SPORT RESOLUTIONS

SR/152/2023

IN THE MATTER OF PROCEEDINGS BROUGHT BY THE INTERNATIONAL TENNIS INTEGRITY AGENCY UNDER THE 2023 TENNIS ANTI-DOPING PROGRAMME

Before:

William Norris KC (Chair)
Professor Dorian Haskard
Ms Abigail Gauci

BETWEEN:

INTERNATIONAL TENNIS INTEGRITY AGENCY

Anti-Doping Organisation

and

(1) TARA MOORE & (2) BARBARA GÁTICA

Respondents

DECISION OF THE INDEPENDENT PANEL

A. Introduction & Summary

1. Tara Moore ("TM") and Barbara Gática ("BG") (also referred to together as "the Players" and individually as "Player") are both professional tennis players who participated in the *Women's Tennis Association ("WTA") 250 Copa Colsanitas* tournament in Bogotá, Colombia, in April 2022 ("the Tournament"). TM is British, but now lives in the USA. BG is Chilean. Both provided In-Competition samples for the purposes of drug-testing on 6 April 2022.

2. The analysis of TM's A Sample identified the presence of two Prohibited Substances, Boldenone and Nandrolone. Nandrolone is an anabolic steroid, which is prohibited in and out of competition and Boldenone is also a naturally occurring anabolic-androgenic steroid.[1] The findings regarding Nandrolone and Boldenone in her case are summarised by the ITIA thus[2]:

> "*Nandrolone metabolites. 19-norandrosterone in an estimated concentration of 105 ng/mL, greater than 15 ng/mL, not consistent with pregnancy or the use of norethisterone. Boldenone (androst-1,4-dien-17β-ol-3-one) and its metabolite (5β-androst-1-en-17β-ol-3-one) in the roughly estimated concentrations of 6.5 ng/mL and 0.5 ng/mL, respectively. Carbon isotopic signature of 19-NA measured at -23.7‰, 19-NE at -23.8‰. IRMS results consistent with the exogenous origin of boldenone (-29.6‰) v. pregnanediol (-21.2‰) and 16-enol (-21.6‰)*"

3. The Sample provided by BG was also analysed and Boldenone was found to be present at a concentration of 2.5 ng/mL (and its metabolite at 8.6 ng/mL) in the A Sample and 1.9 ng/mL (and its metabolite at 8.5 ng/mL) in the B Sample.

4. The presence of Nandrolone metabolites and Boldenone (and its metabolites) constitute an Adverse Analytical Finding ("AAF") because both Nandrolone and Boldenone are in Section S1 "*Anabolic Agents*", sub-section 1 "*Anabolic Androgenic Steroids*" of the 2022 Prohibited List.

5. After analysis of the B Sample and an exchange of correspondence, TM and BG were charged with Anti-Doping Rule Violations ("ADRVs") under the 2022 Tennis Anti-Doping Programme ("TADP"). Those Notices of Charge were sent on 13 January 2023.

6. Both Players admit the presence of Boldenone in their systems at a level which is consistent with exogenous origin although they deny that they were caused by deliberate doping. In the case of TM, however, it is also contended that the AAF for Nandrolone was not valid because a proper application of the relevant regulation: World Anti-Doping Agency ("WADA") Technical Document - TD2021NA *Harmonization of Analysis and*

[1] It occurs naturally in the human body, but only in very small quantities, and is similar in structure to the male hormone testosterone. It has the effect (amongst others) of increasing muscle mass. What is detected in drug tests in the metabolism product of this molecule, called 19-Norandrosterone. Boldenone is a synthetic derivative of testosterone which is similarly prohibited. Both drugs are used (and, in the sporting context, abused) to increase muscle mass and strength.

[2] Paragraph 27 of the ITIA submissions of 28 June 2023 [A/13].

*Reporting of 19-Norsteroids related to Nandrolone ("*TD2021NA*")* is to the effect that the AAF should not have been reported.

7. If, contrary to that contention on behalf of TM, there were valid tests for both Nandrolone and Boldenone in her case and Boldenone alone in BG's case, then the issue is whether the two Players can provide an innocent explanation for their AAFs. It is accepted on all sides that such requires them to demonstrate how that substance got into their system which, on the facts of this case, means they must establish that it *probably* resulted from their consumption of meat in various restaurants in Bogotá, including at the tournament venue.

8. It is significant to recognise that there was a third player (out of the 21 tested at that competition) who also returned an AAF for Boldenone but at a level at which it would not be possible to exclude an endogenous origin. However, that does not mean the third positive test is irrelevant to our consideration of this case. Indeed, one of the most striking features here is the fact that 3 out of 21 players tested positive in that single competition, whereas considering the number of positive tests generally, according to WADA's published data between 2015 and 2021, only 0.03% of all samples worldwide returned an AAF for Boldenone[3].

9. Assuming for the moment that the ITIA is correct in its submission that the AAF for Nandrolone was properly reported in accordance with TD2021NA, the issues for us to determine are as follows:

   (a) Have the Players demonstrated that the presence of the Prohibited Substances in their systems has an innocent explanation?

[3] Those figures are quoted by TM's legal representative in a submission of 28 November 2023 [B1141]; see also their Appendix B at [B1148]. Between 2010 – 2017, 0.08% of anti-doping samples analysed by the WADA-accredited laboratory in Bogota returned an AAF for boldenone [A/483]. Since 2015, 0.9% of anti-doping samples collected in Colombia and analysed by the WADA-accredited laboratory in Montreal have reported an AAF for boldenone [A/483].. That is significantly higher than the wider sample WADA figure of 0.03%. In the case of nandrolone, *the analyses of Colombian anti-doping samples by the Montreal laboratory showed that 0.07% of the samples analysed since 2015* returned an AAF for 19-norandroserone (a nandrolone metabolite) *[B/1142, para 6.46(d)], as compared to the worldwide figure of 0.06% (between 2015 and 2021).*

(b) If they can provide such an explanation, and satisfy us that, on a balance of probabilities, this was the cause of the AAFs, have they acted with No Fault or Negligence or, alternatively, No Significant Fault or Negligence?

(c) Third, having decided the answer to the first two issues, it is necessary to decide on any sanction (if appropriate) and other Consequences that follow from our conclusions.

10. In considering those issues, the only explanation that both Players offer for the Presence of those substances in their system is that they ate significant quantities of meat at various restaurants in the days leading up to the provision of those samples. It is submitted on their behalf that it is **likely** that that meat was contaminated by Boldenone and Nandrolone[4] so that is the real cause of the AAFs.

11. In this context, it is common ground that it is – we put it neutrally – not at all unusual for Colombian farmers to administer Boldenone and possibly Nandrolone to their animals before slaughter. On behalf of the Players, it is argued that it is therefore not surprising that those substances were present in the meat. The weight of the evidence was to the effect that at least 25% of Colombian farmers may use one or both substances[5]. But the parties did not agree as to whether that was a significant proportion (the argument on behalf of the Players) or whether it meant it inherently unlikely because there was only a one in four chance that the meat was contaminated (as the ITIA contended).

12. As we shall record in a little more detail hereafter, we heard a great deal of evidence and detailed analysis of various scientific studies which the parties relied in support of their competing contentions.

13. We should, however, say at the outset that we found all the scientific evidence interesting, but ultimately not decisive. We consider that trying to deduce statistical probability from studies with obvious limitations and many variables and uncertainties (not the least of which is the sample size in all of those studies) is not an exercise that can be undertaken

[4] The significance of the fact that only TM also tested positive for Nandrolone is a point to which we will return.
[5] What we shall refer to as the 'Martinez study' reported in 2014 [B/149-162]. It may reasonably be assumed that a farmer would not report using these steroids unless they actually did, so 25% may be a conservative figure.

with much confidence in the outcome. We think such analyses must be used only with caution.

14. We certainly do not think that the ITIA's statistical analysis (and evidence) is sufficient to demonstrate that an innocent explanation for the AAFs in these two Samples is inherently improbable, let alone very improbable, because of the levels of the Prohibited Substance(s) found as against the quantities of meat that they must have consumed. In our view, the more striking statistic is the one to which we referred earlier: namely the fact that three AAFs were returned out of the 21 players tested in Bogotá in 2021. That is very substantially higher than the figures typically experienced worldwide.

15. In that situation, common sense leads one to consider whether or not there may be some common cause of the AAFs. In essence, it seems to us that the combination of high/ regular usage of these agents in Colombian farming, coupled with the amount of meat that these Players ingested[6] and the fact that they and another player returned AAFs at this competition cannot sensibly be regarded as coincidental.

16. We repeat our note of caution about using scientific or statistical data in this sort of case especially when deciding whether the Players have provided innocent explanations for that finding on a balance of probability. The balance of probability test must not be applied mechanistically. We consider that our job is to stand back and take account of all the evidence, lay and professional, expert or otherwise, and use that to inform our holistic judgement.

17. In summary, our conclusion is that it is more likely than not that the source of the AAFs, as regards Boldenone in the case of both Players, and Nandrolone in the case of TM[7] was the meat that they consumed in the days leading up to the tests.

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[6] There is no suggestion that the three players had, for example, a common coach or that they have some pre-existing personal relationship. All that we know is that on more than one occasion at that event TM and BG happened to eat at the same place, where they ate similar meals which unquestionably contained meat (whether beef or pork) in various forms. It would be unsurprising if the third player ate in the same places.

[7] Although the ITIA attaches significance to the fact that BG did not test positive for Nandrolone, which it says would be expected if she was exposed to the same sources of contamination as TM, we think that might be purely coincidental and it is, as TM argues, unsurprising that a Colombian farmer might administer Nandrolone rather than Boldenone and that TM might have eaten meat on one or more occasions containing both steroids. We say a little more about this issue later in this decision.

18. We firmly reject the ITIA's alternative case, which is that even if the Players have demonstrated that meat contamination was the cause of their AAFs, nevertheless they acted recklessly and with "*fault and negligence*" because (according to the ITIA) they knew or ought to have known that it was risky to eat meat in Colombia.

19. We do so because that contention is at odds with what we think the Players should have been aware of at the time. They had received no warnings given by the WTA (or any Colombian tennis authority) about the risks of eating Colombian meat and none were given until well after this event[8]. In addition, these Players were eating in mainstream establishments in Bogotá, both at the hotel/restaurant, at the Tournament venue and in other respectable restaurants in the immediate vicinity.

20. It follows that we accept that the Players have discharged the burden upon them in all respects and have demonstrated that they acted without any Fault or Negligence.

21. The only remaining issue, therefore, is whether their results between the relevant competition in Bogotá and the date of their Provisional Suspensions should stand or be disqualified. In the case of TM, that Provisional Suspension began on 27 May 2022. In the case of BG, the Provisional Suspension took effect from 31 May 2022 but, in practice, BG had been suspended anyway for a match-fixing offence which had led to her suspension under the Tennis Anti-Corruption Program ("TACP") with effect from 9 December 2022.

22. Our decision on that last issue is that their results should stand. We have found that although there was an ADRV in the case of both Players, that came about without Fault or Negligence on their part. Nor do we think that, however the steroids got into their system when they were tested on 6 April 2022 it could have had any significant immediate or lasting effect on their performance at that or at subsequent tournaments.

B. Jurisdiction & Relevant Rules

23. As we have already explained, the Anti-Doping charges arise under the TADP. The central provisions are as follows:

[8] Issued on 6 January 2023

Article 2.1:

> "*The presence of a Prohibited Substance or any of its Metabolites or Markers in a Player's Sample, unless the Player establishes that such presence is consistent with a TUE granted in accordance with Article 4.4.* […]"

Article 2.2

> "*Use or attempted Use by a Player of a Prohibited Substance or a Prohibited Method, unless the Player establishes that such Use or Attempted Use is consistent with a TUE granted in accordance with Article 4.4.* […]"

24. There are a number of explanatory provisions under Article 2.1 which are relevant to how an ADRV may be proved. Particularly:

> *"2.1.1* […] *not necessary to demonstrate intent, Fault, Negligence, or knowing Use"*
>
> […]
>
> *2.1.2 Sufficient proof to of an Anti-Doping Rule Violation under Article 2.1 is established by any of the following* […] *(c) where the Player's A or B Sample is split into two parts, the presence of a Prohibited Substance or its Metabolites or Markers in the first part of the split Sample and the Player waives analysis of the confirmation part of the split Sample or analysis of the confirmation part of the split Sample confirms the presence of the Prohibited Substance or its Metabolites or Markers found in the first part of the split Sample.*
>
> *2.1.3 Excepting those substances for which a Decision Limit[9] is specifically identified in the Prohibited List or a Technical Document, the presence of any reported quantity of a Prohibited Substance or its Metabolites or Markers in a Player's Sample constitutes an Anti-Doping Rule Violation under Article 2.1, unless the Player establishes that such presence is consistent with a TUE granted in accordance with Article 4.4.*
>
> *2.1.4 As an exception to the general rule of Article 2.1, the Prohibited List, International Standards or Technical Documents may establish special criteria for reporting or the evaluation of certain Prohibited Substances."*

25. Further, it is relevant to note the following provisions under Article 3:

> *"3.1.1 The ITIA will have the burden of establishing that an Anti-Doping Rule Violation has occurred. The standard of proof will be whether the ITIA has established the commission of the Anti-Doping Rule Violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation that is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt.*

[9] A Decision Limit is defined in the TADP as "*The value of the result for a threshold substance in a Sample above which an Adverse Analytical Finding will be reported, as defined in the ISL*."

[…]

3.2.1 Facts related to Anti-Doping Rule Violations may be established by any reliable means, including admissions.

3.2.2 Analytical methods or Decision Limits that have been approved by WADA after consultation within the relevant scientific community or that have been the subject of peer review will be presumed to be scientifically valid. Any Player or other Person seeking to challenge whether the conditions for such presumption have been met or to rebut the presumption must (as a condition precedent to any such challenge) first notify WADA and explain the basis for their position. The hearing panel, on its own initiative, may also inform WADA of any such challenge or attempt to rebut the presumption. Within ten days of WADA's receipt of such notice and the case file related to such challenge, WADA will also have the right to intervene as a party, appear as amicus curiae, or otherwise provide evidence in such proceeding. In cases before CAS, at WADA's request, the CAS panel will appoint an appropriate scientific expert to assist the panel in its evaluation of the challenge.

[…]

3.2.4 WADA-accredited laboratories and other laboratories approved by WADA are presumed to have conducted Sample analysis and custodial procedures in compliance with the ISL. The Player or other Person asserted to have committed an Anti-Doping Rule Violation may rebut this presumption by establishing that a departure from the ISL occurred that could reasonably have caused the Adverse Analytical Finding (or the factual basis for any other Anti-Doping Rule Violation asserted). Where the presumption is rebutted, the ITIA will have the burden of establishing that such departure did not cause the Adverse Analytical Finding (or the factual basis for such other Anti-Doping Rule Violation).

3.2.5 Departures from any other International Standard, or other antidoping rule or policy set out in the Code or this Programme will not invalidate analytical results or other evidence of an Anti-Doping Rule Violation, and will not constitute a defence to an Anti-Doping Rule Violation; but if the Player or other Person establishes a departure from one of the specific International Standards listed below, and further establishes that that departure could reasonably have caused an Adverse Analytical Finding or Adverse Passport Finding or a Whereabouts Failure based on which an Anti-Doping Rule Violation is asserted, the ITIA will have the burden of establishing that such departure did not cause the Adverse Analytical Finding […]"

26. It may also be convenient here to set out the provisions of the TADP with regard to intentional ADRVs in response to the ITIA's contention that Fault (significant or otherwise) attaches to both Players in the event that they did eat contaminated meat and that that is the cause of their ADRV. We therefore quote the following provisions:

> "*10.2.1* Save where Article 10.2.4.1 applies, the period of Ineligibility will be four years:

10.2.1.1 where the Anti-Doping Rule Violation does not involve a Specified Substance or a Specified Method, unless the Player or other Person establishes that the Anti-Doping Rule Violation was not intentional; and

10.2.1.2 where the Anti-Doping Rule Violation involves a Specified Substance or a Specified Method and the ITIA can establish that the Anti-Doping Rule Violation was intentional.

[…]

10.2.3 As used in Article 10.2, the term 'intentional' is meant to identify those Players or other Persons who engage in conduct that they 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."

27. It is also material to note the definition of No Fault or Negligence at Appendix One Definitions of the TADP which, again, we will quote:

"*No Fault or Negligence:: 'The Player or other Person establishing that they did not know or suspect, and could not reasonably have known or suspected even with the exercise of utmost caution, that they had Used or been administered the Prohibited Substance or Prohibited Method or otherwise violated an antidoping rule. Except in the case of a Protected Person or Recreational Athlete, for any violation of Article 2.1 the Player must also establish how the Prohibited Substance entered their system'.*"

28. Article 10.6.2 deals with No Significant Fault or Negligence and is set out by the ITIA in their Response and Reply Submissions:

"107. *Article 10.6.2 provides: 'In an individual case where Article 10.6.1 is not applicable, if a Player or other Person establishes that they bear No Significant Fault or Negligence for the violation, then (subject to further reduction or elimination as provided in Article 10.7) the otherwise applicable period of Ineligibility may be reduced based on the Player's or other Person's degree of Fault, but he 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 may be no less than eight years'.*"

108. *No Significant Fault or Negligence is defined as: 'The Player or other Person establishing that their Fault or Negligence, when viewed in the totality of the circumstances and taking into account the criteria for No Fault or Negligence, was not significant in relation to the Anti-Doping Rule Violation. Except in the case of a Protected Person or Recreational Athlete, for any violation of Article 2.1 the Player must also establish how the Prohibited Substance entered their system.'*"

109. Fault is defined in turn as: 'Fault is any breach of duty or any lack of care appropriate to a particular situation. Factors to be taken into consideration in assessing a Player's or other Person's degree of Fault include, for example, the Player's or other Person's experience, whether the Player or other Person is a

Protected Person, special considerations such as impairment, the degree of risk that should have been perceived by the Player and the level of care and investigation exercised by the Player in relation to what should have been the perceived level of risk. In assessing the Player's or other Person's degree of Fault, the circumstances considered must be specific and relevant to explain the Player's or other Person's departure from the expected standard of behaviour. Thus, for example, the fact that a Player would lose the opportunity to earn large sums of money during a period of Ineligibility, or the fact that the Player only has a short time left in their career, or the timing of the sporting calendar, would not be relevant factors to be considered in reducing the period of Ineligibility under Article 10.6.1 or 10.6.2'."

110. The application of No Significant Fault or Negligence and the assessment of the level of Fault (and any appropriate reduction) have been considered in numerous cases. As the Panel explained in Cilic v ITF (CAS 2013/A/2237), in considering an athlete's level of fault a panel must consider both the 'objective and subjective level of fault' (at §71)."

C. Process & Hearing

29. After the Notices of Charge of 13 January 2023, and the Players' responses thereto, an Order was made by the Chair of the Independent Tribunal, on 13 April 2023 (by consent) consolidating the proceedings involving TM with those involving BG. A Directions Order was made on 26 June 2023.

30. I was appointed as Chair of the Independent Panel on 15 June 2023, and Dorian Haskard and Abigail Gauci were appointed in October 2023.

31. The hearing was conducted remotely over 14 and 15 December 2023. In advance of the hearing, the Parties provided us with very substantial quantities of documentation, including witness evidence (factual, quasi-expert and expert) as well as a considerable number of scientific studies to which the experts referred, albeit with different interpretation or application of the findings of those studies.

32. The case for TM was presented by Tom Seamer instructed by *Morgan Sports Law*. The case for BG was presented by Juliana Avezum and Ariadna Mendoza of *Bichara e Motta Advogados*, a law firm in Sao Paulo, Brazil. The case for the ITIA was presented by Kendrah Potts, of *4 New Square*, External Counsel instructed by ITIA Legal.

33. The Panel would like to express our appreciation to all participants in the hearing for their assistance in presenting their respective cases with economy, clarity and moderation and for their analysis and explanation of the evidential basis for their submissions. We particularly compliment the lawyers for the way in which they were able to present scientific and statistical material what, at least to the two lawyer-members of this Panel, would, without their help, have been difficult to follow.

34. We would also wish to pay particular tribute to BG's legal representatives and to those witnesses who spoke or gave evidence to us notwithstanding the fact that English was not their first language.

D. The Case Law

35. Various cases were cited to us and they are listed below as they appeared in the index to the Authorities Bundle (the last 3 named were in a Supplemental Bundle):

Tab	Case	Page
1.	Ward v FEI (CAS/99/A/246)	3-13
2.	R v. Clark [2003] EWCA Crim 1020 1 4-39	4-39
3.	CAS 2007/A/1312 Adams v. CCES	40-66
4.	CAS 2009 /A/1752 & CAS 2009/A/1753 Devyatovskiy & Tsikhan v. IOC	67-143
5.	CAS 2009/A/1768 Hansen v. FEI	144-161
6.	CAS 2009/A/1926 & 1930 ITF v. Gasquet	162-183
7.	CAS 2011/A/2384 UCI v. Contador & RFEC & CAS 2011/A/2386 WADA	184-257
8.	Cilic v ITF (CAS 2013/A/2237)	258-284
9.	CAS 2013/A/3170 Garcia v. FECNA	285-300
10.	CAS 2013/A/3274 Glasner v. FINA	301-324
11.	CAS 2014/A/3615 WADA v. Daiders, Daiders & FIM	325-345
12.	FISA v. Gomez (22 June 2015)	346-354

13.	Aitken v. DPP [2015] EWHC 1079 (Admin)	355-374
14.	CAS 2016/A/4563 WADA v. EGY-NADO & Elsalam	375-389
15.	CAS 2016/A/4377 WADA v. IWF & Caicedo	390-405
16.	Villanueva v FINA (CAS 2016/A/4534)	406-421
17.	Ademi v UEFA (CAS 2016/A/4676)	422-446
18.	CAS 2017/A/5296 WADA v. Roberts	447-466
19.	CAS 2017/A/5016 & 5036 Abdelrahman v. WADA & Egyptian	467-503
20.	CAS 2018/A/5768 Scott v. ITF	504-570
21.	CAS 2018/A/5583 Taylor v. World Rugby	571-596
22.	CAS 2019/A/6313 Lawson v. IAAF	597-614
23.	CAS 2019/A/6443 & 6593 CCES v. Jamnicky	615-654
24.	IAAF v Bett (Decision dated 19 November 2019)	655-683
25.	CAS 2020/A/6978 etc Iannone v. FIM Iannone v FIM CAS 2020/A/6978 & WADA v FIM & Iannone, CAS 2020/A/7068	684-716
26.	ITF v Farah (2020)	717-727
27.	ITF v Yastremska (21 June 2021)	728-761
28.	CAS 2022/ADD/46 United Wrestling v Jackson	762-787
29.	CONMEBOL v X [redacted]	788-860
30.	ISU v Park (20th March 2017)	861
31.	CAS 2019/A/6482 Gabriel da Silva Santos v Federation Internationale de Natation (FINA)	862-880
32.	CAS 2017/A/5301 Sara Errani v International Tennis Federation (ITF) & CAS 2017/A/5302 National Anti-Doping Organisation (Nado) Italia v Sara Errani and ITF	881-920

33.	CAS 2013/A/3279 Viktor Troicki v International Tennis Federation (ITF)	920-943
	CAS 2021/O/7977 World Athletics v Shelby Houlihan	
	[2012] EWHC 3464 (Ch) Slocom Trading Ltd & Another v Tatik Inc and others	
	CAS 2018/O/5668 IAAF v RUSAF & Ivan Ukhov	

36. We wish to make a general point about the utility of citing previous cases. We recognise that this is intended to be helpful to our decision-making process and it is entirely understandable that parties do this, particularly when there have been other cases where meat contamination, for example, has been the basis of the Players defence – see, for example, *Lawson v IAAF*, *CCES v Jamnicky* and *World Athletics v Houlihan* to name but three. However, almost all these cases turn upon their own facts and the relevant tribunals' assessment of the evidence and analysis in those cases. What is important, therefore, is not so much whether there are factual similarities or differences between those cases and these ones if not to find common points of principle rather than seeing how those principles may have been applied in a particular case.

37. Those principles to which we refer are, we consider, uncontroversial and familiar.

38. First, a player seeking to provide an innocent explanation for their AAF will have to do so on a balance of probabilities.

39. Second, a player who tries to achieve that objective by demonstrating that the cause was probably an exogenous source – whether it be a contaminated supplement or contaminated food – will almost always have to do more than provide a bare assertion of their innocence, however convincing it may seem. In almost every case, they will need to make every reasonable effort to establish the source of that contamination and it is very unlikely indeed that they will discharge the burden of proof if they fail to do so.

40. In the case of an allegedly contaminated supplement, that will involve usually identifying the supplement in question and showing some basis upon which, it is likely to have become contaminated even if the actual supplement is no longer available to be tested.

41. In the case of meat contamination, the player will usually have to provide a satisfactory explanation for how they came to eat food which was probably contaminated in the way they contend. In practice, however, it cannot be expected that they will be able to identify the actual meat they ate or provide a sample of that meat which demonstrates that it was in fact contaminated.

42. Those simple propositions derive from the importance that sport attaches to an athlete being responsible for whatever substance enters their body. As a matter of policy, it would undermine the objectives of all the anti-doping rules if it were considered sufficient for an athlete to advance a plausible denial of guilt on the basis that they declare their aversion to anti-doping but without any explanation for how the Prohibited Substance entered their body. On the other hand, the anti-doping rules exist to catch and deter cheats. They are not intended to penalise the innocent.

43. As Ms Potts correctly points out, Court of Arbitration for Sport (the "CAS") panels consistently distinguish between that which is "*possible*" and that which is "*probable*" whilst recognising that different forms of evidence may not have equal value – see, for example, the decision in ***Abdelrahman*** cited by Ms Potts at A438, para. 27. The importance attached to ensuring that sport is clean is a good reason for having strict rules about how players are expected to discharge the burden of proving that there is an innocent explanation for an AAF.

44. That is as far as the jurisprudence goes. To that extent, trying to compare this case with others where meat contamination has or has not been accepted as the explanation of an AAF is an exercise of only very limited value. What matters is to evaluate the evidence in the particular case against the general points of principle that we have already identified.

E. The various Scientific Studies

45. Before we consider the evidence and submissions of the parties, we list the main studies to which the parties referred with some introductory and general observations that are applicable to all of them. These studies include:

- A 2014 paper authored by Gina Lorena Garcia Martinez [redacted] entitled "*Antibiotics and Anabolics in food products of bovine origin as a bioethical problem*", focusing on Villavicencio, Meta in Colombia [B/149-162].
- The "*Final Report of a Mission carried out in Colombia from 19 January to 27 January 2011 to evaluate the monitoring of residues and contaminants in live animals and animal products including controls on veterinary medicinal products*" (a European Commission report) [B/198-226].
- A report by Moralez-Perez et al. in 2020 - a study of boldenone residues in meat from cattle slaughtered in Ecuador (Quito) [B/937-950][10].
- The "Official Statement on the presence of Boldenone in Colombia's beef" issued by the Colombian Olympic Committee in 2020 [B/951-952].
- A report in November 2020 by Fajardo-Zapata et al. (of the University del Area Andina in Bogota) into "*Residues of anabolic drugs in meat intended for human consumption*" [B/1080-1112].
- A November 2008 report by Giron et al. on "*Determination of anabolic steroids in beef cattle* […] *from the southwestern region of Guatemala*" [B/1160-1212].
- A study by Debruyckere et al. in 1995 on the excretion of 19-NA in urine after consumption of nandrolone, discussed by Dr Austin in his report [B/1055-1079].
- A report by Costain et al. in 2008 on the concentration of testosterone (another steroid but with slightly different characteristics) following injection and relied on by Dr Austin [mentioned, for example, at B/1063].
- A study by Wu et al. on 2015, discussed by Professor Ayotte at (for example) A/481 on the metabolism of boldenone in human urine.
- The Montreal study, overseen by Professor Ayotte[11], conducted on tests of meat samples collected from different locations in Colombia (yet

[10] The highest concentration of boldenone found in meat in this study was 0.035 mg/kg.
[11] The highest concentration found here was 263.5 ng/kg more than seven times higher than had been found in the Morales-Perez study.

unpublished[12]) but with results explained and summarised by Professor Ayotte in her second report [A/483-4].

46. That is far from an exclusive list of all the material on which the parties and the expert witnesses relied. It is, however, a sufficient one for present purposes and, before we summarise the parties' respective evidence and arguments, we repeat our warning about over-reliance on that scientific material. There are limitations and qualifications to be recognised in almost all of those (and other) studies which mean great care must be very careful if trying to use them in any assessment of improbability or, indeed, probability.

F. <u>The evidence submitted on behalf of TM and BG</u>

47. Although we must obviously consider the cases of each Player separately, and different factual issues undoubtedly arise, there is so much commonality between them that it is probably helpful to begin with the evidence which both Players rely on in support of their respective cases.

48. We say at the outset that the evidence for both Players goes well beyond *"mere protestations of innocence*".

49. TM's own Witness Statement is at B/55-66. She gave evidence orally and was cross-examined. She demonstrated, and we accept, that she arrived in Bogotá on 30 March 2022, and she says that she has a large appetite. She attended the Tournament to play in the Women's Doubles with her wife, Emina Bektas. They were together for most of the time. She was able to establish, by reference to the bill, that she and Ms Bektas ate at the [redacted] restaurant on 31 March. There she ate considerable quantities of meat - see her Witness Statement at B/56-57. On 1 April, she ate more meat with Ms Bektas at the restaurant in the country club where the Tournament was taking place. One of the dishes was fried pork, whereas the previous evening she had been eating beef.

[12] The analysis was undertaken in 2022/2023. A preliminary report was presented to WADA in March 2023.

50. On 2 April, she and others ate dinner at a restaurant which was part of the [redacted] and the following days (3 and 4 April) she lunched at the country club, the Tournament venue and on both occasions ate pasta with Bolognese sauce (which may be assumed to have contained minced beef). She probably had at least one further helping, and later on 4 April dined at the [redacted]. Again, she ate a meal which contained at least some meat. She ate more meat on 5 April 2022 for breakfast and then had lunch (again with Bolognese sauce) at the country club restaurant on 5 April before returning to the [redacted] for dinner that same evening. She ate yet more meat that evening and again the following day (6 April 2022) which was the day on which she later provided the Sample which on analysis was found to contain Boldenone and Nandrolone.

51. In support of her case, TM subjected herself to a polygraph test which, it is submitted, is positive evidence in support of her credibility because she answered (honestly, according to the polygraph examination) to two questions. The first was "*Have you ever deliberately or intentionally ingested either Boldenone or Nandrolone in any form?*" and the second was whether she has "*at any time knowingly taken either Boldenone or Nandrolone in any form*". In each case she said "*No.*" and the algorithms indicate that she was being truthful.[13]

52. Supporting evidence was given by TM's wife, Emina Bektas [B/79-90]. Corroboration of the fact that she ate beef came from the restaurant [redacted] [B/93-94, in translation], from another competitor (Julia Lohoff) who dined with TM on 2 April 2022 and on 3, 4, 5 April 2022.That also confirms what TM says she ate on the morning of 6 April 2022 because, as Ms Lohoff says [B/100], she saw what she ate. There is further confirmation of what she ate at the country club from the club itself [B/102-112] and, similarly, there is confirmatory evidence in relation to what was provided and eaten at the [redacted] [B/113-114].

53. However, the evidence goes further than merely confirming who ate what where. TM has also obtained evidence from some of the suppliers. For example, the owner of one such

[13] The polygraph report is by Kendall Shull [B/67/75]. We recognise that such tests have limited utility as the caselaw recognizes. But this evidence is nevertheless part of the overall factual matrix we must consider.

meat supplier confirms that they supply the [redacted] with meat products, all of which come from farms in Colombia [B/117 and B/120 and 123].

54. TM also submitted a considerable body of evidence which demonstrates that the administration of Nandrolone and Boldenone to cattle in Colombia was permitted. Indeed, the [redacted] recognised in evidence provided in the *ITF v Farah (2020)* case[14] that it was authorised for commercial use in "*cattle breeding and fattening*"[15].

55. We attach particular importance to the evidence given by [redacted] who not only focuses in his academic work on animal nutrition and the nutrition of livestock but has worked "*in and around the Colombian livestock industry*" for his entire career and has a "*deep knowledge of the use of anabolic steroids by livestock farmers in Colombia*" [B/925-926]. Furthermore, between 2018 and 2021, he managed a livestock company dedicated to rearing cattle in which (he says) "*we used some anabolic products to improve the weight gain of the animals*".

56. When he gave evidence, [redacted] spoke of the standard and recommended applications of products such as Boldenone and Nandrolone by farmers. He emphasised that there is no effective regulation of how such products are administered.

57. In considering withdrawal rates, he told us that although it would make obvious sense only to administer such a product sufficiently far in advance of slaughter that the administration had the potential benefit to increase the weight of the animal nevertheless, as a matter of fact, he knows that some farmers administer such steroids within two or three days of slaughter. They do so in the belief – mistaken or otherwise matters not – that this will enable the animal to **maintain** weight and/ or avoid stress in the immediate period before slaughter. He also told us that the meat would probably enter the food chain within two or three days of slaughter.

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[14] Authorities Bundle 717-727

[15] Evidence he gave in the separate case involving Robert Farah, who was alleged to have committed a doping control offence due to the presence of Boldenone and its metabolites in a urine sample collected on 17 October 2019.

58. We found that evidence both interesting and powerful. It allowed for the realistic possibility that meat entering the food chain might have been exposed to steroid injection[16] within a relatively short time before slaughter whereas, if what one might call expected/standard practice had been followed, the effect of the steroid could well have been dissipated had the administration been over 14 days before the meat entered the food chain.

59. Another veterinary expert who gave evidence to us was [redacted] a veterinarian from [redacted] Colombia[17], who is currently [redacted]. She [redacted] confirmed that meat produced in her region (relatively close to Bogotá) is routinely sold in the Bogotá market. She also says, and we accept, that farmers "*often ignore recommendations and regulations when using such products*"[18].

60. The presence of Boldenone particularly in Colombia's beef was confirmed by a Statement from the Colombian Olympic Committee, issued before these proceedings, stating that the Boldenone was "*sold freely in Colombia*" and "*frequently used in cattle*" so that it was found "*in one out of four samples of cattle residues*" [B/952].

61. TM also submitted evidence from Dr Daren Austin, an expert in Pharmacokinetics, whose evidence is at [B/1055-1079]. He also gave oral evidence and focussed on the likely effect of injections of Boldenone in the period 14 days or fewer before slaughter and on slaughter within 14 days of the last Nandrolone injection.

62. Dr Austin was a careful witness who recognised the limitations of the material with which he was working and who Professor Le Bizec (on behalf of the ITIA) has acknowledged conducts "*very good*" pharmacokinetic analyses.

63. We intend no disrespect to Dr Austin if we repeat that there are obvious limits to the value of his Pharmacokinetic analysis. We note, however, that in reaching his conclusion that

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[16] It is, we accept, very unlikely that an implant would be used that close to slaughter.
[17] We accept [redacted] evidence that her direct experience in that region is relevant to what one might find in meat in Bogotá itself.
[18] The contrary cannot be assumed – that is it cannot sensibly be assumed that farmers will act responsibly and only administer a product in accordance with whatever instructions may or may not be attached to it.

the Boldenone results were consistent with TM's consumption of meat during the breakfast of 6 April 2022, he took account of the highest meat Boldenone concentration reported in the study by Pérez[19]. He then went on to look at the Boldenone concentration in the more recent Montreal study conducted under the supervision of the ITIA expert, Professor Christiane Ayotte. That study revealed a Boldenone concentration in meat that was seven times greater[20] than any previous finding[21].

64. That demonstrates the dangers of drawing too firm of conclusions from these earlier scientific studies. One can look at a particular study and say that the concentration found in another later case is many more times higher than any that has been previously identified. But that does not mean that the later finding cannot be a genuine case of meat contamination indeed, as we observed immediately above, the most recent (Montreal) study has already revealed concentrations more than seven times higher than any previously identified.

65. The other evidence submitted on behalf of TM came from Professor Pascal Kintz [B/1157-1159]. Professor Kintz is a renowned expert in hair analysis and his evidence is not contradicted in the present case. What he says is that her results are "*inconsistent with repetitive consumption of Boldenone or Nandrolone*". That does not, of course, rule out the possibility that the person whose hair has provided this sort of result has engaged in micro-dosing and was unlucky enough to return a positive AAF on this single occasion, nor does it rule out the possibility of a single dose being taken. But it weighs in the balance of probability since, as is submitted on her behalf, a player would have to be a "*dopey doper*" to have behaved that way. It is therefore another point in the Player's favour, as is the fact that, in the case of TM, she has a clean doping record.

66. One further point is that TM tested positive for both Boldenone and Nandrolone. It is theoretically possible that she might have been deliberately taking two steroids and, of course, it is conceivable that Boldenone might be explicable as meat contamination whilst the Nandrolone was taken deliberately. But we think that is unlikely.

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[19] Which was 0.035mg/kg.
[20] The highest concentration reported by the Montreal laboratory was 263.5ng/kg – that is 0.263mg/kg. 0.263mg/kg divided by 0.035mg/kg = 7.53.
[21] He also said that he would not find it surprising if one result differed from another by a factor of 10.

G. The evidence on behalf of BG

67. BG also gave evidence and asserted that she had not, to her knowledge, taken any substance that she thought might contain Boldenone. In the written material supplied on her behalf, she explained that she arrived in Bogotá on 27 March 2022. She has set out in some detail the meals that she ate on 28 March 2022 (at [redacted]), at a dinner prepared for her and her colleagues on 29 March 2022, when she ate lasagne with Bolognese sauce, and the beef she ate at the country club venue on 31 March and at the restaurant at the Tournament itself on 4 and 5 April 2022.

68. In short, she says, and this is not contradicted, that she ate beef on seven different occasions at meals eaten within a few days of the Sample collection.

69. We are satisfied that the evidence provided in support of that contention confirms what she says about the amount of beef she had eaten and when.

70. In addition to relying on the material submitted on behalf of TM as supportive of her own case, BG called supportive evidence from Professor Kintz to the same effect [C/187-192].

71. She also relied on written and oral evidence from Professor Luiz Cláudio Cameron from the University of State of Rio de Janeiro, whose expertise is in mass spectrometry, protein biochemistry and he is Chair of the Department of Genetics and Molecular Biology. As we have said more than once, his opinion is necessarily dependent upon the quality of the information with which he has been provided, and that is, by definition, limited as to the quantity, concentrations and date of ingestion of potentially contaminated meat.

72. Nevertheless, everything that Professor Cameron had to say[22] is supportive of the proposition that the AAF in BG's case was consistent with the consumption of contaminated meat. Indeed, he concludes his report [C/195] by saying that:

[22] Particularly as regards the practical evidence of what Colombian farmers do as to when they may inject their animals, as to variations in injection sites and as to the use of meat which may come from at or close to the injection site and could well end up in mince (and Bolognese sauce).

> "*[…] according to my experience and analysis, the most probable cause of the appearance of this concentration of Boldenone and Boldenone M1 in the athlete's urine is the consumption of contaminated meat.*"

73. The ITIA also submitted that BG's ban for match-fixing, imposed on 9 December 2022 in respect of an offence committed in 2016 casts doubt on her credibility. It is a point, we accept, but not one that we consider weighs significantly in the balance. Indeed, it is argued on the other side that the fact that she admitted her fault in that case is supportive of the contention that she is a credible witness as well as giving her little reason to have contested this case given that she is serving a three-year ban imposed for that offence[23].

74. It is also relevant to note that BG also returned a negative test when her hair was submitted to Professor Kintz for analysis [C/187-192]. This is also a factor we take into account.

H. The ITIA Evidence

75. To counter the Players' contention that contaminated meat was probably the source of their AAF, the ITIA relied on two reports by Professor Ayotte dated respectively 27 June 2023 [A/21-31] and 7 September 2023 [A470-487].

76. Professor Ayotte's position is that the levels of urinary 19-NA in males and females can vary from 0.01ng/mL to 0.8ng/mL (the higher value of 0.8ng/mL occurred in females in the ovulation phase of the menstrual cycle) and the value of 15ng/mL, one of the highest values of endogenous 19-NA observed, occurred during the last trimester of pregnancy. Consequently, and based on extensive research over many years, the WADA working group determined that where the concentration of NA-19 is greater than 15ng/mL, it is consistent with an exogenous origin (and hence must be reported as an AAF).

77. Against that background, Professor Ayotte's view, as explained by the ITIA in their "*Response and Reply Submissions*" at A/432-433 is (and we quote, including the footnote references given in that submission):

[23] She will be banned until 8 December 2025.

"*13. First (and in summary), IRMS analyses carbon isotopic signatures, which enables a comparison between the nandrolone and its metabolites in an athlete's sample with known exogenous sources of nandrolone. Natural carbon isotopic signatures vary among individuals and in some cases (as is the case here) an individual's natural urinary steroid isotopic signature may be similar to that of the exogenous norsteroid, which produces a false negative.*[24] *Professor Ayotte explains that the IRMS analysis of Ms Moore's sample is consistent with her taking a norsteroid exogenous preparation described as 'pseudo-endogenous', meaning that it is exogenous and synthetic but has enriched δ13C values close to normal values derived from the diet of some populations. However, when 19-NA has a natural origin (endogenous) its isotopic signature does not differ from the other urinary steroids in the urine sample: in 14 negative samples tested in the Montreal laboratory the difference was 0.02 ± 0.45, which effectively means there was no difference*[25]*. By contrast, in Ms Moore's sample the difference was 3.0. The IRMS analysis is therefore consistent with Ms Moore ingesting an exogenous nandrolone preparation.*

14. Second, both Professors Ayotte and Le Bizec state[26] *that a concentration above 15 ng/mL is not consistent with an endogenous source (save in the limited examples of pregnancy or use of THNE).*[27] *Consequently, the assertion that 'the IRMS results must override the theory that any urine nandrolone concentration exceeding 15ng/mL is the result of exogenous nandrolone administration'*[28] *is scientifically flawed and unsupported by any evidence.*

15. In any event, Ms Moore's case the estimated concentration of nandrolone in Ms Moore's sample was not only just over the threshold of 15ng/mL: rather, it was more than seven times over the threshold for reporting an AAF. The exogenous origin can, therefore, not be in doubt."

78. Professor Ayotte gave oral evidence. It was put to her that on two previous occasions other tribunals had not accepted her evidence on similar issues. One of those cases was *Lawson*, to which we have already referred and where the finding speaks for itself. We note that in the second case[29] to which reference was made, the first instance decision was subject to appeal and so we say no more about it.

79. Despite reservations which may have been expressed by other tribunals, we prefer to approach Professor Ayotte's evidence with an open mind, making no assumptions against

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[24] Ayotte Report page 10.
[25] Ayotte 2 page 6.
[26] As further demonstrated by the provisions of TD2021NA, which reflect the views of the working group of scientists who were responsible for preparing it.
[27] Le Bizec Report §4.1.1; Professor Le Bizec states that 105 ng/mL "cannot be explained by simple endogenous production".
[28] TM submissions §5.10.
[29] [redacted].

her. We do comment, however, that the way in which she gave evidence was sub-optimal. Rather than answering the questions that were put directly to her, her style was to respond in the way in which a lecturer might engage in debate in the course of a seminar. At times, she strayed from what should have been the role of independent and dispassionate expert into that of an advocate.

80. In essence, we found that her evidence was of no particular assistance, and it is also fair comment that she is not entirely independent when offering opinion based on the analyses which she herself oversaw in the Montreal study[30].

81. The ITIA also called evidence from Professor Bruno Le Bizec, who was a more impressive witness, although he, too, tended to stray into advocacy when putting forward propositions about the likely behaviour of Colombian farmers in steroid administration. That is a subject of which much better direct evidence had been given from people with more immediate experience of the subject than he has.

82. Whilst it is true that Professor Le Bizec said that, if the Players did not consume meat from the injection site, then he thought it impossible that the AAFs would be caused by meat contamination (and that may be right) we do not accept his assessment of the possibility/ probability of consuming steak from the injection site as being only around 3%.

83. That is, in our view a misuse of statistical analysis for the reasons that Mr Seamer explained on behalf of TM. Professor Le Bizec may be right about what "*good veterinary practice*" involves, but he simply has no idea what Colombian farmers may, in fact, do or indeed how and where the injection site may enter the food system when that meat – other, perhaps, than in steak form – enters the food supply system, as it will do if (for example) it is minced and / or ends up in Bolognese sauce. Professor Le Bizec cannot even rule out the possibility, however remote this may be that an implant may have been placed even in the animal's ear[31] which could have ended up in the mincing machine.

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[30] We also recognise some of the limitations in that Montreal study which analysed meat that was muscle (not mince and anything other than the better cuts\) and which was uncooked (cooking may have the effect of increasing concentrations because the volume of the meat reduces with cooking),

[31] This is typically the area where an implant would be placed rather than into the animal's muscle. However, the possibility than an implant somehow ended up in meat sent for mincing cannot be eliminated and Dr Austin explained the effect if it were included [B/1075].

84. The short point is that we simply do not know what concentrations there may have been in the meat that these Players actually consumed though it can be considered, as regards mince and Bolognese sauce, that it is not at all unlikely that it would contain meat from a point on the animal close to the injection site. It is also material to note that the Montreal study looked at uncooked cuts of meat whereas the fact of meat being cooked would tend to increase the concentration of a contaminant and, of course, the normal injection site (around the neck or high shoulder) would be expected to be away from the area for prime cuts (such as the rump). This would be particularly relevant in the case of a player who – as we know was the case here – ate mince/Bolognese sauce which tends to be served as a cooked volume as opposed to a pre-cooked weight (as is the case for steak).

85. In considering the potential for the meat to have been contaminated by Boldenone and/ or Nandrolone, Ms Potts, on behalf of the ITIA, submitted a helpful paper in which she sought to tabulate the amounts of food that would have necessarily been eaten by TM on 5 and 6 April, and by BG on 5 April, in order to produce the AAFs identified. We reproduce that table here (with original footnotes below):

Meal	Quantity of Boldenone player needed to eat to cause B AAF based on DA report	Quantity of B from highest two concentrations in WADA Study[1]	Quantity of Nandrolone TM needed to eat to cause B AAF[2]
TM[3] breakfast 6.4.22 25g pork bacon 40-60g pork ham 80g beef	0.096-2.4 mg (based on Wu)[4] 0.0029 – 0.043 mg (based on Shanzer study)[5]	0.0429mg (highest) 0.0189mg (2nd highest) (assumes all 3 separate meats contaminated)	0.079 – 0.156 mg
TM dinner 5.4.22 240g beef	0.34-9.6 mg (based on Wu)[6] 0.29-1.9 mg (based on Shanzer)	0.0624mg (highest) 0.02756mg (2nd highest)	3.7 – 7.4 mg
BG dinner 5.4.22 2 burgers 180g[7]		0.0468mg (highest) 0.021mg (2nd highest)	NA

Results of WADA Study[8]
Highest concentration of 264 ng/mL = quantity of 0.065mg per 250 g or 0.026 mg per 100g
Second highest concentration of 115 ng/mL = quantity of 0.0287 mg per 250g or 0.01148 mg per 100g

[1] Ayotte 2 calculations [A15/478]
[2] Austin [B29/1061/21(c)]
[3] TM meal quantities from Austin [B29/1056/5d] for TM.
[4] Austin [B29/1069/58(d)]
[5] Austin [B29/1070/59(e)]
[6] Austin [B29/1070/60]
[7] BG submissions [1/11/4.5]
[8] Ayotte 2 calculations [A15/478]

86. In our view, the comparisons attempted between the levels found here and those found in the earlier studies do not advance the ITIA's case. Even if Professor Le Bizec is right to say (for example) that the meat TM ate at breakfast on 6 April 2022 would have to have been 1.5 times more contaminated than the meat in the Montreal study to cause her Boldenone result and Professor Ayotte is right to say that the amount of Nandrolone in the meat would need to have been 3 times higher than the highest in the Montreal study, we consider these are relatively insignificant variations.

87. Essentially, whilst it is the Player who has to pass the 50% probability barrier, none of these various theoretical improbabilities can simply be individually eliminated when deciding overall probability. To try and proceed as the ITIA here has done is, as Mr Seamer correctly observes, to confuse the assessment of probability *ex ante* with the assessment *ex post*.

88. It may well be the case, as we know from the Montreal study, that there were only 13 AAFs and one ATF found in the 1,502 urine samples that Montreal has tested since 2015. Nor do we ignore the fact that, as Professor Le Bizec observes, only 9 of the 201 samples in Professor Ayotte's Montreal study contain more than 1ng of Boldenone per gram of meat and only six of those samples showed a concentration greater than 5ng/g of meat. But even if it is right that the concentration of Boldenone in the meat here would need to be higher (or even much higher) than the highest concentration in the Montreal study[32], that does not mean that it cannot have happened. The science on this issue is far from settled.

89. Reverting to Ms Potts's tabulation, a similar point arises; it is another analysis which is only as good as the information upon which it depends. At the risk of (re)stating the obvious, we do not know how much meat was eaten by those individuals on those occasions. We do not know how fast these two Players metabolise any such material. Nor do we know whether any previous meals would have had any continuing (cumulative) effect on their systems (given the amount of meat they ate over several days prior to the test). If the meat was contaminated, we do not know how much came from the injection

[32] 263.5ng/g

site or close to it. Particularly, what we simply do not know is what may have been the concentrations of Boldenone or Nandrolone in any contaminated meat that they may have eaten.

I. Our conclusions on the issue of contamination

90. Standing back from all the evidence we have in this case, and without disregarding questions of the burden and standard of proof, there is, ultimately, a binary issue to resolve. Either both Players deliberately doped – as is the primary case of the ITIA, illustrated by the fact that Ms Potts put that to both Players at the beginning of her cross-examinations, or there is an innocent explanation. We prefer the latter.

91. We do not consider that the scientific evidence submitted on behalf of the ITIA rules out an innocent explanation, namely that the cause of the AAFs for both Players was that they ate contaminated meat. In our view, the probabilities either way are neither proved nor disproved by the scientific studies or by the expert evidence adduced.

92. Looking at matters in the holistic way in which we should, where the scientific evidence is but part of the overall picture and where we also decide what we make of the witnesses of fact who gave evidence, we summarise as follows.

    (a) First, scientific studies in this area demonstrate that this is an area where expertise is developing. That is perhaps demonstrated by the fact that the Montreal study comes up with a highest concentration that is 7.5 times the concentration previously identified. In short, there are obvious limitations to relatively small-scale studies and the conclusions that can be drawn from them in a field where scientific knowledge is developing.

    (b) Second, it is striking that 3 out of 21 of the players tested at this event tested positive for Boldenone (nearly 15%), whereas the general figure for positive tests in WADA's published data is, as we have said before, 0.03%.

(c) Third, all, three players have no other known link between themselves, other than that they were at the same Tournament and at least two of them and, very probably, the third (given that food was available to the tournament venue) ate at the same places, and have all tested positive for Boldenone (with the qualification that the third test may have had an endogenous cause).

(d) Fourth, both Players have gone as far as we think they reasonably could have done in establishing that Boldenone and Nandrolone were regularly used in Colombian meat production – frankly, it really does not matter whether the actual proportion is 25% more or less[33].

(e) Fifth, TM and BG both ate significant quantities of meat. No-one is able to say exactly how much or whether earlier consumption of meat which may have included a contaminant will necessarily have left any residual effect so that there is some sort of cumulative effect. We certainly do not know that cannot be so since excretion rates (however rapid) and individual metabolisms will vary.

(f) Sixth, we found both Players to be credible and to be supported by other evidence, including (in the case of TM) the evidence of her wife and other witnesses. In the case of both of them, the fact that they each have clean doping records and neither has tested positive before nor after this particular event is also relevant.

(g) In the case of BG, we recognise that some doubt is cast on her credibility by virtue of the fact that she has admitted a match-fixing charge which led to her being suspended for three years from 9 December 2022. On the other hand, as we have said, we bear in mind that there is mitigation put forward for how she came to be involved in that regrettable and discreditable form of cheating. We also acknowledge that she admitted her guilt there and, from a purely practical point of view, given that she is currently serving a three-year ban, there is some force in the argument that there would be little point in her going to all the trouble of denying her responsibility for an AAF if she truly had doped.

[33] Insofar as it is 25%, based on farmers reporting that they used Nandrolone or Boldenone, it is unlikely to be less than that.

93. One other point has caused us concern and it is that, even if it is our view that TM has established that the source of the Boldenone is likely to have been meat, the fact remains that her sample was contaminated with two steroids, the other being Nandrolone. In the end, we think that is neither a point for nor against her. For reasons we address further below, we think it appropriate to treat the issue of the two steroids found in TM's Sample in exactly the same way.

J. The issue about the validity of the AAF

94. As we observed earlier, a (essentially) technical issue has arisen as to the interpretation of the relevant regulation (TD2021NA) which is relevant to the validity of the analysis of TM's Sample for nandrolone. The argument advanced on TM's behalf is that Isotope-Ration Mass Spectometry (IRMS) analysis did not establish in her case that the 19-NA was not of exogenous origin by reference to TD2021NA and the flowchart Annex A thereof.

95. This is not so much a matter for expert opinion as it is for legal submissions. TM's contention, put very simply, is that an AAF should not have been reported for Nandrolone in this case on the basis that "*once an IRMS analysis is performed which does not establish the nor-steroid as being of exogenous origin, an AAF cannot be reported*".

96. We consider that TD2021NA provides two distinct bases for reporting an AAF for 19-Norsteroid. The first is when the concentration is estimated to be above 15ng/mL. The second is when the level of 19-Norsteroid is estimated to be less than or equal to 15ng/mL and the GC/C/IRMS results are consistent with an exogenous source[34].

97. In support of his submission that the IRMS analysis here did not establish that the 19-NA was of exogenous origin, Mr Seamer argued that whilst the sample here contained more than 15ng/mL of 19-NA, nevertheless once a GC/C/IRMS analysis has been performed and it has been concluded (as was the case here) that the 19-NA/ 19-NE ration is less than or equal to 3, then a negative finding should have been reported.

[34] See Section 4.3 of TD2021NA.

98. Given our findings on the central issue, which is whether or not the Players have demonstrated that the likely source of their AAFs is contaminated meat, this point becomes academic, and we would prefer to leave this issue to be debated further elsewhere if necessary. However, if it were necessary for us to resolve the point, we would probably find in favour of the ITIA's analysis on the basis that, whilst we accept that ambiguities in regulatory provisions should be construed *contra proferentem*, that is not the same thing as saying that there is any real ambiguity in the construction of the provision.

99. In short, whilst we make no formal finding to this effect, and only if it were necessary to decide this point, we would favour the ITIA's argument[35] to the effect that TD2021NA provides two distinct bases for reporting an AAF, namely where the concentration of above 15ng/ml or if the level of 19-Norsteroids is less than or equal to 15 ng/ml and GC/C/IRMS results are consistent with an exogenous source[36].

K. Boldenone and Nandrolone in TM's sample

100. As we have already explained, the ITA also submits that, even if the Boldenone result can be attributed to contaminated meat eaten by TM, that does not mean that there is probably an equally innocent explanation for the presence of Nandrolone in the sample.

101. We do not think that necessarily follows. There is no doubt that Nandrolone (as well as Boldenone) is also used in Colombian meat production[37]. In considering this hypothesis, we have already found that some of the meat she ate was contaminated in substantial quantities by Boldenone. As we have said, it therefore seems to us to be reasonable to assume in her favour that the meat came from a Colombian farmer or farmers who administered one steroid and it is no great leap of logic to accept they probably used another (Nandrolone) as well, given the other evidence summarised above and the uncertainties which we have identified in the process of deciding how much contamination would be required of how much meat TM must have eaten and when. Whether the

[35] As explained in paragraphs 16 to 19 of its "*Response and Reply*" at A/434.
[36] See Section 4.3 of TD2021NA cited in the ITIA's Reply submissions at para 9 [A/431].
[37] See para 6.8 of the Reply submissions of TM [B/1132]. This was confirmed by [redacted].

Boldenone and Nandrolone were both in the same or different pieces of meat (minced or otherwise) we cannot know.

102. This issue does, however, offer another illustration of how much caution must be exercised when comparing *ex ante* with *ex post* probability. Ms Potts argues (based on Professor Le Bizec's evidence) that "*probability of consuming the injection site from two different pieces of meat would be 0.0009%"* the based on the 3% x 3% risk he gave of eating meat from a single injection site. Even if the 3% figure were reliable – and we consider it is not – that is an *ex ante* calculation which replicates the error of approach identified in the well-known criminal case of R v Clark [2003] EWCA Crim 1020.

L. No Fault or Negligence

103. Insofar as the ITIA sought to argue that, even if the AAFs were the result of eating contaminated meat, the Players should still be held to have been at Fault to some (or even to a considerable) extent, we disagree. Indeed, we observe that it does not lie very comfortably with the ITIA to argue so forcefully, on the one hand, that meat contamination is a very unlikely explanation for these AAFs, whilst, on the other hand, arguing that the Players should have known that there was a risk of that very contamination which the ITIA has argued very probably did not happen.

104. The short answer, in our view, is that there is no basis for saying that the risks should have been known by these tennis Players. There is no reason why they should have been familiar with the European Commission Report published in 2011, and / or the Statement issued by the Colombian Olympic Committee in 2018 and / or with the Decision in the case of the (admittedly well-known) grand slam winning player, Robert Farah.

105. In the context of that last point, it was put to TM that she should have been aware of the issue with Mr Farah because it must have been common knowledge amongst the tennis community. There is no sound basis for thinking that that must be the case and we accept the evidence of both Players that they were unaware of the risk – at least not of eating meat in Colombia[38] – and we note that the tennis authorities had not issued any warnings

[38] TM said she was aware of some risk from eating meat in Mexico.

about the risks from eating contaminated meat at the time. Indeed, the ITIA did not issue any warning about eating Colombian meat until October 2022 [C/181-3].

106. We add that, given we were told that the restaurant [redacted] was actually recommended by the Tournament Director and that several of the meals were consumed at the Tournament venue, it is perhaps a rather better point to say that the Players ate food at a place which they had every reason to expect that it was safe to do so.

M. Conclusions

107. In those circumstances we conclude that:

(a) It is probable that both Players returned AAFs because they consumed contaminated meat and so that neither TM (in the case of both Boldenone and Nandrolone) or BG (in the case of Boldenone) intended to dope by the consumption of such steroids.

(b) Neither of them bears any Fault or Negligence for their ADRV.

(c) We accept that neither will have obtained any performance enhancing benefit from their exposure to those substances; and

(d) It would therefore be wrong to disqualify any of the results which were obtained between 7 April 2022 and the dates of their suspension[39].

108. Article 7.4 of the Rules which states that "*Where the Independent Tribunal finds that an argument advanced by a party was frivolous or otherwise entirely without merit, the Independent Tribunal may award costs against that party. Otherwise, however, each of the parties will bear its own costs (legal, expert, and otherwise), and the ITF will bear the*

[39] Here, Article 10.10 of the TADP applies. That provides: "*Unless fairness requires otherwise, in addition to the Disqualification of results under Articles 9.1 and 10.1, any other results obtained by the Player in Competitions taking place in the period starting on the date the Sample in question was collected or other Anti-Doping Rule Violation occurred and ending on the commencement of any Provisional Suspension or Ineligibility period, will be Disqualified, with all of the resulting consequences, including forfeiture of any medals, titles, ranking points and Prize Money).*"

costs of convening the Independent Tribunal". Neither party raised the question of costs which they may or may not wish to do in the light of the Panel's decision. If any such matter is raised, it can be determined on the papers in due course.

N. Right of Appeal

109. This decision may be appealed to the Court of Arbitration for Sport ("CAS"), located at Palais de Beaulieu Av. des Bergières 10, CH-1004 Lausanne, Switzerland (procedures@tas-cas.org), in accordance with Article 13 of the TADP.

110. Article 13.8.1.1 of the TADP sets the deadline for the parties to file an appeal to the CAS, which is 21 days from the date of receipt of this final decision.

William Norris KC (Chair)

Professor Dorian Haskard

Ms Abigail Gauci

London, England
22 December 2023