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

**CAS 2023/A/10025 Simona Halep v. International Tennis Integrity Agency**

**CAS 2023/A/10227 International Tennis Integrity Agency v. Simona Halep**

# ARBITRAL AWARD

**delivered by the**

# COURT OF ARBITRATION FOR SPORT

**sitting in the following composition:**

| | |
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| President: | The Hon. Dr. Annabelle Bennett AC SC, Barrister in Sydney, Australia |
| Arbitrators: | Mr. Jeffrey Benz, Attorney-at-Law and Barrister in London, United Kingdom |
| | Prof. Ulrich Haas, Professor of law in Zurich, Switzerland and Attorney-at-Law in Hamburg, Germany |
| *Ad hoc* Clerk: | Mr. Alistair Oakes, Barrister in Sydney, Australia |

**in the arbitration between**

**Simona Halep, Romania**
Represented by Mr. Howard Jacobs and Ms. Katy Freeman of Law Offices of Howard L. Jacobs in Westlake Village, California and Mr. Claude Ramoni of Libra Law in Lausanne, Switzerland
**Appellant in CAS 2023/A/10025**
**Respondent in CAS 2023/A/10227**

**and**

**International Tennis Integrity Agency, United Kingdom**
Represented by Richard Liddell KC, Barrister, Ms. Lauren Pagé, Mr. Chris Lavey and Mr. Magnus Wallsten of Bird & Bird and Mr. Ben Rutherford and Ms. Katy Stirling of the International Tennis Integrity Agency, all in London, United Kingdom
**Respondent in CAS 2023/A/10025**
**Appellant in CAS 2023/A/10227**

## I. PARTIES

1. Ms Simona Halep (the "Player") is a Romanian professional tennis player. She is currently 32 years old and, at the time of the relevant incidents (late 2022), she was 30 years old. She has held the number 1 ranking in women's singles tennis on numerous occasions and was the champion for the 2018 French Open and 2019 Wimbledon Championships.

2. The International Tennis Integrity Agency ("ITIA") is the body responsible for doping control in the sport of tennis, as delegated by the International Tennis Federation ("ITF"), the international sports federation recognised as such by the International Olympic Committee. In accordance with its obligations as a signatory to the World Anti-Doping Code (the "WADC") of the World Anti-Doping Agency ("WADA"), the ITF issued the 2022 Tennis Anti-Doping Programme ("TADP").

3. The Player and the ITIA are jointly referred to as the "Parties".

## II. FACTUAL BACKGROUND

### A. Background Facts

4. Below is a summary of the relevant facts and allegations based on the Parties' written submissions, pleadings and evidence adduced in these proceeding. Additional facts and allegations found in the Parties' written and oral submissions, pleadings and evidence may be set out, where relevant, in connection with the legal discussion that follows. The Panel has considered all the facts, allegations, legal arguments and evidence submitted by the Parties in the present proceedings. However, it refers in this Award only to the submissions and evidence it considers necessary to explain its reasoning.

5. This proceeding is an appeal from a decision of the Independent Tribunal (the "First Instance Tribunal" or "Tribunal") which determined the charges at first instance and held that the Player had committed Anti-Doping Rule Violations ("ADRVs") under Article 2 of the TADP as follows:

   a. the presence of the Prohibited Substance, Roxadustat, in her urine sample collected In-Competition on 29 August 2022, in breach of Article 2.1 of the TADP;

   b. the use of the Prohibited Substance, Roxadustat, on 29 August 2022, in breach of Article 2.2 of the TADP; and

   c. the use of a Prohibited Substance and/or a Prohibited Method on or before 29 August 2022, as evidenced by her Athlete Biological Passport, in breach of Article 2.2 of the TADP.

6. The First Instance Tribunal imposed a sanction of a period of ineligibility of four (4) years, commencing on 7 October 2022.

*a. Roxadustat*

7. As identified by the First Instance Tribunal, Roxadustat (also known as FG-4592) is legitimately used for medical treatment of anaemia. In the sporting context, and under the TADP, it is a banned substance because it could be used as a blood doping agent, increasing haemoglobin and the production of red blood cells. In doing so, it increases the available oxygen in an athlete's body which usually improves endurance and recovery.

8. Roxadustat is a prohibited substance under section S2 (S 1.2 "ERYTHROPOIETINS (EPO) AND AGENTS AFFECTING ERYTHROPOIESIS") of the 2022 WADA Prohibited List (the "Prohibited List"), which is incorporated into the TADP. It is a non-specified substance.

*b. 29 August 2022 urine sample*

9. On or around 28 July 2022, the Player travelled to North America, in preparation for the US Open Tennis Championships (the "US Open") (which commenced in late August). She travelled with Ms. Candice Gohier, her physiotherapist at the Mouratoglou Academy in Biot, France (which the Player had joined in around April 2022). The Player competed in the National Bank Open in Toronto, Canada between 8 and 14 August 2022 and in the Western & Southern Open in Cincinnati, USA, between around 15 and 17 August 2022, though she withdrew from the latter tournament before her second-round match due to a thigh injury.

10. The Player's evidence is that, at around that time, Ms. Gohier recommended that the Player add sugar-free supplements to her nutritional regimen, including a sugar-free collagen supplement, and suggested a product called Keto MCT with Marine Collagen ("Keto MCT"). That evidence was supported by Ms. Gohier. Ms. Gohier's evidence is that she spoke with Mr. Patrick Mouratoglou (the director of the Mouratoglou Academy) who asked her to find supplements that contained less sugar, and suggested she enquire with Mr. Frédéric Lefebvre, the Director of physical preparation at the Mouratoglou Academy. Her evidence is that Mr. Lefebvre had told her that one of his athletes (a high-ranking men's singles player) had used the Keto MCT supplement without issue. Ms. Gohier's statement exhibited a text message exchange with Mr. Lefebvre in which they discussed the Keto MCT supplement and he provided her with the contact details of a person at the manufacturing company, Schinoussa, from whom she could obtain the supplements.

11. The Keto MCT and other products were shipped to the Player in New York City, USA and arrived on 23 August 2022. Ms. Gohier stated that she checked the ingredients on each product to ensure that they contained no banned substances (it was common ground that none of the ingredients as listed on the supplement were banned substances).

12. Although the Player did not give direct evidence of this matter, she asserted in her case that she used the Keto MCT between 23-28 August 2022. She used 10g of the powder on each of 23, 25, 26, 27 and 28 August 2022. The powder was mixed with water so that she could ingest the supplement.

13. On 26 August 2022, the Player submitted an out-of-competition urine sample. No prohibited substances were detected in that sample.

14. On 29 August 2022, the Player competed in the first round of the US Open. She lost that match and, afterwards, was subjected to an in-competition doping control urine test. On her doping control form, she disclosed her use of a 'schinoussa recovery drink', which the Panel accepts was a reference to her recovery drink which contained the Keto MCT. The Player's urine sample was split into an A-Sample and B-Sample in the usual manner and sent to the WADA-accredited laboratory in Montreal, Canada (the "Montreal Laboratory") for analysis.

15. On 7 October 2022, the Player was issued a notice of a potential ADRV, notifying her that her A-Sample (no. A1084535) had returned an adverse analytical finding ("AAF") for Roxadustat and that, if she did not admit the possible ADRV, the B-Sample would be analysed to see whether it also contained Roxadustat. The notice also informed the Player that she was subject to a provisional suspension with effect from 7 October 2022.

16. The Player requested to have the B-Sample (no. B1084535) analysed, which occurred on 17 October 2022. The B-Sample confirmed the presence of Roxadustat.

17. Roxadustat is not a threshold substance; that is, its presence alone in an athlete's urine sample is sufficient to constitute an AAF. In contrast, in order to have an AAF for a threshold substance, it is necessary to have not only identification of the substance but also a quantitative determination in excess of a predetermined limit set by WADA.

18. Given that a finding of the presence of Roxadustat alone was sufficient for an AAF, the relevant analysis of the Player's A-Sample for Roxadustat was only a qualitative analysis. The analysis of the B-Sample was simply to confirm the presence of Roxadustat in the A-Sample, and therefore was also a qualitative analysis. Nonetheless, the testing conducted by the Montreal Laboratory provided estimated concentrations in each sample: approximately 289 pg/mL for the A-Sample and approximately 529 pg/mL for the B-Sample. The reliability of those reported concentrations was the subject of dispute and is addressed below.

19. On 31 October 2022, the ITIA notified the Player that she was being charged with ADRVs under the TADP as a result of her 29 August 2022 urine sample. The relevant charges were contraventions of Article 2.1 (presence of a prohibited substance) and Article 2.2 (use of a prohibited substance) of the TADP.

20. The operation of the TADP (which largely reproduces the WADC) is that contraventions of its Articles 2.1 and 2.2 are strict liability offences. Accordingly, subject to the existence of a therapeutic use exemption (which was not the case here), whether or not the substance was used intentionally and the athlete's level of fault are matters which are irrelevant to whether or not an ADRV occurred. Those matters are, however, relevant to any period of ineligibility to be imposed.

21. The Player did not dispute that the mere presence of Roxadustat in her system meant that, on the strict terms of the TADP, she had committed an ADRV. However, she

claims that she did not consume any Roxadustat intentionally and that in fact the Roxadustat detected in her system came from the Keto MCT product, which she submitted was contaminated with Roxadustat. The Player relied upon expert reports which stated that Roxadustat was found in the Keto MCT container which the Player had used as well as other (unopened) containers from the same batch as used by the Player. She contended that, in all of the circumstances, she had exhibited no significant fault or negligence and there the *prima facie* period of ineligibility ought to be reduced. Her Appeal Brief proposed a period of ineligibility of four months.

22. The ITIA disputed that Roxadustat was present in the Keto MCT product used by the Player. Two different WADA-accredited laboratories (the Montreal Laboratory and the Sports Medicine & Research Testing Laboratory in Utah, "SMRTL") were unable to detect Roxadustat in the Keto MCT, despite multiple attempts using different methodologies, which methods were able to detect Roxadustat at the levels reported by the Player's expert. The ITIA also submitted that, even if the Keto MCT was contaminated, it could not explain the Player's positive urine sample because it was not plausible that the amount of Keto MCT the Player asserted she consumed could have resulted in the reported concentrations of Roxadustat found in her urine.

*c. Athlete Biological Passport*

23. Separately to the Roxadustat charges, but concurrently (albeit filed later), the Player was also charged with an ADRV, being contravention of Article 2.2 of the TADP (use of a prohibited substance or method) on the basis of abnormalities in her blood samples provided under the Athlete Biological Passport Program ("ABP").

24. The ABP is based on a longitudinal monitoring of athlete blood values and is designed to be an 'indirect' method of doping detection. It is accepted as a 'reliable means' within the meaning of Article 3.2 of the WADC (and TADP). It focuses on the effect of prohibited substances and methods on the athlete's haematological values rather than the identification of a specific substance or method in the athlete's specimen. It records values in an athlete's blood samples of the following haematological parameters known to be sensitive to changes in red blood cell production:

    a. the concentration of haemoglobin ("HGB" or "HG"), a molecular carrier within red blood cells that transports oxygen from the lungs to the body's tissues; and

    b. the percentage of immature red blood cells, known as reticulocytes, in the blood ("RET%").

25. The relationship between levels of HGB and the RET% is calculated using a function known as the OFF-score to assist in identifying abnormal blood profiles. That function is 10*HGB[g/dL] - 60*sqrt(RET%). Further, a relationship of immature reticulocytes to the total number of reticulocytes, known as the immature reticulocytes fraction ("IRF") is also calculated.

26. As an athlete's blood samples are obtained over time, they are entered into a statistical model (known as the "Adaptive Model") and a longitudinal profile for that athlete is

established. That profile includes upper and lower limits within which the athlete's HGB and RET% values would normally be expected to sit. In that way, the athlete becomes their own point of reference. Each new blood sample whose values are input into the Adaptive Model will influence that athlete's intra-individual parameters. Any blood sample whose values fall outside those parameters will be considered abnormal. It is possible (as in this case) for a sample to have values which fall within the parameters but are nonetheless considered abnormal by reason of the pattern of entered values.

27. The algorithm used in the Adaptive Model to determine the upper and lower limits and flag atypical samples is internal to WADA. It cannot be externally accessed. The position also seems to be that values from samples assessed outside WADA accredited laboratories cannot be entered into, or at least are not accepted as valid entries into, the Adaptive Model. This is because sample collection and transportation in the ABP Program follows standardised procedures in order to ensure comparability of the values entered into the system. Nevertheless, analysis of 'outside' samples may measure the same parameters, namely HGB and RET%.

28. The Player has been in the TADP ABP program since 2013. In that time, 57 blood samples have been collected from the Player for ABP purposes (though only 52 of those samples were considered by the ITIA to be valid, which consideration was the subject of dispute).

29. In early 2022, some of the Player's haematological ABP data was flagged as atypical. Her ABP data was sent to an expert appointed by the Athlete Passport Management Unit (the "APMU"), Dr. Jakob Mørkeberg, who reviewed the Player's data in May 2022 and assessed them as 'likely normal' but recommended additional testing.

30. On 26 August 2022, another blood sample was collected from the Player. That sample was later deemed invalid due to the Blood Stability Score ("BSS") for the sample being above the allowed threshold. As identified in Annex I.4.3 of the 2021 International Standard for Testing and Investigations ("2021 ISTI") and reproduced in Part 3.1 of the Athlete Biological Passport Operating Guidelines (version 8, April 2021) ("2021 ABP Guidelines"), which were the relevant guidelines in force at that time, the BSS is a function of the average temperature at which a sample is stored and the collection to analysis time. Accordingly, this deemed invalidity was a product of the storage temperature and period of the sample (which were not matters which were the Player's responsibility or within her control).

31. On 22 September 2022, a further sample was collected from the Player – Sample 48. This was the sample which was the primary subject of the ABP charge brought by the ITIA against the Player. This sample was reviewed by Dr. Mørkeberg, who assessed the sample as 'suspicious' due to "*an elevated HBmass and erythropoietic suppression reflected in the elevated Hb, low %ret and low IRF.*" Dr. Mørkeberg recommended further target testing of the Player.

32. Two further blood samples were obtained from the Player on 7 October 2022 and 13 December 2022 (Samples 49 and 50). After the 13 December 2022 sample was logged, the Adaptive Model flagged the Player's ABP as atypical.

33. On 16 December 2022, Dr. Mørkeberg again reviewed the Player's data and raised his assessment to 'likely doping'. The written record of his reasons stated:

> *"The last four valid samples show great variability in Hb and %ret. Samples 46, 49 and 50 all have Hb values in the lower range with %ret in the higher range for the athlete indicating a supra-physiological Hbmass. Also the IRF is low. Sample 48 and 49 are divided by only 15 days and show completely different blood pictures."*

34. On 18 December 2022, the Player's ABP was reviewed by a second expert, Prof. Giuseppe D'Onofrio. He assessed the data as 'suspicious', noting that "[t]*he ABP status is atypical due to a low OFF score in the last sample and a statistically abnormal OFF sequence … there is no evident blood doping scenario, and the use of AAS could hypothetically contribute to the blood changes.*" AAS is a common abbreviation of anabolic-androgenic steroids.

35. On 20 December 2022, a third expert reviewed the ABP: Dr. Laura Garvican-Lewis. She also assessed the data as 'suspicious'. Her comments in the Anti-Doping Administration and Management System ("ADAMS") included: "*Profile of female tennis player … ABP status is atypical for low offscore, arising from increased rets up to the upper limit and low Hb … the increased Hb in sample 48 is the anomaly … No confounding factors declared … Finally, the competition schedule would be useful to put context around sample 48.*"

36. Dr. Mørkeberg, Prof. D'Onofrio and Dr. Garvican-Lewis are together referred to as the "ABP Panel".

37. On 23 December 2022 and 6 January 2023, further blood samples were collected from the Player (Samples 51 and 52). When each sample was analysed and its results logged in ADAMS, the Adaptive Model flagged the passport as atypical, based on an atypical OFF-score sequence.

38. As can be seen from Dr. Garvican-Lewis' comments extracted above, the ABP Panel was aware in December 2022 that the data they were reviewing were those of a female tennis player. However, at that time, they did not know that they were those of the Player.

39. On 12 January 2023, the ABP Panel held a videoconference with the APMU director Dr. Jean-François Naud. At that conference, it was confirmed that the athlete whose data the ABP Panel had been assessing had had a Roxadustat AAF. The ABP Panel has subsequently acknowledged that, at that point, Dr. Mørkeberg and Dr. Garvican-Lewis had inferred that the ABP profile belonged to the Player (given that they were aware that the profile belonged to a female tennis player, there was significant coverage of the Player's AAF, the rarity of Roxadustat AAFs and the fact that numerous ABP samples had been tested at a laboratory in Bucharest, Romania). Prof. D'Onofrio only became aware that the ABP profile belonged to the Player after the videoconference.

40. At that 12 January 2023 conference, the ABP Panel all agreed that the ABP profile would be consistent with use of Roxadustat or another ESA (erythropoiesis stimulating agent), assuming an effective dose.

41. On 13 January 2023, Dr. Mørkeberg again reviewed the passport (with data from the additional samples) and maintained his assessment of 'likely doping'. His comments in ADAMS included "*Sample 48 is collected 25 days after the beginning of the US Open and shows a completely different blood picture than previous and subsequent samples that year ... Sample 48 and 49 are divided by only 15 days and Sample 49 show*[s] *completely different blood picture than Sample 48.*"

42. On 14 January 2023, Dr. Garvican-Lewis amended her assessment to 'likely doping'. Her comments noted the new samples and provision of a competition schedule and included: "*the increased Hb in sample 48, with a clear down regulation of rets is the anomaly ... when compared to the competition schedule, sample 48 was collected shortly after a major competition (US Open). Thus, the doping scenario is apparent of blood manipulation around competition.*"

43. On 29 January 2023, Prof. D'Onofrio also amended his assessment of the Player's ABP to 'likely doping'. His ADAMS comments included:

> *"The last sample collected on 6-1-2023 confirms the values of HB, reticulocytes and OFF score observed in the preceding three samples taken out of competition. On such basis, the results observed in sample 48, collected on 23-9-2022, are abnormal and indicate an anomalous condition, for the athlete, of erythropoietic suppression with increased HB and OFFs, with relatively low reticulocytes and IRF, highly likely related to a previous exogenous stimulation."*

44. A further blood sample was obtained from the Player on 27 January 2023 (Sample 53) and analysed and the results were input into ADAMS. Each member of the ABP Panel again assessed the Player's data in light of that further sample and maintained their previous opinions of 'likely doping'.

45. On 24 February 2023, the APMU declared a 'unanimous likely doping' evaluation in ADAMS, which was notified to the ITIA.

46. On 12 April 2023, the APMU declared an Adverse Passport Finding ("APF") in ADAMS. The ITIA notified the Player of the APF the following day.

47. The Player first contended that Sample 48 (being the sample that gave rise to the conclusion of likely doping) ought to be declared invalid due to improper transportation temperature. Relevantly, she argued that the RET% was unreliable because the temperature logger during the sample's transportation recorded a temperature below +2°C and briefly touched 0°C.

48. Further, the Player contended that the ABP Panel should have had regard to blood test analysis results from a private blood test she took on 9 September 2022. That blood test

was taken in the context of nasal surgery which the Player underwent on 11 September 2022. The Player contended that, if her ABP were assessed in light of those results, then the doping scenarios relied upon by the ABP Panel were not plausible.

49. The Player also raised other non-doping factors which she submitted could otherwise explain the APF. Those included: (i) hypothyroidism and hypercortisolism; (ii) anaesthesia during her nasal surgery; (iii) a period of detraining after the 2022 US Open; (iv) fluctuations in her menstrual cycle; and (v) blood loss during her nasal surgery. As the ITIA noted in these proceedings, the latter three of these factors were referred to by the Player but not pressed as important in the hearing of this appeal.

50. In response, the ITIA submitted that:

a. Sample 48 was a reliable sample and did not need to be deemed invalid because the BSS was acceptable, the sample could not have frozen (as blood freezes at -3°C) and the analysis of that sample did not suggest any haemolysis, swelling or apoptosis. Haemolysis is a medical term for the destruction of red blood cells. Apoptosis is a medical term for cell death;

b. the results of the Player's private blood test should be disregarded because their reliability could not be satisfactorily confirmed (noting that WADA imposed very strict protocols to ensure the reliability of blood samples used for the ABP);

c. the Player's assertion that the non-doping explanations could plausibly explain her atypical ABP data should be rejected; and

d. the evidence was sufficient to ensure that the Panel was comfortably satisfied that an ADRV had occurred.

## B. Proceedings before the First Instance Tribunal

51. In or around early December 2022, the Roxadustat charges against the Player were submitted for determination to the First Instance Tribunal pursuant to Article 8 of the TADP. Although the hearing of those charges was initially set down for late February 2023, that was moved to late March 2023 by agreement of the Parties.

52. In early March 2023, the ITIA made a written application for a stay of the Roxadustat proceedings in light of the 'unanimous likely doping' evaluation in respect of the Player's ABP. That application was opposed by the Player. After further exchanges of correspondence and submissions, the First Instance Tribunal vacated the March 2023 hearing dates.

53. Further procedural applications followed, which were enumerated in some detail by the Athlete in written submissions but, for the purposes of the determination of this Appeal, are not necessary to summarise in this Award. It is sufficient to note that the Roxadustat charges and ABP charges were heard together at a final hearing held in London, United Kingdom, on 28 and 29 June 2023.

54. The First Instance Tribunal ultimately upheld both charges, finding ADRVs under Article 2.1 (presence) and Article 2.2 (use) of the TADP and imposing a period of Ineligibility of four (4) years, with a credit for the Player's provisional suspension served since 7 October 2022. Its final decision was issued on 22 September 2023.

55. The First Instance Tribunal provided detailed reasons in respect of its decision. The Panel does not propose to repeat those reasons in this Award, particularly noting that these proceedings are to be determined on a *de novo* basis (see Article R57 para. 1 of the CAS Code of Sports-related Arbitration (the "CAS Code")). Nonetheless, it is appropriate to provide a brief precis of the First Instance Tribunal's reasons.

56. With respect to the Roxadustat charges:

a. The First Instance Tribunal noted that there were sufficient uncertainties regarding the evidence of testing of the Keto MCT product, which prevented them from forming (on that evidence alone) a reliable judgment on whether or not the Keto MCT consumed by the Player was contaminated.

b. It then had regard to a 'control' study carried out by the expert retained by the Player, Prof. Alvarez, involving a volunteer from his laboratory using the Keto MCT product. The results of that study (detection of Roxadustat in urine samples provided by that volunteer) supported the Player's position. In light of the testing of the Keto MCT and that study, the Tribunal concluded that the Keto MCT was contaminated with Roxadustat. The Tribunal noted that the Player's burden was the balance of probabilities and expressed the view that "*we cannot say that it is a conclusion we reach with any higher degree of confidence*".

c. The Tribunal did not consider that results from a hair testing study conducted by Prof. Alvarez added support for the Player's assertion of contamination.

d. However, the Tribunal had regard to the reported concentration of Roxadustat detected in the Player's 29 August 2022 urine samples and the pharmacokinetic evidence adduced by the ITIA. In light of these matters, it reached a "*firm*" conclusion that the contamination of the Keto MCT as reported by Prof. Alvarez could not have produced the amount of Roxadustat actually present in the Player's A and B-Samples collected on 29 August 2022. Therefore, it concluded (to a level of comfortable satisfaction) that, if the Keto MCT was contaminated, it could not have been the sole source of the Roxadustat detected by the Montreal Laboratory when analysing the Player's A and B-Samples.

e. The First Instance Tribunal was therefore not persuaded that the Player had discharged her burden of proof of non-intentional use of Roxadustat from a source other than the Keto MCT.

f. In reaching the above conclusions, the Tribunal expressly noted the apparent improbability that the Player ingested Roxadustat from two entirely separate sources. It also acknowledged that this raised a question of whether one of its

two conclusions (first, that the Keto MCT was contaminated and, second, that the contamination could not explain the concentration of Roxadustat in the Player's urine samples) was incorrect. It maintained its conclusions based on the evidence before it. However, it acknowledged that, if it were required to discard one of its conclusions, it would discard the conclusion that the Keto MCT was contaminated, stating that the evidence in support of the latter conclusion was "*too compellingly strong for that to be the one to give.*"

57. With respect to the ABP charges:

a. The First Instance Tribunal noted that the Player did not challenge the accuracy and efficacy of the Adaptive Model or the accuracy of the results of the testing of the 51 valid samples (it should be noted that the validity of Sample 48 was challenged in these appeal proceedings).

b. The Tribunal confirmed that the Adaptive Model was able to produce an APF even if the ABP results did not breach the upper or lower limits of the model. Accordingly, the fact that the results of Sample 48 did not breach those limits did not provide a complete defence to the ABP charges.

c. The Tribunal determined that the test results from the private blood sample obtained from the Player on 9 September 2022 were too unreliable to be given any significant weight. It accepted the reasons provided by the ABP Panel, which broadly concerned uncertainty of the analytical and pre-analytical quality of the results.

d. The only non-doping factors relied upon by the Player before the First Instance Tribunal were (i) blood loss during the nasal surgery; (ii) heavy menstruation; and (ii) periods of detraining. Each of those confounding factors was rejected by the Tribunal:

i. the surgeon's report for the nasal surgery reported minimal bleeding. The Tribunal held that the factual and expert evidence did not demonstrate that blood loss through surgery could have had any significant impact on the analysis results of Sample 48;

ii. the Tribunal accepted the ABP Panel's evidence that the Player's low RET% and elevated HGB was highly unlikely to be caused by menstruation; and

iii. the Tribunal accepted that a sudden and drastic change in training load following strenuous exercise may result in consequent plasma fluctuations (which in turn might affect HGB concentration). However, the timing of the Player's ceasing to train as compared to collection of Sample 48 (over three weeks) and the fact that Sample 49 did not show a similar picture strongly supported a view that detraining was not a significant confounding factor.

e. As to possible doping scenarios, the Tribunal relied on evidence of Mr. Paul Scott (an expert witness retained by the Player), the ABP Panel and Dr. Daniel Eichner (an expert witness retained by the ITIA). The Tribunal found that those experts accepted that the following doping scenarios were plausible:

   i. micro-doses of ESAs (other than Roxadustat);

   ii. use of an autologous (player's own blood) or homologous (matching donor's blood) blood transfusion in addition to the use of Roxadustat that led to the Player's AAF;

   iii. use of an autologous or homologous transfusion that contained low levels of Roxadustat;

   iv. use of therapeutic doses of Roxadustat; and

   v. use of therapeutic doses of another ESA (e.g. rEPO).

f. The First Instance Tribunal determined that it did not need to explore the relative likelihoods of the various scenarios and found that there was a sufficiently sound basis for the plausible scenarios to support the ABP Panel's overall opinion that it was 'highly likely' that the Player's ABP was caused by illicit blood manipulation.

58. With respect to the sanction:

a. due to its findings on the Roxadustat and ABP charges, the Tribunal rejected any finding of No Significant Fault or Negligence. Accordingly, the minimum sanction was a four-year period of ineligibility, with credit for the provisional suspension served by the Player from 7 October 2022;

b. the Tribunal did not consider there to be aggravating circumstances that justified an increase in the period of ineligibility under Article 10.4 of the TADP;

c. the Tribunal did not deem the period of ineligibility to start at an earlier date than 7 October 2022 on the basis of substantial delays in the hearing process not attributable to the Player (Article 10.13.1 of the TADP). It held that there had been no more delay than would normally be expected; and

d. the Player's results from 29 September 2022 were disqualified.

59. As to costs, the First Instance Tribunal noted that, following delivery of the decision (excluding costs) the ITIA no longer pressed for any costs award and therefore the Tribunal made no order for costs except to confirm that the Parties would each bear their own costs.

60. On 22 September 2023, the First Instance Tribunal issued the initial decision which is the subject of the present appeals (the "First Instance Decision").

61. As will be evident from the remainder of this Award, it is apparent that there were some differences in the evidence adduced, and the submissions made, by the Parties in this *de novo* hearing as compared to before the Tribunal.

## III. PROCEEDINGS BEFORE THE COURT OF ARBITRATION FOR SPORT

62. By a Statement of Appeal dated 28 September 2023, and in accordance with Articles R47 *et seq.* of the CAS Code, the Player appealed the First Instance Decision to the CAS. The Statement of Appeal nominated Mr. Jeffrey Benz as an arbitrator and also contained a request for provisional measures, namely the production of categories of documents in respect of the ABP charge. The proceedings were docketed as CAS 2023/A/10025.

63. On 13 October 2023, the ITIA nominated Prof. Ulrich Haas as an arbitrator in the appeal.

64. On 16 October 2023, the ITIA responded to the Player's request for provisional measures. It asserted that the request was improperly made as production of documents is not a temporary remedy and therefore could not properly be characterised as a provisional measure. Further, it submitted there was no basis to make an order for disclosure.

65. On 21 October 2023, the Player requested an extension of time to file her Appeal Brief.

66. On 23 October 2023, the ITIA agreed to the Player's extension request.

67. On the same date, the CAS Court Office informed the Parties that the Player's request for an extension of time to file her Appeal Brief was granted in accordance with Article R32 para. 2 of the CAS Code.

68. On 2 November 2023, pursuant to the extension granted in accordance with Article R32 para. 2 of the CAS Code, the Player filed her Appeal Brief, together with various factual exhibits and legal authorities. The Player's Appeal Brief also dealt with the request for provisional measures set out in her Statement of Appeal. The Player reframed the request as a request for production of documents made pursuant to Article R44.3 of the CAS Code, which she asserted gave the Panel a power to order the ITIA to produce documents in its custody or under its control.

69. On 13 November 2023, the ITIA provided a written response to the Player's request for production of documents set out in the Player's Appeal Brief.

70. On 15 November 2023, the CAS Court Office, on behalf of the President of the CAS Appeal Arbitration Division, and pursuant to Article R54 of the CAS Code, confirmed the Panel appointed to decide the appeals as follows:

> President: The Hon. Dr. Annabelle Bennett AC SC, Barrister in Sydney, Australia

Arbitrators: Mr. Jeffrey Benz, Attorney-at-Law and Barrister in London, United Kingdom

Prof. Ulrich Haas, Professor of law in Zurich, Switzerland and Attorney-at-Law in Hamburg, Germany

71. On 17 November 2023, Mr. Alistair Oakes, Barrister in Sydney, Australia, was appointed *ad hoc* Clerk.

72. On 27 November 2023, the ITIA requested an extension of time to file its Answer to 14 December 2023.

73. On 29 November 2023, the Player informed the CAS Court Office that she would not oppose to the ITIA's time limit extension request.

74. On 30 November 2023, the CAS Court Office informed the Parties that the ITIA's request for an extension of time to file its Answer was granted.

75. On 5 December 2023, a case management conference was held via video link to address hearing logistics, the request for production of documents and associated matters. With respect to the request for production of documents, the Parties were requested to confer in respect of the request and advise the CAS Court Office by 22 December 2023 whether or not the request had been resolved.

76. On 8 December 2023, the CAS Court Office confirmed that the hearing would take place from 5-9 February 2024 at the CAS Headquarters in Lausanne, Switzerland.

77. On 14 December 2023, the ITIA filed a Statement of Appeal as well as a partially-redacted Answer and Cross-Appeal Brief, which it indicated would stand as its Answer in CAS 2023/A/10025 and its Appeal Brief in its newly-instituted appeal. The proceedings related to the ITIA's appeal were docketed by the CAS Court Office as CAS 2023/A/10227.

78. On 15 December 2023, the CAS Court Office informed the Parties that the ITIA's appeal would be submitted to the same Panel and *ad hoc* Clerk as in the Player's appeal.

79. On 21 December 2023, the Player requested a suspension of the deadlines for her submission of her Answer Brief in CAS 2023/A/10227 as she was yet to receive an unredacted copy of the ITIA's Answer and Cross-Appeal Brief.

80. On 22 December 2023, the Parties advised the CAS Court Office that the Player's request for production of documents had not been resolved between the Parties. The CAS Court Office was informed that the Player had informed the ITIA (by letter dated 18 December 2023) that she had narrowed her disclosure request. By letter to the CAS Court Office dated 22 December 2023, the ITIA set out its response to the narrowed request, maintaining a position that it continued to be overbroad and unnecessary and ought to be dismissed.

81. On 27 December 2023, the Parties agreed to and signed a Confidentiality and Protective Order in respect of certain confidential information to be relied upon by the ITIA. Those orders were duly rendered by the Panel.

82. Later on 27 December 2023, the ITIA provided an unredacted version of its Answer and Cross-Appeal Brief together with the relevant unredacted exhibits. The Player was informed by the CAS Court Office that her deadline to file her Answer in CAS 2023/A/10227 was no longer suspended and resumed with immediate effect.

83. On 2 January 2024, the Player provided a written response to the ITIA's 22 December 2023 letter concerning the Player's request for production of documents.

84. On 3 January 2024, a case management conference was held via video link to address the Player's request for production of documents. At that case management conference, an agreement was reached between the Parties for the ITIA to produce correspondence between the APMU and the ABP Experts. Those documents were produced on 10 January 2024.

85. On 12 January 2024, the Player filed her Answer in CAS 2023/A/10227.

86. On 17 January 2024, the Player asserted that the ITIA's document production had failed to produce all documents falling within the relevant category.

87. On 18 January 2024, the ITIA wrote to the CAS Court Office, making written objections to a number of sections (and related evidence) in the Player's Answer to the ITIA's appeal, on the basis that those sections did not address and were not consequential upon the ITIA's appeal on aggravating circumstances. The Player provided a written response to those objections on 22 January 2024.

88. On 18 January 2024 (ITIA) and on 22 January 2024 (the Player) signed and returned the Order of Procedure.

89. On 23 January 2024, the ITIA provided further written submissions in respect of the document production issue.

90. On 2 February 2024, a case management conference was held via video link to address the ITIA's objections to submissions and evidence in the Player's Answer and other administrative matters concerning the hearing. The objections were partially upheld and reasons were given. It is not necessary to address in this Award in detail the objections, rulings or reasons.

91. The in-person hearing was held between 7-9 February 2024 at the CAS Headquarters in Lausanne, Switzerland. Persons present at the hearing were as follows (honorifics and post-nominals have been omitted, though with no intention of any disrespect):

Panel, *ad hoc* Clerk and CAS staff:

- Dr. Annabelle Bennett, President of the Panel
- Mr. Jeffrey Benz, Panel member

- Prof. Ulrich Haas, Panel member
- Mr. Alistair Oakes, *ad hoc* Clerk
- Mr. Matthieu Reeb, CAS Director General
- Dr. Björn Hessert, Counsel to the CAS

For the Player:

- Ms. Simona Halep, the Player
- Mr. Howard Jacobs, counsel for the Player
- Mr. Claude Romani, counsel for the Player
- Mr. Bogdan Stoica, counsel for the Player
- Ms. Katy Freeman, counsel for the Player (by video)
- Mr. Nicolae Halep, brother of the Player
- Mr. Patrick Mouratoglou, lay witness
- Ms. Candice Gohier, lay witness
- Mr. Frédéric Lefebvre, lay witness
- Prof. Jean-Claude Alvarez, expert witness
- Prof. Pascal Kintz, expert witness
- Prof. Douwe de Boer, expert witness
- Mr. Paul Scott, expert witness (by video)
- Dr. Anthony Raizis, expert witness (by video)
- Ms. Gaël le Gall, interpreter

For the ITIA:

- Mr. Richard Liddell, counsel for ITIA
- Ms. Lauren Pagé, counsel for ITIA
- Mr. Chris Lavey, counsel for ITIA
- Mr. Magnus Wallsten, counsel for ITIA (by video)
- Mr. Ben Rutherford, ITIA Senior Director – Legal
- Ms. Katy Stirling, ITIA Legal Counsel
- Prof. Giuseppe D'Onofrio, expert witness
- Dr. Jakob Mørkeberg, expert witness
- Dr. Laura Garvican-Lewis, expert witness
- Prof. François Pralong, expert witness
- Prof. Christiane Ayotte, expert witness
- Dr. Daniel Eichner, expert witness
- Prof. Peter Van Eenoo, expert witness (by video)
- Mr. [redacted], lay witness (by video)

Observers:

- Dr. Stuart Miller, International Tennis Federation
- Ms. Courtney McBride, Women's Tennis Association

92. The Parties each confirmed that they had no objection to the composition of the Panel and, at the conclusion of the hearing, that their right to be heard had been fully implemented.

## IV. SUBMISSIONS OF THE PARTIES AND REQUESTS FOR RELIEF

93. The submissions of the Parties have been summarised in the Factual Background above. Further details of the facts and associated submissions relevant to the reasons of the Panel are addressed within the section of this Award dealing with consideration of merits.

94. The Player's requests for relief set out in her Appeal Brief of 2 November 2023 were as follows:

> *"11.1 With regard to the Roxadustat charge, Appellant respectfully requests that this Tribunal (i) find that Ms. Halep did not intentionally violate the anti-doping rules and was not significantly negligent because the Keto MCT supplement was contaminated; (ii) reject the ITIA's argument that the Code requires the Appellant to prove that the source of contamination explains the concentration levels detected in the positive urine sample; (iii) the sanction should be no more than the period of the provisional suspension for which Ms. Halep has already served.*
>
> *11.2 With respect to the ABP charge, Appellant respectfully requests that this Tribunal (i) dismiss the ABP charge; (ii) confirm that there has been no anti-doping rule violation in relation to the ABP; (iii) reject the ITIA's aggravated circumstances argument; and (iv) reject the ITIA's results disqualification argument.*
>
> *11.3 Appellant further requests that:*
>
> *11.3.1 Appellant's sanction should start on the 29 August 2022 date of her positive test; and*
>
> *11.3.2 Appellant be awarded a contribution towards her legal costs in this appeal."*

95. The ITIA's requests for relief set out in its Statement of Appeal of 14 December 2023 were as follows:

> *"a. confirm that the Player has committed an ADRV pursuant to TADP Articles 2.1 (presence) and 2.2 (use) as a result of the presence of a Prohibited Substance (Roxadustat) in her urine sample collected In-Competition on 29 August 2022;*
>
> *b. confirm that the Player has committed an ADRV pursuant to TADP Article 2.2 (Use) as a result of her Use of a Prohibited Substance and/or Prohibited Method on or before 29 August 2022, as evidenced by her Athlete Biological Passport;*

*c. sanction the Player's ADRVs together as one single violation based on the violation that carries the most severe sanction (TADP Article 10.9.4) and impose a period of ineligibility of between four and six years, in accordance with TADP Article 10.2.1 and (pursuant to the ITIA's cross appeal) TADP Article 10.4 (Aggravating Circumstances);*

*d. credit the Player for the period of Provisional Suspension served (if respected) by backdating the start of the period of ineligibility imposed to 7 October 2022, in accordance with TADP Article 10.13.2;*

*e. disqualify the results obtained by the Player between 29 August 2022 and 7 October 2022, pursuant to TADP Articles 9.1 and 10.10, with all resulting consequences, including forfeiture of any medals, titles, ranking points, and prize money; and*

*f. award the ITIA a significant contribution to its legal costs and expenses incurred in relation to these proceedings."*

96. The identical requests for relief were set out in the ITIA's Answer and Cross-Appeal Brief dated 14 December 2024.

97. In her Answer dated 12 January 2024 in CAS 2023/A/10227, the Player did not expressly file a request for relief but stated that "*the ITIA cannot meet its burden of proving aggravating circumstances in this case.*"

## V. JURISDICTION

98. Article R47 para. 1 of the CAS Code provides as follows:

> *"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."*

99. There was no dispute that Article 13.2 of the TADP provided each party an express right to bring their appeals. Each Party expressly confirmed that the CAS had jurisdiction to hear the present appeals by signing the Order of Procedure. Each Party fully participated in these proceedings without objection as to jurisdiction.

100. The Panel is satisfied that it has jurisdiction over the appeals.

## VI. ADMISSIBILITY

101. Article R49 of the CAS Code provides as follows:

> *"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."*

102. No issue of, or objection to, admissibility was advanced by either party.

103. Article 13.8.1.1 of the TADP provides for a 21-day deadline for a party to file an appeal to the CAS. The decision of the First Instance Tribunal was received by the Player on 22 September 2023 and therefore the 21-day period expired on 13 October 2023. The Player's Statement of Appeal was filed on 28 September 2023 and is therefore timely and admissible.

104. Article 13.9.4 of the TADP concerns timing of filing a cross-appeal. It requires a cross-appeal to be filed at the latest with a respondent's answer to an appeal. The ITIA's Statement of (Cross) Appeal was filed within the time limit for filing its Answer Brief and is therefore timely and admissible.

105. Each Party expressly confirmed that the admissibility of the appeals by signing the Order of Procedure.

## VII. APPLICABLE LAW

106. Article R58 of the CAS Code provides as follows:

> *"The Panel shall decide the dispute according to the applicable regulations and 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 application of which the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision."*

107. In this proceeding, the 'applicable regulations' are the TADP.

108. Article 1.1.5 of the TADP provides:

> *"Subject to Article 1.1.4, this Programme is governed by English law. Subject always to the jurisdiction conferred on the Independent Tribunal in Article 8.1 and on the CAS in Article 13 to determine charges brought for violation of the TADP and certain related issues, any other claims or disputes (contractual or otherwise) relating to or arising out of the TADP between (on the one hand) Players, Player Support Personnel, and/or other Persons who are subject to the TADP and (on the other hand) the ITF, ITIA, the ATP, the WTA, the Grand Slam tournaments and/or Delegated Third Parties, are subject to the exclusive jurisdiction of the English courts."*

109. Accordingly, English law applies subsidiarily to the TADP.

## VIII. MERITS

### A. Introductory remarks

110. As identified above, the case before the Panel was separated into two parts: (i) the Roxadustat charges; and (ii) the ABP charges. The merits of each set of charges are dealt with separately in this Award.

111. The Panel received oral evidence from the following lay witnesses (there were other witnesses who did not provide oral testimony but made written statements which were tendered by the Player):

a. the Player;

b. Mr. Patrick Mouratoglou, founder of the Mouratoglou Academy;

c. Ms. Candice Gohier, physiotherapist at the Mouratoglou Academy;

d. Mr. Frédéric Lefebvre, director of physical preparation at the Mouratoglou Academy; and

e. Mr. [redacted], owner of Quantum Nutrition Inc. which sells products under the brand name Schinoussa.

112. Many expert witnesses gave evidence at the hearing, both in person and via video link. Although the Player served expert reports prepared by certain other experts with her Appeal Brief, she confirmed at the hearing that she did not rely on evidence given by those other experts.

113. The experts relied upon by the Parties (and whether their evidence was relied upon in respect of the Roxadustat Charges or the ABP charges) were as follows:

| Name | Roxadustat | ABP |
|---|---|---|
| **Experts retained by the Player** | | |
| Prof. Jean-Claude Alvarez | Yes | Yes |
| Prof. Pascal Kintz | Yes | |
| Dr. Anthony Raizis | | Yes |
| Mr. Paul Scott | | Yes |
| Prof. Douwe de Boer | | Yes |
| **Experts retained by the ITIA** | | |
| Dr. Daniel Eichner | Yes | Yes |
| Prof. Christiane Ayotte | Yes | |
| Prof. Peter Van Eenoo | Yes | |

| Name | Roxadustat | ABP |
|---|---|---|
| Dr. Jakob Mørkeberg | | Yes |
| Dr. Laura Garvican-Lewis | | Yes |
| Prof. Giuseppe D'Onofrio | | Yes |
| Prof. François Pralong | | Yes |

114. It is convenient to set out, in summary form, the expertise of each of the above experts:

a. Prof. Alvarez is a Professor of Pharmacology-Toxicology of the Faculty of Medicine at University of Versailles Saint-Quentin-en-Yvelines and Head of Department of Pharmacology-Toxicology at the University Hospital Centre of Garches. He has acted as an expert in pharmacology and toxicology to the Court of Appeal of Versailles and to the French Cour de Cassation and is (or at least has been) a board member of the International Association of Forensic Toxicology;

b. Prof. Kintz is a Professor of Legal Medicine at the University of Strasbourg and is an Expert for Justice appointed by the French Cour de Cassation for Chemistry, Toxicology and blood alcohol determination;

c. Dr. Raizis has a PhD in mechanisms of transcriptional regulation of IGF-II and, from 1997 to 2022 has worked at a molecular pathology laboratory;

d. Mr. Scott is the principal and CEO of Korva Scientific, an analytical testing and research laboratory. He is also the Chief Scientific Officer of Scott Analytics Inc., located in California, USA;

e. Prof. de Boer is a biochemist who has over three decades' experience working in or with sport drug testing laboratories or authorities. He is head of the Department of 'Protein Chemistry', Central Diagnostic Laboratory, Maastricht University Medical Centre in the Netherlands;

f. Dr. Eichner has been President of the WADA-accredited SMRTL laboratory for 12 years and was previously the Science Director of the United States Anti-Doping Agency. He has extensive experience in the detection of performance-enhancing substances, their structure, pharmacology, and pharmacokinetics;

g. Prof. Ayotte has been the Director of the WADA-accredited Montreal Laboratory since 1991;

h. Prof. Van Eenoo is the Professor at the Faculty of Medicine and Health Sciences of Ghent University in Belgium, and Director of the WADA-accredited doping control laboratory in Ghent, Belgium;

i. Dr. Mørkeberg is the Senior Science Manager of Anti-Doping Denmark and a member of the WADA ABP Expert Panel;

j. Dr. Garvican-Lewis is the Director of Science at the United States Anti-Doping Agency and a member of the WADA ABP Expert Panel;

k. Prof. D'Onofrio is a Professor in Clinical and Laboratory Haematology and in Clinical Pathology and member of the WADA ABP Expert Panel; and

l. Prof. Pralong is the Chief of the Endocrinology and Diabetes and Obesity Centre at Hospital de La Tour in Geneva, Switzerland.

115. As is addressed in more detail below, there was significant (and at times almost irreconcilable) divergence amongst the expert opinions, particularly concerning the testing of the Keto MCT product for presence of Roxadustat.

116. In considering the evidence given by the experts, the Panel has had regard not only to their reports and oral evidence, but also to the way in which each Party put their case. Significantly, neither Party made any submission that any expert had given deliberately dishonest evidence. This was expressly acknowledged by the Parties.

117. Further, save for some minor exceptions which ultimately had no bearing on the outcome of the case, there were no challenges to the experts' qualifications and ability to properly provide expert evidence on the matters on which they gave evidence.

118. The Panel has carefully considered the evidence of each expert, as well as that of the lay witnesses. The expert evidence greatly assisted the Panel, both by way of written reports and in concurrent evidence in a 'hot tub'. Thus, the Panel was able to understand the issues between the experts and each expert's expertise and perspective. It is not, however, necessary to set out the views and evidence of each witness in order to understand the Panel's reasons and reference to specific evidence will only be made where necessary.

## B. Roxadustat charges

### *a. Matters in / not in dispute*

119. A number of factual matters in respect of the Roxadustat charges were not in dispute:

a. Roxadustat is a Prohibited Substance that is not a Specified Substance (as defined in the TADP);

b. the Player committed an ADRV pursuant to Articles 2.1 (presence) and 2.2 (use) of the TADP as a result of the presence of a Prohibited Substance (Roxadustat) in her urine sample collected In-Competition on 29 August 2022;

c. on 26 August 2022, the Player provided a urine sample in which no Roxadustat was detected; and

d. due to the negative test on 26 August 2022 and the concentration of Roxadustat detected in the 29 August 2022 sample, the relevant exposure to Roxadustat

(i.e. the exposure which resulted in the positive sample on 29 August 2022) was a sub-therapeutic dose.

120. The dispute between the Parties in the appeal therefore centred on the sanction to be imposed as a result of the admitted ADRVs. In that regard, it was not in dispute that:

a. the *prima facie* period of ineligibility to be imposed on the Athlete was four years, pursuant to Article 10.2.1 of the TADP;

b. if the Player established, on the balance of probabilities, that the ADRV was not intentional, the maximum period of ineligibility would be reduced to two years, pursuant to Article 10.2.2 of the TADP; and

c. if the Player further established, on the balance of probabilities, that (i) she bore no significant fault or negligence for the ADRV and (ii) the Prohibited Substance came from a Contaminated Product, then the period of ineligibility would be, at a minimum, a reprimand and no period of ineligibility, and at a maximum, two years ineligibility, depending on the Player's degree of fault: Article 10.6.1.2 of the TADP.

*b. Overview of Parties' submissions*

121. The Player relied, in summary, on the following:

a. she consumed a supplement powder called Keto MCT with Marine Collagen ("Keto MCT") on five occasions, being 23, 25, 26, 27 and 28 August 2022 (an amount of 10g on each occasion);

b. Roxadustat was not listed as an ingredient on the label of Keto MCT;

c. prior to consuming the Keto MCT product, she made inquiries through the physiotherapist on her team and by reference to the WADA Prohibited List, to confirm that no listed ingredient on the label of Keto MCT was a Prohibited Substance;

d. subsequent testing by Prof. Alvarez established that the container of Keto MCT product which she consumed, as well as other containers from the same batch, contained Roxadustat as a contaminant; and

e. she was not required to prove mathematically that the amount of Roxadustat contamination in the Keto MCT product correlates to the amount of Roxadustat detected in her urine sample, in particular because of: (i) the extreme difference between concentrations in the A and B urine samples; and (ii) the concentrations of Roxadustat detected in the various Keto MCT containers were artificially low due to degradation of the Roxadustat in the product as well as possible non-homogeneity of the contaminant in the product.

122. In answer, the ITIA contended, in summary:

a. the scientific evidence confirmed that there was no Roxadustat in the Keto MCT product. Two WADA-accredited laboratories conducted testing of Keto MCT samples which were from containers in the same batch as the product used by the Player. Those laboratories used their own methodologies as well as the same methodology identified to them in writing by Prof. Alvarez. They were unable to detect any Roxadustat in those containers (though successfully detected Roxadustat in control samples at similar quantitative levels to those reported by Prof. Alvarez as present in the samples of Keto MCT that he tested); and

b. in any event, even if Roxadustat was present in the Keto MCT product, it could not have caused the Roxadustat AAF. The level of Roxadustat detected by Prof. Alvarez in the Keto MCT product could not explain the levels of Roxadustat found in the Player's urine sample collected on 29 August 2022. This was a matter which the Player was required to (yet could not) establish.

*c. Construction / interpretation issue: Article 10.6.1.2 of the TADP*

123. A preliminary legal matter for consideration in respect of this charge is whether, in order for the Player to establish that "*the Prohibited Substance came from a Contaminated Product*" (Article 10.6.1.2 of the TADP):

a. it is sufficient for the Player to merely establish that Roxadustat was in fact present in the Keto MCT product she consumed; or

b. in the circumstances, the Panel must also be satisfied that the Player's use of Keto MCT caused the concentration of Roxadustat detected in her urine.

124. Strictly speaking, this legal issue only arises for consideration after the Player has established on the balance of probabilities that her ADRV was not intentional. However, as the issues of intent and contamination are intertwined, it is convenient to address the legal issue first.

125. The Parties' submissions on this issue demonstrated a divergence of authorities.

126. The Player relied on the decision of *USADA v Hardy* (AAA Award, 4 February 2009), in which the panel stated at [7.12]:

> *"There is however no requirement in FINA DC 10.5.2 that Respondent prove a correlation between the concentration of the Prohibited Substance in her urine and the quantity in her supplements."*

127. The ITIA primarily relied on *CAS 2017/A/5296 WADA v Roberts*, in which the CAS panel noted at [54]:

> *"... The Panel does, however, note that the Athlete must establish the origin of the concentration of probenecid in his system so that what might otherwise be*

*an apparently plausible explanation of origin could be fatally undermined by scientific, in particular pharmacokinetic, evidence."*

128. The ITIA further relied on numerous authorities where claims of use of contaminated products were not accepted because analytical evidence did not support (or in fact contradicted) the defence of contamination. These included, among others, *CAS 2010/A/2277 La Barbera v IWAS*; *CAS 2006/A/1130 WADA v Stanic & SOA; CAS 2019/A/6110 Cameron v UK Anti-Doping; CAS 2012/A/2960 WADA v Covert & FEI*; *IRB v Gould*, (IRB Board Judicial Decision, 27 October 2013); and *CAS 2007/A/1399 WADA v FILA & Stadnyik.*

129. Although not cited by either Party, the Panel notes the following observations from the CAS Panel in *CAS 2018/A/5768 Dylan Scott v. International Tennis Federation* at [135]:

> *"In consideration of CAS jurisprudence, the Panel concurs, in principle, with the ITF that the Athlete must not only show how the M4 parent compound entered his system (i.e., the Quad), but also that the timing of such ingestion is consistent with the concentrations of the substance ultimately found in his sample (cf. CAS 2007/A/1399). It cannot, otherwise, be sufficient for an athlete to meet his or her burden of proof by simply pointing to a product as the source of the prohibited substance without ensuring that the timing and route of the alleged ingestion corresponds to the sample results in question. To conclude, therefore, the Panel finds that the Appellant, in principle, bears the burden of proof for establishing all of the above objective facts that are necessary to deduce his lack of intention. The Panel does not overlook the fact that there may be exceptions to this rule (cf. CAS 2011/A/2384&2386), where one party conceals evidence or in so-called instances of 'Beweisnotstand' or 'evidence calamity',' i.e., 'when a party faces serious difficulty in discharging his or her burden of proof, in light of the fact that the information required to prove the fact is (for example) not in the athlete's control, or that: [. . .] by its very nature, the alleged fact cannot be proven by direct means. This is the case whenever a party needs to prove 'negative facts'."*

130. This issue ultimately requires interpretation of the relevant provision, Article 10.6.1.2 of the TADP, which provides (emphasis added):

> *"In cases involving a Prohibited Substance that is not a Substance of Abuse, where the Player or other Person can establish both No Significant Fault or Negligence for the violation* ***and that the Prohibited Substance came from a Contaminated Product****, the period of Ineligibility will be, at a minimum, a reprimand and no period of Ineligibility, and at a maximum, two years Ineligibility, depending on the Player's or other Person's degree of Fault."*

131. The Panel observes that the wording of this provision as it appears in the TADP differs slightly to Article 10.6.1.2 of the WADC. In Article 10.6.1.2 of the WADC, the equivalent to the portion of Article 10.6.1.2 of the TADP emphasised above reads "*and*

*that the detected Prohibited Substance (other than a Substance of abuse) came from a Contaminated Product"*. The WADC includes the additional word 'detected'.

132. However, Article 1.1.4 of the TADP affirms that the TADP must be interpreted in a manner consistent with the WADC and comments annotating various provisions of the WADC are to be used to interpret the TADP.

133. In that regard, there is a comment to Article 10.6.1.2 of the WADC, which relevantly includes:

> *"In order to receive the benefit of this Article, the Athlete or other Person must establish not only that the detected Prohibited Substance came from a Contaminated Product, but must also separately establish No Significant Fault or Negligence."*

134. Therefore, the concept of a 'detected' Prohibited Substance is imported into the TADP. On that basis, the Panel does not consider there to be any difference in substance between Article 10.6.1.2 of the TADP and Article 10.6.1.2 of the WADC.

135. The Panel acknowledges that there is some ambiguity as to the meaning of the "*detected Prohibited Substance*" and, indeed, "*came from*", and whether these mean that it is sufficient for an athlete to establish merely the substance itself (i.e. the fact of presence of Roxadustat) or it is also necessary for the athlete to explain the concentration observed. The Panel notes the comments of the Sole Arbitrator in *CAS 2013/A/3365 & 3366 Juventus Football Club S.p.A. v. Chelsea Football Club Ltd & Livorno Calcio v. Chelsea Football Club Ltd* at [139], which have been cited in numerous subsequent authorities:

> *"Where the text is not entirely clear and there are several possible interpretations, the true scope of the provision will need to be narrowed by taking into account all the pertinent factors, such as its relationship with other legal provisions and its context (systematic interpretation), the goal pursued, especially the protected interest (teleological interpretation), as well as the intent of the legislator as it is reflected, among others, from the drafting history of the piece of legislation in question (historical interpretation) ... When called upon to interpret a law, the SFT adopts a pragmatic approach and follows a plurality of methods, without assigning any priority to the various means of interpretation ..."*

136. The Player is required to prove (on the balance of probabilities: Article 3.1.2 of the TADP) that "*the* [detected] *Prohibited Substance came from a Contaminated Product*". The Panel notes that Article 10.6.1.2 of the TADP is not expressed to contain any further individual elements which the Player is required to separately prove on the balance of probabilities. Nevertheless, the determination in a particular case depends on the evidence and submissions of the parties.

137. In the present case, the issue was clearly raised by the ITIA that, irrespective of the presence of Roxadustat contamination in the Keto MCT, the level of that prohibited

substance in the Player's urine could not have come from the taking of the supplement in the quantity said to have been taken. Expert evidence was adduced to support that submission. Expert evidence was also adduced by the Player to negate that submission.

138. It is noteworthy that, in this case, the testing for Roxadustat in the Player's urine was qualitative and not quantitative. Further, there was a significant difference in the amounts detected, in that the level detected in the B-Sample was significantly higher than in the A-Sample. Various hypotheses were advanced to explain this discrepancy.

139. Insofar as Article 10.6.1.2 of the TADP applies in the present case, and for the reasons addressed further herein, the Panel concludes that:

a. merely establishing the presence of Roxadustat in the Keto MCT product will not, of itself, be sufficient for the Player to discharge her burden of establishing that "*the* [detected] *Prohibited Substance came from a Contaminated Product*". The language of Article 10.6.1.2 of the TADP (in particular "*came from*") indicates a need for causality between the Keto MCT and the Prohibited Substance found in the Player's system; and

b. whether causality has been sufficiently demonstrated on the balance of probabilities (and therefore, whether the Player has discharged her burden) will depend on the evidence available.

*d. Presence of Roxadustat in Keto MCT*

140. It is the Player's burden to demonstrate, on the balance of probabilities, that her consumption of Roxadustat was not intentional. She sought to discharge that burden by establishing that the Keto MCT product which she used was contaminated with Roxadustat.

141. In that regard, the Player primarily relied on the reports, experimental data and oral evidence of Prof. Alvarez to support her case.

142. The Player also called and relied on expert reports from Prof. Kintz. A report prepared by Prof. Kintz and tendered by the Player indicated that Keto MCT samples were tested at Prof. Kintz's laboratory in Strasbourg and Roxadustat was identified in those samples. However, at the hearing, Prof. Kintz acknowledged that the relevant results were not validated according to international criteria. Nonetheless, he still asserted that they showed there was a difference between what was used by the Player and a sample which was considered negative in Prof. Alvarez's laboratory. In her closing submissions, the Player did not place reliance on Prof. Kintz's evidence.

143. Prof. Alvarez was adamant, by reference to standards and using his own developed method of extraction of Roxadustat from the collagen matrix of Keto MCT, that he had detected Roxadustat, not only in samples taken from the container of Keto MCT which had been used by the Player, but also in samples from other sealed containers of Keto MCT from the same batch as that consumed by the Player. He conducted tests on

numerous different occasions (i.e. December 2022, March 2023 and again in October 2023).

144. Prof. Alvarez's evidence is that he did detect a compound in the Keto MCT product and the detected compound sufficiently corresponded with the standard spectrophotometric characteristics of Roxadustat. If that evidence is accepted, it follows that Prof. Alvarez positively demonstrated the presence of Roxadustat as a contaminant in the Keto MCT product.

145. Prof. Alvarez separately conducted a 'control' study with a volunteer from his laboratory, who consumed the same Keto MCT powder in the same timings and quantities as used by the Player. He took 35 urine samples from the volunteer, which were tested for Roxadustat. Roxadustat was detected in 7 of those samples, though at much lower concentrations than the estimated concentrations in the Player's 29 August 2022 samples (the lowest estimated concentration for the Player's sample was 289 pg/mL whereas the highest concentration in the control study was 4 pg/mL).

146. The ITIA submitted that Prof. Alvarez's testing was neither reliable nor consistent with good scientific practice. It made a detailed attack on Prof. Alvarez's methodology and relied on the fact that, even following the methodology described in Prof. Alvarez's reports, two separate WADA-accredited laboratories did not detect any Roxadustat in samples of Keto MCT taken from containers in the same batch. There were also detailed criticisms of the conclusions reached by Prof. Alvarez as to the identity of the isolated compound that he detected by way of mass spectrometry in various of his tests and the fact that he did not provide chromatograms for certain tests.

147. The ITIA primarily relied on the evidence of Dr. Daniel Eichner, President of the SMRTL. It further relied on the evidence of Prof. Christiane Ayotte, Director of the Montreal Laboratory.

148. The experience and professionalism of the experts who attempted to detect Roxadustat in the Keto MCT – Prof. Alvarez, Prof. Kintz, Dr. Eichner and Prof. Ayotte – was not questioned. There was no dispute that the SMRTL and Montreal laboratories were capable of detecting the levels of Roxadustat in similar amounts/concentrations as were identified by Prof. Alvarez (or that they did not in fact detect Roxadustat in any Keto MCT samples). Their failure to detect Roxadustat in the Keto MCT supplement was despite the fact that, when their own extraction techniques failed to yield Roxadustat, they followed the written protocol provided by Prof. Alvarez.

149. It is significant to note that the ITIA made no submission that Prof. Alvarez manipulated his tests results or that he was dishonest. Accordingly, its case is that Prof. Alvarez's conclusion that Roxadustat was present in the Keto MCT was incorrect because of some error by Prof. Alvarez, either in the testing process or analysis of the results.

150. There is no satisfactory explanation for the different results from the respective laboratories. The various expert reports put forward hypotheses, including:

a. differences in the machines – however, at the hearing, it was accepted that the machines in the laboratories, although not identical, had the same capabilities;

b. differences in extraction methods – initially, the WADA-accredited laboratories used a different extraction process to Prof. Alvarez. However, they eventually sought to replicate Prof. Alvarez's methods and still did not detect Roxadustat. Prof. Alvarez theorised that the WADA-accredited laboratories simply failed to extract the Roxadustat from the 'sticky' collagen matrix, giving rise to a false negative. This theory was rejected by the experts from those laboratories, whose evidence was that they followed Prof. Alvarez's methodology as described and were able separately to detect Roxadustat in spiked samples;

c. differences resulting from automatic versus manual integration in analysis of chromatography results – however, this did not explain the correlation of peaks for all of Prof. Alvarez's positive results;

d. differences resulting from lack of homogeneity in the Keto MCT product – Prof. Alvarez suggested that the WADA-accredited laboratories may have taken samples from the relevant containers which, for reasons of lack of homogeneity, did not contain measurable quantities of Roxadustat. This was rejected by Dr. Eichner, who explained that he used a standard procedure of mixing the powder product and taking multiple aliquots at the same time to determine any potential variation in contamination; and

e. further, if the supplement was contaminated, the Player's negative urine test for Roxadustat on 26 August 2022 is consistent with a lack of homogeneity in the product, as the (unchallenged) evidence is that the Player was, as at that date, already using the supplement.

151. Assuming that the various laboratories did in fact use the same methods, no expert (including Prof. Alvarez) was able to provide a satisfactory explanation for the stark differences in results between the laboratories. While the ITIA was able to criticise certain aspects of Prof. Alvarez's subsequent testing of the Keto MCT product as well as the hair-testing and 'control' study (volunteer urine) results, it was not able to identify a clear mistake in Prof. Alvarez's initial testing of the Keto MCT product which detected the presence of Roxadustat. On the other hand, the only explanation (from Dr. Alvarez's perspective) was that the other laboratories failed to extract Roxadustat from the collagen matrix of the supplement, which he described as not straightforward. There was some discussion in the evidence of the difficulties of extracting compounds from a collagen matrix and differences that may arise in such extraction compared to extraction of a compound/metabolite from urine.

152. There was also the evidence as to the Alvarez extraction protocol from Prof. Kintz. While Prof. Kintz freely acknowledged his friendship with Prof. Alvarez, he works in a separate laboratory. Prof. Kintz also initially failed to detect Roxadustat when he followed Prof. Alvarez's written protocol. However, when Prof. Alvarez personally came to Prof. Kintz's laboratory and the extraction was performed under his supervision, the laboratory did extract a compound from the Keto MCT which indicated

a difference between the product used by the Player compared with a product negative for Roxadustat, with a peak that appeared to correspond with the standard for Roxadustat. At the oral hearing, Prof. Kintz candidly accepted that the results were not validated and therefore could not provide a scientifically validated conclusion that Roxadustat had been detected.

153. The Panel accepts that there can be modifications in following a written extraction procedure which, in theory, could affect the outcome, although none were specifically identified in this case. Prof. Alvarez did offer to go to Dr Eichner's laboratory to demonstrate or observe the extraction procedure, but this offer was not accepted.

154. This leaves the Panel with evidence of a positive detection of Roxadustat in the supplement by Prof. Alvarez, both in different containers of the supplement itself and in the urine of a volunteer who took the supplement in dosages similar to the Player. That evidence was supported, in a qualitative but not quantitative manner, by Prof. Kintz. On the other hand, very experienced WADA-accredited laboratories were able to detect Roxadustat when present in urine and in test samples in the quantities reported by Prof. Alvarez but did not detect any Roxadustat in any of the samples of the Keto MCT supplement that they tested after having subjected those samples to various extraction techniques (their own and that of Prof. Alvarez) for Roxadustat.

155. The Player must establish the presence of the compound on the balance of probabilities. On the one hand, there could be said to be false positives, on the other, false negatives. On balance, it is more difficult to explain a false positive (and repeated false positives) than a false negative (and repeated false negatives). The ITIA did challenge the mass spectrometer evidence provided by Prof. Alvarez as to the presence of Roxadustat to explain false positives, but the Panel is not satisfied that these challenges succeeded, in that they were sufficiently countered by Prof. Alvarez.

156. The Panel concludes that there is not sufficient reason to reject the evidence of, and conclusions by, Prof. Alvarez. It finds that, on the balance of probabilities, the Player has established the presence of Roxadustat as a contaminant in the Keto MCT product that she consumed prior to 29 August 2022.

157. There were a number of other matters in evidence, on which the Panel does not rely and does not need to, or cannot on the evidence, determine. For example:

a. the presence of Roxadustat in the testing of the Player's hair was equivocal in determining whether it came from a contaminated supplement;

b. the 'control' testing of a volunteer taking the Keto MCT did establish the presence of Roxadustat but there was no explanation proffered on the lower level detected or conclusions to be drawn from that fact;

c. the evidence that another elite athlete had taken Keto MCT was not helpful, as there was no evidence as to when and in what amounts that athlete used the supplement, whether he provided urine samples at similar times or whether he

had even been tested or had samples taken while allegedly using the Keto MCT; and

d. no explanation was advanced as to the negative urine test of 26 August 2022, at a time when the Player had taken the Keto MCT on at least two occasions.

e. *Whether the Roxadustat in the Player's 29 August 2022 urine sample came from the Keto MCT product*

158. The question then arises whether the concentration of Roxadustat in the Player's urine could be explained by (i.e. come from) the taking of the Keto MCT supplement in the doses said to have been taken.

159. The ITIA points to the pharmacokinetic evidence of Dr. Eichner which, he says, included a scenario which adopted every variable in the Player's favour. Dr. Eichner concluded from his calculations that, in order to explain the urinary levels of Roxadustat in the 29 August 2022 urine sample, the Player would have had to have taken dosages in vast multiples of the recommended serving size of Keto MCT (50 times on the scenario with variables weighed in the Player's favour and 5000 times using average parameters). The mathematics of those calculations is unchallenged. If that were the only evidence and the underlying assumptions on which they were based were inviolate, it would provide strong evidence rebutting the plausibility of the Player's case.

160. However, there are a number of confounding factors with regard to conclusions to be drawn from the pharmacokinetic calculations before the Player's explanation as to the source of the Roxadustat are found to be implausible:

a. Dr. Eichner pointed out that the urinary test was a qualitative test and only provided estimates for the concentration of the Roxadustat found in the Player's Sample.

b. Dr. Eichner also pointed to the variability between the estimates of the Roxadustat levels in the A and B-Samples (the latter being significantly higher). His explanation was that the differences were likely due to photoisomerisation of the compound in the A-Sample arising from exposure and handling of that sample. Photoisomerisation is molecular behaviour in which structural change between isomers is caused by light.

c. In the scenario more favourable to the Player, Dr. Eichner used the lower estimate of concentration (i.e. from the A-Sample) for his calculations (adjusted down for concentration). However, there was no further allowance for variability or lack of accuracy of that A-Sample measurement itself in the calculations nor of the impact of time or handling on the Roxadustat in the supplement.

d. No allowance was made for incomplete extraction of Roxadustat from the Player's urine (however, this worked in the Player's favour).

e. No allowance was made for the variability in results of levels of Roxadustat in the supplement found by Prof. Alvarez, which he attributed in part to lack of homogeneity and/or degradation over time. Although the impact of those factors was not clearly quantified, they do, in any event, require consideration in the comparison between urinary levels and dosage levels.

f. No allowance was made for possible degradation of the compound between its use by the Player (August 2022) and the testing of the sample by Prof. Alvarez (December 2022).

g. Dr. Eichner's calculations on the scenario most favourable to the Player did not in fact import the maximum level of Roxadustat reported by Prof. Alvarez. In his first report, Prof. Alvarez reported concentrations of 300-1200 pg/g in the Keto MCT. However, in his third report, Prof. Alvarez revised that conclusion and re-assessed the concentration to be in the range of 60-100 pg/g. Dr. Eichner used the concentration of 100 pg/g (i.e. the upper limit of Prof. Alvarez's revised concentrations). It was only in Prof. Alvarez's 8th report (served with the Answer to the Cross-Appeal after Dr. Eichner's evidence), that Prof. Alvarez suggested that his initial calculations were in fact accurate and the difference may be explained by degradation. Nonetheless, the Panel observes that Dr. Eichner's reports did also include separate calculations for the concentration of 1200 pg/g, concluding that (using all other variables in the Player's favour) the Player would have been required to consume 6.75 times the recommended serving of Keto KCT. This is a very different multiple (compared to a multiple of 50 to 5000) and itself invites further discussion as to, for example, possible degradation between the Player's consumption and the testing by Prof. Alvarez (some 4 months). Dr Eichner did not comment on this for the purposes of his conclusions.

h. No allowance was made in the dosage calculations for incomplete extraction of Roxadustat from the Keto MCT for the purposes of comparison of Roxadustat in the dose, when it was acknowledged that such extraction was likely incomplete and there was evidence consistent with variability in extraction efficiency. Indeed, there was evidence that recovery levels of Roxadustat on extraction from the Keto MCT could be only 30-40%.

161. Further, Dr Eichner's conclusions require a finding that the Player was taking Roxadustat from another source, either alone or in addition to any contaminated Keto MCT. In this regard, of particular relevance is the fact that the Player provided a urine sample on 26 August 2022 (only three days earlier) which was negative for Roxadustat. It is then relevant that:

a. All experts agreed that this negative test, together with the estimated concentration detected in the Player's urine on 29 August 2022 (even assuming it was accurate), leads to the conclusion that the amount consumed by the Player causing the 29 August 2022 positive test was a sub-therapeutic dose.

b. The negative test was not consistent with micro-dosing and suggested that the Player's exposure to Roxadustat leading to the positive 29 August 2022 test occurred between 26 and 29 August 2022.

c. This in turn argues against a suggestion that the Player intentionally took a dose of Roxadustat (separate to the Keto MCT) between 26 and 29 August 2022. It is not logical to have taken a sub-therapeutic dose and no explanation for doing so has been advanced.

d. No good explanation was given as to why the Player would take Roxadustat from two separate sources, with the total being a non-therapeutic dose.

162. It is necessary to assess the evidence and, in this case, the conclusions to be drawn from the pharmacokinetic results, with a degree of common sense.

163. The Panel has accepted that the supplement that the Player was taking was contaminated with Roxadustat. In order to decide whether the Roxadustat in the urine came from that contaminated supplement, the ITIA argues, in effect, that the concentrations 'do not match'.

164. There are a number of possible explanations, each of which would require the Player to have taken not only the contaminated Keto MCT product, but also additional Roxadustat. These could include:

a. that the Player consumed the Keto MCT without knowing that it was contaminated with Roxadustat and, in addition, unknowingly took Roxadustat from another source (i.e. unknowing exposure to two sources of Roxadustat);

b. that the Player consumed the Keto MCT knowing that it was contaminated with Roxadustat and, in addition, knowingly took Roxadustat from another source (i.e. knowing exposure to two sources of Roxadustat); and

c. that the Player consumed the Keto MCT knowing that it was contaminated with Roxadustat and, in addition, unknowingly took Roxadustat from another source or *vice versa* (i.e. knowing exposure to one source of Roxadustat and unknowing exposure to another).

165. The Player says that she has established a sufficient connection between he contaminated supplement and the presence of Roxadustat in her urine on 29 August 2022. There may be alternative hypotheses to explain a discrepancy between the two levels and thus two sources of Roxadustat, such as those just set out. However, there is no evidence why, or reason advanced for, the Player to have consumed Roxadustat from two separate sources.

166. The Panel also notes the comments of the Panel in *CAS 2017/A/5296 WADA v Roberts* at [53]-[54], which authority was cited by the ITIA:

> *"53. There are two main points for the Panel to consider: (1) Does the Panel accept as more likely than not the explanation advanced on the Respondent's*

*behalf (the 'Roberts version') that the residue of a course of Moxylong, purchased for his girlfriend in India and consumed by her on the day of his out of competition test was transferred to him by kissing; and (2) if so, does the Panel accept that this was the reason why his urine sample taken on 24 March 2017 contained probenecid at an estimated concentration of 9ng/ml.*

*54. The Panel notes that it is, in theory, possible for it to accept the first point, but reject the second. This would, however, require it to conclude that there were two sources of probenecid in the Athlete's system on the same day, a far-fetched coincidence which the Panel, in the absence of any supporting evidence, must discard. The Panel does, however, note that the Athlete must establish the origin of the concentration of probenecid in his system so that what might otherwise be an apparently plausible explanation of origin could be fatally undermined by scientific, in particular pharmacokinetic, evidence. The first and second points are therefore intertwined, not independent."*

167. In the Panel's view, each of the above hypotheses advanced to explain the facts in this case to conclude that there was a source of Roxadustat external to a contaminated supplement can be rejected.

168. Taking all of the evidence into account, the Player has provided a plausible explanation that the Roxadustat detected in her urine came from the Keto MCT supplement. The Player's explanation has not been rendered implausible (or, to use the language in *WADA v Roberts*, "*fatally undermined*").

169. The Panel concludes that, on the balance of probabilities:

a. the Roxadustat detected in the Player's urine on 29 August 2022 came from the Keto MCT product that she consumed that was contaminated with Roxadustat;

b. the Player's ADRV (concerning presence or use of Roxadustat) was not intentional; and

c. there was no significant fault or negligence on the part of the Player in her ingestion of Roxadustat.

## C. Athlete blood profile charge

*a. Applicable rules*

170. Article 5.5 of the TADP concerns ABP testing. It relevantly includes:

*"5.5.1 The ITIA will implement an ABP Programme in accordance with the relevant International Standards.*

...

> *5.5.3 Samples that are intended to be part of the ABP Programme will be collected, transported, and analysed in accordance with the relevant International Standards.*
>
> *5.5.1 The data arising from analysis of such Samples will be processed and reviewed to identify Atypical Passport Findings that warrant referral to an Expert Panel, in accordance with the relevant International Standards."*

171. The Player has been charged with an ADRV within the meaning of Article 2.2 of the TADP, on the basis of the analytical data in her ABP. Articles 2.2 and 2.2.1 of the TADP provide:

> *"2.2 Use or Attempted Use by a Player of a Prohibited Substance or a Prohibited Method, unless the Player establishes that such Use or Attempted Use is consistent with a TUE granted in accordance with Article 4.4.*
>
> *2.2.1 It is each Player's personal duty to ensure that no Prohibited Substance enters their body and that no Prohibited Method is Used. Accordingly, it is not necessary to demonstrate intent, Fault, Negligence, or knowing Use on the Player's part in order to establish an Anti-Doping Rule Violation for Use of a Prohibited Substance or a Prohibited Method under Article 2.2; nor is the Player's lack of intent, Fault, Negligence or knowledge a defence to a charge that an Anti-Doping Rule Violation of Use has been committed under Article 2.2."*

172. As to the burden and standard of proof, Article 3.1.1 of the TADP makes it clear that the ITIA bears the relevant burden, with the standard being that of comfortable satisfaction:

> *"3.1.1 The ITIA will have the burden of establishing that an Anti- Doping Rule Violation has occurred. The standard of proof will be whether the ITIA has established the commission of the 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."*

173. As has been mentioned above, Article 1.1.4 of the TADP affirms that the TADP must be interpreted in a manner consistent with the WADC and comments annotating various provisions of the WADC are to be used to interpret the TADP. In that regard, Article 2.2 of the 2021 WADC includes the following comment:

> *"Use or Attempted use may also be established by other reliable means such as ... conclusions drawn from longitudinal profiling, including data collected as part of the Athlete Biological Passport."*

174. The Panel has had regard to the ITIA's written submissions, which summarised what the ITIA contended it was required to prove in the context of a charge based on abnormal ABP blood values (citations omitted):

> *"7.5.1 First, that tracking changes over time in particular haematological biomarkers is a reliable means of proving blood doping.*
>
> *7.5.2 Second, that the specific biomarker values reported in the Player's ABP are reliable.*
>
> *7.5.3 Third, that the variations in the Player's blood values are abnormal (a quantitative assessment).*
>
> *7.5.4 Fourth, that blood doping is highly likely to explain the Player's abnormal values (a qualitative assessment). Because abnormal blood values could, in principle, be caused by something else, such as a pathological condition, such values alone are not sufficient to prove an anti-doping rule violation. An Expert Panel's conclusion that an ABP profile is 'highly likely' the result of doping (which phrasing is informed by the vocabulary of the ISRM) is* 'synonymous with [the] "comfortable satisfaction" [standard] on its face; because of its use of the adverb "highly" is posited a higher standard than one of mere probability, ie likelihood'.[...] *The burden is on the ITIA to persuade the CAS Panel that it should share the opinion of the experts who have come to that view,* [...] *also shared by the Independent Tribunal,* [...] *while there is a burden on the Player to provide alternative explanations for the abnormal values.*[...]".

*b. The blood analysis data in the case at hand*

175. The analysis results of the ABP blood samples obtained from the Player, and her private blood sample provided on 9 September 2022, are set out in the table below. In respect of the table:

a. the ABP blood samples which were declared invalid have been identified using strikethrough;

b. the private blood sample is referred to as "PBS";

c. the OFF-score of the private blood sample was not provided in the analytical results. It has been calculated based on the HGB and RET% and therefore is included in square brackets; and

d. the private blood sample and sample 48 have been emphasised in bold typeface.

| Sample No. | Date | HGB (d/dL) | RET% | OFF-score |
|---|---|---|---|---|
| 1. | 27 Aug 2013 | 13.2 | 1.48 | 59.00 |
| 2. | 16 Apr 2014 | 14.1 | 0.76 | 88.69 |
| 3. | 23 Jun 2014 | 13.1 | 1.01 | 70.70 |
| 4. | 7 Jul 2014 | 13.4 | 1.21 | 68.00 |

| Sample No. | Date | HGB (d/dL) | RET% | OFF-score |
|---|---|---|---|---|
| 5. | 14 Oct 2014 | 13.4 | 1.23 | 67.46 |
| 6. | 19 Jan 2015 | 12.8 | 1.30 | 59.59 |
| 7. | 29 Apr 2015 | 13.0 | 1.15 | 65.66 |
| 8. | 19 May 2015 | 12.8 | 0.98 | 68.60 |
| 9. | 25 May 2015 | 13.2 | 1.28 | 64.10 |
| 10. | 17 Jan 2016 | 12.5 | 1.36 | 55.03 |
| 11. | 11 Apr 2016 | 13.8 | 1.32 | 69.07 |
| 12. | 17 May 2016 | 13.0 | 1.34 | 60.50 |
| ~~13.~~ | ~~21 Jun 2016~~ | ~~14.0~~ | ~~0.88~~ | ~~83.70~~ |
| 14. | 23 Aug 2016 | 13.6 | 1.20 | 70.30 |
| 15. | 28 Aug 2016 | 12.7 | 1.31 | 58.30 |
| 16. | 12 Jan 2017 | 13.1 | 1.32 | 62.07 |
| 17. | 1 Mar 2017 | 13.3 | 1.09 | 70.36 |
| 18. | 26 May 2017 | 12.8 | 1.72 | 49.30 |
| 19. | 24 Jul 2017 | 14.1 | 1.18 | 75.82 |
| 20. | 6 Sep 2017 | 13.8 | 1.12 | 74.50 |
| 21. | 14 Sep 2017 | 13.6 | 1.23 | 69.46 |
| 22. | 26 Feb 2018 | 13.7 | 1.22 | 70.73 |
| ~~23.~~ | ~~23 May 2018~~ | ~~14.2~~ | ~~0.82~~ | ~~87.70~~ |
| 24. | 19 Jun 2018 | 13.8 | 1.18 | 72.82 |
| 25. | 19 Jul 2018 | 13.7 | 1.17 | 72.10 |
| 26. | 26 Aug 2018 | 12.7 | 1.47 | 54.30 |
| 27. | 4 Sep 2018 | 13.4 | 1.24 | 67.19 |
| 28. | 29 Jan 2019 | 13.7 | 1.53 | 62.80 |
| 29. | 25 Feb 2019 | 13.4 | 1.51 | 60.30 |
| 30. | 11 Apr 2019 | 13.8 | 1.44 | 66.00 |
| 31. | 22 May 2019 | 13.0 | 1.08 | 67.60 |
| 32. | 30 Jun 2019 | 12.6 | 1.68 | 48.20 |
| 33. | 29 Jul 2019 | 13.7 | 1.20 | 71.30 |
| 34. | 11 Sep 2019 | 12.9 | 1.61 | 52.87 |
| 35. | 18 Jan 2020 | 12.5 | 1.75 | 45.63 |

| Sample No. | Date | HGB (d/dL) | RET% | OFF-score |
|---|---|---|---|---|
| 36. | 11 Feb 2020 | 13.4 | 1.28 | 66.12 |
| 37. | 17 Dec 2020 | 12.3 | 1.73 | 44.08 |
| 38. | 6 Jun 2021 | 13.4 | 1.49 | 60.80 |
| 39. | 21 Jul 2021 | 12.7 | 1.36 | 57.00 |
| 40. | 26 Aug 2021 | 12.2 | 1.39 | 51.30 |
| 41. | 27 Sep 2021 | 12.3 | 1.42 | 51.50 |
| 42. | 13 Dec 2021 | 11.8 | 1.48 | 45.00 |
| ~~43.~~ | ~~13 Jan 2022~~ | ~~13.4~~ | ~~1.69~~ | ~~56.00~~ |
| 44. | 8 Mar 2022 | 13.8 | 1.67 | 60.50 |
| 45. | 21 Mar 2022 | 13.3 | 2.05 | 47.10 |
| 46. | 27 Apr 2022 | 12.6 | 2.12 | 38.60 |
| ~~47.~~ | ~~26 Aug 2022~~ | ~~12.7~~ | ~~1.72~~ | ~~48.03~~ |
| **PBS** | **9 Sep 2022** | **13.4** | **1.62** | **[57.63]** |
| **48.** | **22 Sep 2022** | **14.2** | **1.17** | **77.10** |
| 49. | 7 Oct 2022 | 12.7 | 1.72 | 48.30 |
| 50. | 13 Dec 2022 | 12.4 | 2.20 | 35.00 |
| 51. | 23 Dec 2022 | 11.9 | 1.68 | 41.20 |
| 52. | 6 Jan 2023 | 12.1 | 1.76 | 41.40 |
| 53. | 27 Jan 2023 | 12.7 | 1.81 | 46.30 |
| 54. | 14 Feb 2023 | 13.3 | 1.64 | 56.20 |
| 55. | 22 Feb 2023 | 12.4 | 1.65 | 46.90 |
| 56. | 3 Mar 2023 | 12.9 | 1.93 | 45.60 |
| 57. | 30 Mar 2023 | 12.8 | 1.89 | 45.51 |

c. *Whether the ABP is a reliable means of proving blood doping*

176. As was the case before the First Instance Tribunal, in these proceedings, the Player does not challenge the existing CAS jurisprudence that analysis and interpretation of an ABP – that is, tracking changes over time in particular haematological biomarkers – can be a reliable means for the ITIA to discharge its burden to establish an ADRV. For the avoidance of doubt, the Panel accepts the CAS jurisprudence affirming the reliability of using an ABP (in general terms) to prove an ADRV of Use of a Prohibited Substance: see, e.g., CAS 2010/A/2174 *de Bonis v CONI & UCI*; CAS 2014/A/3614 & 3561 *IAAF & WADA v RFEA & Dominguez*.

*d. Should Sample 48 have been declared invalid?*

177. The ITIA's case on the ABP charge is premised on the HGB and RET% data reported from the analysis of Sample 48. The ITIA contends that, having regard to the Player's ABP, those results are abnormal and demonstrate that the Player committed an ADRV.

178. A preliminary issue which the Player raises in defence of the charge is that Sample 48 should have been declared invalid due to improper transportation temperature which sufficiently undermined the integrity of the of the sample. As has been summarised earlier in this Award, the laboratory documentation package in respect of that sample included data from the temperature logger which indicated that the temperature was below +2°C for a period of 2 hours and 36 minutes, and briefly touched 0°C.

179. Relevantly, Article 5.5.3 of the TADP requires blood samples used in the ABP to have been collected, transported and analysed in accordance with the relevant International Standards. The relevant International Standard as at September 2022 was the 2021 ISTI. Annex I of that document, which is reproduced as Part 3.1 of the 2021 ABP Operating Guidelines dealt with collection, storage and transport of blood ABP samples. Relevant requirements include:

> *"I.2.5 The Sample shall be refrigerated from its collection until its analysis with the exception of when the Sample is analyzed at the collection site without delay. The storage procedure is the DCO's responsibility.*
>
> *I.2.5 The Sample shall be refrigerated from its collection until its analysis with the exception of when the Sample is analyzed at the collection site without delay. The storage procedure is the DCO's responsibility...*
>
> *I.2.7 A temperature data logger shall be used to record the temperature from the collection to the analysis of the Sample except when the Sample is analyzed at the collection site without delay...*
>
> *I.4.3 The integrity of the Markers used in the haematological module of the Athlete Biological Passport is guaranteed when the Blood Stability Score (BSS) remains below eighty-five (85), where the BSS is computed as:*
>
> $BSS = 3 * T + CAT$
>
> *with CAT being the Collection to Analysis Time (in hours), and T the average Temperature (in degrees Celsius) measured by the data logger between Sample collection and analysis."*

180. Relying on experimental results provided by Prof. Alvarez and the expert opinion of Dr. de Boer, the Player asserts that:

a. the BSS in respect of Sample 48 – which was within the parameters contained in the 2021 ABP Operating Guidelines – could not be used as a basis to affirm the validity of the sample. This is because the BSS has only been validated for

temperatures from +4°C to +15°C. Therefore, it is focused on increased temperatures and not decreased temperatures; and

b. the low temperatures recorded on the temperature logger invalidated the sample, as low temperatures can cause a decrease in RET%. In support of this assertion, the Player refers to Prof. Alvarez's study, in which he sought to reproduce the transport conditions for Sample 48 with five different blood samples. The relevant haematological markers were measured in those samples at various points in time. Those measurements showed differences in the RET% between the various samples, with the samples kept at lower temperatures for longer periods of time having a lower RET%. The variation in RET% was from 1.22% to 1.06%.

181. In response, Dr Mørkeberg pointed out that, even at the lower temperatures during transport of Sample 48, the blood would not have frozen and the red blood cells (reticulocytes) would not have been disrupted. In that regard, he explained that blood freezes at about -3°C and Sample 48 did not reach that temperature. Therefore, his opinion was that the transport temperature for Sample 48 would have had no impact on the stability of the red blood cells.

182. Further, in response to the study conducted by Prof. Alvarez, each member of the ABP Panel noted that there is an acceptable variability of RET% in blood analysis. Relevantly, the 2021 ABP Operating Guidelines (at Part 3.2, section 5) provide:

> *"The ABP blood Sample shall be analyzed twice. The Laboratory's or ABP Laboratory's procedure should minimize the delay between the two analyses. Absolute differences between the two (2) analyses shall be equal or less than (≤) each of the following criteria in order to accept the results:*
>
> - *0.1 g/dL for HGB;*
> - *0.15% for RET% if either the first or second measurement is lower or equal to 1.00%; otherwise 0.25% absolute difference.*
>
> *The data from the second injection is used to confirm the first injection data. Therefore, if the absolute differences between the results of the analyses are within the criteria above, then only the first injection data is reported into ADAMS."*

183. The RET% results in Prof. Alvarez's study were all greater than 1% and the largest difference (in absolute terms) between the various results was 0.13%. This was within the 2021 ABP Operating Guidelines acceptable variability of 0.25%. Prof. Alvarez acknowledged that he has observed variability in measurements and said that his laboratory only tolerated a variability of 10% (in relative terms) for RET%. At one point in his oral evidence, he asserted that, when conducting his study mentioned above, he analysed the samples twice and observed no variation in RET%. However, he later indicated that the analysis of samples had a variability of below 10%. Neither of these

matters, nor the fact of possible variability, were addressed in his expert report directed to this issue.

184. Dr. Eichner's evidence on this matter was that this variability was a product of the instrumentation used to take measurements, but that the variability in practice – at least at his laboratory SMRTL – was usually lower than the amounts in the 2021 ABP Operating Guidelines.

185. The Panel is satisfied that the temperature during the transport of Sample 48 did not have a material effect on the integrity of the sample and therefore is not a basis to declare the sample invalid.

*e. Are the results of the Player's private blood sample to be included in the ABP?*

186. As has been addressed above, on 9 September 2022, the Player provided a sample of blood for a blood test taken in the context of planned nasal surgery which the Player underwent two days later. That blood was collected and analysed by the Regina Maria Laboratory of the Ponderas Hospital in Bucharest, Romania. The professional capacity and integrity of that laboratory was not challenged.

187. The ITIA submitted that the results of that private blood sample could not form part of the Player's ABP (in that they cannot be inserted into the Player's ABP profile) because they were not conducted at a WADA-accredited laboratory and in accordance with the WADA-related protocols. The ITIA accepted that the Panel could, at least at a general level, have regard to the results of that blood test but maintained that those results should be considered with caution and given only limited weight due to the uncertainty about the conditions of collection, transportation and analysis.

188. 2021 ISTI Annex I specified the pre-analytical requirements for blood collection. The Doping Control Officer/Blood Collection Officer taking the sample was required to collect and record information including (2021 ISTI Annex I.2.9):

a. whether the athlete had been seated for at least ten minutes with their feet on the floor prior to blood collection;

b. whether the sample had been collected immediately following at least three consecutive days of an intensive endurance competition, such as a stage race in cycling;

c. whether the athlete had a training session or competition in the two hours prior to the blood collection;

d. whether the athlete had trained, competed or resided at an altitude greater than 1,500 meters within the prior two weeks;

e. whether the athlete had used any form of altitude simulation such as a hypoxic tent, mask, etc. during the prior two weeks;

f. whether the athlete had received any blood transfusion(s) during the prior three months; and

g. whether the athlete had been exposed to any extreme environmental conditions during the two hours prior to blood collection.

189. Further, as has been mentioned above, the 2021 ABP Operating Guidelines contained requirements for analysis of ABP blood samples (see Part 3.2, section 5). These included that the blood sample must be homogenised prior to analysis and for a minimum period of 15 minutes using an appropriate mixer; and analysed twice to ensure that there is not an excessive variability in HGB or RET%.

190. The evidence given by the ABP Panel is that the above requirements are important in ensuring reliability of collection data and consistency between samples in, and for the purposes of, an athlete's ABP, which is why blood samples which do not meet these criteria are deemed invalid or otherwise not included in the ABP.

191. The Panel accepts that blood samples obtained from athletes under the ABP program to be included in an athlete's ABP and, ultimately, to establish a possible ADRV, ought to be collected and analysed under stringent conditions. This is necessary to ensure the integrity and acceptance of the ABP program as a valid means of establishing an ADRV. For this reason, privately collected samples cannot be included in the ABP. However, it does not follow that athletes should be prohibited from relying on other available evidence – including analysis of blood samples obtained outside the ABP program – in defending charges. Instead, such blood parameters from a private sample may be taken into account – provided that they are reliable – when assessing whether doping is a likely cause for the abnormal values contained in the ABP.

*f. Are the values of Sample 48 abnormal?*

192. Putting aside, for the time being, the results of the private blood sample, the ABP Panel was unanimous in its conclusion that Sample 48 test results were abnormal and 'highly likely' to be indicative of illicit blood manipulation.

193. Parts of the ABP Panel's reasoning has been extracted earlier in this Award. In short, their view was that Sample 48 had a statistically abnormal OFF-score driven by an elevated HGB and low RET%. This showed a different blood picture to the previous and subsequent samples.

194. One of the expert witnesses retained by the Player, Dr. de Boer also accepted that Sample 48 was a deviation from the valid ABP data and required an explanation.

195. Prof. Alvarez, on the other hand, insisted that the values, including those for Sample 48, were normal. He noted that blood concentrations demonstrated both inter- and intra-individual variability, that the Player's results remained within the upper and lower limits established by the Adaptive Model, and that the earlier blood samples provided by the Player had returned HGB and RET% values similar to those of Sample 48 (see, for example, Samples 2 and 19).

196. The Panel finds that, whether or not the private blood sample results are taken into account, the analytical results of Sample 48 were abnormal. The fact that the values from Sample 48 did not breach the upper or lower limits of the Player's intra-individual range did not mean, of itself, that the results were normal. Even where results fall within an intra-individual range, they need to be considered against other results in the ABP to assess whether they are statistically abnormal. With respect to Sample 48, the elevated HGB and low RET% were statistically abnormal when compared to other ABP samples as well as the private blood test results.

*g. Whether confounding factors can explain the abnormal values*

197. In *UCI v. Mr. Alex Correia Diniz* (UCI Anti-Doping Tribunal ADT 06.2017), the Single Judge noted at [68]-[69]:

> *"68. ...the mere fact that the Rider's hematological values are abnormal is no proof of doping. In order to establish the 'use' of a prohibited substance or method it does not suffice that the UCI demonstrate that doping is a plausible source for these values. Instead, the UCI must establish – in principle – that all other alternative explanations for these values can be excluded. This puts the UCI in a difficult evidentiary position that has been described, and solved, by a CAS Panel as follows (CAS 2011/A/2384& 2386, para. 252 et seq.):*
>
> > *"The exceptions concern cases in which a party is faced with a serious difficulty in discharging its burden of proof ('état de nécessité en matière de preuve', 'Beweisnotstand'). A cause for the latter may be that the relevant information is in the hands or under the control of the contesting party and is not accessible to the party bearing the burden of proof (cf. ATF 117 Ib 197, 208 et seq.). Another reason may be that, by it[s] very nature, the alleged fact cannot be proven by direct means. This is the case whenever a party needs to prove 'negative facts'.*
> >
> > *According to the Swiss Federal Tribunal, in such cases of 'Beweisnotstand', principles of procedural fairness demand that the contesting party must substantiate and explain in detail why it deems the facts submitted by the other party to be wrong (ATF 106 II 29, 31 E. 2; 95 II 231, 234; 81 II 50, 54 E 3; FT 5P.1/2007 E. 3.1; KuKo-ZGB/Marro, 2012, Art. 8, no 14; CPC-Haldy, 2011, Art. 55, no 6).*
> >
> > ...
>
> *69. It follows from the above that difficulties in proving 'negative facts' result in a duty for the party not bearing the onus of proof to cooperate in establishing the facts. That party – i.e. the Rider – must cooperate in the investigation and clarification of the facts of the case. It is up to him to submit and substantiate other plausible sources for the abnormal values. It will then be up to the UCI to contest those other alternatives and, ultimately, for the Single Judge to evaluate the evidence before him in relation to the various scenarios. Nonetheless, the*

*burden of proof, i.e. the risk that a certain scenario cannot be established or discarded, remains with the UCI."*

198. The Player submitted a series of innocent explanations, or 'confounding factors' for her abnormal values. Those included:

a. hypothyroidism and high levels of cortisol;

b. anaesthesia during her nasal surgery;

c. the effect of a period of detraining after the 2022 US Open;

d. fluctuations in her menstrual cycle; and

e. blood loss during her nasal surgery.

199. Much evidence by way of written reports addressed these various factors. At the hearing, the focus of the oral evidence and oral submissions were directed primarily to the 'confounding factors' in sub-paragraphs (a) and (b) above.

i. Hypothyroidism and high levels of cortisol

200. As to hypothyroidism:

a. The ITIA relied on evidence from Prof. Pralong, who was the only expert who is a qualified endocrinologist.

b. Prof. Pralong explained that hypothyroidism is a medical condition where the thyroid gland, a small butterfly-shaped gland located in the neck, does not produce sufficient amounts of essential thyroid hormones. The two thyroid hormones are thyroxine (T4) and triiodothyronine (T3). There is a distinction between frank (or overt) hypothyroidism and subclinical hypothyroidism, the latter of which is a milder form of hypothyroidism. The diagnosis of hypothyroidism relies on the measurement of the pituitary Thyroid Stimulating Hormone ("TSH"), together with the two thyroid hormones T3 and T4 in a blood sample.

c. The Player was diagnosed with a thyroid condition in 2020 and prescribed with levothyroxine, a medicine which is used to treat thyroid conditions by replacing missing T4. In July 2022, after commencing use of a combined oral contraceptive pill, her TSH levels were raised outside the acceptable normal range. She increased her dose of levothyroxine from 350 micrograms per week to 400 micrograms per week.

d. Dr. Raizis, an expert retained by the Player, was of the opinion that Sample 48 was taken during a period of relapse of the Player's thyroid condition and before recovery after receiving an incremental dosage of levothyroxine, which likely resulted in a reduction in plasma volume. He identified studies which showed that patients had increases in plasma volumes after treatment with thyroxine

therapy. He asserted that comparison of results of Sample 48 with Samples 49-56 was consistent with a reduction of plasma volume induced by the Player's thyroid condition.

e. The Player also relied on the evidence of Dr. de Boer. The effect of his expert report was that her complex and unclear endocrinological status is directly associated with her long-term biological variation of haematological markers. However, at the hearing, he accepted that an increase in thyroid medication would expect to result in an increase in both reticulocytes and HGB, which would then reach a new equilibrium.

f. Prof. Pralong's opinion was that the Player's use of levothyroxine – including the increase in dosage in July 2022 – was highly unlikely to have affected her haemoglobin and haematocrit levels, and that another cause must be considered as the origin of the abnormal variations in Sample 48.

g. His view from information available to him was that the Player has (probably mild) subclinical hypothyroidism. However, whether or not she had subclinical or frank hypothyroidism when she was first diagnosed with a thyroid condition in 2020 was not material, because her TSH levels had normalised by October 2021. Therefore, the relevant issue was the role played by the modifications to her levothyroxine dosage in 2022.

h. Based on the data available for 2021 and 2022, he was of the opinion that the Player could, at most, be considered to have subclinical hypothyroidism. He observed that Dr. Raizis's evidence concerned the known consequences of frank hypothyroidism on erythropoiesis and blood formula and would not apply to subclinical hypothyroidism.

i. Prof. Pralong also referred to a study performed on 66 female patients with subclinical hypothyroidism which was designed to evaluate the effect of restoration of euthyroidism (normal thyroid function) on peripheral blood cells in patients with subclinical hypothyroidism. The authors of that study reported no change in either haemoglobin or haematocrit levels in the group receiving levothyroxine.

j. Finally, he observed that, if the increase in medication did have any measurable effect on red blood cells, then there would be a corresponding increase in reticulocytes (rather than the decrease observed in Sample 48).

201. As to high cortisol levels, it was common ground that the Player had not been diagnosed with hypercortisolism but nonetheless had elevated levels. The evidence suggested that this was caused by use of a contraceptive pill. Dr. Raizis referred to a study which apparently indicated that increased cortisol would increase erythropoietin production which would, by inference, increase reticulocyte production. That study was not in evidence. Prof. Pralong's evidence was that high cortisol levels caused by use of a contraceptive pill would have no relevant impact on HGB or RET% values. Dr. de Boer, whose expert report queried the impact of high cortisol levels, accepted at the hearing

that the use of the contraceptive pill was those most logical explanation for those elevated levels. He did not otherwise disagree with, and in fact implicitly acknowledged agreement with, Prof. Pralong's views. The Player initially contended in her Appeal Brief that her elevated cortisol levels affected her blood results, but made no closing submissions on the issue.

202. The Panel accepts the evidence and reasons of Prof. Pralong on these matters and therefore does not consider that these 'confounding factors' explain the results for Sample 48.

ii. Anaesthesia

203. As to anaesthesia, this matter was not raised in the Player's Appeal Brief but was argued at the hearing. Relevantly, the Player underwent general anaesthesia for her nasal surgery.

a. The Player contended that the ABP Panel had not excluded this as a possible confounding factor. She relied on evidence from Dr. Raizis, who identified a study which indicated that the thyroid hormone T3 significantly decreases after elective surgery because anaesthesia blocks peripheral deiodination of the T4 hormone to T3. The T3 level recovery reached a low at around eight days post-surgery. This would cause suppressed erythropoiesis and reduced plasma volume, in turn supressing reticulocytes, which could explain Sample 48. Dr. Raizis acknowledged that there was no evidence of what the Player's T3 levels were following her surgery.

b. The evidence from the ABP Panel was that anaesthesia would have no effect on the Player's ABP results.

i. Prof. d'Onofrio stated that he checked the list of drugs used during the anaesthesia and conducted research to determine whether they would have side effects on HGB or RET%. There was only one such drug – which he described as vaporised flurane – where a study in mice saw a decrease in erythropoietin. His view was that this would not have any effect on a haematological picture after 10 or 12 days (being the period from the surgery to Sample 48).

ii. Dr. Garvican-Lewis noted that the issues raised by the Player in respect of the surgery were blood loss and anaesthesia. She explained that a loss of blood, if it were to have an impact, would decrease HGB levels, which was the opposite to what was seen in Sample 48. Her view was that any effect of anaesthesia was unlikely to override any effect of blood loss to such an extent that it would suppress reticulocytes.

iii. Dr. Mørkeberg candidly acknowledged that he was not an expert in this particular area and asserted that his understanding is that there is no proof that anaesthesia results in low RET%.

c. Prof. Pralong stated that the Player's T3 levels prior to the surgery were below the mean but were still within the normal range. Further, he noted that the study relied upon by Dr. Raizis was done on patients undergoing abdominal surgery, which he described as "*one of the most stressful surgeries one can think of*" and that T3 levels are expected to drop with surgery of that kind. He contended that one cannot extrapolate results from that kind of surgery to minor nasal surgery. His view was that the impact of minor nasal surgery on deiodination would be "*at best, minor, and probably non-significant*".

204. The Panel accepts the reasoning of the ABP Panel and the evidence of Prof. Pralong.

iii. Detraining

205. The Player suspended training and competing after her 29 August 2022 loss at the US Open. She relied on Mr. Scott's evidence to the effect that detraining results in a loss of plasma and a consequent rise in HGB, though her Appeal Brief acknowledges that detraining is only relied upon "*to a lesser extent*".

206. In response, the ABP Panel and Dr. Eichner referred to studies which showed that detraining had a noticeable impact on plasma volume in the days following changes in training status but not several weeks later (the Player stopping training on 29 August 2022 and provided Sample 48 some three weeks later on 22 September 2022). Further, the detraining hypothesis was not consistent with the HGB levels in Sample 49 returning to lower levels. Finally, the ABP Panel observed that a detraining effect did not impact RET%, and could therefore not explain the low RET% observed in Sample 48.

207. For the reasons advanced by the ABP Panel and Dr. Eichner, the Panel does not consider that this 'confounding factor' explains the results for Sample 48.

iv. Menstruation

208. The ITIA noted that the Player had not adduced any detailed evidence regarding her menstrual cycle. The ABP Panel expressed the view that the Sample 48 results were highly unlikely to be caused by menstruation. They accepted that heavy blood loss through menstruation can cause variations in HGB levels, though this was in ranges of around -1 g/dL for subjects who lose more than 80mL regularly. Further, such levels of blood loss can lead to chronic iron deficiency and subsequently iron deficient anaemia, but there was no indication of that in the Player's profile. Furthermore, as the Player would have been at the end of the 'Luteal phase' of her period when Sample 48 was collected, it would be expected that her RET% would be slightly elevated rather than decreased.

v. Blood loss during surgery

209. The surgeon's report indicated that the Player had minimal blood loss during her surgery. Further, blood loss would have caused a decrease in HGB, whereas Sample 48 showed elevated HGB levels.

vi. Conclusion on confounding factors

210. Having regard to the evidence before it, the Panel concludes that none of the above confounding factors – either individually or cumulatively – have been demonstrated to have had a significant or material effect on the Player's ABP so as to explain the abnormality in Sample 48.

*h. Whether blood doping explains the Player's abnormal values – plausible doping scenario*

211. In *UCI v. Mr. Alex Correia Diniz* (UCI Anti-Doping Tribunal ADT 06.2017), the Single Judge noted at [83]:

> *"The Single Judge understands this CAS jurisprudence to mean the following: Even if all scenarios other than doping can be excluded, the use of a prohibited substance or method must be a plausible explanation of the values obtained* [in order to] *positively assume doping. Such assessment must be made based on all evidence... ".*

212. The Panel accepts this statement of principle as correct. The Panel in the case at hand is not persuaded to the required degree that doping is a plausible explanation for the abnormal values, because of the results of the private blood sample.

i. The reliability of the private blood sample

213. The Panel cannot include the private blood testing results in the ABP. However, as previously explained this does not exclude the data from the private blood sample as evidence from the outset. Instead, all evidence must be assessed by the Panel as long as it is reliable. In this context the Panel notes that:

a. The Player gave oral evidence that each of the pre-analytical matters referred to above had been satisfied in the taking of the private blood sample. The Panel acknowledges that she did not call any corroborating witnesses; neither did she suggest that any of the supporting documentation she adduced concerning this private blood test supported her evidence. The ITIA did challenge the Player's assertion that the taking of the private blood sample mirrored the methodology utilised for the taking of a sample for the purposes of the ABP. For example, it challenged whether or not the Player had in fact sat still for a full 10 minutes prior to providing her sample. However, there was no evidence before the Panel of the specific consequence of any deviation from that strict methodology.

b. At the time the private blood sample was given, the Player had suspended her competitive tennis schedule to undertake the relevant surgery. This makes it less likely that she would have been recently training, competing or utilising altitude simulation.

c. As to transportation, the evidence adduced by the Player indicated that the sample was tested three hours after collection. The temperature at which it was

stored was not readily apparent from the documents and neither Party addressed the Panel on that issue. However, even assuming that it was stored at room temperature (~24°C), the BSS would have been 75, which was below the limit of 85 in the 2021 ABP Operating Guidelines.

d. The sample was analysed by a recognised laboratory using 'Sysmex XN1000 equipment', which the Player asserted (without any disagreement by ITIA) was the same as that used by WADA-accredited laboratories. The Panel acknowledges that the documents did not suggest that the sample was analysed twice or that the HGB/RET% levels between the analyses were compared (as required under the WADA guidelines).

e. The Player provided her private blood sample on 9 September 2022 for the purposes of a scheduled medical procedure. This was before she had been notified of an adverse analytical finding in respect of her 29 August 2022 urine sample and also prior her being notified of any abnormalities in her ABP. These matters speak strongly against a possibility that the sample results were manipulated or analyses were conducted to obtain favourable results.

214. The Panel accepts that the collection, transportation and analysis of the Player's private blood sample obtained on 9 September 2022 may not have strictly met the requirements in the relevant International Standards and thus cannot simply be inserted into the Player's ABP. Nonetheless, in the circumstances, the Panel considers that:

a. it is appropriate to have regard to the HGB and RET% results of the testing of that blood sample when considering whether the ABP charge is made out; and

b. such results should be given material weight in considering a plausible doping scenario.

ii. The consequences drawn from the private blood sample

215. Taking the Player's 9 September 2022 private blood sample into account (which Dr. Mørkeberg acknowledged showed a normal profile) does impact the plausible doping scenarios.

216. The date of the private blood sample is particularly relevant in considering the impact of Sample 48 (the outlier result in the ABP) which was the subject of consideration by the ABP Panel. The private blood sample was provided on 9 September 2022, approximately two weeks prior to the collection of Sample 48 (i.e. 22 September 2022). The closest earlier valid ABP sample was collected almost five months earlier (i.e. 27 April 2022). This is corroborated by the testimony of the ABP experts. At the hearing, each member of the ABP Panel was asked whether their view (of 'likely doping') changed if the results of the private blood sample were also considered:

a. Prof. d'Onofrio acknowledged that it "*would make the picture a bit more complex*" but did not accept that he would have come to a different conclusion; his evidence was "*I can't say if – which my decision would have been.*" Prof.

d'Onofrio did acknowledge, in response to a question from the Panel, that it was unlikely for a patient confronting imminent surgery under general anaesthesia to mislead or fail to disclose to her treating physician any prior manipulation of her blood values that might affect the outcome of the surgery.

b. Dr. Garvican-Lewis maintained that Sample 48 "*would still be an anomaly*" even if the private blood sample were taken into account, as it would still show an increased in HGB and decrease in RET%. She affirmed that she would still reach a conclusion of 'likely doping'.

c. Dr. Mørkeberg stated that the private blood sample results would have changed his view on the timing of the manipulation as those results suggested that "*it would not be very likely that the manipulation was done around the US Open, but it had to have been done after the* [private blood] *sample was collected*". However, he would not have changed his conclusion of 'likely doping' because the abnormal results of Sample 48 still required explanation.

217. At the conclusion of the hearing, the ITIA contended that the plausible doping scenarios were as follows:

| **Doping Scenario** | **Including 09 Sep 22 Private Blood Sample** | **Excluding 09 Sep 22 Private Blood Sample** |
|---|---|---|
| **Micro-dosing Roxadustat** | No | No |
| **Micro-dosing ESAs** | Yes | Yes |
| **Blood transfusion** | No | Yes |
| **Therapeutic dose Roxadustat** | No | No |
| **Therapeutic dose EPO/ESA** | Yes | Yes |
| **Combination** | Yes | Yes |

218. As can be seen, when the test results from the private blood sample of 9 September 2022 are taken into account, the ITIA does not press a blood transfusion as a plausible doping scenario. Evidence given by members of the ABP Panel was that, in such circumstances, the relevant transfusion would have needed to have occurred between the private blood sample (9 September 2022) and Sample 48 (22 September 2022).

219. The absence of blood transfusion, and a concession by the ABP Panel and the ITIA that micro-dosing or therapeutic doses of Roxadustat were also not plausible, leaves the asserted possibility of micro-dosing with an erythropoietic stimulating agent ("ESA") and/or the taking of therapeutic erythropoietin ("EPO")/ESA.

220. This now requires these scenarios to be considered in the context of the chronology.

a. ESA and EPO need to be used as part of a regime, not a once-only taking;

b. the Panel considers it unlikely that the Player was taking such products around the time that she was competing in the US Open in August 2022. Neither of her 26 or 29 August 2022 urine samples tested positive for such substances. The results of the private blood test on 9 September 2022 were also not consistent with such use; and

c. Prof. d'Onofrio ruled out a therapeutic dose of ESA or EPO around the US Open. Dr Mørkeberg stated that manipulation around the US Open was not very likely. His view as that, if there were manipulation, it would have occurred after 9 September 2022, as otherwise it would have shown up in the private blood sample test results. Prof. d'Onofrio gave similar evidence, namely that any micro-dosing would have to have occurred after 9 September 2022.

221. The Panel considers it unlikely that the Player used ESA/EPO after the private blood sample on 9 September 2022 and before providing Sample 48 on 22 September 2022 as the use of such agents is not consistent with the chronology of the Player's competition status. The Player lost the first round of the US Open on 29 August 2022. Her evidence, which is undisputed, is that she immediately decided to undergo nasal surgery and to cease playing tennis for the rest of the year. That is was occurred. There was no logical reason for her to use ESA or EPO after the US Open, let alone between 9 September and 22 September 2022. Notably, on 16 September 2022, an article was published confirming the Player's decision and that the Player did not expect recovery from her surgery until 2023.

222. The ABP Panel did postulate the possibility that the Player took a therapeutic dose of EPO earlier in the year (before the US Open) followed by micro-doses after 9 September 2022. Again, given the Player's publicised intention that she did not expect to return to tennis until 2023, the Panel considers this hypothesis unlikely.

223. The ITIA bears the onus of establishing the ADRV that arises if the conclusion from the ABP is that it is suspicious for doping. When the private blood sample and the chronology (including the Player's competition schedule, her clear urine sample on 26 August 2022, the cessation of play after the US Open and the surgery that the Player underwent) is taken into consideration, the doping scenarios relied upon by the ITIA may have been considered 'possible'. However, in the Panel's view, they were not 'plausible'.

224. The Panel is not comfortably satisfied that an ADRV has occurred under the ABP charge. Accordingly, that charge is dismissed.

## D. Period of ineligibility

225. It remains for the Panel to consider the period of ineligibility resulting from the admitted ADRV arising from the detection of Roxadustat in the Player's urine.

226. In circumstances where there has been (i) an ADRV in contravention of Articles 2.1 or 2.2 of the TADP; (ii) the relevant prohibited substance was not a 'Specified Substance'; and (iii) the Player has established that the ADRV was not intentional (each of which is

the case here), Article 10.2.2 of the TADP provides for a maximum sanction of 24 months:

> *"**10.2 Imposition of a period of Ineligibility for presence, Use or Attempted Use, or Possession of a Prohibited Substance or Prohibited Method***
>
> *The period of Ineligibility imposed for an Anti-Doping Rule Violation under Article 2.1, 2.2 or 2.6 that is the Player's or other Person's first doping offence will be as follows, subject to potential elimination, reduction, or suspension pursuant to Article 10.5, 10.6, or 10.7.*
>
> *10.2.1 Save where Article 10.2.4.1 applies, the period of Ineligibility will be four years:*
>
> *10.2.1.1 where the Anti-Doping Rule Violation does not involve a Specified Substance or a Specified Method, unless the Player or other Person establishes that the Anti-Doping Rule Violation was not intentional; and*
>
> *10.2.1.2 where the Anti-Doping Rule Violation involves a Specified Substance or a Specified Method and the ITIA can establish that the Anti-Doping Rule Violation was intentional.*
>
> *10.2.2 If Article 10.2.1 does not apply, then (subject to Article 10.2.4.1) the period of Ineligibility will be two years."*

227. The Player has satisfied the Panel to the requisite standard (the balance of probabilities) that the Prohibited Substance came from a Contaminated Product and that she had no significant fault or negligence. In those circumstances, Article 10.6.1.2 of the TADP gives the Panel a discretion to impose a period or ineligibility between 0-24 months based on the Player's degree of fault:

> *"10.6.1.2 Contaminated Products*
>
> *In cases involving a Prohibited Substance that is not a Substance of Abuse, where the Player or other Person can establish both No Significant Fault or Negligence for the violation and that the Prohibited Substance came from a Contaminated Product, the period of Ineligibility will be, at a minimum, a reprimand and no period of Ineligibility, and at a maximum, two years Ineligibility, depending on the Player's or other Person's degree of Fault."*

228. In considering the Player's fault and degree of fault, the Panel is to consider the circumstances as a whole, as relevant to the Player herself. The Player is not simply a professional elite athlete. She is highly experienced, having been on the WTA Tour and at the pinnacle of her sport for many years.

229. The Player's unchallenged evidence is that, prior to using the Keto MCT product, she relied on her team physiotherapist – Ms. Gohier – to source that product, and confirmed with Ms. Gohier that Ms. Gohier had checked the product to ensure that it was safe for

the Player to take. That evidence was broadly confirmed by Ms. Gohier. Ms. Gohier stated that she became aware of the Schinoussa brand of products (including Keto MCT) from Mr. Lefebvre and she then sourced the products from Schinoussa directly. Mr. Lefebvre was the director of physical preparation at the Mouratoglou Academy and was part of a team for a well-known male tennis player who had used Schinoussa products, including the Keto MCT. His evidence is that he told Ms. Gohier that that male tennis player had used Schinoussa products. The Player also stated that she checked with her coach – Mr. Mouratoglou – to ensure that the supplement was safe to use and did not contain any banned substances.

230. Ms. Gohier is an employed physiotherapist at the Mouratoglou Academy and not qualified as a sports nutritionist, nor as a clinician. Nonetheless, she was part of a professional team of people who were responsible for managing the Player's performance at one of the leading tennis training centres in the world. A question arises as to why, in such a professional environment, the important task of complying with anti-doping obligations is outsourced to a person in the team who has no, or no claimed, professional qualification in the relevant field. Ms. Gohier's evidence was that she has worked with many elite-level tennis players, is well aware of anti-doping responsibilities under the WADC and handles the same for many tennis players at the academy. It is for this reason that the Player asserts to have requested assistance from, and relied on, Ms. Gohier to check the listed ingredients of Keto MCT (and the other Schinoussa products) against the WADA website. Ms. Gohier was certainly capable of doing a technical check, and correctly determined that none of the ingredients as listed on the supplement were banned substances. However, there was no suggestion in the evidence that she advised the Player of the dangers related to the use of nutritional supplements.

231. There was also no evidence, and it was not suggested, that Ms. Gohier was a qualified medical practitioner or sports dietician. The Player clearly would have known of the limits of Ms Gohier's qualifications in that regard. Notably, Mr. Mouratoglou's oral evidence was that there were doctors available at the Mouratoglou Academy with respect to nutritional supplements:

> *"Q. Who in your academy would generally deal with what nutritional supplements a player should take? Is there a particular person?*
>
> *A. No, but we have doctors that are specialists of those questions, the doping questions, that we always go to, to make sure that nothing is forbidden."*

232. There was no evidence, and it was not suggested, that the Player or Ms. Gohier (or anyone on their behalf) consulted those doctors, despite them apparently being available to her. The Player did not suggest that a lack of financial resources had any relevance to this matter. The Player and Ms. Gohier had been in North America since late July 2022. Ms. Gohier's evidence was she contacted Schinoussa (located in Canada) on 16 August 2022 to obtain the products. The products were sent to an address in New York and arrived on 23 August 2022, which was the day that the Player asserts that she started using them. However, neither the suggestion in the evidence (from Mr. Lefebvre) that the Player had run out of her previously used supplement and that

there was a degree of urgency, nor the fact that the Player was in a continent away from her home base, is an excuse to derogate from the degree of care and personal responsibility that needed to be exercised in taking a new supplement.

233. None of the above should be taken as any criticism of Ms. Gohier. These matters have been noted to emphasise that the Player could not simply delegate her anti-doping responsibilities to Ms. Gohier.

234. The Player would have, or at least should have, known that taking the Keto MCT carried a degree of risk. The existence of contaminants in nutritional supplements is now, and was then, widely known. The Comment to Article 10.6.1.2 of the WADC notes that "*Athletes are on notice that they take nutritional supplements at their own risk*". Although not adduced in evidence by either party, the WTA website includes a webpage on dietary supplements, dated 26 July 2017, which warns about the risks of contamination of dietary supplements, advises players to see a physician or a sports dietician prior to taking a supplement, and provides a link to a webpage which identifies products which have been certified to be free of prohibited substances.

235. Although the Player took some steps to satisfy herself that the Keto MCT supplement was safe to use (or arranged for someone to do so on her behalf), those steps were little beyond the minimum required of an athlete in her position. Where a prohibited substance has come from a contaminated supplement, the act of checking that the supplement's ingredients do not include prohibited substances (or having someone do so on one's behalf) can be said to be merely a threshold requirement to establish no significant fault or negligence.

236. The Player did have the listed ingredients on the supplement checked and did make some inquiries as to its safety and use by another athlete.

237. However, the Player willingly assumed the risk that the Keto MCT supplement could be contaminated. In that regard:

    a. the Keto MCT was a new supplement for the Player; she had not used it before;

    b. it had been obtained for her at short notice;

    c. it had not been certified to be free from prohibited substances and did not appear on the list of substances tested and certified by disinterested third-party entities, and there appear to be alternative collagen supplements that have been so certified;

    d. there was no suggestion that the Player took any steps at the time to check if it had been certified, or whether there were alternative sugar-free collagen supplements which had been certified which she could use instead. Athletes, particularly experienced, high-level athletes should know, if they do not already know, that ingesting supplements that have not been tested and certified in advance as not containing prohibited substances by disinterested third-party

entities, are taking a great risk, and that is a factor that this Panel has considered as indicative of more than minor fault; and

e. the Player had the means and ability to seek advice from doctors at Mouratoglou Academy regarding the supplement – which was apparently (on Mr. Mouratoglou's evidence) the common process. However, she did not do so.

238. On one view, it could be said that there was no action that the Player could reasonably have taken to ascertain the contents of the Keto MCT that would have revealed the presence of Roxadustat as a contaminant and thus that there was no fault on the part of the Player. However, the fact that even testing of the supplement may not have revealed its contamination (noting that neither SMRTL nor the Montreal Laboratory was able to identify the contamination) does not detract from the fact that the Player, an elite and experienced athlete, willingly assumed the risk of using an uncertified substance.

239. The Panel concludes that, despite the steps actively taken by the Player to ascertain the contents of the supplement, there was fault on the Player's part. The Panel notes that this was effectively acknowledged in the suggestion in the Player's submissions of a very short period of suspension. Taking all the above matters into account, the Panel is of the view that a period of ineligibility of nine (9) months appropriately reflects the Player's degree of fault.

## E. Start date of period of ineligibility

*a. Credit for provisional suspension*

240. Article 10.13.2 of the TADP provides:

> *"10.13.2 Credit for any Provisional Suspension or period of Ineligibility served:*
>
> *10.13.2.1 Any period of Provisional Suspension (whether imposed or voluntarily accepted) that has been respected by the Player or other Person will be credited against the total period of Ineligibility to be served.*
>
> *10.13.2.2 To get credit for any period of voluntary Provisional Suspension, however, the Player or other Person must have given written notice at the beginning of such period to the ITIA, in a form acceptable to the ITIA (and the ITIA will promptly provide a copy of that written notice to each Interested Party) and must have respected the Provisional Suspension in full."*

241. The Player commenced a provisional suspension on 7 October 2022. It was common ground between the Parties that she should receive a credit for her period of provisional suspension. Accordingly, the start date of the Player's period of ineligibly is 7 October 2022.

*b. Earlier deemed start date due to delays*

242. Article 10.13.1 of the TADP confers a discretion on the Panel to deem an earlier start date for the period of ineligibility if there have been substantial delays in these proceedings which are not attributable to the Player:

> *"10.13.1 Delays not attributable to the Player or other Person:*
>
> *Where there have been substantial delays in the hearing process or other aspects of Doping Control, and the Player or other Person can establish that such delays are not attributable to the Player or other Person, the period of Ineligibility may be deemed to have started at an earlier date, commencing as early as the date of Sample collection or the date on which another Anti-Doping Rule Violation last occurred. All competitive results achieved during the period of Ineligibility, including retroactive Ineligibility, will be Disqualified."*

243. The Player asserts that the conditions for the application of Article 10.13.1 of the TADP have been met and any sanction imposed on her should start on 29 August 2022.

244. In this case, the length of the period of ineligibility as determined by the Panel is less than the time elapsed since the commencement of the Player's provisional suspension. Therefore, a deemed earlier start date will have no substantive impact on the period of time during which the Player has been unable to compete.

245. In light of these matters, even if the threshold requirements for Article 10.13.1 of the TADP were satisfied (and the Panel makes no finding in that regard), the Panel would decline to exercise its discretion. Accordingly, the Panel does not deem an earlier start date for the Player's period of ineligibility.

## F. Disqualification of results

246. Article 9.1 of the TADP provides for automatic disqualification of results for ADRV's arising out of in-competition tests:

> *"An Anti-Doping Rule Violation committed by a Player in connection with or arising out of an In-Competition test automatically leads to Disqualification of the results obtained by the Player in the Competition in question, with all resulting consequences, including forfeiture of any medals, titles, ranking points and Prize Money obtained by the Player in that Competition."*

247. The Player has accepted that her 29 August 2022 result at the US Open will be disqualified. She did not compete in any competitions between that date and the commencement of her provisional suspension on 7 October 2022.

248. It is appropriate to order that all results obtained by the Player in competitions taking place in the period 29 August 2022 to 7 October 2022 are disqualified, with all resulting consequences, including forfeiture of any medals, titles, ranking points and prize money.

## IX. CLARIFICATION

249. After the notification of the operative part of the Award on 5 March 2024, the CAS Court Office received a request from the International Tennis Federation in which it requested to change "ITF Independent Tribunal" to the "Independent Tribunal" in the operative part of the Arbitral Award. In this regard, the Panel notes that the International Tennis Federation was not a party to the proceedings but an observer. In addition, none of the Parties have filed a request to amend the operative part of the present Arbitral Award. In consideration that none of the Parties to the present proceedings requested an amendment of the operative part of the Arbitral Award, the operative part shall remain unchanged. For the avoidance of doubt, the Panel confirms there was no suggestion in the proceedings that the Independent Tribunal (which determined the first instance proceeding pursuant to the Tennis Anti-Doping Programme issued by the International Tennis Federation) was established, maintained or selected by the International Tennis Federation or otherwise not independent of the International Tennis Federation.

## X. COSTS

(...).

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# ON THESE GROUNDS

**The Court of Arbitration for Sport rules that:**

1. The appeal filed by Simona Halep on 28 September 2023 against the decision issued on 22 September 2023 by the ITF Independent Tribunal is admissible and partially upheld.

2. The appeal filed by the International Tennis Integrity Agency (ITIA) on 14 December 2023 against the decision issued on 22 September 2023 by the ITF Independent Tribunal is admissible and is dismissed.

3. The decision issued on 22 September 2023 by the ITF Independent Tribunal is set aside.

4. Simona Halep is found to have committed Anti-Doping Rule Violations under Articles 2.1 (presence) and 2.2 (use) of the Tennis Anti-Doping Programme 2022 as a result of the presence of a Prohibited Substance (Roxadustat) in her urine sample collected In-Competition on 29 August 2022.

5. Simona Halep is sanctioned with a period of Ineligibility of nine (9) months, commencing on 7 October 2022.

6. Credit is given to Simona Halep for her provisional suspension served since 7 October 2022.

7. All results obtained by Simona Halep in competitions taking place in the period 29 August 2022 to 7 October 2022 are disqualified, with all resulting consequences, including forfeiture of any medals, titles, ranking points and prize money.

8. (...).

9. (...).

10. All further and other motions or prayers for relief are dismissed.

Seat of arbitration: Lausanne, Switzerland
Operative part of the Award notified on 5 March 2024
Date: 20 September 2024

# THE COURT OF ARBITRATION FOR SPORT

Annabelle Bennett AC SC
President of the Panel

Ulrich Haas
Arbitrator

Jeffrey Benz
Arbitrator

Alistair Oakes
*Ad hoc* Clerk