

UCI Anti-Doping Tribunal

Judgment

case ADT 01.2020

UCI v. Mr. Raul Alarcon Garcia

Single Judge:

Ms. Helle Qvortrup Bachmann (Denmark)

Aigle, 8 March 2021

I. INTRODUCTION

1. The present Judgment is issued by the UCI Anti-Doping Tribunal (hereinafter referred to as “the Tribunal”) in application of the UCI Anti-Doping Tribunal Procedural Rules (hereinafter referred to as “the UCI ADT Rules”) in order to decide upon a violation of the UCI Anti-Doping Rules (hereinafter referred to as “the UCI ADR”) committed by Mr. Raul Alarcon Garcia (hereinafter referred to as “the Rider”) as alleged by the UCI (hereinafter collectively referred to as “the Parties”).

II. FACTUAL BACKGROUND

2. The circumstances stated below are a summary of the main relevant facts, as submitted by the Parties. Additional facts may be set out, where relevant, in connection with the legal discussion that follows. While the Single Judge has considered all the facts, allegations, legal arguments and evidence submitted by the Parties in the present proceedings, the Judgment refers only to the necessary submissions and evidence to explain her reasoning.

A. The Parties

1. The UCI

3. The UCI is the association of national cycling federations and is a non-governmental international association with a non-profit-making purpose of international interest, having legal personality pursuant to Articles 60 ff. of the Swiss Civil Code according to Articles 1.1 and 1.2 of the UCI Constitution.

2. The Rider

4. At the time of the asserted Anti-Doping Rule violation, the Rider was a professional road cyclist affiliated to the Spanish Cycling Federation (RFEC) and a License Holder within the meaning of the UCI ADR. The Rider started his professional cycling career in 2007 when he joined the UCI Team Saunier Duval – Prodir. In 2015 he joined the Portuguese UCI Continental team W52/FC PORTO. The Rider was under contract with this team until the end of 2020.

B. The ABP

5. The Rider was part of the UCI’s Athlete Biological Passport Programme (hereinafter the “ABP”). The APB is based on longitudinal monitoring of the athlete and is designed to be an “indirect” method of doping detection. 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.
6. The Adaptive Model is a statistic tool which was developed to identify atypical values or profiles that warrant further investigation. It predicts - for the individual athlete - an expected range within which the athlete’s biological markers will fall assuming a normal physiological condition.
7. The Adaptive Model flags haematological data as atypical if 1) a haemoglobin (HGB) and/or OFF-score (OFFS) marker value falls outside the expected intra-individual ranges, with outliers corresponding to values out of the 99%-range (0,5 – 99,5 percentiles) (1:100 chance or less that this result is due to normal physiological variation), or 2) when sequence deviations (a longitudinal profile of marker values) are present at specificity of 99,9% (1:1000 chance or less that this is due to normal physiological variation).

8. The OFF-score value is a haematological marker which is a combination of HGB and the percentage of reticulocytes (RET%).

C. The alleged anti-doping rule violation

9. The UCI alleges that the Rider committed a violation of Article 2.2 UCI ADR based on abnormalities detected in the haematological values contained in the Rider's ABP.
10. The following table summarizes the key parameters reported in the Rider's ABP:

No.	Sample code	Date of test	HCT%	HGB (g/dL)	OFF-score	RET# 10 ⁶ /uL	RET %	RBC 10 ⁶ /uL	MCHC g/dL
1	520182	03.08.2011	44.1	15.1	92.52	0.0446	0.95	4.69	34.2
2	848987	08.04.2015	42.6	14.9	104.9	0.0248	0.54	4.6	35
3	107528	28.07.2015	45.3	15.9	92.73	0.0587	1.22	4.81	35.1
4	107417	05.08.2015	44.4	15.2	103.63	0.03	0.65	4.61	34.2
5	101735	19.10.2015	41	14.9	81.4	0.058	1.27	4.57	36.3
6	144281	Invalid test	-	-	-	-	-	-	-
7	144406	Invalid test	-	-	-	-	-	-	-
8	160948	Invalid test	-	-	-	-	-	-	-
9	319495	12.07.2017	48	16.6	111.3	0.0421	0.83	5.07	34.6
10	354261	30.07.2017	45.6	15.2	80.8	0.065	1.41	4.61	33.3
11	238058	08.08.2017	46	15.4	109.5	0.0259	0.55	4.7	33.5
12	238061	Invalid test	-	-	-	-	-	-	-
13	362775	27.02.2018	48	16.7	111.36	0.0449	0.86	5.22	34.8
14	350186	15.03.2018	40.5	14.5	92.7	0.0338	0.76	4.45	35.8
15	347783	09.04.2018	44.9	15.8	82.1	0.0773	1.6	4.83	35.2
16	397919	31.07.2018	45	15.1	78.5	0.0656	1.46	4.49	33.6
17	239336	04.08.2018	47.3	16.3	114.3	0.0313	0.66	4.74	34.5
18	260279	05.08.2018	46.5	15.8	115.2	0.0235	0.51	4.6	34
19	239327	11.08.2018	46.6	16.2	125.5	0.0174	0.37	4.69	34.8
20	399383	22.08.2018	50	16.9	122.52	0.0305	0.6	5.08	33.8
21	600107	22.10.2018	43.7	15.5	75	0.086	1.78	4.83	35.5
22	600119	04.11.2018	40.8	14.6	65.7	0.0793	1.79	4.43	35.8

11. In the present case, the Rider's biological profile was flagged with abnormalities at 99.0% specificity for:
- Haemoglobin concentration in sample 20 (upper limit),
 - OFF-score in samples 17, 18, 19, 20 (upper limit) and 22 (lower limit),
 - RET% in samples 15, 21 and 22 (upper limit) and sample 19 (lower limit).

The sequences for RET% and OFF-score were also abnormal at >99,5% specificity.

12. Following the initial expert review, the Athlete's Passport Management Unit submitted the Rider's ABP to an expert panel consisting of three experienced anti-doping specialists (Giuseppe d'Onofrio, Jakob Mørkeberg and Yorck Olaf Schumacher; hereinafter: the Expert Panel) for independent evaluation.
13. The Expert Panel conducted a review of the Rider's ABP regarding samples obtained in the period between 2011 and 2018 and the Rider's competition schedule for the same period, and in a joint expert opinion dated 8 May 2019 (Expert Opinion #1) set forth their unanimous opinion on the Rider's haematological profile.

Sample quality

14. The Expert Panel first confirmed that it had scrutinised each sample of the ABP to exclude that analytical or pre-analytical issues could explain the abnormalities or influence the results in a way that would disadvantage the Rider. As part of this assessment, the Expert Panel decided to invalidate samples 6, 7, 8 and 12 due to issues of imperfect storage or lack of confirmation of storage conditions, which led to abnormal blood stability scores (BSS). The samples 6, 7, 8 and 12 were therefore not taken into account by the Expert Panel when reaching their conclusions on the Rider's profile.

The Expert Panel in invalidating samples number 6, 7, 8 and 12 applied the standards set out by WADA ABP Operating Guidelines version 7.0, para L.2.1.6, Departure from WADA ABP requirements.

Quantitative analysis

15. The Expert Panel confirmed that the Rider's profile contained abnormal features in the samples collected prior or during the 2015, 2017 and 2018 editions of the Volta a Portugal, which displayed a high haemoglobin concentration paired with low reticulocytes (leading to an increased OFF score). The Expert Panel noted that:

"[...] A high OFF score is typically observed when the red blood cell mass of the organism has been supraphysiologically increased (high hemoglobin) and the body's own red cell production was reduced (low reticulocytes) as a consequence to downregulate the excess in red blood cells. This constellation is pathognomonic for the use and recent discontinuation of an erythropoiesis stimulating agent (ESA) or the application of a blood transfusion (2,3). In the profile, it is clearly visible that the constellation develops further over the samples 16-19 (taken over 12 days) and goes from a mild erythropoietic stimulation with elevated reticulocytes into suppression with low reticulocytes.[...]"

16. The Expert Panel stated that the timeline of the stay at altitude declared by the Rider does not support altitude as a potential cause:

"[...] The athlete declares altitude sojourns on the Doping Control Forms for the years 2015-2018 at 1800-1900m (1587m according to the whereabouts) during the periods of June/July for 2-3 weeks, thus 8-12 days prior to the start of Volta a Portugal and 15-20 days prior to the occurrence of the typical OFF constellations mentioned above.

The impact of altitude on markers used in the ABP has been studied extensively (4–6). There is agreement that altitude of sufficient duration and height will cause mild changes in the ABP: As main feature, a mild increase in the OFF score is visible within 7 to 10 days upon return to sea level. The magnitude of these changes ranges between 10 and 20 points from baseline.

This only applies if the "altitude dose" (duration and height of altitude exposure) has been sufficient. Usually, an equivalent of exposure to around 2000m for 2-3 weeks is warranted to elicit a relevant response of haemoglobin mass and thus erythropoietic markers. For lower altitudes such as in the present case (1800m), there is evidence that even lifelong residence at such altitudes does not significantly impact red blood cell mass and is therefore unlikely to cause relevant alterations in ABP markers (7).

Furthermore, in the present case, the timeline of the changes does not support altitude as a potential cause. As mentioned above, the blood picture changes (increase in OFF score) in the passport caused by altitude will be visible after 7 to 10 days. However, the high OFF scores in the present case occur only after 15 days or later, with residual stimulation visible ~10 days after return to sea level (see samples 3, 10, 16) which is the opposite of what is expected from a physiological point of view.

It is thus highly unlikely that altitude alone has caused changes in the OFF score visible in the profile. [...]"

17. The Expert Panel further noted that the blood loss declared by the Rider on the Doping Control Form (DCF) of samples 13 and 21 could not be a potential cause for the abnormalities:

"[...] The athlete also declares blood loss for samples 13 (crash on 4.2.2018) and 21 (microsurgical intervention on 1.10.2018). Relating these dates to the profile, it becomes apparent that there is no relation to the abnormal samples.[...]"

18. The Expert Panel concluded that:

"[...] In summary, the profile bears features of blood manipulations on several occasions, coinciding with the Volta a Portugal from 2015, 2017 and 2018.

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

19. On 6 August 2019, the Rider was informed of the APF, provided with all relevant documentation, and requested to provide an explanation for the abnormalities identified in his ABP.
20. The documents sent to the Rider included the Documentation Package of samples 3, 4, 6, 7, and 9 to 22 of the Rider's ABP, a Certificate of analysis for the other 4 samples of his ABP, the ABP Documentation Package, the Rider's competition schedule and the APF issued by the APMU.
21. On 18 August 2019, the Rider sent his explanation in the form of an expert report to the UCI via his scientific expert, Dr. Douwe de Boer.
22. In summary Dr. Douwe de Boer concluded the following including criticizing the mathematical approach to determine the abnormality of the samples and the analytical validity of some of the tests:

"1. In general it must be stated that the total number of UCI samples evaluated in this case is limited, which has consequences for the representative nature of those samples and the robustness of the sample size;

2. Because of the limited number of UCI samples, Mr. Alarcón must be able to hand-over private test results as evidence and use alternative software to re-evaluate data and to supply it to anti-doping authorities for an adequate defence based on equal opportunities. This way an alternative and more adequate explanation can be presented;

3. Mr. Alarcón is suffering from immunological reactions as shown by large fluctuations in number of leucocytes and neutrophils and thus short periods of bone marrow suppression. This results in so-called abnormal features of OFF constellations, especially when combined with incidental hemoconcentration;

4. Therefore, the apparent fluctuations of the concentration of hemoglobin and percentage of reticulocytes are not so abnormal if all data are taken into consideration. One reason is the fact that statistical data lead to increased precision with a larger and more robust sample size. The other reason are the short periods of bone marrow suppression;

5. Consequently, it can be concluded that the AFP in fact is not an AFP anymore if additional data are implemented into the data set. The alternative explanation shows that the likelihood of the use (a) prohibited substance(s) and/or (a) prohibited method(s) is very low."

23. Dr. de Boer also criticised the invalidation of samples 6 to 8. In contrast, he suggested invalidating sample 1, because the sample was collected in 2011, while all other samples were collected in the period 2015 – 2019, “*in time a distinct period; distinct in term of physiology and pathology*”.
24. On 8 September 2019, after reviewing the Rider’s explanation, the Expert Panel issued a follow up Report (Expert Opinion #2) in which it considered the Rider’s explanations. The opinion of the Expert Panel was as follows:

[...]

Mathematical approach

[...] *The number of samples necessary to obtain a valid estimate of the individual reference ranges in the adaptive model of the ABP is not defined by the guidelines. We refer to an expert statistician for the mathematical details regarding this question, which has been dealt with in several previous ABP cases.*

The current ABP approach uses an adaptive model based on Bayesian statistics. The individual reference ranges are set by using a universal variance adapted to each individual athlete’s values. The variance has been estimated from a large number of athletes and confirmed in many different research studies (1). The calculations are done automatically by a software system developed and hosted by WADA in their online portal ADAMS.

[...] *The statistical approach at the basis of the software has been used in several independent research studies (see for example (2)), where the details of the calculations are explained. Furthermore, the theoretical and scientific basis behind the adaptive model is also published (3,4). Thus, the mathematical approach to determine abnormalities in blood profiles such as done by the proprietary WADA software system is in the public domain and can be replicated by the educated reader.*

[...] *Instead of applying one of these established models, Dr de Boer chose his own approach based on the median absolute deviation. The theory behind this method eludes us, as it seems to apply a measure of variation (confidence interval ?, coefficient of variation?, total error ?) derived from all samples of the athlete (i.e. including the data of the possibly manipulated samples) and a measurement error from a commonly used database (Westgaard (7)) quantifying analytical and biological variation to identify individual reference ranges. It is obvious that using this approach, the likelihood of having one of the samples used in the determination of the variation identified as outlier is very low.*

[...] *the alternative analysis of the abnormalities of the profile by the model developed by Dr de Boer is unclear and not supported by any scientific publication. We therefore dismiss the claim that the samples identified as abnormal by the adaptive model used for the ABP are in fact not abnormal.*

Validity of tests

[...] *In summary, we do not see any reason to change the validity/ invalidity of any of the samples of the blood profile at this stage based on Dr de Boers comments.*

Athlete’s own tests

Dr de Boer suggests admitting the athlete’s own tests to be used in addition to the official ABP tests of the profile. He makes the point that this is one of the only options the athlete has to defend himself.

This topic has been discussed in many other ABP cases and as Dr de Boer states correctly, private tests were never accepted. The main reason is that there is no preanalytical or analytical standardisation or documentation for private samples. There is also no comparability with the other ABP tests of the profile. Such comparability is usually confirmed by the independent external quality control (Centre Suisse de Controle de Qualité (CSCQ)) which compares all laboratories which are part of the network analysing ABP samples. It cannot even be determined if the sample in fact belongs to the athlete. Furthermore, it is

always unclear if the athlete presented all available private results or just a selection that suits his case. For all these reasons, previous decisions in ABP cases have supported the practise of not admitting private blood tests as part of ABP blood profiles.

It must be highlighted that this only applies to blood tests measuring the variables used in the adaptive model to create and evaluate the ABP blood profile. If the athlete has documentation or laboratory tests supporting a medical condition which are not part of the ABP (such as immune markers, results of certain viral titers or other laboratory investigations), these tests are obviously considered in the context of explaining any abnormal feature in a profile.

In summary, we confirm that we do not recommend admitting the private tests submitted by the athlete.

“Immunological” condition

The defence expert claims that the Mr. Alarcon suffers from an unspecified immunological reaction, illustrated by elevated Leukocytes and Neutrophils, such as seen in samples 16-19. This immunological reaction has allegedly caused bone marrow suppression with low reticulocyte% (thus elevated OFF scores). No other explanation or indication of the nature or type of the suspected pathology is provided, and no further investigations are available to support this claim.

[Table 1 and Figure 1 omitted. Table 1 and Figure 1 summarize the relevant white blood cell (WBC, NEUT, LYMPH) and platelet variables (PLT) as well as the OFF score of all official ABP tests of the profile.]

Form the data in the table and the illustration in Figure 1, it is clearly visible that there is no relation between the degree of erythropoietic suppression (expressed by the OFF score) and the level of white blood cells.

What is obvious is that the level of white blood cells depends on whether the sample has been taken in competition or out of competition. Except sample 10 (WBC 24.9thsd/ μ l, OFF score 80.8), all other samples with high WBC have been taken in competition (samples 17-19). The three samples (red circles) which show low WBC but are labelled as “in competition” are in fact pre-competition samples that were taken on the day prior to the race (and, by the regulations, are therefore labelled as “in competition” tests). This is of importance because the features seen in the samples highlighted by Dr de Boer as showing an “immunological reaction” are in fact typical for blood samples taken after a physical effort: Neutrophils are swept into the blood stream from their usual position in the vessel wall due to the higher blood velocity during exercise and are therefore measured higher in the analysis. This is a well-known phenomenon and extensively described in the literature (8). This exercise induced Neutrophilia can persist over several hours after the cessation of the physical effort, such as in the present case, where the samples with the high WBC have all been obtained in the evening after the different stages of the 2018 Volta a Portugal.

Other alternative explanations include viral or bacterial infections with a systemic immunological response. This is however unlikely, given the good performance of the athlete in the race where most of the samples in question were taken. Furthermore, such normal immune response does not suppress erythropoiesis on a regular basis.

Dr de Boer further states that the “immunological reaction” discussed above is paired with haemoconcentration, which then leads to the elevated OFF scores. As of the explanations in the previous paragraphs, this is not the case: The samples which show the most important neutrophilia and the highest OFF score have been obtained in competition, where there is usually a marked haemodilution (and not a haemoconcentration, such as mentioned by Dr de Boer). This has been shown in many research studies (9–11) and is even visible in the profile (see samples 3 and 4, where haemoglobin drops during the race (Volta a Portugal 2015, as expected).

Thus, based on the currently available data, any immunological condition paired with haemoconcentration as a potential cause for the abnormal features of the profile is highly unlikely. [...]

Adverse passport finding

[...] the use of private tests to be included in the ABP analysis is not recommended and Dr de Boers method to determine abnormality in the blood data remains obscure to us. In the defence submission, we were also unable to find any alternative explanations for the abnormalities of the profile as specified in our joint report. In the absence of any suitable explanation, we therefore confirm our previous evaluations.

We therefore conclude that based on the data available at this stage, it is highly likely that a prohibited substance or method has been used and that it is unlikely that the passport is the result of any of the causes highlighted in the defense statement."

25. On 21 October 2019, the Rider was informed of the Expert Panel's conclusion and was provided with the relevant documentation. In the same communication the Rider was notified by the UCI that an anti-doping rule violation of Article 2.2 UCI ADR was asserted against him and that he was therefore provisionally suspended. The Rider was also offered an Acceptance of Consequences pursuant to Article 8.4 UCI ADR and Article 2 UCI ADT Rules.
26. On 4 November 2019, the Rider rejected the UCI's Acceptance of Consequences.

III. PROCEDURE BEFORE THE TRIBUNAL

27. In accordance with Article 13.1 UCI ADT Rules, the UCI initiated proceedings before this Tribunal through the filing of a petition to the Secretariat on 19 March 2020.
28. In the UCI Petition the UCI requested the following relief:
 - *Declaring that the Rider has committed an Anti-Doping Rule Violation;*
 - *Imposing on the Rider a Period of Ineligibility of 4 years starting on the date of notification of the Tribunal's decision;*
 - *Holding that the period of provisional suspension served by the Rider since 21 October 2019 shall be credited against the period of ineligibility imposed by the Tribunal;*
 - *Disqualifying all the results obtained by the Rider from the date of collection of Sample 3 (i.e. 28 July 2015 until the day he was provisionally suspended (i.e. 21 October 2019);*
 - *Ordering the Rider to pay a fine of [REDACTED]; and*
 - *Ordering the Rider to pay the costs of results management by the UCI (2'500.- CHF), and the costs incurred for the documentation packages of the blood samples analysed for the Biological Passport (5'600.- EUR).*
29. On 23 March 2020, the Secretariat of the Tribunal appointed Ms. Helle Qvortrup Bachmann to act as Single Judge in the present proceedings in application of Article 14.1 UCI ADT Rules.
30. On 24 March 2020, in application of Article 14.4 UCI ADT Rules, the Tribunal informed the Rider that disciplinary proceedings had been initiated against him before the Tribunal and that Ms. Helle Qvortrup Bachmann had been appointed as Single Judge of the Tribunal. Furthermore, the Rider was informed that any challenge to the appointment of the Single Judge and any objection to the jurisdiction of the Tribunal should be brought to the Secretariat within 7 days of the receipt of the

correspondence, and that he was granted a deadline of 8 April 2020 to submit his answer in conformity with Articles 16.1 and 18 of the UCI ADT Rules.

31. On 30 March 2020, the Rider submitted a communication alleging and requesting the following:
- *Lack of jurisdiction of the UCI Anti-Doping Tribunal;*
 - *Incorrect constitution of the Tribunal;*
 - *Lack of compliance with the requirements of sufficient legal qualifications and expertise of the Single Judge;*
 - *Lack of independence and impartiality of the Single Judge;*
 - *Requesting for suspension of the proceedings because of the COVID-19 pandemic; and*
 - *Requesting for the procedure to be archived.*

32. On 14 April 2020 the UCI submitted its response to the Rider's submission of 30 March 2020. The UCI did not object to a suspension of the proceedings of two months, also accepting that further suspension of the proceedings could be accepted depending on the evolution of the pandemic in Spain.

33. On 15 April 2020 the Tribunal issued its procedural directions responding to the Rider's submission of 30 March 2020 by stating the following:

- *Regarding the Rider's claim on lack of jurisdiction of the Tribunal:*

The Tribunal stated that in accordance with Article 3 para. 3 UCI ADT Rules, the Tribunal shall rule on its own jurisdiction in its judgement;

- *Regarding the Rider's claim on incorrect constitution of the Tribunal:*

The Rider claims that the Tribunal was not validly constituted since only a single member of the Tribunal was appointed as Single Judge. The Rider argued that 4 members shall decide on the case in accordance with UCI ADT Rules Article 4.

The Tribunal stated that the Secretariat of the Tribunal acted in accordance with the UCI ADT Rules by assigning the case to one Single Judge in accordance with UCI ADT Rules Article 14, and the Tribunal dismissed the Rider's claim.

- *Regarding the Rider's claim on lack of compliance with the requirements of sufficient legal qualifications and expertise of the Single Judge:*

The Rider claims that the Single Judge *"does not (at least does not appear in the documentation provided) comply with the requirements [...], since there is no evidence that she has a recognized legal qualification or experience in resolving doping matters"*.

The Tribunal stated that the Rider did not put forward any evidence to establish that the Single Judge does not meet the requirements of Article 4 para. 2 of the UCI ADT Rules. The Tribunal further stated that the mere assertion that there is no evidence of the Single Judge's legal qualifications and expertise on the record is not sufficient to be considered as a challenge of the Single Judge as per Article 15 para. 3 of the UCI ADT Rules, and the Tribunal dismissed the Rider's claim.

- *Regarding the Rider's claim on lack of independence and impartiality of the Single Judge:*

The Rider claims that the Single Judge cannot possibly be independent and impartial as the UCI appointed her and as the UCI pays for her work in this case.

The Tribunal stated that this objection relates more to the operational independence of the Tribunal itself as a judicial body than to the independence and impartiality of the Single Judge in the present case, and stated that the Tribunal shall address this issue in its judgement.

- *Regarding the Rider's request for suspension of the proceedings because of the COVID-19 pandemic; and the Rider's request for the procedure to be archived.*

The Tribunal decided to stay the proceedings for a period of two months, i.e. until 15 June 2020 as requested by the Rider. In the same communication, the Tribunal set a new deadline to 30 June 2020 for the Rider to submit his answer to the UCI's petition.

34. On 24 April 2020 – that means in the period that the proceedings were stayed at the request of the Rider – the Rider submitted a communication with the main content being the same as in the Rider's submission of 30 March 2020 as mentioned in para 31. The Rider also stated that he is not a member of the UCI.
35. On 28 April 2020 the Tribunal acknowledged receipt of the Rider's application dated 24 April 2020, and confirmed the procedural orders issued by the Tribunal on 15 April 2020.
36. On 7 May 2020 – that means in the period that the proceedings were stayed at the request of the Rider – the Rider submitted another communication. The main content was essentially the same as in the Rider's submissions of 30 March 2020 and 24 April 2020 as mentioned in paras 31 and 34, except that the Rider as regards the claim regarding the Single Judge's alleged lack of compliance with the requirements of sufficient legal qualifications and expertise as well as alleged lack of independence and impartiality, the Rider clarified his application, so that both issues would be referred to the other members of the Tribunal in accordance with the procedure set out in Article 15 para. 4 of the UCI ADT Rules.
37. On 15 June 2020 the proceedings continued.
38. On 22 June 2020 the Single Judge's written comments as per Article 15 para. 4 of the UCI ADT Rules were sent to the other members of the Tribunal.
39. On 30 June 2020 the Rider submitted:
 - his answer;
 - an Expert Report from Dr. Alfredo Córdova;
 - a request for a hearing to be held via videoconference.
40. On 6 July 2020, the Tribunal informed the Parties that the Rider's challenge of the Single Judge had been rejected by the other members of the Tribunal in accordance with Article 15 para. 4 of the UCI ADT Rules. The Tribunal also confirmed that a hearing would be held in accordance with Article 22 para. 12 of the UCI ADT Rules, as requested by the Rider.
41. On 6 August 2020 the UCI filed a letter stating the following:
 - *"As far as such hearing is concerned, the UCI wishes to emphasise that Mr. Alarcon Garcia's Statement of Defence (submitted on 30 June 2020) contains - exclusively - claims and allegations which have been raised for the first time before this Tribunal. For the sake of procedural economy, the UCI is prepared to address these claims directly at the hearing and will therefore not request that a second exchange of written submissions be ordered."*

42. On 22 September 2020 the Rider filed a submission claiming that “Throughout the procedure in the UCI there have been a series of extremely serious events that must be immediately filed” further expressing the following:

- The Rider was provisionally suspended on 21 October 2019. On 4 November 2019 the Rider denied having committed doping and refused responsibility. The UCI didn’t send the case file to the UCI Anti-Doping Tribunal before 11 March 2020 which was damaging to the Rider because the Rider was suspended without the corresponding anti-doping process being initiated;
- The Rider has since the beginning of the proceedings challenged the appointment of the Single Judge. The appointment of the Single Judge was challenged for the first time by the Rider on 30 March 2020. This challenge wasn’t resolved until the 6 of July 2020, even though the Rider reiterated the challenge in the Rider’s submissions of 24 April 2020, 7 May 2020 and 30 June 2020;
- The Rider claimed he should have received a copy of the decision issued by the other members of the Tribunal rejecting the challenge of the Single Judge;
- The Rider claimed the procedure had been undue delayed;
- The Rider claimed as a response to the UCI’s communication of 6 August 2020, that the UCI should receive the warning contained in Article 17 paragraph 1 of the UCI ADT Rules meaning that the UCI should not be allowed to supplement or modify its arguments or to provide additional new evidence after the filing of the Petition;
- Claiming that it is contrary to the principle of equality of arms that the Rider would not receive the UCI’s written comments to the Riders’ claims submitted on the 30 June 2020 before the hearing;
- Demanding that the Tribunal should grant a period of time for the UCI to present its written comments before the hearing;
- Requesting the Tribunal to close the case.

43. In relation to the Rider’s challenge of the appointment of the Single Judge, the Rider also at the hearing stated, that the Rider expected to receive an answer from the Single Judge as to why the Tribunal members’ decision regarding the Rider’s request for the disqualification of the appointment of the Single Judge, has not been sent to the Rider.

44. On 20 October 2020 both Parties informed the Tribunal of who would attend the hearing. The UCI also submitted that no second exchange of written submissions was necessary to take place, since the UCI and its experts would address the Rider’s new allegations contained in his Answer of 30 June 2020 directly at the hearing with the intend to promote efficient proceedings and avoid further delays resulting from a second exchange of written submissions. The Rider reiterated the claims submitted on 22 September 2020 and also requested *primarily* that the case should be closed, *subsidiarily* that the hearing be held if agreed on.

45. On 29 October 2020 the Tribunal decided that the Rider’s new allegations of 30 June 2020 should be addressed directly at the hearing.

46. The hearing was scheduled for and held on 25 November 2020 via videoconference.

47. The hearing was attended on behalf of the UCI by:

Ms. Charlotte Frey, attorney-at-law, Lévy Kaufmann-Kohler, Geneva

and on behalf of the Rider by:

Mr. Raul Alarcon Garcia, the defendant
Mr. Ignacio Arroyo Martinez, attorney-at-law, Consejeros y Abogados, Santander
Mr. Mario Sanchez Eguren, attorney-at-law
Ms. Cristina Fuentes Sanchez, interpreter

During the hearing the following experts were heard by the Tribunal:

Mr. Yorck Olaf Schumacher (called by the UCI)
Mr. Giuseppe d'Onofrio (called by the UCI)
Mr. Alfredo Córdova (called by the Rider)

IV. JURISDICTION OF THE TRIBUNAL

48. The jurisdiction of the Tribunal follows from Article 8.2 UCI ADR and Article 3.1 UCI ADT Rules according to which *“the Tribunal shall have jurisdiction over all matters in which an anti-doping rule violation is asserted by the UCI based on a results management or investigation process under Article 7 UCI ADR”*.
49. Article 3.2 UCI ADT Rules provides that *“Any objection to the jurisdiction of the Tribunal shall be brought to the Tribunal’s attention within 7 days upon notification of the initiation of the proceedings. If no objection is filed within this time limit, the Parties are deemed to have accepted the Tribunal’s jurisdiction”*.

A. The Rider’s objection to the jurisdiction of the Tribunal

50. A preliminary objection to the jurisdiction of the Tribunal was raised by the Rider in his submission of 30 March 2020, i.e. within the aforementioned time limit. The Single Judge must therefore decide on the objections raised by the Rider.
51. The Rider objected to the jurisdiction of the Tribunal by claiming the following:
- That the Rider is a Spanish Rider with a Spanish national license. The Rider claims that Article 37.1 of Organic Law 3/2013, on the protection of athlete’s health and the fight against doping, is applicable in the case at hand. Article 37.1 of Organic Law 3/2013, establishes that *“The disciplinary power in the matter of doping with respect to athletes of national level corresponds to the Spanish Agency for the protection of Health in Sport.”*
 - The Rider further referred to: Article 7 of the Royal Decree 461/2015, of 5 June 2015: *“Functions of the Spanish Agency for the protection of Health in Sport [...] b) Exercise disciplinary authority in the field of doping in sports activities carried out with an approved state of autonomous sports license”*.
 - The Rider claims that since the Rider has a *“special Spanish License”* the Spanish Agency for the protection of Health in Sport (AEPSAD) has jurisdiction in this matter, and not the UCI Anti-Doping Tribunal.
 - The Rider also argues that compulsory arbitration is unconstitutional in Spain and the Rider claims that he has not voluntarily entered into any commitment to arbitration.
 - The Rider claims that he is not a member of the UCI, and that the Rider does not have to submit to the Tribunal.

- The Rider claims that the Spanish Administrative Court of Sport has considered the biological passport not to be conclusive evidence to issue a sanction against an athlete.
- The Rider overall claims that “*All this prevents accepting the jurisdiction of the UCI Anti-Doping Court and later the CAS*”.

B. Position of the UCI

52. The UCI submitted the following regarding the Rider’s objection to the jurisdiction of the Tribunal:

- The UCI submits that irrespective of what a foreign national legislation may provide, the Tribunal’s jurisdiction arises out of the UCI Regulations, whose application is not contested by the Rider.
- The UCI submits that the Tribunal is an internal disciplinary body of the UCI, which means that the Tribunal does not – by its nature – have the same level of independence as a state court or an arbitral tribunal, nor does it need to. The UCI refers to UCI ADT 04.2017, *UCI v. Ralf Matzka*, para. 76, and CAS 2009/A/1983, *Mariana Ohata v. ITU*, award of 21 July 2010, at para. 72, which refers to the Swiss Supreme Court Decision ATF 119 II 271 of 15 March 1993, at para. 3b.
- The UCI emphasizes that the members of the Tribunal are totally independent from the UCI administration and, in particular, are neither employees, nor exercise any function or belong to any non-independent committee or commission within the UCI or within a National Federation member of the UCI, as expressly set out under Article 4.3 of the UCI ADT Rules. The mere fact that the Single Judge is paid for her work in the context of an assignment does not alter that.
- The UCI claims that the Tribunal satisfies the requirement of “*operational independence*” that will be required under Article 8.1 of the 2021 WADA Code.
- The UCI emphasizes as for the impartiality, that it is the Rider’s right to file a challenge if he has good reasons to believe that the Single Judge appointed in the case at hand is not impartial, in accordance with Article 15.3 of the UCI ADT Rules.
- In the present case, the relevant anti-doping rule violation was asserted by the UCI following a results management process in accordance with Article 7.1.2.3 of the UCI UCI ADR. According to this provision, “[r]esults management for Adverse Passport Findings or Atypical Passport Findings and related review shall be conducted by the UCI if the Rider’s Biological Passport is under UCI custody”. This is the case, as the ABP Documentation Package (Exhibit 9W) clearly states that the UCI is the passport custodian.
- As to the Rider’s second jurisdictional argument, according to which he did not freely consent to arbitration, the UCI submits that such an argument is premature. Indeed, the Tribunal is merely an association’s internal disciplinary body, which is called upon to adjudicate an internal dispute between the UCI and one of its indirect members (i.e. the Rider), the Rider being the holder of a license issued by one of the UCI’s members. Hence, given that the Tribunal does not, and does not need to, meet the conditions of an independent arbitral tribunal, it is submitted, as previously held by the Tribunal, that the question of the Rider’s voluntary consent to the arbitration will only become relevant at the appeal process stage. The UCI further emphasizes, that should the Rider not be satisfied with the Tribunal’s judgement, the Rider will have the right, as pointed out by the Rider himself, to bring the case *de novo* before the Court of Arbitration for Sport (CAS), an institution which has been recognized by the Swiss Federal Supreme Court as a true arbitral tribunal on the ground that “*the CAS is sufficiently independent vis-à-vis the IOC, as well as other parties that call upon its*

services, for its decisions in cases involving the IOC to be considered true awards equivalent to the judgment of state courts". The UCI refers to the Swiss Supreme Court Decision ATF 129 III 445 of 25 May 2003, at para. 3.3.4, and the fact that this jurisprudence has been recently confirmed by the European Court of Human Rights in the case of Mutu and Pechstein v. Switzerland of 2 October 2018, at para. 157. The UCI submits, that in this respect, the Rider does not establish why his procedural rights would not be respected if his case were ultimately heard by the CAS.

- The UCI notes that the Rider considers his jurisdictional objection to be all the more relevant in this case because the Spanish Administrative Court of Sport considered the biological passport not to be conclusive evidence to issue a sanction against an athlete and there is therefore a risk that the Tribunal's judgement may be contradictory to the decision in the pending appeal proceedings before the Central Court of Administrative Litigation.
- The UCI submits in this respect that the validity of the biological passport as a means of evidence is a substantive question, which has no bearing on the Tribunal's jurisdiction.
- The UCI also submits that Article 37.1 of Organic Law 3/2013, was modified following the adoption of the new royal decree 3/2017 of 17 February 2017, and now provides not only that the disciplinary power of the local authority concerns "*athletes of national level*" but also explicitly provides that the AEPSAD does not have jurisdiction over international level athletes, such as the Rider.
- The UCI overall claims that the Rider's jurisdictional objections should be dismissed.

C. Position of the Single Judge

53. As a preliminary matter, the Single Judge notes that the UCI ADR and the UCI ADT Rules shall apply to the Rider's objection to the jurisdiction of the Tribunal. In this regard, the Single Judge refers to Article 8.2 of the UCI ADR and Article 3.1 of the UCI ADT Rules from which it follows that "*the Tribunal shall have jurisdiction over all matters in which an anti-doping rule violation is asserted by the UCI based on a results management or investigation process under Article 7 UCI ADR*".
54. The UCI has documented in the case at hand that the Rider in the period 2015 – 2019 (both included) held a UCI license, and is therefore a UCI License Holder within the meaning of the UCI ADR.
55. In this case the ABP Documentation Package (Exhibit 9W) clearly states that the UCI is the ABP passport custodian.
56. It follows from the above that the Rider is bound by the UCI ADR, and that the UCI asserted the anti-doping rule violation following a results management/investigation process under Article 7 UCI ADR.

The Rider's claim regarding the operational independence of the Tribunal

57. It is common ground between the parties that the Tribunal is an internal UCI body. This means that the Single Judge needs to determine whether the Tribunal's jurisdiction is based on the relevant UCI regulations and whether the requirements of such rules are met; these questions have already been answered in the affirmative above.
58. The Single Judge emphasizes - as already previous stated by this Tribunal - that being an association's internal disciplinary body, the Tribunal does not - by its nature - meet the conditions of an independent arbitral tribunal and, in fact, does not need to. The Tribunal is merely called upon to resolve an internal dispute between the association (the UCI) and one of its indirect members (the Rider), the latter holding a license issued by a member of the UCI. The Rider's rights

are guaranteed by the fact that the UCI ADR, in compliance with the World Anti-Doping Code, set certain due process standards. In case these standards are deemed by the Rider inadequate or, simply, not met by the Tribunal, the Rider shall have the right of appeal before a court of law. Such court of law generally can be either a state court or an arbitral tribunal.

59. It is exactly at that point in time, namely the appeal process, where the question of the Rider's voluntary consent or not through the license application with the RFEC will become relevant. In the present case, this will happen once the UCI-internal proceedings are completed with the issuance of the present judgement. Only at that moment the Rider's submission to the jurisdiction of an arbitral tribunal produces legal effect, opening the way to a CAS appeal to the exclusion of remedies in state courts. Only then such consent can be attacked by the Rider. The Rider's objection in these proceedings is therefore premature albeit prudently placed at the outset of a two-step process that he does not wish to accept. Ultimately, it will be for the CAS and/or a state court to decide upon this objection.
60. In light of the above, the Single Judge rejects the Rider's objections to the jurisdiction and the operational independence of the Tribunal, and concludes that the Tribunal has jurisdiction to decide on the Petition.

V. APPLICABLE RULES

61. Article 25 UCI ADT Rules provides that *"the Single Judge shall apply the [UCI] UCI ADR and the standards referenced therein as well as the UCI Constitution, the UCI Regulations and, subsidiarily, Swiss law"*.
62. The relevant samples of the Rider's ABP were collected between 28 July 2015 and 4 November 2018.
63. Article 25.1 UCI ADR provides that the effective date of the 2015 edition of the UCI ADR is 1 January 2015. Since the relevant doping controls were carried out after this date, the Single Judge shall apply the 2015 edition of the UCI ADR.
64. As to the other *"standards referenced therein"* the Tribunal notes that part E of the introduction of the UCI ADR provides as follows:

"Under the World Anti-Doping Program, WADA may release various types of documents, including (a) International Standards and related Technical Documents, and (b) Guidelines and Models of Best Practices.

The UCI may, consistent with its responsibilities under the Code, choose to (a) directly incorporate some of these documents by reference into these Anti-Doping Rules, and/or (b) adopt Regulations implementing all or certain aspects of these documents for the sport of cycling.

Compliance with an International Standard incorporated in these Anti-Doping Rules or with UCI Regulations (as opposed to another alternative standard, practice or procedure) shall be sufficient to conclude that the procedures addressed by the International Standard or UCI Regulations were performed properly.

All documents binding upon Riders or other Persons subject to these Anti-Doping Rules are made available on the UCI Website, in their version effective and as amended from time to time."

65. The Tribunal also notes that Article 7.5 UCI ADR provides as follows:

“Review of Atypical Passport Findings and Adverse Passport Findings shall take place as provided in the UCI Testing & Investigations Regulations, the International Standard for Laboratories, WADA Athlete Biological Passport Operating Guidelines and respectively related Technical Documents. [...]”

66. Accordingly, in addition to the UCI ADR, the Single Judge will take into consideration the UCI Testing & Investigations Regulations, the International Standard for Laboratories, the WADA Athlete Biological Passport Operating Guidelines (“WADA ABP Guidelines”), and the related Technical Documents to the extent relevant or necessary.

A. Anti-doping rule violation

67. Article 2.2. UCI ADR defines the relevant anti-doping rule violation as follows:

“2.2 Use or Attempted Use by a Rider of a Prohibited Substance or Prohibited Method

2.2.1 It is each Rider’s personal duty to ensure that no Prohibited Substance enters his or her body and that no Prohibited Method is Used. Accordingly, it is not necessary that intent, Fault, Negligence or knowing Use on the Rider’s part be demonstrated in order to establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method.

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

[Comment to Article 2.2: It has always been the case that Use or Attempted Use of a Prohibited Substance or Prohibited Method may be established by any reliable means. As noted in the Comment to Article 3.2, unlike the proof required to establish an anti-doping rule violation under Article 2.1, Use or Attempted Use may also be established by other reliable means such as admissions by the Rider, witness statements, documentary evidence, conclusions drawn from longitudinal profiling, including data collected as part of the Rider Biological Passport, or other analytical which does not otherwise satisfy all the requirements to establish ‘Presence’ of a Prohibited Substance under Article 2.1. For example, Use may be established based upon reliable analytical data from the analysis of an A Sample (without confirmation from an analysis of a B Sample) or from the analysis of a B Sample alone where the Anti-Doping Organization provides a satisfactory explanation for the lack of confirmation in the other Sample.] [...]”

B. Burdens and Standards of proof

68. As to the burden and standard of proof, Article 3.1 UCI ADR reads as follows:

“The UCI shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether the UCI has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation which 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. Where these Anti-Doping Rules place the burden of proof upon the Rider or other Person alleged to have committed an anti-doping rule violation to rebut a presumption or establish specified facts or circumstances, the standard of proof shall be by a balance of probability.[...]”

69. As to the methods of establishing facts and presumptions, Article 3.2 UCI ADR provides:

“Facts related to anti-doping rule violations may be established by any reliable means, including admissions. The following rules of proof shall be applicable in doping cases:

[Comment to Article 3.2: For example, the UCI may establish an anti-doping rule violation under Article 2.2 based on the Rider's admissions, the credible testimony of third Persons, reliable documentary evidence, reliable analytical data from either an A or B Sample as provided in the Comments to Article 2.2, or conclusions drawn from the profile of a series of the Rider's blood or urine Samples, such as data from the Athlete Biological Passport.]]

[...]

- 3.2.2 *WADA-accredited laboratories, and other laboratories approved by WADA, are presumed to have conducted Sample analysis and custodial procedures in accordance with the International Standard for Laboratories. The Rider or other Person may rebut this presumption by establishing that a departure from the International Standard for Laboratories occurred which could reasonably have caused the Adverse Analytical Finding.*

If the Rider or other Person rebuts the preceding presumption by showing that a departure from the International Standard for Laboratories occurred which could reasonably have caused the Adverse Analytical Finding, then the UCI shall have the burden to establish that such departure did not cause the Adverse Analytical Finding.

[Comment to Article 3.2.2: The burden is on the Rider or other Person to establish, by a balance of probability, a departure from the International Standard for Laboratories that could reasonably have caused the Adverse Analytical Finding. If the Rider or other Person does so, the burden shifts to the UCI to prove to the comfortable satisfaction of the hearing panel that the departure did not cause the Adverse Analytical Finding.]

- 3.2.3 *Departures from any other rule set forth in these Anti-Doping Rules, or any International Standard or UCI Regulation incorporated in these Anti-Doping Rules which did not cause an Adverse Analytical Finding or other anti-doping rule violation shall not invalidate such evidence or results. If the Rider or other Person establishes a departure from any other rule set forth in these Anti-Doping Rules, or any International Standard or UCI Regulation incorporated in these Anti-Doping Rules which could reasonably have caused an antidoping rule violation based on an Adverse Analytical Finding or other anti-doping rule violation, then the UCI shall have the burden to establish that such departure did not cause 11 the Adverse Analytical Finding or the factual basis for the anti-doping rule violation. [...]"*

C. Sanctions and Consequences

1. Period of Ineligibility

70. As for the standard period of Ineligibility Article 10.2 UCI ADR provides as follows:

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

The period of Ineligibility for a violation of Articles 2.1, 2.2 or 2.6 shall be as follows, subject to potential reduction or suspension pursuant to Articles 10.4, 10.5 or 10.6:

- 10.2.1 *The period of Ineligibility shall be four years where:*

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

10.2.1.2 *The anti-doping rule violation involves a Specified Substance and the UCI can establish that the anti-doping rule violation was intentional.*

- 10.2.2 *If Article 10.2.1 does not apply, the period of Ineligibility shall be two years.*

10.2.3 *As used in Articles 10.2 and 10.3, the term ‘intentional’ is meant to identify those Riders who cheat. The term therefore requires that the Rider or other Person engaged in conduct which he or she knew constituted an anti-doping rule violation or knew that there was a significant risk that the conduct might constitute or result in an anti-doping rule violation and manifestly disregarded that risk. An anti-doping rule violation resulting from an Adverse Analytical Finding for a substance which is only prohibited In-Competition shall be rebuttably presumed to be not intentional if the substance is a Specified Substance and the Rider can establish that the Prohibited Substance was Used Out-of-Competition. An anti-doping rule violation resulting from an Adverse Analytical Finding for a substance which is only prohibited In-Competition shall not be considered intentional if the substance is not a Specified Substance and the Rider can establish that the Prohibited Substance was Used Out-of-Competition in a context unrelated to sport performance.”*

71. As for the possibilities to reduce the aforementioned periods of Ineligibility based on fault, Articles 10.4 and 10.5 of the UCI ADR state as follows:

“10.4 Elimination of the Period of Ineligibility where there is No Fault or Negligence

If a Rider or other Person establishes in an individual case that he or she bears No Fault or Negligence, then the otherwise applicable period of Ineligibility shall be eliminated. [...]

10.5 Reduction of the Period of Ineligibility based on No Significant Fault or Negligence
[...]

10.5.2 *Application of No Significant Fault or Negligence beyond the Application of Article 10.5.1*

If a Rider or other Person establishes in an individual case where Article 10.5.1 is not applicable that he or she bears No Significant Fault or Negligence, then, subject to further reduction or elimination as provided in Article 10.6, the otherwise applicable period of Ineligibility may be reduced based on the Rider or other Person’s degree of Fault, but the reduced period of Ineligibility may not be less than one-half of the period of Ineligibility otherwise applicable. If the otherwise applicable period of Ineligibility is a lifetime, the reduced period under this Article may be no less than eight years. [...]”

72. In relation to the Disqualification of results in competitions subsequent to sample collection or commission of an anti-doping rule violation Article 10.8 UCI ADR provides as follows:

“In addition to the automatic Disqualification of the results in the Competition which produced the positive Sample under Article 9, all other competitive results of the Rider obtained from the date a positive Sample was collected (whether In-Competition or Out-of-Competition), or other anti-doping rule violation occurred, through the commencement of any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified with all of the resulting Consequences including forfeiture of any medals, points and prizes.[...]”

73. In relation to the commencement of the period of Ineligibility Article 10.11 UCI ADR provides as follows:

“Except as provided below, the period of Ineligibility shall start on the date of the final hearing decision providing for Ineligibility or, if the hearing is waived or there is no hearing, on the date Ineligibility is accepted or otherwise imposed. [...]

10.11.3.1 If a Provisional Suspension is imposed and respected by the Rider or other Person, then the Rider or other Person shall receive a credit for such period of Provisional Suspension against any period of Ineligibility which may ultimately be imposed. If a period of Ineligibility is served pursuant to a decision that is subsequently appealed, then the Rider or other Person shall receive a credit for

such period of Ineligibility served against any period of Ineligibility which may ultimately be imposed on appeal. [...]

2. Mandatory fine and costs

74. In relation to the Financial Consequences, Article 10.10.1 UCI ADR provides as follows:

“In addition to the Consequences provided for in Article 10.1-10.9, violation under these Anti-Doping Rules shall be sanctioned with a fine as follows.

10.10.1.1 A fine shall be imposed in case a Rider or other Person exercising a professional activity in cycling is found to have committed an intentional anti-doping rule violation within the meaning of Article 10.2.3.

[Comments: 1. A member of a Team registered with the UCI shall be considered as exercising a professional activity in cycling. 2: Suspension of part of a period of Ineligibility has no influence on the application of this Article].

The amount of the fine shall be equal to the net annual income from cycling that the Rider or other Person was entitled to for the whole year in which the anti-doping violation occurred. In the Event that the anti-doping violation relates to more than one year, the amount of the fine shall be equal to the average of the net annual income from cycling that the Rider or other Person was entitled to during each year covered by the anti-doping rule violation.

[Comment: Income from cycling includes the earnings from all the contracts with the Team and the income from image rights, amongst others.]

The net income shall be deemed to be 70 (seventy) % of the corresponding gross income. The Rider or other Person shall have the burden of proof to establish that the applicable national income tax legislation provides otherwise. Bearing in mind the seriousness of the offence, the quantum of the fine may be reduced where the circumstances so justify, including:

- 1. Nature of anti-doping rule violation and circumstances giving rise to it;*
- 2. Timing of the commission of the anti-doping rule violation;*
- 3. Rider or other Person’s financial situation;*
- 4. Cost of living in the Rider or other Person’s place of residence;*
- 5. Rider or other Person’s Cooperation during the proceedings and/or Substantial Assistance as per article 10.6.1.*

In all cases, no fine may exceed CHF 1,500,000.

For the purpose of this article, the UCI shall have the right to receive a copy of the full contracts and other related documents from the Rider or other Person, the auditor or relevant National Federation.

[Comment: No fine may be considered a basis for reducing the period of Ineligibility or other sanction which would otherwise be applicable under these Anti-Doping Rules].”

75. As for the liability for costs of the procedures, Article 10.10.2 UCI ADR provides as follows:

“If the Rider or other Person is found to have committed an anti-doping rule violation, he or she shall bear, unless the UCI Tribunal determines otherwise:

- 1. The cost of the proceedings as determined by the UCI Anti-Doping Tribunal, if any.*

2. *The cost of the result management by the UCI; the amount of this cost shall be CHF 2'500, unless a higher amount is claimed by the UCI and determined by the UCI Anti-Doping Tribunal.*
3. *The cost of the B Sample analysis, where applicable.*
4. *The cost incurred for Out-of-Competition Testing; the amount of this cost shall be CHF 1'500, unless a higher amount is claimed by the UCI and determined by the UCI Anti-Doping Tribunal.*
5. *The cost for the A and/or B Sample laboratory documentation package where requested by the Rider.*
6. *The cost for the documentation package of Samples analyzed for the Biological Passport, where applicable. [...]*

76. As for the liability for costs of the proceedings, Article 28 UCI ADT Rules provides as follows:

- “1. *The Tribunal shall determine in its judgment the costs of the proceedings as provided under Article 10.10.2 para. 1 UCI ADR.*
2. *As a matter of principle the Judgment is rendered without costs.*
3. *Notwithstanding para. 1 above, the Tribunal may order the Defendant to pay a contribution toward the costs of the Tribunal. Whenever the hearing is held by videoconference, the maximum participation is CHF 7'500.*
4. *The Tribunal may also order the unsuccessful Party to pay a contribution toward the prevailing Party's costs and expenses incurred in connection with the proceedings and, in particular, the costs of witnesses and experts. If the prevailing Party was represented by a legal representative the contribution shall also cover legal costs.”*

VI. THE FINDINGS OF THE TRIBUNAL

77. The main issues for the Single Judge to decide are whether the UCI has successfully established that the Rider committed a violation of Article 2.2 UCI ADR, and if so, to decide upon the consequences of such anti-doping rule violation.
78. The Rider's counsel brought during the proceedings - and also during the stay of the proceedings - a number of allegations against the Tribunal, the Single Judge and the UCI. The allegations raised against the Tribunal was mainly a number of repeated challenges against the appointment of the Single Judge, an alleged lack of jurisdiction of the Tribunal, an alleged lack of independence and impartiality by the Tribunal and by the Single Judge, and also a number of repeated claims directed at the Tribunals proceedings and against the UCI and its counsels. Among the high number of claims one of the main claims was that the procedure was undue delayed. The Rider's counsel also repeatedly claimed that the Tribunal should close and archive the case. The Rider's counsel also claimed that the UCI should receive procedural warnings from the Tribunal, because of the UCI's behaviour during the proceedings and before the UCI's filing of the petition.
79. The Single Judge finds that it should not be necessary to confirm, that the proceedings at the Tribunal must follow the Tribunals Procedural Rules (The UCI ADT Rules).
80. Regarding the claim from the Rider's counsel that the UCI should receive a warning for their behaviour during the proceedings, it is worth noting that the UCI followed the procedure laid down by the Tribunal in accordance with the UCI ADT Rules.
81. Regarding the claim from the Rider's counsel that the proceedings were unduly delayed, the Single Judge finds it relevant to mention the UCI ADT Rules Article 24, from which it follows, that the Rider had the opportunity to request for an expedited procedure. As far as the Single Judge is informed, the Tribunal has never denied a request for an expedited procedure. The Rider's counsel did not request for such expedited procedure. Instead, the Rider requested for a stay of the proceedings due to the COVID-19 pandemic for as long as Spain was suffering as consequence of the COVID-19 pandemic, and also the Rider repeatedly requested the proceedings to be closed

and archived. The Rider's counsel also claimed that the elapsed period between the Rider's answer dated 30 June 2020 and the hearing date being the 25 November 2020 was an undue delay. The Tribunal tried to schedule the hearing to be held in September, but the Rider's counsel was not able to participate on the specific suggested date. The Single Judge does not agree that the proceedings were unduly delayed.

A. Did the Rider commit an anti-doping rule violation?

82. The UCI submits that the Rider committed an anti-doping rule violation within the meaning of Article 2.2. UCI ADR, which conclusion the UCI derives from the analytical data in the Rider's ABP as well as the interpretation of said data by the Expert Panel.
83. The Rider objects to this conclusion. The Rider argues that the analytical results of all the samples - with specific claims regarding samples number 3, 4, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 - shall be discarded, and, also the Rider argues, that the abnormalities in his ABP are not that abnormal taken the impact of confounding factors, plasma volume impact on the blood values and the coefficient of variation of the machines and laboratories into consideration.
84. It follows from Article 3.1 UCI ADR that the UCI bears the burden of proof to establish that the Rider committed a violation of Article 2.2 UCI ADR. The standard of proof is *"comfortable satisfaction, bearing in mind the seriousness of the allegation which 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"*.

1. The ABP as reliable evidence

85. With regard to the Rider's argument, that the Spanish Administrative Court of Sport has considered the biological passport not to be conclusive evidence to issue a sanction against an athlete, it is in dispute between the Parties if the ABP is a reliable means for the purpose of establishing the use of a prohibited substance or prohibited method within the meaning of Article 2.2 UCI ADR.
86. The Single Judge finds that the ABP constitutes a reliable means of evidence as it has been confirmed by numerous CAS decisions¹ and by this Tribunal,² and it also follows from the comment to Article 3.2 UCI ADR that *"the UCI may establish an anti-doping rule violation under Article 2.2 based on the conclusions drawn from the profile of a series of the Rider's blood or urine Samples, such as data from the Athlete Biological Passport"*.

2. Should the data of samples number 3, 4, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 be included in the Rider's ABP?

87. The UCI bases its allegation of an anti-doping rule violation on the haematological profile of the Rider's blood samples number 1 - 5, 9 - 11 and 13 - 22.

¹ See e.g. CAS 2015/A/4006, para. 103; CAS 2016/O/4481, para. 133; CAS 2016/O/4464, para 148; CAS 2010/A/2174, para 9.8; CAS 2010/A/2176; CAS 2010/A/2235.

² UCI ADT 03.2017, *UCI v. Isabella Moreira Lacerda*, para 60, UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 54, UCI ADT 02.2018, *UCI v. Jaime Roson Garcia*, para 55, UCI ADT 03.2018, *UCI v. Juan José Cobo Acebo*, para 78 and UCI ADT 04.2019, *UCI v. Roberto Pinheiro*, para 64.

a) The Rider's challenge of the reliability of the analytical results

88. The Rider claims that the analytical results in his ABP regarding all samples - with specific claims regarding samples 3, 4, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 - shall be discarded.
89. In general, the Rider claims the existence of numerous serious breaches of the International Standards for Control [Testing] and Investigations of the WADA.
90. The Rider states that: *"International standards must be met, and if they are not met, the consequence is that the samples must be cancelled. In law it's not possible not to apply the existing rules"*.
91. Here follows a (non-exhaustive) overview of the Rider's claims regarding the reliability of the analytical results.

Documentation in German

92. Regarding samples number 13, 16 and 20, the Rider claims that German is not an official language of the UCI, and therefore the Rider's fundamental rights are not respected since the documentation has not been translated to English, and since it is clear to the Rider that this documentation is important. The Rider claimed that this documentation regarding samples number 13, 16 and 20, should either be translated into English or be removed from the file.
93. At the hearing the Rider requested the Tribunal to have the original German documents in the laboratory documentation packages translated from German and sent to the Rider.

Claims regarding the alleged breach of International Standards

94. The Rider claims a failure to comply with international standards in the preservation of samples. The Rider claims - among others - a breach of;
- International Standard for Controls [Testing] and Investigations Article 9.3.2; Section E.4.15 [E.4.16] (the sealed Sample shall be stored in a manner that protects its integrity, identity and security); Section E.4.16 [E.4.17] (blood Samples shall be transported in a device that maintains the integrity of Samples over time notwithstanding changes in external temperature); Section K.4; Section K.2.3; Section K.2.4.a) (the temperature data logger shall be able to record the temperature in degrees Celsius at least once per minute); Section K.2.4.c) (the temperature data logger shall be able to report the temperature profile over time); Section K.2.7 (it is important to start recording the temperature before Sample collection); International Standard for Laboratories Article 6.2.2.5 and 6 etc.

Breach of the International Standard for Testing and Investigations Annex K, section K.2.3.

95. The Rider claims breaches of the International Standard for Testing and Investigations Annex K, section K.2.3, regarding all the contested samples except for one sample (sample 16). The Rider argues that it follows from Annex K, K.2.3 and the interpretation of said rule that *"A refrigerated sample is one that is kept constantly between +2 and +8 degrees Celsius"*. The Rider argues that the samples must be kept constantly refrigerated between 2 and 8 degrees Celsius because in all documentation packages *"there is a document from the Swiss Quality Control Centre, which indicates that the samples must be kept protected from light between +2 and +8 degrees Celcius"*. The Rider also refer to the Spanish order PRE/1832/2011 of 29 June 2011, which governs the control area for doping, sampling material and the protocol for handling and transporting blood samples. The Article 34 of this protocol provides that the transport temperature *"must range between 2 and 8°C"*.

96. The Rider claims that the samples have not been refrigerated in accordance with the International Standard for Testing and Investigations Annex K, section K.2.3, since all samples have been above 8 degrees Celsius. As regards sample 20, it was also below 2 degrees Celsius.
97. Dr. Cordova explained at the hearing, that in accordance with the rules, samples must be kept refrigerated between 2 and 8 degrees Celsius. Dr. Cordova explained, that it is clear that many samples in the Riders APB did not live up to the claimed criteria that samples must be kept constantly between 2 and 8 degrees Celsius, and that the samples are therefore invalid.
98. The Rider also claims a breach of Annex K, section K.2.4.a) since temperature control was only carried out every 5 minutes - and not each minute.

Breach of the International Standard for Laboratories Article 6.2.2.5 and 6

99. The Rider claims regarding sample 18 and sample 19 a breach of the International Standard for Laboratories Article 6.2.2.5 and Article 6. The Rider claims that samples require to be cooled approximately at 4 degrees Celsius from the time the sample was taken and until analysis.

Other claims

100. The Rider claims that other national rules specify that the transportation time of blood samples must be maximum 24 hours in order to avoid degradation. The Rider states that regarding samples 7, 11, 13, 16, 21 and 22, more than 24 hours transportation time elapsed and that the samples are therefore invalid. Dr. Cordova explained in this regard, that many samples in the case are not valid, since the rules have not been accepted. Dr. Cordova explained that the refrigeration in the time between the sample collection and the receipt at the laboratory is important since over time *“the blood cells are leaving and the metabolites continue”*.
101. The Rider claims that: *“The International Standard for [Testing] and Investigations requires at least two persons to take samples: The Blood Collection Officer [and] The Doping Control Officer”*. The Rider further submits that it follows from Annex E *“Collection of Blood Samples”* that these two figures must fall on different persons, and that this requirement is not met regarding the samples number 11, 18, 19, 20, 21 and 22, since only one person was involved in the collection of these samples, and that the samples are therefore invalid. Dr. Cordova explained at the hearing, that for many samples, there are not two sanitary experts.
102. The Rider claims, that it is not recorded in the file that the staff involved in the sample collection meet the requirements of the International Standard for Testing and Investigations, section H.5, and that the samples are therefore invalid.
103. The Rider claims that in regard of sample 3 and 11, the requirements in section K.2.6 of International Standard for Control [Testing and Investigation] regarding the Doping Control form are not met, since the Rider was not asked e.g. how much time had passed without exercising. Nor, did he train or compete at a height for more than 1,500 metres in the previous two weeks etc. The Rider claims that samples 3 and 11 are therefore invalid.
104. The Rider claims regarding samples 17, 18, 19, and 22, that there is no temperature recordings from the data logger in the period between arrival at the laboratory until storage in the laboratory refrigerator, and that the samples are therefore invalid.
105. The Rider claims that samples 15, 16 and 20, are invalid because it is not recorded in the laboratory documentation who received the samples. The Rider claims this is a breach of Article 5.2.2.5; Article 6 and Article 6.2.1.3 of the International Standard for Laboratories. The Rider claims that samples 13, 16 and 20 are invalid since the laboratory documentation does not identify the persons involved in the analysis of the samples. Also the Rider argues that the technical qualifications of the persons involved in the analysis of the samples are not indicated, and

therefore the Rider cannot verify whether the samples have been handled and analysed for persons with the qualifications required by the International Standard for Laboratories.

106. The Rider claims - regarding all samples - that it has not been documented that the International Standard for Laboratories Article 5.2.3.2 and Section B.4 have been followed, and the Rider claims that the laboratories should not have accepted the samples as there is no evidence in the case file that the samples have been collected and sealed in accordance with the International Standard. In no one of the laboratory documentation packages is it documented that the samples arrived sealed at the laboratory. For this reason the Rider finds the samples and analytical results of all samples are invalid.
107. The Ride claims that sample number 9 is invalid since it is not known who received it at the laboratory because more names are indicated in the documentation package on who received the sample.
108. The Rider claims that samples number 11 and 19 are invalid since samples number 11 and 19 were received by a *"laboratory technician"* and not by a *"chain of custody technician"* as the *"chain of custody technician"* who received samples number 17 and 18.
109. The Rider claims that sample 11 is invalid because page 29/31 of the laboratory documentation shows that *"the delivery note number of the transport agency is not on the chain of custody document"* and that *"the seal number of the bag received (031857) does not match that indicated in the Shipment Form document"*.
110. The Rider claims that samples number 3, 4, 17 and 18 are invalid since the persons involved in the samples must be fully identified. The Rider claims that this is not the case for samples number 3, 4, 17 and 18 since the persons involved in these samples were either not identified or not fully identified.
111. The Rider claims that samples number 9, 10 , 11, 12, 14, 15, 17, 18 and 19 are invalid since there is no record of the qualifications, degrees and experience of those who have participated in the analyses which is a requirement under the Royal Decree 641/2009 of April 17, in connection with the requirements under the International Standards for Laboratories.
112. The Rider claims that sample number 15 is also invalid since there is no signature from the Director of the Laboratory on the official laboratory documentation, which is required under article 33 of the Royal Decree 641/2009 of April 17 2009.

The Rider's overall position on the challenge of the analytical results

113. The Rider claims that he has demonstrated through an exhaustive analysis of the documentation on file, the existence of numerous and serious breaches of the International Standard for Controls [Testing] and Investigations.
114. The Rider also claims that none of the analyses of the samples in the case at hand can possibly be considered valid since WADA laboratory accreditations for the years 2015, 2017 and 2018 and laboratory standard operating procedures PNT-EG-02 are not included in the file.
115. The Single Judge understands the Rider's numerous claims regarding the alleged irregularities and the alleged serious breaches in the handling of the samples during sampling, storage, transportation and analysis to be elements of the Rider's claim that all samples - with specific claims regarding samples number 3, 4, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 - shall be discarded because the irregularities mentioned by the Rider in his submissions have led to erroneous or invalid analytical results.

116. The Single Judge understands the Riders submissions to be a challenge of Article 3.2.2 UCI ADR and Article 3.2.3 UCI ADR.

b) Position of the UCI

117. The UCI overall claims, that the Rider did not establish a departure from any relevant and applicable rule that could reasonably have caused the abnormalities in the Rider's ABP.

118. The UCI claims, that even in the rare cases, where the Rider identified a potential breach of the rules, the Rider has brought no explanation on how such a breach could have caused the abnormalities in the Rider's profile, the latter being a crucial element. The UCI emphasized, that identifying a potential departure from relevant and applicable standards is one thing, but establishing that it could reasonably have caused the abnormalities in the profile, is another. The UCI argues that the jurisprudence is clear, and that the Rider has failed to satisfy his key legal burden in this respect.

119. The UCI argues, that the Rider for many of the Rider's claims referred to a rule that did not exist at the time the relevant sample was taken, and, also that the Rider for some claims referred to a rule not applicable to the case at hand. For example the Rider claimed a breach of the International Standard for Laboratories Article 5.2.3.2 regarding a blood sample, while the rule is clearly and only applicable to urine samples.

120. The Expert Panel in Expert Opinion #1 stated:

"All samples included in the initial analysis were scrutinized for their analytical details outlined in the documentation packages and certificates of analysis.

For samples 6, 7, 8, 12, 18 and 19, there are issues with the transport temperature."

121. The Expert Panel invalidated samples 6, 7, 8, and 12. The Expert Panel confirmed the validity of samples 18 and 19 with the following reasoning:

"[...] Sample 18: The temperature recording for this test suggests a storage temperature of 29.2°C. In the temperature plot on page 5/31 of the Laboratory documentation package however, it is clearly visible that after the sample has been obtained (5.8.2018 at 21:00), the average temperature ranges around 15°C which will result in a BSS of 59 given the collection to analysis time of 14h. The high temperatures reported in the laboratory documentation package were recorded by the data logger before the sample was placed in the storage container. The sample is therefore valid.

Sample 19: For sample 19, the temperature logger reports a minimal temperature of -10°C (see page 4/30 of the Laboratory documentation package for sample 19). This temperature was recorded shortly after activation of the device. When the sample was placed in the storage container (around 21:00h on 5.8.2019), the temperature rose quickly (see temperature spike in the diagram, likely due to the opening of the box) and then remained in the ideal range. The abnormal temperature was thus recorded before the sample was in the box, i.e. during the setup process of the storage. Furthermore, in the scattergrams for sample 19, there are no indications of sample damage through freezing, nor any reporting of haemolysis by the analysing laboratory. The sample should therefore be considered as valid.

In summary, the issue related to sample 18 discussed above do not alter the validity as this was an administrative error and has no impact on the sample condition. [...]"

122. Professor d'Onofrio emphasized at the hearing that a mandatory temperature range of 2 - 8 degrees Celsius, as expressed by the Rider, does not appear in the applicable rules.

123. Professor d’Onofrio argued that the rules state 1) that the samples must be kept cool, and 2) that samples are not allowed to freeze. Professor d’Onofrio elaborated, that the rule is to keep the sample “cool”, and not to keep the sample constantly in a range between 2 – 8 degrees Celcius. Professor d’Onofrio also emphasized, that the Blood Stability Scores (BSS) were within the applicable range – also for sample 18 as explained in the Expert Report #1 and elaborated on at the hearing.
124. Regarding the Rider’s claim that a Data Logger shall log temperature every minute, and that this has not been carried out for the samples, Professor d’Onofrio submitted, that the intention of this provision is, that the temperature is continuously recorded. Professor D’Onofrio further explained that in the case at hand it appears from the graphs, that the temperature was recorded in 3-5 minutes intervals, and, even if the instrument was not fully responding to the rules, the samples are completely valid. D’Onofrio further argued that the point about the temperature to be taken every minute is not relevant in regard of the validity of the samples. The determining factor is, if the temperature of the sample is stable, and the temperatures in the samples in the case at hand are in fact stable, and have also perfect aspect in the instrument report.
125. Regarding the Rider’s claim, that some samples should be invalidated because sometimes the temperature was not recorded before the sample was put in the box, Professor d’Onofrio explained, that normally the box is opened, and the data logger is put in before the sample - but sometimes the timing of the order is different. The UCI and Professor d’Onofrio took up the example of sample 3, with collection time 20:17, and with data logger recording starting at 21:56. Professor D’Onofrio explained, that this period of time between collection and start of recording of temperature is not a problem even if the samples were kept at room temperature in this period of time. Professor D’Onofrio explained that it is known from scientific studies that haemoglobin and reticulocytes are still well measured even after 48 hours of storage. This means that even though the sample might have been stored at room temperature in the above mentioned period of time, this does not impact the validity of the samples.
126. Dr. Schumacher explained regarding the Rider’s claim on invalidity of sample 3 and 11 for which the ABP Supplementary Form (“the list of questions”) is missing, and, allegedly that ISTI section K.2.6 is invalidated, that, at the end all the information asked for in the list is already available by other means to the Expert Panel for their evaluation. This means, that any changes that might have been reported in those forms will not have invalidated any of the samples, because the information is provided to the Expert Panel. Dr. Schumacher elaborated, that in this case, information on altitude and on the place where the Rider stayed every day, was included in the whereabouts, which is available to the Expert Panel. The information was thus available in other means than from the specific ABP Supplementary Form.
127. Regarding the Rider’s claim that for samples 17, 18, 19 and 22, there is a lack of temperature recordings from when arrival at laboratory and until the sample was put in laboratory refrigerator storage, Professor d’Onofrio explained, that as soon as the sample is received at the laboratory, the sample is put in the laboratory refrigerator. It is true that sometimes the data logger is stopped when the samples are put in the laboratory refrigerator, which is refrigerating very stable around 4 degrees Celsius, and sometimes, the data logger is also put with the sample into the refrigerator. Professor D’Onofrio emphasized that the BSS is based on the mean temperature and that it does not in itself invalidate the sample, if for example a sample is kept at 20 degrees Celsius for 1-2 hours before the sample is put into the laboratories refrigerator.
128. Professor d’Onofrio emphasized regarding the temperature of the samples, that refrigeration of the samples means to keep temperature sufficiently low for a good preservation of the sample.
129. The Rider claims a breach of ISL Article 6.2.2.5. The UCI emphasized that this provision is about serum or plasma fractions only. Professor D’Onofrio explained that this article requires centrifugation and separation of the liquid parts of the blood, which means serum or plasma

fractions. Professor D'Onofrio explained that this article is applicable for samples used for older anti-doping measurements, and not for the ABP, and that it is a mistake to refer to this rule in the context of the APB.

Swiss Quality Control Centre recommendations

130. Dr. Schumacher explained about the Swiss Quality Control Samples (CSCQ) that the CSCQ recommendation to keep samples between 2 - 8 degrees Celsius and protected from light applies to *quality control samples*, and that they do not apply to ABP samples. Dr. Schumacher explained, that quality control means, that the laboratories and the analysers are checked on a regulatory basis to allow corroborability between the laboratories and the analysers. Dr. Schumacher explained that samples in the quality control are not the blood samples being analysed. The liquid used for the quality controls (the CSCQ controls) needs to be stored between 2 - 8 degrees Celsius, and needs to be protected from light, and it has nothing to do with normal blood samples and normal blood sample analysis; it is the quality control fluid that is sent to the laboratory that must be kept *“between 2 - 8 degrees Celcius and protected from light.”*

c) Legal Analysis

Presumption and Rebuttal of the Presumption

131. The starting point of the analysis is Article 3.2.2. According thereto *“WADA-accredited laboratories, and other laboratories approved by WADA, are presumed to have conducted Sample analysis and custodial procedures in accordance with the International Standard for Laboratories.”* The Laboratories where the analysis of the Rider's blood samples were conducted are WADA-accredited - except for the Lisbon Laboratory. As regards the Lisbon Laboratory, this laboratory was WADA-accredited at the time of the conduct of the analysis of the samples. Thus, the presumption contained in Article 3.2.2 UCI ADR applies.
132. Article 3.2.2 UCI ADR provides explicit guidance on how a Rider may rebut a presumption of procedural validity and thereby (potentially) invalidate the results of the analysis of a WADA-accredited Laboratory based on a procedural error (or departure) from the International Standard for Laboratories: i) The Rider must establish by a balance of probability *“that a departure from the International Standard for Laboratories occurred, ii) which could reasonably have caused the Adverse Analytical Finding”*. If the Rider establishes this, the burden shifts to the UCI to prove that the departure did not cause the Adverse Analytical Finding.
133. As regards Article 3.2.3 UCI ADR it follows that i) if the Rider establishes a departure from any other rule set forth in the Anti-Doping Rules, or any International Standard or UCI Regulation incorporated in the Anti-Doping Rules ii) which could reasonably have caused an anti-doping rule violation based on an Adverse Analytical Finding or other anti-doping rule violation, then the UCI shall have the burden to establish that such departure did not cause the Adverse Analytical Finding or the factual basis for the anti-doping rule violation.
134. As previously set forth by this Tribunal, CAS case law has further clarified the above prerequisites as follows:³

“Therefore, the Panel deems a mere reference to a departure from the ISL insufficient, in the absence of a credible link of such departure to a resulting Adverse Analytical Finding. In other words, in order for an athlete to meet his/her burden and thus effectively shift the burden to an anti-doping organization, the athlete must establish, on the balance of probabilities, (i) that there is a specific (not hypothetical) departure from the ISL; and (ii) that such departure could have reasonably, and thus credibly, caused a misreading of the analysis.

³ UCI ADT 05.2016, *UCI v. Jure Kocjan*, para 64 and UCI ADT 09.2017, *UCI v. Nicola Ruffoni*, para 53 quoting CAS 2013/A/3112, *WADA v. Lada Chernova & RUSADA*, para 85.

Further, the Panel remarks that such athlete's rebuttal functions only to shift the burden of proof to the anti-doping organization, which may then show, to the Panel's comfortable satisfaction, that the departure did not cause a misreading of the analysis."

d) Position of the Single Judge

135. The Single Judge has evaluated all the facts, allegations, arguments and evidence put in front of her. Due to the numerous claims raised by the Rider, the reasoning will not refer to every single one of the claims raised by the Rider.
136. The Single Judge finds it worth emphasizing, that the Rider's burden of proof in the context of a challenge of Article 3.2.2 UCI ADR and Article 3.2.3 UCI ADR is two-fold, as explained above. This has also been emphasized in the Tribunals decision UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 62:

"However, the applicable rules (in particular Article 3.2.2 UCI ADR) make it equally clear that not any departure from the applicable provisions automatically invalidates the results of the analysis. Instead, only if the rules were breached severely enough to plausibly affect the outcome of the analysis is there a need for the Single Judge to examine whether or not the analysis results should be discarded."

137. The Single Judge in her overall evaluation finds, that the Rider has not lifted his burden of proof as set forth in Article 3.2.2 UCI ADR and Article 3.2.3 UCI ADR.

Documentation in German

138. The documents regarding samples 13, 16 and 20 contain working documents in the native language of the Laboratory (German). The Single Judge takes note of the fact the relevant documents in the laboratory documentation are in English, and also that the analytical results from the analyses of the blood samples are also included in the ABP documentation package (exhibit 9.W), whereas e.g. the Quality Control Centre Switzerland's document is in German. This quality control document, as is also evaluated regarding the Rider's claims regarding the temperature of the samples, has no relevance for the blood samples analysed in the Rider's ABP, since this document regards the quality controls and not the analyses of the blood samples.
139. As explained by the UCI at the hearing, it follows from the WADA Technical Document on Laboratory Documentation Packages, that in the Laboratory Documentation Package, *"Laboratory working documents, computer printouts, and similar documents may be in the native language of the Laboratory"*.
140. The Single Judge for these reasons dismisses the Rider's claim that the documents in German should be removed from the file.

Claims regarding the alleged breach of International Standards

Claims regarding temperature – a claimed Breach of the International Standard for Testing and Investigations Annex K, section K.2.3.

141. The Rider raised a number of allegations regarding the temperature of the blood samples during sampling, storage, transportation and analysis. The Rider's overall argument is that a blood sample shall be kept constantly between 2 and 8 degrees Celsius.
142. It is not in dispute that a sample shall be refrigerated. The dispute arises out of the understanding of the criteria *"refrigerated"*.

143. The Rider claims several breaches of International Standard for Testing and Investigations Annex K, K.2.3. The Rider did not in every claim regarding temperature of the samples refer to a provision that was applicable at the time of the sampling. The Single Judge has considered all the submissions and evidence put forward by the Rider, but the Single Judge will not include every step in her evaluation in the written reasoning.
144. The Rider argues that it follows from ISTI section K.2.3, that samples shall constantly be kept between 2 and 8 degrees Celsius. The Single Judge notes that it follows from ISTI 2017 section K.2.3 that *“The Sample shall be refrigerated from its collection until its analysis”* and that *“The storage and transport device shall be capable of maintaining blood Samples at a cool temperature during storage. Whole blood Samples shall not be allowed to freeze at any time”*.
145. As follows from the provision and as explained by Professor d’ Onofrio at the hearing, the essential in this provision is, that the sample shall be kept *“refrigerated”* and *“at a cool temperature”* and that blood samples are not allowed to freeze at any time.
146. The Blood Stability Score (BSS) regulates the relationship between the collection to analysis time (in hours) and the average temperature (in degrees Celsius) measured by the data logger between sample collection and analysis. It follows from International Standards for Testing and Investigations (2017) Annex K, Article K.4, that *“Blood Samples shall be transported in a device that maintains the integrity of Samples over time, due to changes in external temperature. [...] K.4.1 The integrity of the Markers used in the haematological module of the ABP is guaranteed when the Blood Stability Score (BSS) remains below 85”*.
147. It is confirmed in the Laboratory Documentation Packages for all (valid) samples that a data logger was used. It is confirmed in the Laboratory Documentation Packages for all samples except for sample 18, that the temperature during transport was correct, and that the Blood Stability Score (BSS) was below 85. As regards sample 18, the BSS in the documentation package was estimated above 85. The reason for this was explained by the Expert Panel, and can be seen in the Laboratory Documentation package page 5/31, being that the storage temperature at 29.24 degrees Celsius is caused by the fact that the temperature before the sample was obtained and put in the box was recorded by the data logger and was included in the average temperature as reported. It clearly shows in the documentation package that after the sample was obtained on 5 August 2018 at 21:00 and put in the box, the average temperature ranges around 15 degrees Celsius, which will – as explained by the Expert Panel in Expert Opinion #1 and at the hearing - result in a BSS of 59 given the collection to analysis time of 14 hours.
148. The Expert Panel confirmed at the hearing that none of the alleged temperature issues had any impact on the validity of the samples, and the Expert Panel also explained and emphasized that the disputed samples show stable temperatures.
149. The Single Judge finds that the Rider has not established a breach of ISTI Article K.2.3 and the claims in this regard are dismissed.

Breach of International Standards for Laboratories Article 6.2.2.5 and Article 6

150. The Rider seems to find that the International Standards for Laboratories Article 6.2.2.5 and Article 6 is applicable from when the sample was taken and until analysis. International Standards for Laboratories (2016) Article 6.2.2.5 is applicable for *“Samples for which Analytical Testing is to be performed on serum/plasma fraction only (not on cellular components)”* and it follows from this Article *“that Samples should be centrifuged as soon as is practical after Laboratory reception to obtain the serum or plasma fraction. When analyzed shortly after centrifugation (within 48 hours), the serum or plasma Samples and/or Aliquots may be stored refrigerated at approximately 4 degrees Celsius until analysis”*.

151. As explained by Professor d’Onofrio at the hearing, ISL Article 6.2.2.5 requires separation and centrifugation. Professor D’Onofrio explained that this provision is used for a different type of samples used for older anti-doping measurements, and that this provision is not used for APB samples. Professor D’Onofrio explained that it is wrong to refer to this article, and that the provision is not violated.
152. The Single Judge does not find that the International Standards for Laboratories Article 6.2.2.5 is applicable in the situation as put forward by the Rider regarding samples 18 and 19, and the Rider’s claim is dismissed.

The Single Judge overall conclusion on all the claims regarding the temperature of the samples

153. Regarding the Rider’s overall claim that there were severe problems about the temperature of the samples, the Single Judge finds that it was thoroughly explained at the hearing by the Expert Panel, that the temperatures of the samples were acceptable and showed stable temperatures in accordance with the relevant provisions and the science which the provisions on temperature are based on. The Single Judge finds it relevant in this evaluation that a data logger was used, and that the Blood Stability Scores for the samples were acceptable (meaning below 85) including for sample 18 as explained above. The Single Judge also agrees that the applicable rule regarding temperature is ISTI Annex K, section K.2.3., and that it follows from this rule that the samples shall be refrigerated from collection until analysis, that blood samples shall be kept “cool” during storage, and that blood samples shall not be allowed to freeze at any time. As explained and discussed thoroughly at the hearing this provision has not been breached.
154. Therefore the Rider’s claims regarding temperature are dismissed.

Supplementary Form

155. Dr. Schumacher explained at the hearing, that any changes that might have been reported in the supplementary forms will not have invalidated any of the samples, because the necessary information was provided to the Expert Panel in other means. E.g. information on altitude and on the place where the Rider stayed every day was included in the whereabouts available to the Expert Panel. The Rider’s claim is dismissed since the relevant information was in fact available for the Expert Panel’s evaluation.

Alleged breach of ISL Article 5.2.3.2

156. As regards the Rider’s claim that all samples shall be invalidated since the International Standard for Laboratories Article 5.2.3.2 and Section B.4 have not been followed, the Single Judge rejects the Rider’s claim since the International Standard for Laboratories Article 5.2.3.2 applies to the analysis of urine doping control samples and is therefore not applicable in the case at hand.

Other claims

157. The Rider claims that sample 11 is invalid because page 29/31 of the laboratory documentation shows that “*the delivery note number of the transport agency is not on the chain of custody document*” and that “*the seal number of the bag received (031857) does not match that indicated in the Shipment Form document*”. The Single Judge finds that page 29/31 of the laboratory documentation on sample 11 is a page from the quality control documentation, and the Single Judge does not see the information as claimed by the Rider. The Single Judge has evaluated the Riders claims regarding sample 11, and the Single Judge finds that the Rider has not proved that a departure from the International Standard for Laboratories did occur. Furthermore, the Single Judge notes that the sample code number is the same throughout the chain of custody and laboratory documentation, i.e. sample code number 238058, as certified in the laboratory documentation package. The Rider’s claim that sample 11 is invalid is dismissed.

158. As regards the Rider's claims regarding the personnel involved in the analyses of the samples and the Rider's claims regarding the lack of documentation of personnel qualifications, the Rider has not established that rules have not been followed and the Rider's claims in these regards are dismissed.

Conclusion

159. Based on all the facts, allegations, arguments and evidence before her, the Single Judge concludes that the Rider did not establish a departure from the International Standard for Laboratories, the International Standard for Testing and Investigations or any other rule set forth in the Anti-Doping Rules, or any International Standard or UCI Regulation incorporated in the Anti-Doping Rules, let alone a departure that "*could reasonably have caused the Adverse Analytical Finding*"; nor did the Rider set forth any other potential legal basis on which his arguments may rely.
160. The Rider's arguments are hereby dismissed, and the analytical data of samples number 3, 4, 5, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22 in the Rider's ABP must stand.

B. Requirements of the ABP data

161. As set forth by the UCI in the Petition, the fundamental requirement of establishing an anti-doping rule violation on the basis of a longitudinal profile is that:

"[...] all experts – independent from each other – come to the conclusion that doping is a plausible and likely explanation for the abnormal variation and that there is no other plausible cause ascertained with a significant degree of probability".⁴

162. As previously emphasised by this Tribunal⁵ in quoting CAS:⁶

"a pitfall to be avoided [in the context of the ABP] is the fallacy that if the probability of observing values that assume a normal or pathological condition is low, then the probability of doping is automatically high". Concretely this has been said in legal literature to mean that "if the ADO is not able to produce a 'doping scenario' with a minimum degree of credibility ('density'), the abnormality is simply unexplained, the burden of proof enters into play and the ADO's case must be dismissed since there is no evidence pleading in favour of the hypothesis of 'doping' any more than for another cause."⁷

163. It has further been stated by this Tribunal, that since the mere fact that the Rider's haematological values are abnormal is no proof of doping, the UCI must both demonstrate that doping is a plausible source for the abnormal ABP values, as well as "*establish – in principle – that all other alternative explanations for these values can be excluded. This puts the UCI in a difficult evidentiary position*".⁸ As previously emphasized by this Tribunal,⁹ this position has been described, and solved, by a CAS Panel as follows (CAS 2011/A/2384 & 2386, *UCI & WADA v. Alberto Contador Velasco & RFEC*, para. 252 et seq.):

⁴ CAS 2010/A/2174, *Francesco De Bonis v. CONI & UCI*, para 4.4.2 (b).

⁵ UCI ADT 03.2017, *UCI v. Isabella Moreira Lacerde*, para 64 and UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 82.

⁶ CAS 2016/O/4464, *IAAF v. ARAF & Ekaterina Sharmina*, para 150.

⁷ Id. quoting Marjolaine Viret (2016), *Evidence in Anti-Doping in the Intersection of Science and Law*, T.M.C Asser Press, The Hague, p. 774.

⁸ UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 68.

⁹ *Ibid.*

“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 its 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). The Swiss Federal Tribunal has described in the following manner (ATF 119 II 305, 306 E 1b) this obligation of the (contesting) party to cooperate in elucidating the facts of the case:

“Dans une jurisprudence constante, le Tribunal fédéral a précisé que la règle de l’art. 8 CC s’applique en principe également lorsque la preuve porte sur des faits négatifs. Cette exigence est toutefois tempérée par les règles de la bonne foi qui obligent le défendeur à coopérer à la procédure probatoire, notamment en offrant la preuve du contraire (ATF 106 II 31, consid. 2 et les arrêts cités). L’obligation, faite à la partie adverse, de collaborer à l’administration de la preuve, même si elle découle du principe général de la bonne foi (art. 2 CC), est de nature procédurale et est donc exorbitante du droit fédéral – singulièrement de l’art. 8 CC –, car elle ne touche pas au fardeau de la preuve et n’implique nullement un renversement de celui-ci. C’est dans le cadre de l’appréciation des preuves que le juge se prononcera sur le résultat de la collaboration de la partie adverse ou qu’il tirera les conséquences d’un refus de collaborer à l’administration de la preuve.”

164. As previously stated by this Tribunal *“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.”*¹⁰

C. Were the abnormalities in the Rider’s ABP established?

165. The ABP in the case at hand is based on the Expert Panel’s evaluation of 18 valid samples, the documentation of which was included as evidence in the UCI’s submissions.
166. The Rider’s ABP was flagged with abnormalities at 99.0% specificity for haemoglobin (HGB) concentration in sample 20 (16.9 g/dL) (upper limit), OFF-scores in samples 17, 18, 19 and 20 (114.3; 115.2; 125.5 and 122.52) (upper limit), and OFF-score in sample 22 (65.7) (lower limit), RET% in samples 15, 21 and 22 (1.6 %; 1.78 % and 1.79 %) (upper limit) and RET% in sample 19 (0.37 %) (lower limit). The sequences for RET% and OFF-score are abnormal at >99,9% specificity.
167. The Expert Panel found that the data of the Rider bears as main abnormal features typical OFF constellations with previous stimulation in samples 16-20 and, to a lesser extent, in samples 3, 4 and 11 all samples obtained prior and during the Volta a Portugal in 2015, 2017 and 2018.
168. The Expert Panel in Expert Opinion #1 also stated that: *“the profile bears features of blood manipulations on several occasions, coinciding with the Volta a Portugal from 2015, 2017 and 2018. We therefore conclude that it is highly likely that a prohibited substance or prohibited*

¹⁰ *Ibid.*, para 68-69.

method has been used and that it is unlikely that the passport is the result of any other cause.”
This opinion was confirmed by the Expert Panel in Expert Opinion #2, after having examined the Rider’s first Expert Opinion by Dr. Douwe de Boer.

169. The Rider did not challenge the Expert Panel’s conclusion to the presence of the abnormalities in the Rider’s profile as such. The Rider’s main arguments are that the measured values are not that abnormal taken the confounding factors into consideration and taken plasma volume impact on the blood values and the coefficient of variation of the machines and laboratories into consideration.
170. In light of the above, and after examining the documentation in the case at hand, the Single Judge finds the Expert Panel’s opinion to be well-founded, logical and compelling, thus the Single Judge concludes that important abnormalities did exist in the Rider’s haematological profile.

D. Were the abnormalities in the Rider’s ABP caused by the Use of a Prohibited Substance or Prohibited Method?

171. As stated above, it is not enough to establish that abnormalities exist in the Rider’s haematological profile. The UCI must also establish that the abnormalities were caused by the Use of a Prohibited Substance or Prohibited Method, and not by any other cause.
172. The UCI has submitted (based on the Expert Panel’s opinions) that the abnormal values in the Rider’s haematological profile can be explained with the use of a prohibited substance or prohibited method.
173. The Rider has denied the use of a prohibited substance or prohibited method.
174. The Rider claims that the documentation on the file does not indicate the existence of any prohibited substance, and also the Rider claims that the documentation does not indicate which prohibited method the Rider is claimed to have used. In the Riders view the case shall be declared null and void.

1. Position of the Rider

Multiple physiological factors that can alter the result

175. The Rider submitted that there are multiple pre-analytical factors that can modify the sample before its final analysis. Some factors can be controlled such as fasting, the time of the day the sample is taken, the sampling site, the measurement technique, diet, physical activity, posture, tourniquet use, hydration status. Others cannot be controlled - but should be considered - such as gender, age, genetic factors, circadian rhythm and height above sea level where the persons resides. Therefore, the Rider emphasizes, blood biometrics may vary according to the individual characteristics and environment of a population. Therefore, the reference ranges in haematology vary according to these factors, and therefore each laboratory should establish its own reference limits. Thus, when the UCI itself makes the variations and makes value judgement with respect to the variations of the analysed parameters, it never does so with this detail in mind. If so, *“you should give at least 2 possible results or indicate the reference taken to make the biometric calculations you perform”*.
176. Dr. Cordova elaborated at the hearing, that the fact is, that those many other factors can alter the behaviour of the athlete’s samples, and that this is basic knowledge. Also, Dr. Cordova stated that *“We must remember that judgements are being made on the basis of minimal variations”*.

Intraindividual biological variability of measured parameters

177. The Rider claims that the UCI does not indicate the statistic procedure followed, and the Rider suggest, that the method proposed by Fraser and his collaborators should be followed (with reference to scientific literature).

Analyses carried out in different laboratories - coefficient of variation

178. The Rider claims that the coefficient of variation of the machines and laboratories impacts the reliability of samples number 16, 17, 18, 19 because the coefficient of variation of the machines and laboratories can result in a great dispersion of results. The Rider highlights that it shall be kept in mind *“that minimal variations are being judged. That makes these variations very important”*.
179. The Rider claims that when the coefficient of variation is taken into account, the analysed parameters (especially the reticulocyte) do not offer sufficient guarantees to be an indicator of the biological condition of the athlete.
180. The Rider claims, that taken the variations caused by the coefficient of variation of the machines and laboratories into account *“it would result in the results of the analyses being within the normal range. This situation is even more noticeable when, as with reticulocyte, it is a very variable parameter found in small quantities in the blood. And even more so when you value the data in terms of percentage and not as total quantity.”*
181. The Rider argues that the manufacturer of the Sysmex machine recognizes a variation in the accuracy of +/- 20% for total blood, and that this means, that with so much variation, any circumstance can modify the result.
182. Dr. Cordova explains that the coefficient of variation, that should be considered, is a summative effect of laboratory and machines.
183. Dr. Cordova in his Expert Opinion states that *“The model used by Sysmex is the Xt2000i, as stated in the laboratory documentation. The manufacturer recognizes a variation in the accuracy of +/- 20%, for total blood. The manufacturer also acknowledge that the linearity of the results obtained for reticulocytes is also quite variable, admitting +/-20%, and makes the precision that it is variable according to the concentration of red blood cells. As for the reproducibility of the aforementioned Sysmex equipment, the manufacturer acknowledges a variability of +/-15%. This means, with so much variation, any circumstance can modify the result.”*
184. The Rider claims based on the Expert Report by Dr. Alfredo Cordova, that *“It’s possible, therefore, that if two samples (even from the same patient) are processed in two different equipment (from two different laboratories) there may be significant discrepancies in the results”*.
185. The Rider bring forward examples of the discrepancies, which he claims takes place. E.g. the Rider claims:

“It’s proven that the same sample analysed in the same machine model (in this case the Sysmex self-analysis used in all samples) gives different results.

All the machines that perform laboratory tests have a coefficient of variation. It’s the percentage that varies from one sample to another.

And it’s in the file that this coefficient of variation of the Sysmex machine is recorded. Thus, to give an example in samples 16 to 19:

- Sample 16: on page 10/15 of the laboratory documentation, it’s known that 10 analyses have been carried out on the same sample over a period of 2 hours, and it can be seen that the results vary very significantly.

For example:

Hemoglobin varies from 16.4 to 5.4. The % reticulocytes vary from 4.34 to 0.71”.

Expiration of the tubes in which blood is drawn - anticoagulant EDTA

186. The Rider submits that the anticoagulant used in this case is EDTA, which may be altered depending on time and temperature, and may therefore alter the result. The Rider claims, that this is determined by the scientific literature mentioned in Dr. Alfredo Cordova's Expert Report. The Rider claims that this *"could cause altered results and nullify conclusions that could be drawn"* and the Rider further submits *"that this serious omission nullifies the conclusions of the UCI experts' reports made without any scientific rigour"*.
187. In his Expert Report Dr. Alfredo Cordova finds, that *"in a study comparing EDTA 3K and 2K, the plastic tube for blood count with EDTA 2K as anticoagulant offers reliable results, although some problems have been detected in the handling of the samples that deserve to be studied more deeply. These authors found variations of haemoglobin (tube with EDTA K2) with respect to tubes with EDTA K3. It is therefore an element to be considered and should be indicated by the laboratory, since it may produce results that may indicate anomalous situation where there are none. [...] When the tube into which the blood taken from the athlete is inserted expires (it is dated), the anticoagulant is altered and may give erroneous results."* The Rider claims there is no justification in the file for this not being the case.

Physiological factors that can alter the result - variations in plasma volume

188. The Rider submits that *"In neither of the two reports of the UCI experts is reference made to the factors to be considered in terms of variations in plasma volume, such as: temperature, hydration, stress, medication, etc."*
189. The Rider argues that the variations in the plasma volume should be considered and, where appropriate, the results should be corrected according to the variation of the same. The Rider submits the following possible factors that may cause a change in plasma volume:
- Intake of medical products (referring to sample control forms regarding samples 3, 4, 11, 12, 16, 17, 18, 19, 20, 21 and 22);
 - High temperatures with consequent dehydration (referring to samples 17, 18 and 19, taken in the 2018 Volta a Portugal with temperatures above 40° C);
 - The stress generated by high competition (referring to samples 4, 11, 17, 18 and 19 taken in competition);
 - Etc.

The Rider finds that these variations explain *"that we are facing a physiological behaviour of the body, which excludes doping"*.

The OFF-score index is obtained through "a very questionable formula"

190. The Rider claims that science considers, that the OFF-score index is obtained through a very questionable formula from a statistical point of view. The Rider claims that this formula was determined through a study by Pottgiesser and others (Torben Pottgiesser et al, *Detection of autologous blood doping with adaptively evaluated biomarkers of doping: a longitudinal blinded study, 2011*) in which a very small sample of subjects was used. The Rider claims, that if you want to get 99% confidence on the result, the number of subjects should have been much higher than the number taken on by Pottgiesser. In the Rider's opinion, the scientific literature has shown that atypical findings in the ABP for haemoglobin can be improved with corrections of plasma volume, but that this in turn generated an increase in atypical findings for the OFF-score. This leads the

Rider to conclude that great care must be taken when making judgements about biological behaviour if not all the physiological factors that may affect it are taken into account.

191. The Rider also submits *“Let us not forget that the biological passport is based on the observation of indirect data, which can lead to errors in conclusions. As a result, the OFF-score values used by the UCI experts are not valid. They are not sure of 99% of what they speak of in their report. [The] conclusions in this regard are not valid.”*
192. The Rider finds that the conclusion in the Expert Report by Dr. Alfredo Cordova shows that there is a normal physiological explanation for the Rider’s OFF-score out of range apart from doping. The Rider claims, that the explanation for OFF-score out of range could be due to a lack of red blood cells, which causes the body to respond by producing more red blood cells. Since the cell before the hematide is the reticulocyte, there is a physiological explanation for an abnormal off-score result. Consequently this does not have to mean that there has been doping.

Behaviour of haemoglobin and reticulocytes

193. The Rider argues that from a physiological point of view, the parameters haemoglobin and reticulocytes go in the opposite directions, when one increase, the other decrease, and that this is the physiological response of the organism, and that it excludes doping.
194. The Rider refers to the findings by Dr. Cordova, who finds that the parameters haemoglobin and reticulocytes go in the opposite direction; when one increases, the other decreases. Dr. Cordova finds, that this explains, that when there is a deficiency of red blood cells, which in turn reflects a decrease in haemoglobin, the organism responds with an increase in production, which necessarily entails an increase in production of reticulocytes and therefore of red blood cells. Dr. Cordova further explains that there is a purely physiological response of the hematopoietic system, which for example occurs in low oxygen environments, such as in height, which causes red blood cell production and an increase in haemoglobin mass. The Rider further argues, that the scientific literature has concluded, that hypoxia (training in height or height conditions) particularly affects the biological passport. In this case it is known that the Rider was at altitude before Volta a Portugal in 2015, 2017 and 2018. As determined by Dr. Cordova in his Expert Opinion, there is no method to correct the volumetric markers of the biological passport for such changes in natural plasma volume. Consequently, it is speculative to link the results of the samples to the use of a prohibited substance or method, as the physiological response of the blood parameters is real. Dr. Cordova finds, that the Rider’s ABP shows the *“uneven haematological behaviour of the corridor”*. Dr. Cordova further explains that this is because this behaviour is appreciated in competition and outside, both in the competitions of Volta a Portugal and in moments of regular training without a short term race. This makes it impossible for the Rider to accept the Expert Panels’ conclusions regarding the Rider’s ABP.

Plasticizers

195. At the hearing the Rider also argued, that the Expert Panels evaluation cannot be correct, since no plasticizers were found in the Rider samples.

The Rider’s overall submission

196. The Rider overall claims the following:

“the analysed parameters (especially the reticulocytes) don’t offer sufficient guarantees to be an indicator of the biological condition of the athlete.

There is no record in the file that all uninstallations and procedures carried out have been collected from the various laboratories.

It also doesn’t state who is the operator who has performed them etc.

Nor does it indicate the quality controls to which it is subjected (internal and external), incidents, errors that have occurred, authorized technical service sheets, equipment maintenance contracts, authorized reviews and calibrations.

This would ensure that the results are obtained from equipment under strict operational control.

Moreover, all the documents in the laboratory documentation, entitled "e-CHECK (XE) ASSAY SHEET", are dated after the date of the analysis and are therefore of no value.

Despite its obvious importance, none of this is reflected in the UCI expert reports on which this disciplinary dossier is based.

It isn't recorded, because if they had recorded it, the results would have been very different, within the most absolute normality."

2. Position of the UCI

197. The Expert Panel elaborated on the Riders' explanations in the Rider's Answer and Dr. Cordova's Expert Opinion, and confirmed at the hearing, that it is the Expert Panel's opinion that the Rider's ABP shows a clear doping scenario.
198. The Expert Panel explained that every sample is in fact tested twice, as the Rider argues the samples must be, and the Expert Panel explained that the results are only retained if the difference between the two results is less than a certain margin; one for reticulocytes and one for haemoglobin.

Intraindividual biological variability of measured parameters

199. Dr. Schumacher explained, that the Fraser method is not wrong, but the fact is that the most developed model is the Bayesian model, which is the model used by the UCI. Dr. Schumacher further explained, that all the variables and the statistical indicators that Dr. Cordova highlights, they are also a part of the Bayesian model. The same numbers that goes into the Fraser method also goes into the Bayesian model - it is just another way of calculation - and when you do the math you will get the same results, not markedly different.

Analyses carried out in different laboratories - coefficient of variation

200. Professor d'Onofrio explained regarding the Rider's claim, that "*the manufacturer of Sysmex recognizes a variation in the accuracy of +/- 20% for total blood*", that this claim was difficult to discuss, since a variation of results of 20% does not reflect real life. He also explained that "*total blood*" is not measured as such in haematology. Professor D'Onofrio further explained that the coefficient of variation of haemoglobin is 1% or less, and that it has nothing to do with variations of 20%. Also he argued, that a manufacturer who produces an instrument with a 20% coefficient of variation could simply not be present in the market.
201. Professor d'Onofrio also explained that the laboratory in anti-doping analysing for the ABP have to run the sample twice. If the difference of the haemoglobin between the 2 analyses of one sample for haemoglobin is more than 0,1%; the data is not obtained and the sample must be run again.
202. As regards the Rider's claim that for sample 16 "*haemoglobin varies from 16.4 to 5.4. The % reticulocytes vary from 4.34 to 0.71*" with reference to page 10/15 of the laboratory documentation, the Expert Panel explained that this table shows the different results from different samples. The table consists of 3 different Quality Control samples (QC-samples) and the one ABP-sample. In every two lines there is a different sample. As seen, also the QC samples are run twice. To clear it out, the Expert Panel explained that the ABP-analysis and the QC-analyses

are carried out exactly as they should be. The QC is the safety net of all the measures. The values that the Rider refers to are both the values of the Rider's blood sample and the - deliberately different - Quality Control Samples.

Expiration of the tubes in which blood is drawn - anticoagulant EDTA

203. Professor d'Onofrio explained that K2 EDTA and K3 EDTA are two different anticoagulants. EDTA is a chemical compound which avoids coagulation of blood. K2 is a spray in the tube, while K3 is a small drop of the liquid. They are both good, but it is standardised that K2 EDTA shall be used in anti-doping laboratories.
204. With regard to the Rider's claim that there is no justification in this case that the tubes were not expired, Professor d'Onofrio explained, that it is normal laboratory practice to check the expiration of any material used in the laboratory. Also, he explained that the EDTA tubes have a vacuum inside. This means that when the blood reaches the tube it goes into the vacuum because of the aspiration. When the EDTA tube is expired, the vacuum is not the same, and it is impossible to aspirate the blood with an expired tube. Professor D'Onofrio emphasized that certainly these tubes would have been rejected by the laboratory before analysis if they had expired, because the tubes would not have been well filled with blood. In any case, expired materials will not be used in anti-doping practice.

Physiological factors that can alter the result - variations in plasma volume - and behaviour of haemoglobin and reticulocytes

205. Dr. Schumacher explained that plasma volume variations are the biggest impact on haemoglobin concentration, which is one of the markers in the APB. Plasma volume variation can be caused for example by training or exercise. He further explained that reticulocytes are independent from plasma volume variation, meaning that reticulocytes are not affected by plasma volume variation.
206. Dr. Schumacher explained at the hearing regarding the Rider's claim that there are multiple pre-analytical factors (the confounding factors) that can modify the sample before its final analysis, that these analytical factors are already taken into account in the gap between the two "red lines" in the ABP (the reference ranges). Also, Dr. Schumacher emphasized that during exercise and stage racing, plasma volume will always increase.
207. Dr. Schumacher explained at the hearing that reticulocytes are not concentration-based markers. This is important, he explained, because haemoglobin is a concentration (g/dl). The measure of haemoglobin can change either because of a change of numbers of blood cells/the amount of haemoglobin or because of a change in the amount of plasma.
208. As regards reticulocytes, plasma volume variations are irrelevant, because the reticulocytes are not plasma volume dependent. This is because reticulocytes are measured as a percentage of the red blood cells and thus it doesn't matter what plasma volume does; the reticulocytes will not change when plasma volume change.
209. At the hearing the Rider argued, that sample 4 is not abnormal. Dr. Schumacher highlighted, that sample 4 was taken during Volta a Portugal on 5 August 2015, after 1 week of stage racing. Dr. Schumacher elaborated, that sample 4 showed relatively low reticulocytes (0.65%) and what the Rider says is a normal haemoglobin (15.2 g/dl). Dr. Schumacher several times at the hearing explained, that seen in isolation, sample 4 might look normal. But seen in the context, sample 4 shows the constellation of blood manipulation.
210. Dr. Schumacher emphasized, that in the pre-start sample of Volta a Portugal (i.e. sample 3 taken on 28 July 2015), the HGB (15.9 g/dl) was virtually the same as in sample 4, and then there was a little drop from sample 3 to sample 4 (15.2 g/dl), this means a small drop during the race, "but not much of a drop." The RET% in sample 3 (1.22 %), which is the pre-start sample, was the double

of what it was in the race. Dr. Schumacher explained, that the scenario here on blood manipulation is, that the Rider probably manipulated up to closely to the beginning of the race start, probably while he was at altitude, by using stimulating substances. The Rider had still “*a little bit of a high reticulocytes*” when he went into the race, the Rider stops the blood manipulation before he arrives at the race, with no more stimulation on the RET %, which drops while he is racing. Dr. Schumacher argued that this is a classical OFF-score phenomena.

211. The Rider referred to the variations between samples 3, 4 and the invalidated sample 6, showing RET% 1.22 (sample 3), RET% 0.65 (sample 4) and RET% 1.26 (the invalidated sample 6), and claims, that since sample 3 and sample 6 are having the same level of RET%, which is contrary to sample 4, which has RET% 0.65%, the low RET% in sample 4 may be due to external factors or variations in the machines.
212. The Rider emphasized that samples 11 and 14 also has low reticulocytes (sample 11: 0.55% and sample 14: 0.76%), and the Rider claims that the samples 4, 11 and 14 all show low RET% and that this could be due to other factors than doping.
213. The Rider also claims regarding sample 19 (RET% 0.37), that if Dr. Schumacher’s reasoning was correct, then the RET% should have been a lot higher in sample 19.
214. Dr. Schumacher argued that sample 16 - 20 show a classical OFF-scenario, and that the conduct of testing has been well-targeted. To the Rider’s question on why the RET% in sample 19 is low, Dr. Schumacher explained, that the RET% is low because the Rider at that time had a super-physiologically elevated red blood cell mass production, having too much blood, which caused a cut down on the reticulocyte production showing the low RET%.

The OFF-score index is obtained through “a very questionable formula”

215. Dr. Schumacher explained at the hearing that it’s not Pottgiesser who invented the OFF-score in 2011. Dr. Schumacher explained that the OFF-score was invented by Christopher Gore in the years leading up to the Sydney Olympics in 2000. The OFF-score was validated on 1152 athletes, which in Dr. Schumacher’s opinion is a decent sample size. Dr. Schumacher explained that he does not agree with the Rider that the OFF score is not statistically sound.

Plasticizers

216. Dr. Schumacher invited the Rider to discuss this topic further at the hearing, but such discussion was not performed.

3. Position of the Single Judge

217. The Single Judge has evaluated all the facts, allegations, arguments and evidence put in front of her. Due to the numerous claims raised by the Rider, the reasoning will not refer to every single one of the claims raised by the Rider.
218. At the hearing the Rider requested the Single Judge to have the original German documents in the laboratory documentation packages translated from German to English and sent to the Rider.
219. The Single Judge will not have the original documents translated, since laboratory working documents, computer printouts, and similar documents in the laboratory documentation package may be in the native language of the Laboratory as stated in the WADA Technical Document on Laboratory Documentation Packages.
220. The Rider also at the hearing stated, that the Rider expected to receive an answer from the Single Judge as to why the Tribunal members’ decision regarding the Riders request for having the appointment of the Single Judge disqualified, has not been sent to the Rider.

221. The Single Judge notes that the Rider did not refer to any legal basis on which the Rider's request rests. The Single Judge can inform that there is no legal basis for such request in the UCI ADT Rules. The process following a challenge of an appointment of the Single Judge is set out in the UCI ADT Rules, and this process has been followed. It is not a requirement under the UCI ADT Rules that the decision by the other members of the Tribunal in this regard shall be in writing nor reasoned. Never the less the Single Judge can inform, that each of the Tribunal members' decision is filed on the case, and, that the decision to reject the challenge of the Single Judge was unanimous.
222. As regards the Rider's claims and referral to scientific articles by Dr. Schumacher and by Dr. Mørkeberg during the hearing, the purpose of this referral seemed to be to discredit and to question the Expert Panel's professionalism and scientific integrity. If this was indeed the purpose of the Rider's claims and references, the Rider did not succeed with such purpose.

Analyses carried out in different laboratories and coefficient of variation

223. The Single Judge rejects the Rider's claim that a deviation of 15-20% of ABP values must be accepted because of the coefficient of variation. The Single Judge finds, that it has been explained extensively during this case that the APB system takes into account the pleas on which the Rider rests his case. The Single Judge's conclusion also includes the basic premise that not all samples taken in context of the ABP can possibly be tested in the same laboratory.
224. The Single Judge also dismisses the Rider's claims regarding the coefficient of variation. If the Rider's arguments were accepted then the APB system could simply not exist, and this is not the case.
225. Therefore the Single Judge also rejects the Rider's claim that for example in sample 16 "*haemoglobin varies from 16.4 to 5.4. The % reticulocytes vary from 4.34 to 0.71*", and the Rider bringing the same claim as regards sample 17, 18 and 19. These claims are clearly caused by a misreading of the table e.g. on page 10/15 of the laboratory documentation for sample 16, and by a misunderstanding of the Quality Controls and the Quality Control samples.

Expiration of the tubes in which blood is drawn - anticoagulant EDTA

226. As regards the Rider's claim regarding the EDTA tubes, the Rider's claim is dismissed since the Rider has only described a hypothetical and not likely situation regarding the EDTA tubes.

Physiological factors that can alter the result - variations in plasma volume

227. As regards the Rider's claim that there are multiple pre-analytical factors that can modify the sample before its final analysis, the Single Judge finds, that the Rider has not put forward any evidence that the APB system in this case has not taken into account these analytical factors.
228. As regards the impact of the plasma volume variations, the Single Judge finds that it has been well-explained during the proceedings of the case that plasma volume variations do impact the haemoglobin during e.g. stage racing, but that plasma volume variations do not impact the reticulocytes, since reticulocytes is not a concentration-based marker.
229. It follows from the above that the Single Judge therefore dismisses the Rider's claim.

The OFF-score index is obtained through "a very questionable formula"

230. The Rider has not demonstrated that the OFF-score index is "*a very questionable formula*" and the Rider's claim is dismissed.

The Single Judge's overall conclusion

231. The Single Judge finds, that the Expert Panel's opinion as it is put in writing in the Expert Opinions and as explained and discussed at the hearing, is well-founded, logical and compelling, and the Single Judge takes note of the fact that it has been well-documented during the proceedings of the case that plasma volume variations do impact the HGB during e.g. stage racing, but that plasma volume variations do not impact the RET% since the RET% is not a concentration based marker and since RET% is a percentage of the red blood cells.
232. The Single Judge takes note of the well-founded, logical and compelling explanations by Dr. Schumacher that the confounding factors that can affect the ABP values are in fact taken into consideration in the ABP system.

233. When taking the above mentioned into consideration, and on account of:

- the Rider's blood values in the period of time up to the Rider's participation in and during stage racing in Volta a Portugal in 2015, 2017 and 2018;
- In 2015 the values for pre-race sample 3 and sample 4 taken on 28 July 2015 and 5 August 2015, changed as follows: reticulocytes decreased from 1.22% (sample 3) to 0.65% (sample 4), while HGB decreased a little from 15.9 g/dL (sample 3) to 15.2 g/dL (sample 4);
- In 2017 the values for pre-race sample 10 and sample 11 taken on 30 July 2017 and 8 August 2017, changed as follows: reticulocytes decreased from 1.41% (sample 10) to 0.55% (sample 11), while HGB increased a little from 15.2 g/dL (sample 3) to 15.4 g/dL;
- In 2018 the values for pre-start sample 16 (taken on 31 July 2018), sample 17 (in competition taken on 4 August 2018), sample 18 (in competition taken on 5 August 2018), sample 19 (in competition taken on 11 August 2018) and post-race sample 20 (taken on 22 August 2018), changed as follows: reticulocytes decreased from 1.46% (sample 16) to 0.66% (sample 17), to 0.51% (sample 18), to 0.37% (sample 19) and started increasing a bit in sample 20 to 0.6%, while HGB was overall increasing seen by the following values: 15.1 g/dL (sample 16); 16.3 g/dL (sample 17); 15.8 g/dL (sample 18); 16.2 g/dL (sample 19); and 16.9 g/dL (sample 20); those blood values increasing the OFF-score to 114.3 (sample 17); 115.2 (sample 18); 125.5 (sample 19) and 122.52 (sample 20); resulting in the Adaptive Model flagging the Rider's profile with abnormalities at 99.0% specificity for haemoglobin concentration in sample 20 (upper limit), OFF-score in samples 17, 18, 19, 20 (upper limit) and 22 (lower limit), RET% in samples 15, 21 and 22 (upper limit) and sample 19 (lower limit); the sequences for RET% and OFF-score also being abnormal at >99,5% specificity;
- the explanation by Dr. Schumacher that the likelihood of an OFF-score at 125.5 (sample 19) in a none doping male athlete is somewhere around 1:1000, and that this value is observed before and during one of the Rider's major races;
- the Expert Panel's overall evaluation of the case after the Expert Panel having responded to the Riders Answer of 30 June 2020 at the hearing being that the Rider's profile shows a clear doping scenario;

the Single Judge concludes that it is very unlikely that the abnormalities in the Rider's ABP were caused by the many other factors than doping, as claimed by the Rider.

234. The Single Judge does not agree, as stated by the Rider, that "*judgements are being made on the basis of minimal variations*". The Single Judge emphasizes, that the process carried out before a petition is filed and before a judgement is rendered on the basis of a Rider's ABP as means of evidence, has gone through a comprehensive - and long - process exactly to exclude that a certain judgement is a case of "*minimal variations*" not being caused by the use of a prohibited substance or a prohibited method. No matter if the variations in a certain Rider's Biological Passport are "*minimal*" or "*not minimal*", the UCI has the burden to prove, that the certain Rider has violated

the Anti-Doping Rules. The standard of proof is high being whether the UCI has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation which is made.

235. In conclusion the Single Judge finds, that it has been demonstrated in the Expert Panel's written opinions and by the Expert Panel's explanations at the hearing, that it is very unlikely that the abnormalities in the Rider's APB can be explained by the impact of confounding factors, plasma volume impact on the blood values, the coefficient of variation of the machines and laboratories or any of the other claims put forward by the Rider.

Doping scenario

236. The Single Judge finds the Expert Panel's opinions, as put forward in the written proceedings and at the hearing, to be well-founded, logical and compelling.
237. The Single Judge takes note of Expert Opinion #1 where the Expert Panel stated on the pattern observed in the Rider's ABP:

"[...] In summary, the profile bears features of blood manipulations on several occasions, coinciding with the Volta a Portugal from 2015, 2017 and 2018.

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

238. The Single Judge takes note of the Expert Panel's evaluation of the athlete's additional arguments (Expert Opinion #2). The Expert Panel concluded:

"We therefore conclude that based on the data available at this stage, it is highly likely that a prohibited substance or method has been used and that it is unlikely that the passport is the result of any of the causes highlighted in the defense statement."

239. The Single Judge takes note of the Expert Panel's evaluation of the athlete's Answer and scientific report by Dr. Cordova, the Expert Panel concluded that the Rider's profile shows a clear doping scenario.
240. In light of Expert Opinion #1 and #2 and the Expert Panels explanations at the hearing; in light of all of the above mentioned and everything that has been put in front of her; in light of a doping scenario being consistent with the Rider's competition schedule, from which it follows that the Rider's APB profile bears features of blood manipulations on several occasions, coinciding with the Volta a Portugal from 2015, 2017 and 2018; the Single Judge concludes, that the circumstances do allow to establish a doping scenario in the case at hand.
241. The Single Judge concludes that there is no evidence in the case at hand that renders the doping scenario implausible.

Standard of proof

242. The Rider submitted that the standard of proof is whether the UCI has established "beyond any doubt" that there has been a use of a prohibited substance or prohibited method.
243. The Single Judge does not agree with the Rider's assessment of the standard of proof. It follows from UCI ADR Article 3.1, that the standard of proof shall be "whether the UCI has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation which 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".

244. Therefore it follows, that the final question to resolve is, if the UCI has proven to the comfortable satisfaction of the Single Judge that the Rider engaged in doping within the meaning of Article 2.2 UCI ADR.

Conclusion

245. In evaluating all the facts, allegations, arguments and evidence before her, and applying said standard of proof in the context of the assessment of the evidence before her, the Single Judge is comfortably satisfied that the Rider committed an anti-doping rule violation of Article 2.2 UCI ADR in the form of Use of a Prohibited Substance or Prohibited Method.

E. Consequences of the anti-doping rule violation

246. Comfortably satisfied that the Rider committed an anti-doping rule violation, the Tribunal must decide upon the consequences of the violation.

1. Period of Ineligibility

247. The UCI submitted that the Tribunal must impose a four year period of Ineligibility on the Rider.

248. For first time violations of Article 2.2 UCI ADR, the starting point in determining the sanction is Article 10.2 UCI ADR. According to Article 10.2.1.1 UCI ADR, the period of Ineligibility to be imposed shall be four years where the anti-doping rule violation does not involve a Specified Substance, unless the Rider or other Person can establish that the anti-doping rule violation was not intentional.

249. Since blood manipulation by Use of a Prohibited Substance or Prohibited Method is not a *Specified Substance* according to Article 4.2.2 UCI ADR, Article 10.2.1.1 applies. Article 10.2.1.1 UCI ADR provides that the four year period of Ineligibility may be reduced only if the Rider is able to establish that the anti-doping rule violation was not intentional. The standard of proof placed on the Rider in this regard is a balance of probability (Article 3.1 UCI ADR).

250. As concluded above, the Single Judge is comfortably satisfied that the abnormalities in the Rider's haematological profile resulted from the Use of a prohibited Substance or Prohibited Method. The Rider submitted that the abnormalities in his haematological profile were not that abnormal, taken the Riders claims, arguments and scientific evidence into consideration, and that the abnormalities in the Rider's profile could be caused by many other things than doping. The Rider brought no further arguments that any Use of a Prohibited Substance or prohibited Method was not intentional.

251. In evaluating the submissions and evidence before her, the Single Judge concludes that the Rider failed to discharge his burden of proof to convince this Tribunal, on a balance of probability, that the violation was not intentional. Nor did the Rider establish that any of the Fault-related reductions in Articles 10.4 or 10.5 should apply to the case at hand, or that any other reductions or suspensions of the period of Ineligibility for reasons other than Fault as set forth in Article 10.6 UCI ADR are available in the case at hand.

252. In conclusion, the Single Judge finds that a period of Ineligibility of four years shall be imposed on the Rider.

2. Commencement of the period of Ineligibility

253. A period of Ineligibility of four years is imposed on the Rider. The Tribunal has to determine the commencement of the period of Ineligibility.

254. Article 10.11 UCI ADR provides that the period of Ineligibility shall start on the date of the final hearing decision providing for Ineligibility and that if a Provisional Suspension has been imposed and respected by the Rider, then the Rider shall receive a credit for such period of Provisional Suspension.
255. It is undisputed between the Parties that the Rider respected the Provisional Suspension. Therefore the Rider shall receive a credit for the period of the Provisional Suspension pursuant to Article 10.11.3.1 UCI ADR.
256. Therefore, the period of Ineligibility shall commence on the date of the decision, i.e. 4 March 2021. The Provisional Suspension already served by the Rider, starting from 21 October 2019 until the date of the present Judgement, shall be credited against the four-year period of Ineligibility.

3. Disqualification

257. The UCI in its Petition requests the Tribunal to disqualify *“all the results obtained by [the Rider] from the date of collection of Sample 3 (i.e. on 28 July 2015), until the day he was provisionally suspended (i.e. 21 October 2019)”*.
258. The Single Judge takes note of the request in the UCI’s Petition, but also acknowledges that according to Article 26.2 UCI ADT Rules *“[t]he Single Judge is not bound by the Parties’ prayers for relief”*.
259. As regards determining the date from when the Rider’s results shall be Disqualified, the Single Judge concurs with the view expressed by this Tribunal, according to which:

“... art. 10(8) UCI ADR provides an unfortunate lack of clarity in the situation involving a violation based on an ABP. The Single Judge has been unable to find a definition of a “positive Sample” in the UCI ADR; the term appears to be used exclusively in connection with art. 10(8) UCI ADR. The Single Judge sees fit to understand the reference to a “positive Sample” in the phrase “the date a positive Sample was collected” (as opposed to a more precise defined term such as “Adverse Analytical Finding”) here as a means to create a rule that distinguishes between violations based on collected Samples from other types of violations, such as art. 2(4) UCI ADR (Whereabouts Failure) or art. 2(10) UCI ADR (Prohibited Association), or even violations of art. 2(2) UCI ADR that are based on non-analytical evidence. As a consequence, for violations that arise based on collected Samples, such as those based on an ABP, the Disqualification period would start on the date of Sample collection. The Single Judge feels comforted in this view by the consistent line of CAS case law that, in the context of the Disqualification for ABP violations, links the timing of the violation to the timing of the relevant Sample collection.”¹¹

260. Accordingly, the Single Judge finds, that the starting point is, that the Disqualification shall start on the date of the collection of sample number 3 since this was the first sample in the Rider’s ABP that the Expert Panel found to disclose patterns of erythropoietic suppression.
261. Since the sample in question was collected on 28 July 2015, the starting point is, that the period of Disqualification shall start as from this date.
262. Article 10.8 UCI ADR requires Disqualification of all results following this date up to the date the Provisional Suspension was imposed, unless *“fairness requires otherwise”*.

¹¹ See e.g. CAS 2010/A/2235, *UCI v. Valjavec*, para. 117; CAS 2014/A/3469, *IAAF v. Alhamdah*, para. 44; CAS 2014/A/3614, *IAAF v. Dominguez*, para. 404; CAS 2016/O/4463, *IAAF v. Ugarova*, para. 133; UCI ADT 03.2017, *UCI v. Isabella Moreira Lacerde*, para 132, UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 104, UCI ADT 02.2018, *UCI v. Jaime Roson Garcia*, para 158 and UCI ADT 07.2019, *UCI v. Mehdi Sohrabi*, para 77.

263. The Single Judge takes into account the UCI ADT Judgment in case 06.2017, *UCI v. Mr. Alex Correia Diniz*, para 108, where the Single Judge in that case and in line with CAS case law (CAS 2015/A/4006, *IAAF v. ARAF, Yuliya Zaripova & RUSADA*) conducted an overall evaluation of the elements in the case at hand in determining if “*fairness require[d] otherwise*” than disqualifying all results in the period between the sample collection and the Provisional Suspension.
264. In CAS 2015/A/4006, *IAAF v. ARAF, Yuliya Zaripova & RUSADA*, para 102 the Panel held:
- “As a preliminary matter, the Panel notes that ‘fairness’ is a broad concept (CAS 2013/A/3274, para. 85), covering a number of elements that the deciding body can take into account in its decision not to disqualify some results. The CAS precedents (in general terms, inter alia, CAS 2007/A/1283, para. 53; CAS 2013/A/3274, para. 85-88) took into account a number of factors, such as the nature and severity of the infringement (CAS 2010/A/2083, para. 81), the length of time between the anti-doping rule violation, the result to be disqualified and the disciplinary decision, the presence of negative tests between the anti-doping rule violation and the competition at which the result to be disqualified was achieved, and the effect of the infringement on the result at stake (CAS 2008/A/1744, para. 76; CAS 2007/A/1362&1393, para 7.22). The Panel underlines that no single element is decisive alone: an overall evaluation of them is necessary.”*
265. The Single Judge has considered that the disqualification of results from 28 July 2015 and until the provisional suspension on 21 October 2019 is a long period of time. The Single Judge has considered “*if fairness requires otherwise*” when taken this period of time into account and also in consideration of the fact, that there is no valid test results from 2016 that can be taken into account when deciding on the question of disqualification of results.
266. The Single Judge finds the Expert Panel’s evaluation on samples 3 and 4 (sampling performed pre- and during Volta a Portugal 2015), the Expert Panel’s evaluation on samples 10 and 11 (sampling performed pre- and during Volta a Portugal 2017) and the Expert Panel’s evaluation on samples 16 - 20 (sampling performed pre-, during and after Volta a Portugal 2018) to be determining factors in exercising her discretion. The Expert Panel concluded that samples number 3 and 4, samples number 10 and 11, and samples number 16 – 20, shows patterns of erythropoietic suppression. The Single Judge also takes note of the fact that the Expert Panel in Expert Opinion # 1 concludes that: “*the data of the athlete bears as main abnormal features typical OFF constellations with previous stimulation in samples 16-20 and, to a lesser extent, in samples 11 [...] and 3/4, all obtained prior and during the Volta a Portugal in 2018, 2017 and 2015*”, and that the Expert Panel confirmed their evaluation in Expert Opinion # 2 after having evaluated the Rider’s first line of arguments. The Single Judge also takes note of the fact, that the Expert Panel at the hearing, where the Rider’s second line of arguments were discussed, confirmed their evaluation in Expert Opinion #1 and # 2.
267. The Single Judge in the balancing exercise of the elements described above, finds the Expert Panels evaluation on samples 3 and 4 regarding Volta a Portugal 2015, samples 10 and 11 regarding Volta a Portugal 2017, and samples 16 – 20 regarding Volta a Portugal 2018, as mentioned above, to be determining. The Single Judge has also taken into consideration, as determined repeatedly by this Tribunal,¹² that blood manipulation is not committed inadvertently, but intentionally and purposefully, in order to enhance sporting performance.
268. Thus the Single Judge, in exercising her discretion, finds that all competitive results obtained by the Rider from 28 July 2015 until the date of the Provisional Suspension (i.e. 21 October 2019) shall be disqualified.

¹² See e.g. UCI ADT 06.2017, *UCI v. Alex Correia Diniz*, para 108.

4. Mandatory Fine and Costs

a) Application of the mandatory fine

269. According to Article 10.10.1.1 UCI ADR, a fine shall be imposed in case a Rider exercising a professional activity in cycling is found to have committed an intentional anti-doping rule violation within the meaning of Article 10.2.3. This prerequisite is fulfilled in the case at hand.
270. With respect to the calculation of the fine, the UCI submits that the Rider was entitled to an average annual gross income from cycling in the period 2015 - 2018 of [REDACTED]. Therefore, according to the UCI, a mandatory fine of [REDACTED] should be imposed unless the Rider can establish that a reduction of the fine would be justified in application of the criteria set out in Article 10.10.1.1 UCI ADR.
271. The Rider has not contested the above figures and not put forward any arguments for reduction of the fine.
272. The Single Judge therefore confirms that a monetary fine in the amount of [REDACTED] shall be payable by the Rider to the UCI.

b) Liability for Costs of the Procedures

273. In application of Article 10.10.2 UCI ADR, the Single Judge holds that the Rider shall reimburse to the UCI the following amounts:
- CHF 2'500 for the costs of the results management by the UCI (Article 10.10.2.2 UCI ADR); and
 - EUR 5'600 for costs of the documentation packages of the blood samples analysed for the ABP (Article 10.10.2.6 UCI ADR).

VII. COSTS OF THE PROCEEDINGS

274. In application of Article 28.2 UCI ADT Rules, the Tribunal decides that the present Judgment is rendered without costs.
275. Notwithstanding the above, the Tribunal may order the unsuccessful Party to pay a contribution toward the prevailing Party's costs and expenses incurred in connection with the proceedings and, in particular, the costs of witnesses and experts (Article 28.4 UCI ADT Rules). The provision states that if the prevailing Party was represented by a legal representative the contribution shall also cover legal costs.
276. The Parties were invited at the hearing to submit their account of costs. The UCI submitted in letter dated 9 December 2020 the following account of costs: i) Expert fees regarding three experts fees and expenses: EUR 4'100.00 + CHF: 1'320.00; and ii) Legal fees and expenses: CHF 10'000.00 (the UCI informed, that the legal fees correspond to a reduced flat fee agreed upon with the UCI). The Rider submitted in letter dated 9 December 2020 the following account of costs: i) Minute of the law firm: EUR 3'932.50; ii) Expert's minute: EUR 1'815.00; and iii) Invoice from the translator: EUR 723.58.
277. Article 28.4 UCI ADT Rules explicitly states, that the Tribunal may order the unsuccessful Party to pay a contribution toward the prevailing Party's costs and expenses for (in particular) witnesses and experts, and, if the prevailing Party was represented by a legal representative the contribution shall also cover legal costs. In light of all of the circumstances of this case, especially that the UCI (as the prevailing party) was represented by external counsels, and that the UCI called two experts

to be heard at the hearing, the fact that the Tribunal relied in its finding in particular on the Expert Panel's written opinions and explanations at the hearing, the Tribunal finds that the Rider (as the unsuccessful party) must pay a contribution towards the UCI's costs and expenses in the amount of the following: Legal fees and expenses: CHF 6'000.00, Expert fees and expenses: EUR 4'100.00 + CHF: 1'320.00. In total: CHF 7'320.00 + EUR 4'100.00.

VIII. RULING

278. In light of the above, the Tribunal decides as follows:

1. **Mr. Raul Alarcon Garcia has committed an Anti-Doping Rule Violation (Article 2.2 UCI ADR).**
2. **Mr. Raul Alarcon Garcia is suspended for a period of ineligibility of 4 (four) years. The period of ineligibility shall commence on the date of this decision, i.e. 8 March 2021. However, considering the credit for the period of provisional suspension already served by Mr. Raul Alarcon Garcia, starting from 21 October 2019, Mr. Raul Alarcon Garcia's period of ineligibility effectively began on 21 October 2019, and shall end four years from this date, i.e. 20 October 2023.**
3. **The results obtained by Mr. Raul Alarcon Garcia between 28 July 2015 and 21 October 2019 are disqualified.**
4. **Mr. Raul Alarcon Garcia is ordered to pay to the UCI the amount of [REDACTED] as monetary fine.**
5. **Mr. Raul Alarcon Garcia is ordered to pay to the UCI:**
 - a) **the amount of CHF 2'500 for the costs of the results management; and**
 - b) **the amount of EUR 5'600 for costs of the documentation packages of the blood samples analysed for the Biological Passport.**
6. **Mr. Raul Alarcon Garcia is ordered to pay a contribution in the amount of CHF 7'320.00 + EUR 4'100.00 towards UCI's costs and expenses incurred in connection with these proceedings.**
7. **All other and/or further reaching requests are dismissed.**
8. **This Judgment is final and will be notified to:**
 - a) **Mr. Raul Alarcon Garcia;**
 - b) **The Agencia Española de Protección de la Salud en el Deporte;**
 - c) **UCI; and**
 - d) **WADA.**

279. This Judgment may be appealed before the CAS pursuant to Article 30.2 UCI ADT Rules and Article 74 of the UCI Constitution. The time limit to file the appeal is governed by the provisions in Article 13.2.5 UCI ADR.

Helle Qvortrup Bachmann
Single Judge