Agency ("**WADA**"): ESA as a substance prohibited under "*S2. Peptide Hormones, Growth Factors, Related Substances and Mimetics*"; and blood transfusions as a method prohibited under "*M1. Manipulation of Blood and Blood Components*".

9. The ABP's haematological module monitors markers related to blood doping. The following markers are of relevance in the present case:

- Haemoglobin concentration ("**HGB**"): Haemoglobin is a protein in red blood cells responsible for transporting oxygen from the lungs to the rest of the body. The concentration of haemoglobin in the blood is a key indicator of an athlete's oxygen-carrying capacity, which is crucial for endurance performance. Blood doping artificially increases haemoglobin levels, enhancing performance by improving oxygen delivery to muscles.

- Reticulocyte percentage ("**%RET**"): Reticulocytes are immature red blood cells newly released from the bone marrow into the bloodstream. The reticulocyte percentage (or count) is a measure of the number of these cells in the blood relative to the total number of red blood cells. This measure reflects the body's red blood cell production rate. A balanced and relatively stable reticulocyte count indicates normal red blood cell production. When an athlete uses an ESA, the body produces more red blood cells, leading at first to a higher reticulocyte count. Over time, as the number of mature red blood cells increases, the reticulocyte count can decrease. Conversely, after a blood transfusion, the body might reduce its own production of red blood cells, causing a lower reticulocyte count.

- Off-Score: This is a composite score that combines haemoglobin and reticulocyte levels. It helps identify physiological anomalies by integrating the haemoglobin level and reticulocyte count into a single value, making it easier to detect unnatural variations.

10. Blood doping typically results in an abnormal combination of high HGB and unusual %RET. For instance, the use of an ESA might initially elevate both haemoglobin and reticulocytes but eventually lead to high haemoglobin with normal or low reticulocyte levels.

11. When abnormalities are flagged, an athlete's ABP profile is sent (in anonymized form) by the Athlete Passport Management Unit ("**APMU**") to an independent expert. The expert evaluates whether the abnormalities are "normal," "suspicious," "likely doping," or "likely medical." If the abnormalities are considered to indicate "likely doping," the profile is individually reviewed by two additional independent experts.

12. If all three experts conclude in agreement on "likely doping," the APMU declares an Adverse Passport Finding ("**APF**") on the Anti-Doping Administration and Management System which is maintained by WADA. USADA then informs the athlete of a potential ADRV and invites them to explain the abnormalities. The experts assess the athlete's explanation and then either maintain or change their evaluation.

13. If the experts maintain a "likely doping" scenario of use or attempted use of a prohibited substance or method, the athlete is charged with an ADRV under the USADA Protocol for Olympic and Paralympic Movement Testing (the "**USADA Protocol**"). This incorporates by reference and in its Annex A the WADA Code (the "**Code**"), Article 2.2 of which reads as follows:

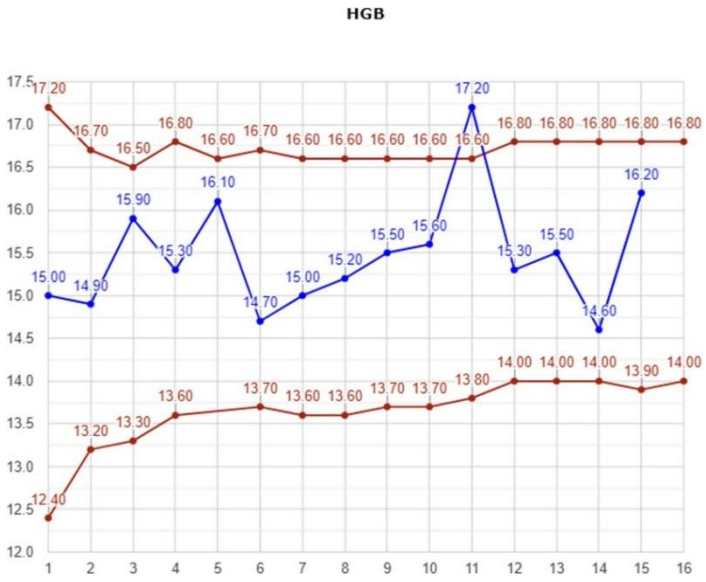
> "***2.2 Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method***
>
> *2.2.1 It is the Athletes' personal duty to ensure that no Prohibited Substance enters their bodies and that no Prohibited Method is Used. Accordingly, it is not necessary that intent, Fault, Negligence or knowing Use on the Athlete's part be demonstrated in order to establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method.*
>
> *2.2.2 The success or failure of the Use or Attempted Use of a Prohibited Substance or Prohibited Method is not material. It is sufficient that the Prohibited Substance or Prohibited Method was Used or Attempted to be Used for an anti-doping rule violation to be committed.*"

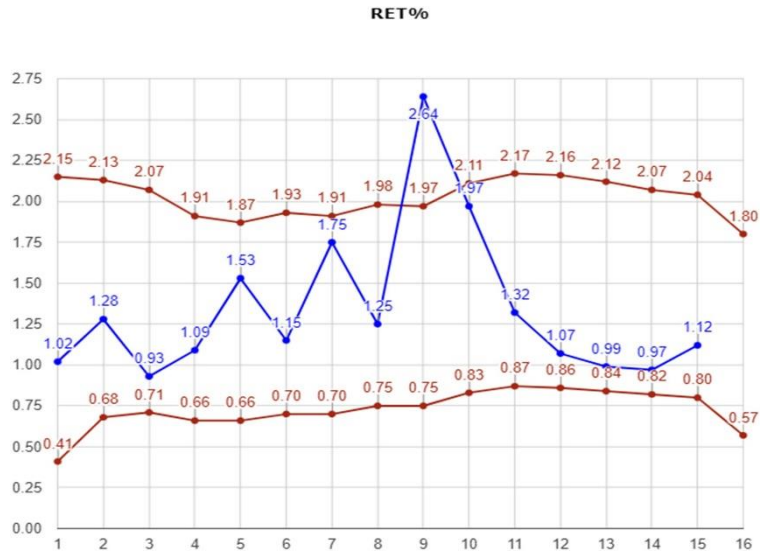
14. On 16 June 2023, USADA received a joint expert report from the APMU (the "**First Joint Expert Report**") in respect of the Athlete's ABP. The declaration letter accompanying the First Joint Expert Report states in material part:

> "*This declaration letter is in reference to the hematological biological passport of athlete BP25FXJ3, a male athlete in the sport of aquatics. Following initial APMU review of this profile, three independent expert reviews, and a joint opinion amongst all three experts, it was determined that, in the absence of an appropriate explanation, the likelihood of the abnormalities identified in the profile being due to a doping scenario (i.e. the use of a prohibited substance or method) is high.*"

15. This First Joint Expert Report highlighted two abnormal values: (a) results of Sample 9, with a %RET value of 2.64, and (b) results of Sample 11, with an HGB value of 17.2. Both exceeded the 99.99% upper limit, meaning that the statistical risk of a false result is highly unlikely (1 in 10,000).

16. The Athlete's full profile for HGB and % RET is represented as follows (the red lines indicate the bounds of the Athlete's individual limits calculated by the Adaptive Model):





17. The First Joint Expert Report contained this assessment:

> "*Quantitative Assessment*
>
> *From a quantitative perspective, the profile exceeds the athlete's individual thresholds for Sample 9* [collected on 20 July 2022] *(high percentage of reticulocytes (%ret) and low OFFscore) and Sample 11* [collected on 27 September 2022] *(high hemoglobin concentration (Hb) and high OFFscore). The %ret value in Sample 9 is above the 99.99% upper limit, while the Hb in Sample 11 is above the 99.9% upper limit. Hence these two results are highly abnormal considering the other sample results in the profile. The individual's thresholds are based on the athlete's own values as well as values from a population of non-doped individuals.*
>
> *Qualitative Assessment*
>
> *The profile shows a significant stimulation of erythropoiesis in Sample 9* [collected on 20 July 2022] *and 10* [collected on 5 August 2022] *evidenced by the elevated %ret values especially in Sample 9, which is well above the 99.99% upper limit. The increased erythropoiesis manifest in a highly elevated Hb in Sample 11* [collected on 27 September 2022]. *Such a blood pattern where elevated %ret values is followed by high Hb values is compatible with the use of erythropoiesis-stimulating agent (ESA) (Haile* et al. *2019).*"

18. Thus, the First Joint Expert Report concluded that "*it is highly likely that the abnormalities are the result of blood manipulation e.g. the administration of an ESA and that it is unlikely that the passport is the result of any other cause*."

19. On 26 June 2023, the Athlete was informed of the abnormalities in his ABP profile and was invited to provide comments.

20. In his response provided on 9 July 2023, the Athlete denied that he had engaged in blood manipulation. He offered a number of events as possible causes for the results: (a) on 20 May 2022 he had been bitten by a stingray and took antibiotics to recover; (b) on 1 June 2022 he had tested positive for Covid-19 and might have developed anaemia as a result; (c) he had stopped training for an extended period and followed a diet high in protein and iron; (d) the July 2022 test occurred two days after he had started training again; (e) he was in a state of dehydration when Sample 11 was collected (on 27 September 2022 at 7:19 am).

21. On 17 August 2023, the experts issued an evaluation of the Athlete's arguments (the "**Second Joint Expert Report**"). They rejected each of his explanations, considering them to be incapable of explaining the abnormalities, and accordingly affirmed the conclusion of the First Joint Expert Report.

22. Further, the experts affirmed their conclusions in a third report, dated 20 October 2023 (the "**Supplemental Joint Expert Report**"). This states the following in material part:

> "[B]*ased on the facts and the information available to date, we maintain our initial opinion that it is highly likely that the abnormalities are the result of blood manipulation e.g. the administration of an ESA and that it is unlikely that the passport is the result of any other cause*."

23. Following the Second Joint Expert Report, on 18 August 2023, USADA issued a charging letter by which it provisionally suspended the Athlete from participating "*in any Competition or activity (e.g., as an athlete, official, or event director) under the jurisdiction of World Aquatics, USA Swimming, the USOPC, or any clubs, member associations or affiliates of these entities, or other Signatories of the Code*" pursuant to Article 7.4.1 of the Code, and formally charged him with an ADRV pursuant to Article 2.2 of the Code:

> "*At this time, reserving all rights to amend this charge and in accordance with the Applicable Rules, USADA charges you with an ADRV for the Use/Attempted Use of a Prohibited Substance and/or a Prohibited Method pursuant to Article 2.2 of the World Aquatics Doping Control Rules and Article 2.2 of the Code, which has been*

> *incorporated into the Protocol. Under the Applicable Rules, doping is strictly forbidden and the use or attempted use of a Prohibited Substance is considered an ADRV*."

B. Proceedings before the New Era ADR Sole Arbitrator

24. In accordance with Article 15(d) of the USADA Protocol, the Athlete informed USADA in writing that he desired an arbitration to be held to contest USADA's charging letter of 18 August 2023. The matter was referred to New Era Arbitration and decided by the sole arbitrator. The sole arbitrator rendered her decision in an "*Operative Award*" dated 27 November 2023 which states, in relevant part, as follows:

> "*The United States Anti-Doping Agency ('USADA' or 'Claimant') failed to establish to the comfortable satisfaction of the undersigned Arbitrator that James Michael Brinegar ('Respondent') violated Article 2.2 of the Code by the use of or attempted use of a prohibited substance or prohibited method, as alleged in the charge letter dated August 18, 2023. Accordingly, the charges against Respondent are hereby dismissed.*"

25. On 26 December 2024, the "*Reasoned Award*" was rendered. The sole arbitrator found in favour of the Athlete and against USADA.

26. The portion of the arbitrator's decision that is most pertinent for present purposes reads as follows:

> "*171. Based on all the evidence of record, the Arbitrator finds the values of Sample 9, Sample 10 and Sample 11 as well as the scientific analysis by the ABP experts of Respondent's longitudinal profile, is not sufficient to establish Respondent committed an ADRV by the use of ESA, such as an EPO, or a Prohibited Method to the comfortable satisfaction of the Arbitrator. In so doing, the Arbitrator considered no blood samples were collected for a seven-week period when Respondent was sick with the Covid-19 virus. Respondent credibly explained he described his symptoms as 'mild' in his written explanation to the Joint Experts Panel, because his grandfather had died of Covid-19. Thus, in relation to his grandfather, his symptoms were mild. Respondent's lay person description of his symptoms, the Arbitrator finds, is insufficient to conclude, to her comfortable satisfaction whether Respondent suffered from Covid-19 anemia during the period at issue. Essentially, without any blood samples, the fact that he described his symptoms as 'mild' or that he was not hospitalized is insufficient to conclude Respondent did not have*

> *Covid-19 induced anemia. In this respect, the Arbitrator considered Dr. Morkeberg indicated individuals infected with the Covid-19 virus may develop anemia. Furthermore, although Dr. Morkeberg concluded the values of Sample 9 do not support the claim that Respondent had Covid-19 anemia at the time Sample 9 was collected on July 20, 2022, he did acknowledge that 'We [the ABP experts] did not have the full picture' when referring the absence of any blood samples during the time Respondent was infected with the Covid-19 virus. Similarly, the Arbitrator considered Dr. Jakšić indicated that due to the high % RET value in Sample 9, it is 'highly unlikely' the abnormalities shown in Sample 9 were caused by anemia. Still, despite his conclusion, Dr. Jakšić acknowledged without any samples from May 14, 2022 until July 20, 2022, 'it is impossible to tell if Respondent had anemia.'*
>
> *172. The absence of blood samples during the period Respondent suffered from the Covid-19 infection coupled with the failure to establish a plausible doping scenario reduced the confidence of the Arbitrator below her comfortable satisfaction. Both Dr. Morkeberg and Dr. Lewis indicated ESA can be used by an athlete to improve performance or to improve the athlete's training and to increase aerobics capacity. ABP experts explained poor performance does not necessarily mean the athlete did not dope because the athlete's performance can be affected by various factors, i.e., altitude or other physical condition. Regarding Respondent's use of ESA, the ABP experts use of ESA took place after the May 14, 2022, when Sample 8 was collected, and before July 20, 2022, when Sample 9 was collected. In the alternative, Dr. Lewis indicated the use of ESA 'did not necessarily stop' on July 20, 2022, because Sample 10, collected on August 5, 2022, still shows an elevated %RET value. Dr. Lewis suggested Respondent may have micro-doped to 'catch up with his training' and due to his competition on August 27, 2022.*"

27. The arbitrator regarded as plausible innocent (i.e. non-ADRV) scenarios the following two:

    (a) The Athlete had reduced his training volume following a bout of Covid-19 (in June of 2022) and until the time of Sample 11 (in September 2022). In that connection, the arbitrator considered that a study submitted by the Athlete, which indicates that "*a 4-week period of detraining in trained athletes affected the plasma volume of the athletes*," elucidated the results of Sample 11.

(b) The Athlete did not participate in competitions between 27 May and 27 August 2022, which the arbitrator took to mean that the Athlete had no need to enhance performance.

28. The arbitrator regarded as unconvincing the motivation posited by USADA, i.e. that the Athlete hoped to attract sponsors at a competitive event scheduled for 27 August 2022.

29. The decision ultimately concluded that USADA had–

> "*failed to establish to the comfortable satisfaction of the undersigned Arbitrator that Respondent violated Article 2.2 of the Code by the use of or attempted use of a prohibited substance or prohibited method, as alleged in the charge letter dated August 18, 2023. Accordingly, the ADRV charges against Respondent are hereby dismissed.*"

IV. THE PROCEEDINGS BEFORE COURT OF ARBITRATION FOR SPORT

30. On 9 January 2024, in accordance with Articles R47 and R48 of the CAS Code of Sports-related Arbitration, 2023 edition (the "**CAS Code**"), USADA filed its Statement of Appeal with CAS against the Athlete with respect to the Appealed Decision. USADA nominated Professor Fumagalli as arbitrator.

31. On 23 January 2024, in accordance with Article R51 of the CAS Code, USADA filed its Appeal Brief and supporting evidence.

32. On 23 January 2024, the Athlete nominated Mr Benz as arbitrator.

33. On 13 February 2024, in accordance with Article R55 of the CAS Code, the Athlete filed his Answer and supporting evidence. The Athlete also lodged five document production requests ("**DPR**s"), all pertaining to the Athlete's ABP profile.

34. On 16 February 2024, USADA objected to all the DPRs lodged by the Athlete.

35. On 19 February 2024, Dr Petrochilos KC was appointed by CAS as President of the Panel.

36. On 23 February 2024, the CAS Court Office, on behalf of the President of the Appeals Arbitration Division, confirmed the constitution of the Panel pursuant to Article R54 of the CAS Code as follows:

President: Dr Georgios Petrochilos KC, Barrister in London, United Kingdom, and Attorney-at-Law in Paris, France

Arbitrators: Mr Luigi Fumagalli, Professor and Attorney-at-Law in Milan, Italy

Mr Jeffrey Benz, Barrister in London, United Kingdom, and Attorney-at-Law in Los Angeles, United States of America.

37. On 26 March 2024, the Athlete submitted its reply to USADA's objections to his DPRs.

38. On 9 April 2024, the Panel held a case management conference with the Parties. The Parties agreed to the appointment of an *ad hoc* Clerk to assist the Panel. The Panel and Parties also discussed:

- the hearing dates and format;
- document-production issues; and
- the provision of a joint list of issues of agreement and disagreement to the Panel, prior to the hearing.

39. On 11 April 2024, the hearing dates of 20 May 2024 and 3 June 2024 were confirmed. On the same day, the Parties were informed that the Panel granted the Athlete's DPRs Nos 1-4, rejected DPR No 5, and directed the Parties to liaise with each other and revert to the Panel with documentation to be added to the file, as might be necessary.

40. The DPRs granted covered the following materials:

1. All expert and APMU evaluations of the Athlete's ABP profile;

2. The initial haemoglobin measurements, including any documentation related to those measurements, from Sample 9; as well as any documented explanation of the reason why the haemoglobin measurements for this ABP sample had to be repeated;

3. The initial haemoglobin measurements, including any documentation related to those measurements, from Sample 10; as well as any documented explanation of the reason why the haemoglobin measurements for this ABP sample had to be repeated; and

4. The initial reticulocyte percentage measurements, including any documentation related to those measurements, from Sample 11; as well as any documented explanation of the reason why the reticulocyte measurements for this ABP sample had to be repeated.

41. Also on 11 April 2024, Ms Camelia Aknouche, Attorney-at-Law in Paris, France, was appointed as *ad hoc* Clerk in these proceedings.

42. On 1 May 2024, the Parties confirmed that they resolved all the document-production issues, and the Athlete adduced three exhibits (i.e. R-33 – R-35) without objection from USADA.

43. On 7 May 2024, the Parties confirmed the joint hearing schedule.

44. On 17 May 2024, the Parties provided a list of their respective experts' points of agreement and disagreement.

45. On 20 May 2024, the Parties signed and returned the Order of Procedure.

46. On 20 May 2024 and 3 June 2024, hearings were held by video-link, with all arbitrators attending. Ms Aknouche and Dr Björn Hessert, CAS Counsel, also attended.

47. The Parties' respective delegations were as follows:

USADA

Jeff T. Cook, USADA's General Counsel
Spencer Crowell, USADA's Olympic and Paralympic Counsel
Muriel Ossip, USADA's Legal Assistant
Dr Laura Lewis, USADA's Director of Science
Dr Ozren Jaksic, ABP Expert Panel
Dr Jakob Mørkeberg, ABP Expert Panel
Dr Paulo Paixao, ABP Expert Panel

The Athlete

James 'Michael' Brinegar, the Respondent
Howard Jacobs, counsel
Katy Freeman, counsel
Jennifer Brinegar, witness
Paul Scott, expert
Dr Ronald Go, expert

48. The Panel heard evidence from both sides' experts. USADA's experts were Dr Laura Lewis (expert in the scientific aspects of doping control and Director of Science at USADA), Dr Jakob Mørkeberg (Senior Science Manager at Anti-Doping Denmark), Dr Paulo Paixao (a physician), and Dr Ozren Jaksic (a physician). The Athlete's experts were Dr Ronald Go (Professor of Medicine and Chair of the Haematology Group at the Mayo Clinic in Minnesota) and Mr Paul Scott (Principal and CEO of Korva Scientific, an analytical testing and research laboratory). During the

hearing, expert conferencing was conducted at the direction of the Panel to elucidate certain disputed points and provide clarity on the issues under consideration.

49. At the conclusion of the hearing, the Parties confirmed they were content with the procedural handling of the case and had no objection to raise.

V. SUMMARY OF THE PARTIES' SUBMISSIONS

A. USADA

50. USADA claims that Samples 9 and 11 of the Athlete's ABP present extraordinarily high %RET followed by high HGB, a sequence which is abnormal and indicates the use of an ESA. USADA's experts explain the values of the Athlete's ABP as follows:

a. Values of Samples 9 and 10

51. High %RET: When an athlete first uses an ESA such as EPO, this stimulates the bone marrow to produce more red blood cells. This leads to an increase in the number of reticulocytes (immature red blood cells) as the body ramps up production.

52. Normal HGB: Initially, the increase in reticulocytes may not immediately be reflected in a significantly higher haemoglobin concentration: it takes a number of days for new reticulocytes to mature into fully functional red blood cells.

b. Values of Sample 11

53. High HGB: As the newly produced reticulocytes mature into red blood cells, the overall haemoglobin concentration increases. This is because haemoglobin is a key component of mature red blood cells, and an increased number of these cells entrains more haemoglobin in the blood.

54. Normal %RET: Over time, as the body's red blood cell count reaches higher levels due to the increased production of such cells, the body may regulate this production, and the reticulocyte percentage can normalize.

55. The values in the Athlete's ABP are explained correctly in the First Joint Expert Report, which states that "[s]*uch a blood pattern where elevated %ret values* [are] *followed by high Hb values is compatible with the use of erythropoiesis-stimulating agent.*" This is corroborated by Dr Lewis's expert report dated 11 January 2024. Dr Lewis explains that the high %RET in Sample 9, followed by the second higher %RET value in Sample 10, then by high HGB in Sample 11 with lower %RET, are consistent with the use of an ESA:

> "[T]*he high %RET value in sample 9 indicates clear erythropoietic stimulation in July 2022, consistent with the administration of an ESA, such as EPO. Sample 10 also displays the second highest %RET value of the profile. Further the resulting high HGB levels in sample 11 (September 2022), together with lowered %RET values are consistent with the effect* [that] *prior ESA administration, and subsequent cessation, would have on HGB and %RET, respectively.*"

56. Based on the expert reports, USADA submits that the "*Respondent's ABP profile displays the classic, well-known effects of blood doping – significant stimulation of erythropoiesis followed by downregulated reticulocytes and highly elevated hemoglobin concentration.*"

57. On this basis, USADA claims that the Athlete committed an ADRV, in violation of Article 2.2 of the Code, and must thus be suspended for four years and his results disqualified since the date the ADRV was committed (i.e. 20 July 2022).

58. The Athlete presented three main defences to USADA's case at the hearing: (a) Covid-induced anaemia explains Sample 9; (b) Sample 11 was not properly refrigerated and therefore could not be taken into account; and (c) USADA had not made out a plausible doping scenario. USADA's position regarding each of these is summarised below.

c. Covid-induced anaemia

59. The Athlete contracted Covid-19 on 1 June 2022 and argued that this could have caused anaemia, which would explain the increased %RET in Sample 9. Regarding this point, the Second Expert Report states that "*anemia can be present in COVID-19 cases, in particular, in more severe cases*", and adds that a mild infection cannot "*give rise to a reticulocyte response of such magnitude (above the 99.99% upper limit) 7-8 weeks later*".

60. The last point was confirmed by the Supplemental Expert Report, which reads as follows:

> "[A] *mild COVID infection (as reported by Mr. Brinegar) is unlikely to result in such an elevated reticulocyte count 7-8 weeks later. Furthermore, an elevated reticulocyte count is usually present when the Hb is low, which was not observed at any point in this athlete.*"

61. In addition, USADA asserted that the Athlete's Sample 9 did not show pattern suggesting he was suffering from anaemia. Indeed, anaemia results in decreased haemoglobin levels, yet the Athlete's HGB levels in Sample 9 were normal.

62. Therefore, based on the Athlete's own admission that he suffered from mild symptoms, and USADA's experts' opinion, USADA argues that even without considering the Athlete's normal haemoglobin level in Sample 9, a reticulocyte count exceeding the 99.99% reference range on 20 July 2022 cannot be explained by a relatively mild Covid-19 infection seven weeks earlier. Such a mild infection would not typically lead to anaemia that would in turn lead to a pronounced increase in reticulocytes seven weeks afterward, like in the case of Sample 9.

d. Temperature of blood Sample 11

63. The Athlete claimed that the temperature log for Sample 11 shows refrigeration issues during transportation that likely affected its results.

64. In this respect, the Supplemental Expert Report states:

> "*We do not agree that 'improper' refrigeration of Sample 11 during transport has contributed to the high Hb. First, the Blood Stability Score which is a measure of sample quality, was 68 points and hence well below the WADA requirements (<85 points). Furthermore, the Hb is an extremely stable parameter also at 12 degrees Celsius for longer periods e.g. 48 hours than in the present case (Ashenden et al. 2013) where the collection to analysis time was 27 hours.*

65. This issue was discussed at length during the hearing, where USADA submitted that variations in refrigeration are not a determining factor for invalidating a blood sample, provided the Blood Stability Score ("**BSS**") remains within the required threshold of 85 or below.

e. Blood doping scenario

66. USADA's primary position is that, since the ABP is adaptive (as described above), the presence of abnormal markers is of itself sufficient to establish a doping scenario. But even on the Athlete's case that the ABP does not suffice in that regard, USADA argues that there were reasons for the Athlete to engage in blood doping. USADA stresses that the Athlete did not altogether cease training and was scheduled to compete in several events, starting with a competition in Canada on 27 August 2022.

f. Relief claimed by USADA

67. In its Appeal Brief, USADA sought the following relief:

> "*USADA respectfully requests that this Panel find that USADA has established that Respondent committed an ADRV based on an APF resulting from the use of a prohibited substance. Therefore, USADA*

> *requests that this Panel uphold USADA's appeal, vacate the first instance arbitrator's decision, and impose a four-year period of ineligibility beginning on the date of this Panel's decision less the credited period of provisional suspension. USADA also requests the disqualification of Respondent's results from 20 July 2022 to 18 August 2023, and that the parties bear their own attorneys' and experts' fees*."

B. The Athlete

68. The Athlete's line of argument starts with his clean record to date (which is not disputed) and then proceeds in three layers:

    (a) The Athlete contests the validity and reliability of Sample 11, which he says was not properly refrigerated between collection and analysis and should not be taken into account.

    (b) If Sample 11 is to be taken into account, the succession of abnormal values from Sample 9 to Sample 11 — respectively, an abnormal %RET value and an abnormal HGB value — is explicable by post-Covid anaemia and a sequent overcorrection of his organism.

    (c) At any rate, it is for USADA to establish a plausible doping scenario, and it has failed to do so. Indeed, the Athlete had no reason to seek to enhance his performance between end-May and end-August 2022, as he was not engaged in rigorous training or competition in that period.

a. Invalidity or unreliability of Sample 11

69. The Athlete argued that the temperature of Sample 11 never went below 10.4° Celsius, which suggests that Sample 11 was not properly refrigerated during transportation to the lab for analysis. According to the Athlete, improper refrigeration contravenes Annex I of the International Standard for Testing and Investigations ("**ISTI**") issued by WADA. In the Athlete's submission, that alleged contravention suffices of itself to take Sample 11 out of reckoning; and compliance with the BSS requirement is a separate and additional requirement.

70. Further, the Athlete contends that "*improper refrigeration of Sample 11 during transport cannot be ruled out as a contributing factor to the elevated HGB concentration in Sample 11*." This is supported by the Athlete's expert, Mr Scott, who testified that the temperature log for Sample 11 indicates improper handling. While Mr Scott recognized that Sample 11 reached the lab in just over 27 hours from

collection, this was not enough to eliminate all concerns with the reliability of that sample.

b. Covid-induced anaemia and subsequent overcorrection

71. The Athlete tested positive with Covid-19 on 1 June 2022. He contended that it is not unusual for individuals with Covid-19 to develop severe anaemia, which may persist for several weeks. In that connection, he argued that it was incumbent on USADA to have him tested in that period, so as conclusively to eliminate anaemia as the cause for the %RET value in Sample 9. Having failed to do so, the Athlete argues, USADA may not now challenge anaemia as a cause.

72. The Athlete's argument regarding severe anaemia relies on the evidence of Dr Go and Mr Scott. Dr Go testified that it is not "*unusual to become anemic as a result of Covid-19 infection*", and that this could explain the increased %RET in Sample 9 and Sample 10. For his part, Mr Scott also affirmed that "*it is possible that the Athlete's SARS-CoV-2 infection affected the Athlete's haematological profile, including causing a transitory increase in reticulocyte percentage*." He explained that "[i]*n studies of hospitalized patients, one medical consequence of SARS-CoV-2 infection was haemolytic anaemia. In those cases, Hb dropped and reticulocyte percentage increased, as would be expected in any case of haemolytic anaemia*."

73. Dr Go went on to testify that in his clinical experience (which has not been documented in published papers) it is possible for individuals who develop anaemia then to overcorrect, which results in an excessive increase in red blood cell count or haemoglobin levels. This is posited as the explanation for the abnormal HGB value in the Athlete's Sample 11.

c. No plausible doping scenario

74. The Athlete argues that USADA must establish plausible motivation, consistent with the actual facts, for a blood doping charge. This, the Athlete says, USADA has failed to do.

75. The Athlete stated he stopped training from end-May until 18 June 2022, the longest break from training in his career. He then resumed training gradually, first with his mother's swimming group, then on his own, and fully only after 12 October 2022, when he started training with the Ohio State University team.

76. As for competitive swimming in the period, there was very little. The Athlete withdrew from the World Championship following his Covid-19 test results in June 2022. He then competed only once, on 27 August 2022, and performed below his usual standards.

d. Relief claimed by the Athlete

77. In its Answer Brief, the Athlete sought the following relief:

> "*Michael Brinegar respectfully requests that CAS rule as follows:*
>
> *9.1.1 That the appeal of USADA be dismissed; and*
>
> *9.1.2 That Appellant USADA shall bear all costs of the proceedings, including a contribution toward Respondent Michael Brinegar's legal costs.*"

VI. JURISDICTION

78. The appellate jurisdiction of CAS is common ground between the Parties and has not been addressed at any length in their pleadings. The Panel addresses the issue for completeness.

79. Article R47 para. 1 of the CAS Code provides:

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

80. The availability of an arbitral appeal before CAS results from a combination of texts. In the first place, the Athlete is a member of USA Swimming, and by virtue of his membership he is bound by the Rulebook of USA Swimming. The "Doping Control" section of the Rulebook provides in material part that "[i]*f it is determined that an individual member may have committed a doping violation, the member agrees to submit to the . . . processes of USADA, including arbitration under the USADA Protocol*". USA Swimming is a "federation" within the meaning of Article R47 para. 1 of the CAS Code; and the Rulebook forms part of its "regulations" within the meaning of the same Article..

81. Turning, therefore, to the USADA Protocol, this incorporates by reference and in its Annex A the WADA Code. The Code provides in Article 13.2.1 as follows:

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

The Athlete is an elite-level international swimmer and thus an "International-Level Athlete" within the meaning of the Code. He has accordingly been included in USADA's Registered Testing Pool between October 2017 and May 2023.

82. Consistent with the foregoing, the Parties affirmed CAS' jurisdiction in Section 1 of the Order of Procedure by their agreement to the Order of Procedure. The Parties participated fully in these proceedings and did not raise any jurisdictional objection at any time.

83. The Panel is therefore satisfied that it has jurisdiction over this appeal.

VII. ADMISSIBILITY

84. Article R49 of the CAS Code provides:

> "*In the absence of a time limit set in the statutes or regulations of the federation, association or sports-related body concerned, or of a previous agreement, the time limit for appeal shall be twenty-one days from the receipt of the decision appealed against. After having consulted the parties, the Division President may refuse to entertain an appeal if it is manifestly late.*"

85. Annex A of the USADA Protocol incorporates Article 13.2.3.5 of the Code, which states that:

> "*The filing deadline for an appeal filed with WADA shall be the later of: (a) Twenty-one (21) days after the last day on which any other party having a right to appeal could have appealed, or (b) Twenty-one (21) days after WADA's receipt of the complete file relating to the decision.*"

86. The sole arbitrator's decision was issued on 27 December 2023. The Statement of Appeal was filed fifteen days later, on 11 January 2024; that is, within the 21-day period imposed by Article 13.2.3.5 of the Code.

87. The Athlete has not challenged the admissibility of USADA's appeal.

88. The Panel is therefore satisfied that the present appeal is admissible.

VIII. APPLICABLE LAW AND RULES

89. Article R28 of the CAS Code provides that "*[t]he seat of CAS and of each Arbitration Panel ('Panel') is Lausanne, Switzerland*."

90. Article 176(1) of the Swiss Private International Law Act ("**PILA**") provides that Chapter 12 (International Arbitration) "*apply to arbitral tribunals that have their seat in Switzerland if at least one of the parties to the arbitration agreement, at the time of its conclusion, did not have its domicile, habitual residence of seat in Switzerland*". CAS Panels are such tribunals, pursuant to Article R28 of the CAS Code.

91. Under Article 187(1) PILA, "*the arbitral tribunal shall decide the dispute according to the rules of law chosen by the parties*". There is no dispute between the Parties that such "rules of law" include rules issued or adopted by federations and similar bodies.

92. Consistent with Article 187(1) PILA, Article R58 of the CAS Code provides in material part:

> "*The Panel shall decide the dispute according to the applicable regulations and, subsidiarily, to the rules of law chosen by the parties or, in the absence of such a choice, according to the law of the country in which the federation, association or sports-related body which has issued the challenged decision is domiciled or according to the rules of law the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision.*"

93. In the present case, the "applicable regulations" for purposes of Article R58 of the CAS Code is the USADA Protocol, which incorporates the Code (including Article 2.2, quoted above) and associated international standards. It is noted for completeness that were it necessary to apply additional rules of law "subsidiarily", the Panel would apply US law, being "the law of the country in which [USADA] is domiciled". As will be seen below, it is unnecessary to have regard to a subsidiary source of law to decide this case.

IX. DE NOVO REVIEW

94. Article R57 para. 1 of the CAS Code provides in relevant part:

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

95. Accordingly, the Panel is to conduct a *de novo* determination of USADA's claims and the Athlete's defences. The Panel must reach its own determination, based on the record

and submissions before it, rather than merely to review the decision of the sole arbitrator. The Panel has carefully and respectfully considered the sole arbitrator's analysis, without however according it any special deference.

X. MERITS

A. The burden and standard of proof

96. It is common ground that the burden and standard of proof are regulated by Article 3.1 of the Code. This provides that USADA as the Anti-Doping Organization bears the burden to establish that an ADRV has been committed by the Athlete, and to discharge that burden successfully it must establish the violation to the comfortable satisfaction of the Panel. It is common ground, consistent with CAS jurisprudence, that this standard of proof is more exigent than a balance-of-probabilities test but less demanding than a beyond-reasonable-doubt test.

97. The Panel stresses that meeting this evidential standard requires USADA affirmatively to establish an ADRV; here, the use of a prohibited substance or method under Article 2.2 of the Code. It is not enough to exclude innocent, non-ADRV explanations for the evidence in the record.

B. The object of proof and the role of a "plausible doping scenario"

98. A number of ADRV cases turn on direct evidence of a prohibited substance or method having been used by an athlete, detected for example in a urine sample. The present case, by contrast, turns on indirect evidence, namely the sequence of abnormal haematological values in Samples 9-11 in the Athlete's ABP. These values are indirect evidence because they do not bear out an ADRV in and of themselves, whether taken in isolation or together. Rather, they are results whose cause must be elucidated by scientific evidence consistent with the actual facts of each case. The Panel's mission is accordingly to assess whether, on the scientific and factual evidence before it, the cause of the abnormal haematological values in Samples 9-11 is an ADRV or another, innocent circumstance. This is a legal judgement, informed by scientific and factual evidence.

99. The Panel therefore agrees with prior CAS holdings to the effect that "*the ABP profile is a method of proving blood doping and not an ADRV in and of itself . . . However, an ABP profile is a reliable and accepted means of evidence in establishing an ADRV*" (CAS 2019/A/6226, para. 5; see also CAS 2016/O/4464, para. 148; CAS 2016/O/4463, para. 90; CAS 2016/O/4469, para. 137).

100. The concept of a "plausible doping scenario" is a helpful exegetical device in cases which turn on indirect evidence. It is especially helpful in cases which involve evidence

taken over a period of time, which accordingly needs to be explicated as a sequence of causes and events (see CAS 2020/A/7510, paras. 142-147).

101. However, it would be wrong to think that making out a doping scenario requires establishing motivation for committing an ADRV. As Article 2.2.1 of the Code makes plain, ADRV violations do not require intent. Rather, the position is that a scenario is a holistic account for the objective evidence which (a) relies on scientific analysis that (b) is consistent with the facts and (c) leads to the conclusion that the underlying cause for the objective evidence is an ADRV. (Cf. CAS 2016/O/4464, para. 5; CAS 2019/A/6226, para. 5.)

102. In the light of the foregoing, the Panel is unable to accept USADA's thesis that abnormal ABP values of and by themselves establish a plausible doping scenario because of the adaptive nature of the model used. The Panel is also unable to accept the Athlete's thesis that it is incumbent on USADA to establish that he had motivation to commit an ADRV. The facts and circumstances must be considered by the Panel as a whole for a charge to take hold based on an ABP violation under Article 2.2 of the Code.

C. The weight of testimony proffered by USADA's experts

103. The Athlete has taken issue with USADA's characterization of the evidence given by Dr Lewis and Dr Mørkeberg as "expert" evidence. Both are affiliated with Anti-Doping Organizations — indeed, Dr Lewis is a USADA employee — and therefore (so the argument goes) do not have the requisite independence one would expect of an expert testifying to a tribunal. A contrast was sought to be drawn with Dr Go and Mr Scott, who have no affiliation with the Athlete.

104. The Panel acknowledges the point but is also compelled to note that Dr Lewis and Dr Mørkeberg were submitted to cross-examination and also expert-witness conferencing/confrontation under the Panel's control. At all events, the Athlete had a full opportunity to test the accuracy and reliability of the opinions proffered by Dr Lewis and Dr Mørkeberg, and indeed to adduce his own expert evidence. He did avail himself of these opportunities.

105. In conclusion, while the Panel is not prepared to accord any special weight or deference to the opinions proffered by Dr Lewis and Dr Mørkeberg, it is not prepared to treat them with any particular caution. The Panel has considered, carefully and in the balance, the evidence given by all the specialists proffered as experts by both sides. It has reached its conclusions on the scientific evidence accordingly.

D. Whether Sample 11 may be taken into account

106. It will be apparent from paragraphs 53-58 above that USADA's case crucially relies on Sample 11. On USADA's own case, Samples 9 and 10 are not enough to bear out an ADRV. Rather, it is the sequence of abnormal %RET and HGB values through Samples 9-11 which USADA relies upon to establish blood doping.

107. As already described, the Athlete contests the validity of Sample 11 on grounds that it was required to be refrigerated and it appears not to have been; and on this basis the Athlete submits that Sample 11 should be left out of reckoning. It is therefore necessary to resolve this issue in order to determine which evidence the Panel may take into account.

a. Applicable regulatory texts

108. As described at paragraphs 79-81 above, the USADA Protocol implements the provisions of the Code. In turn, the Code operates in conjunction with eight International Standards which aim to foster consistency among anti-doping organizations in various areas. The Code provides in its introductory section that "[a]*dherence to the International Standards is mandatory for compliance with the Code*". The Code also incorporates by reference various Guidelines. The Panel takes each of these regulatory texts in turn.

109. Starting with International Standards, the one relevant here is the ISTI. This lays down norms for testing, from a "*test distribution plan*", which is "[a] *document written by an Anti-Doping Organization that plans Testing on Athletes*", to the transportation of samples to laboratories for analysis.

110. As for Guidelines, the Code states in its introductory section that these are "*based on the Code and International Standards*" and "*have been and will be developed to provide solutions in different areas of anti-doping*."

111. The ISTI sets forth requirements for Sample Collection, referring to (a) Annex D in respect of Venous Blood Samples and (b) Annex I in respect of Collection, Storage and Transport of ABP Blood Samples.

112. Annex D of the ISTI provides in material part:

> "*Blood Samples shall be transported in accordance with Article 9 and WADA's Guidelines for Sample Collection. The transport procedure is the responsibility of the DCO.* ***Blood Samples shall be transported in a device that maintains the integrity of Samples over time, in a cool and constant environment, measured by a temperature data logger notwithstanding changes in external***

> ***temperature***. *The transport device shall be transported by secure means using a method authorized by the Testing Authority or Sample Collection Authority.*" (Emphasis added)

113. Annex I of the ISTI provides:

> "***The Sample shall be refrigerated from its collection until its analysis*** *with the exception of when the Sample is analyzed immediately following collection. The storage procedure is the DCO's responsibility.*
>
> ***The storage and transport device shall be capable of maintaining blood Athlete Biological Passport Samples at a cool temperature during storage***. *Whole blood Samples shall not be allowed to freeze at any time. In choosing the storage and transport device, the DCO shall take into account the time of storage, the number of Samples to be stored in the device and the prevailing environmental conditions (hot or cold temperatures). (…) A temperature data logger shall be used to record the temperature from the collection to the analysis of the Sample except when the Sample is analyzed immediately following collection.*" (Emphasis added)

114. Paragraph I.4.3 of Annex I of the ISTI also provides:

> "*The integrity of the Markers used in the hematological module of the Athlete Biological Passport is* ***guaranteed*** *when the Blood Stability Score (BSS) remains below eighty-five (85).*" (Emphasis added)

115. The term "guaranteed" is important: the BSS metric is designed to guard against the potential degradation or alteration of blood samples due to their improper handling, storage, or transportation. It is therefore a metric of sample integrity, as indeed Annex I of the ISTI states in terms.

116. Annex I of the ISTI also provides a table that can be used to estimate the maximum transportation time to the laboratory in the light of the average temperature at which the sample is kept:

I.4.4 Within the framework of the BSS, the following table can be used by the DCO/BCO to estimate the maximal transport time to a Laboratory or *ABP* Laboratory, called the Collection to Reception Time (CRT), for a given average temperature (T), e.g., if shipped at 4°C, the maximal CRT is 60 h.:

T [°C]	CRT [h]
15	27
12	36
10	42
9	45
8	48
7	51
6	54
5	57
4	60

117. Annex D of the ISTI expressly refers to the WADA Guidelines for Sample Collection regarding transportation of blood samples. These WADA Guidelines provide in Section 4 (Storage of Samples and Documentation) that:

> "*Venous* ***blood samples must be stored in a cooled state immediately after collection, preferably in a refrigerator or cool box.*** *The temperature must be monitored with a temperature data logger.*" (Emphasis added)

118. The WADA Guidelines also provide in Section 5, Chapter 16 (Transportation of Blood Samples) that:

> "*Blood samples must be transported to the Laboratory in a device that:*
>
> – *maintains the integrity of samples over time;*
>
> – ***maintains a cool and constant environment, measured by a temperature data logger****;*
>
> – ***prevents a blood sample from freezing****; and*
>
> – *is not affected by changes in the external temperature of the device.*" (Emphasis added)

119. Further, the WADA Guidelines also state that "[a]*ll venous blood samples* ***should be*** *refrigerated as soon as possible after withdrawal*" (emphasis added).

120. Standing back from these texts, the Panel observes that they are less than pellucid in spelling out whether refrigeration is mandatory, and perhaps should be revisited for clarity. The Panel is of the view that if refrigeration were an invariable or mechanical

requirement of process, the texts would say so expressly. In fact, they do not. The Panel is therefore of the view that refrigeration is a potential means to an end, that end being to achieve a BSS below 85, which "guarantees" the integrity of a sample.

121. The Panel accepts in that regard the evidence of Dr Jaksic, who explained the process as follows:

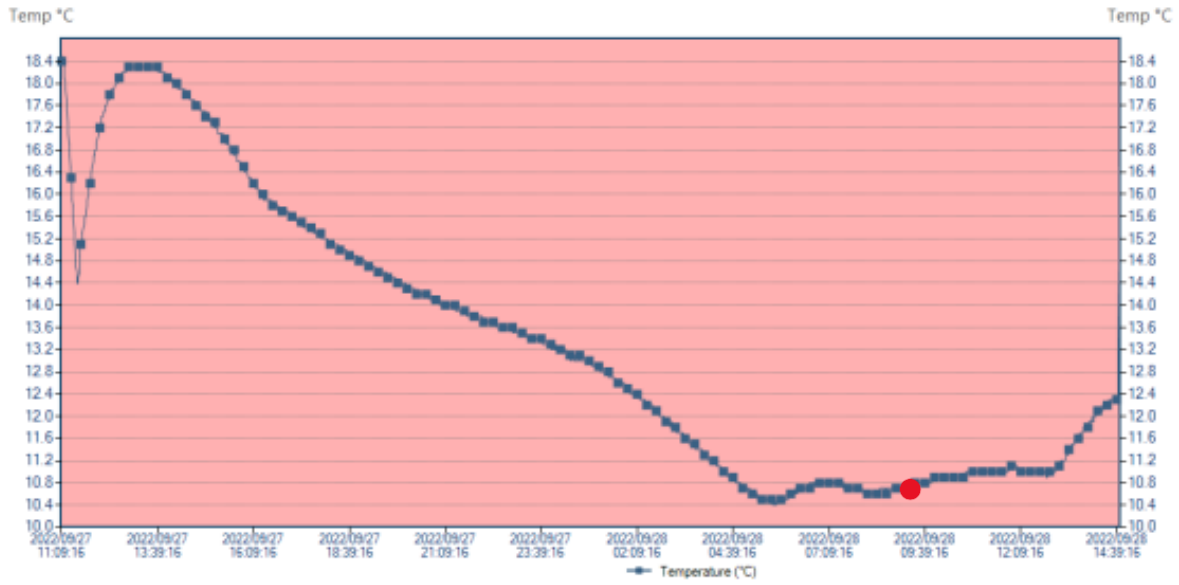
> "*Samples are always to be collected by a trained expert team, stored, and transported in a suitable device at cool temperatures (e.g., 4° C, freezing not permitted), and delivered to the WADA accredited laboratory for further analysis in time.* ***Samples are first tested for potential degradation using the blood stability score (BSS), taking into account transport temperature and time to determine if they are adequate for further analysis***." (Emphasis added)

122. The Panel therefore concludes that preserving samples in a cool and stable environment (Annex D of the ISTI) is an invariable requirement, but refrigeration is a potentially desirable but not always necessary requirement (which is not precisely defined in any event). The Panel also concludes that respecting the correlation between Temperature (***T***) and the maximal transportation time, referred to as Collection to Reception Time (***CRT***) at Annex I.4.4 of the ISTI, is a mandatory requirement. It follows that the absence of refrigeration for at least some period of time will not automatically invalidate a sample. There appears to be no other way to reconcile the various portions of the texts to reach a sensible, coherent result.

123. The Panel now turns to apply the requirements for validity to Sample 11.

b. Application to Sample 11

124. The log of Sample 11 indicates that the temperature of the sample on collection, on 27 September 2022, was 18.4° C, dropping to just over 10.4° C by the time it was tested (9:29 am) on 28 September 2022:



125. From this log and the evidence presented to it, the Panel draws three conclusions.

126. First, Sample 11 was in fact kept in a cool environment, as one can see from the immediate drop in temperature to 14.4° C. The temperature then increases to 18.4° C in the space of what appears to be an hour or so, and then steadily decreases to 10.4° C. This, in the Panel's view, indicates a cool and relatively (if not perfectly) stable environment.

127. Secondly, by application of Annex I.4.4 of the ISTI, the Panel works out the maximal CRT to be about 31.5. In fact, it was about 27.5 — or 1 day, 3 hours, and 36 minutes. Thus, Sample 11 was tested within the required timeframe.

128. Thirdly, it is common ground that Sample 11 had a BSS of 68. This is comfortably within the limitation of 85, and of itself suggests that the sample was kept in a cool and stable environment.

129. The Panel therefore concludes that Sample 11 met the validity requirements set forth in the Code, ISTI, and WADA Guidelines.

130. The Panel adds that it has been given no basis on which to conclude that the absence of refrigeration can affect (and if so how) HGB values, which for present purposes is the relevant data point in Sample 11.

131. Sample 11 is therefore part of the evidence to be taken into account in considering whether the ABP of the Athlete bears out an ADRV as alleged by USADA.

E. Has USADA established a plausible doping scenario?

132. Two important matters are common ground between the Parties.

133. First, it is common ground that Samples 9-11 present a sequence of clearly abnormal haematological values, as may graphically be seen at paragraph 16 above:

(a) The Sample 9 %RET value of 2.64 is highly abnormal — above the 99.99% upper limit.

(b) The Sample 10 %RET value of 1.97, while not per se abnormal (it is just under the upper bounds of normalcy), is the second-highest %RET value in the Athlete's ABP.

(c) The Sample 11 HGB value of 17.2 is highly abnormal — above the 99.99% upper limit.

134. Secondly, Mr Scott had no hesitation in confirming, in response to a question from the Panel, that this sequence of haematological values is consistent with blood doping.

135. The effect of blood doping, especially through the use of an ESA (which USADA's Dr Lewis regards as the most plausible explanation), is to improve aerobic capacity and performance without the need to increase one's training load. Thus, as Dr Lewis explained, using an ESA can accelerate a return to fitness for an athlete who has altogether stopped training or seriously decreased their training load for a period.

136. An accelerated return to fitness does match the overall facts. Having competed in the first leg of the Marathon Swim World Series (in Portugal) on 28 May 2022, the Athlete then practically stopped training after he contracted Covid-19 in the days immediately following, and then trained only lightly in the period to 27 August 2022, when he competed in the third leg of the Series (in Canada), intending at that stage to compete in the fourth and fifth legs in early October and early November respectively.

137. In the Panel's view, the scientific opinion (which, as just noted, is concordant) and the overall facts do rise to the level of a plausible doping scenario. Absent, therefore, an alternative innocent (non-ADRV) scenario having a real plausibility of some degree, the Panel will be compelled to adopt this doping scenario as being established to its comfortable satisfaction. The Panel therefore turns to consider the alternative innocent scenario posited by the Athlete.

F. The plausibility of the innocent scenario posited by the Athlete

138. The innocent scenario posited by the Athlete for the sequence of abnormal haematological values in Samples 9-11 consists of the account that Samples 9-10 are

explicable by Covid-induced anaemia, and Sample 11 by an overcorrection effect. Paragraphs 68-73 above provide further detail.

139. Before turning to consider these accounts in turn, the Panel notes that at first and over time the Athlete has advanced a number of other possible explanations. These receded in the background in the present proceedings. The Panel does not regard this as a sign of insincerity or unreliability on the part of the Athlete. The period concerned spans a number of weeks, in which a number of different events occurred. The science that can explain haematological values is complex, a number of cognate disciplines may be brought to bear for insights, and a period of time had passed between the time when the Athlete was notified of results from a blood test taken some period prior. It is unremarkable that it took the Athlete and those advising him time to settle on the strongest scientific explanation they could muster under the applicable rules.

a. Covid-induced anaemia (Samples 9-10)

140. It is common ground that anaemia might explain the elevated %RET values in Samples 9-10; and that a number of persons who contracted severe Covid-19 did develop anaemia as a result.

141. It is contested, however, whether the Athlete suffered from anaemia (to any degree) in the aftermath of his Covid-19 infection at the beginning of June 2022. No blood tests were conducted at the time for the Athlete's ABP, hence there is no actual evidence either way. The Athlete argues that it was for USADA to conduct blood tests in the period, and having failed to conduct such tests, it is not open to it to contest the Athlete's anaemia explanation.

142. The Panel is not prepared to go that far. It is unclear how USADA would have been informed of the Athlete's positive Covid-19 test of 1 June 2022, still less why it would have been incumbent on USADA then to have blood testing conducted for anaemia.

143. Rather, the Panel is content to proceed on the basis that anaemia is a plausible side-effect of Covid-19, without attaching any importance to the statistical chances of the Athlete's having developed anaemia.

144. But it is further contested whether the Athlete's Covid-19 infection was sufficiently serious in the degree to cause anaemia that can explain the elevated %RET values in Samples 9-10. On that score, USADA relies heavily on the Athlete's contemporaneous account, describing his case as one of "mild" Covid-19 in his response of 9 July 2023. To this, the Athlete retorts that he had in mind as a benchmark his grandfather's Covid-19 infection, which was fatal — anything below that was "mild" in his conception at the time.

145. On this score too, the Panel is content to proceed on the basis that the Athlete's anaemia was of sufficiently severe proportions, whatever the statistical odds of this occurring.

146. The Panel does note, however, that on the concordant evidence before it, anaemia would result in HGB levels of 13 or below — in severe cases, 8 or below — while Samples 9-10 record HBG levels of 15.5 and 15.6 respectively. But as these samples were taken weeks after the Athlete's Covid-19 infection, the Panel is according the Athlete the benefit of the doubt in accepting as a plausible hypothesis that he suffered from severe anaemia in the aftermath of his infection.

b. Post-Covid overcorrection (Sample 11)

147. The concept of overcorrection was advanced by Dr Go, who testified that in his clinical experience from treating patients, those who recover from anaemia may overcorrect by producing red blood cells in excess of the count that the body strictly requires. That excessive increase is reflected in abnormal HGB levels.

148. Dr Go acknowledged that instances of overcorrection are rare and that he was unaware of any scientific literature recording this phenomenon after anaemia.

149. The other experts in the case, for their part, testified that they were unaware of a phenomenon of overcorrection, whether from personal experience or scientific literature.

150. On the evidence before it, and without wishing to cast doubt on Dr Go's experience as a treating physician or his sincerity, the Panel is unable to accept his own clinical observations as an established scientific fact that can affect large segments of the population. Anaemia being a common condition, one would expect that if overcorrection were observed in any statistically meaningful number of cases, it would have been discussed at least once in the relevant literature. As in fact it has not, the Panel is unable to credit overcorrection as a putative cause of any plausibility for the Sample 11 HGB levels.

G. Conclusion

151. The alternative explanation for the haematological values in Samples 9-11 presented by the Athlete lacks plausibility, even with the benefit of the doubt in favour of the Athlete's Covid-induced anaemia account. This inexorably means that USADA's explanation — which is a plausible doping scenario in its own right —must be retained by the Panel, and the Panel so holds.

H. Consequences – Sanctions

152. The sanctions for an ADRV comprise notably ineligibility and disqualification. The Panel addresses each in turn.

153. Ineligibility: Under Article 10.2 of the Code, the period of ineligibility for an ADRV under Article 2.2 of the Code is four years. Article 10.13 provides that the period of ineligibility starts on the "*date of the final hearing decision providing for Ineligibility*". Also, under Article 10.13.2, if a provisional suspension has been served, the Athlete "*shall receive a credit for such period*" against the period of ineligibility that is imposed.

154. Therefore, in application of Article 10.2 of the Code, taking into account that the Athlete has not established (or even argued) that the ADRV was not intentional, the Panel concludes that a period of ineligibility of four years is to be imposed on the Athlete.

155. The Athlete's four-year period of ineligibility starts on the date on which the operative part of the present Award was issued, i.e. 22 June 2024. Credit must be given for the period of just over three months during which the Athlete served a provisional suspension, i.e. from 18 August 2023 until 27 November 2023. The Athlete has made no argument for other reductions or earlier start-date(s), and accordingly the Panel makes no decision in that regard.

156. Disqualification: Article 10.10 of the Code provides that "*all competitive results of the Athlete obtained from the date a positive Sample was collected . . ., through the commencement of any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified*."

157. In the present case, the Panel is satisfied that fairness requires that only the Athlete's results from 20 July 2022 to 31 December 2022 must be disqualified. This is because (i) the evidence is that the performance-enhancing effect of the Athlete's ADRV can last a few months only and (ii) the Athlete was tested by USADA four times in October 2022 – March 2023 without any of the samples giving rise to an ADRV charge.

158. Consequently, the Athlete's results from 1 January 2023 to the present day may be regarded as unaffected by the ADRV which gives rise to the present decision.

XI. COSTS

(…).

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

ON THESE GROUNDS

The Court of Arbitration for Sport rules that:

1. The appeal filed by US Anti-Doping Agency (USADA) on 9 January 2024 against the decision issued on 26 December 2023 by New Era Arbitration (Case No 2023082801) is partially upheld, as set out in paragraphs (3)-(6) below.

2. The said decision issued on 26 December 2023 is set aside.

3. James ‘Michael’ Brinegar is found to have committed an Anti-Doping Rule Violation under Article 2.2. of the World Anti-Doping Code.

4. James ‘Michael’ Brinegar is sanctioned with a period of Ineligibility (within the meaning of the World Anti-Doping Code) of four (4) years, commencing on the date of this decision.

5. Credit is to be given for the period during which James ‘Michael’ Brinegar has already been provisionally suspended, from 18 August 2023 until 27 November 2023.

6. James ‘Michael’ Brinegar’s competition results in the period from 20 July 2022 to 31 December 2022 are disqualified, with all resulting consequences, including forfeiture of any medals, titles, ranking points and prizes (all within the meaning of the World Anti-Doping Code).

7. (…).

8. (…).

9. All other motions or prayers for relief are dismissed.

Seat of arbitration: Lausanne, Switzerland
Operative part of the Award notified on 21 June 2024
Date: 26 February 2025

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

THE COURT OF ARBITRATION FOR SPORT

Georgios Petrochilos KC
President of the Panel

Luigi Fumagalli
Arbitrator

Jeffrey Benz
Arbitrator

Camelia Aknouche
Ad Hoc Clerk