WORLD TRIATHLON (TRI)

ELIGIBILITY REGULATIONS FOR TRANSGENDER ATHLETES
(In force from 1 January, 2025)

Approved by the Executive Board on 18 September 2024.

General Information

The World Triathlon (TRI) Regulations for Transgender Athletes Participation (these Regulations) will come into effect on 1 January 2025.

In the case of general queries regarding these Regulations, please contact the TRI Sport Department.
Email: sport@triathlon.org

In the case of confidential queries regarding the application of these Regulations, please contact the TRI Inclusion Officer.
Email: inclusion@triathlon.org

1. Definitions

1.1. The words and phrases used in these Regulations that are defined terms (denoted by initial capital letters) shall have the meanings specified in the Constitution, or (in respect of the following words and phrases) the following meanings:

a. **"Cisgender"** A person whose gender identity corresponds to their sex assigned at birth, i.e., someone who is not transgender.

b. **"Cisgender man"** (herein after "cis man") is a person who was assigned male at birth and identifies as male.

c. **"Cisgender woman"** (herein after "cis woman") is a person who was assigned female at birth and identifies as female.

d. **"Competition Rules"** means the rules of competition of TRI, as amended from time to time.

e. **"International Elite Competition(s)"** means the Elite, U23, Junior, Youth and Para Triathlon competitions in the TRI and Continental Triathlon calendars.

f. **"Expert Panel"** means a panel of independent experts in the fields of medicine, law and human rights with appropriate knowledge and expertise, appointed by TRI to perform the functions set out in these Regulations (see Appendix 3).

g. **"Gender Identity"** means an individual's self-perceived gender. This may be different to the individual's sexual anatomy, chromosomal, gonadal or hormonal sex, gender role or assigned sex at birth.

h. **"Inclusion Officer** " means the person (s) within TRI to act on its behalf in matters arising under these Regulations.

i. **"Regulations"** means the TRI Regulations for Transgender Athletes Participation, as amended from time to time.

j. **"Transgender"** has the meaning given to that term in clause 2.1.

k. **"Transgender Female Eligibility Conditions"** has the meaning given to that term in clause 4.2.

2. Introduction

2.1. The term 'Transgender' is used in these Regulations to refer to individuals whose gender identity (i.e. how they identify) is different from the sex assigned to them at birth, whether they are pre- or post-puberty, and whether or not they have undergone any form of medical intervention.

2.2. This document relates to the participation in the International Elite Competitions. For information regarding the participation of the Age-Group athletes, please refer to Appendix 2.

2.3. TRI, as the International Federation responsible for the global governance and regulation of the sport of Triathlon, has adopted these Regulations in order to facilitate the participation of Transgender athletes at the international elite level of the sport in the category of competition that is consistent with their gender identity, in accordance with the following imperatives:

a. TRI establishes conditions for participation in the sport of Triathlon, including eligibility categories, that (a) protect the health and safety of participants; and (b) guarantee fair and meaningful competition that displays and rewards the fundamental values and meaning of the sport:

i. TRI wants its athletes to be incentivised to make the huge commitments required to excel in the sport, and so to inspire new generations to join the sport and aspire to the same excellence. It does not want to risk discouraging those aspirations by permitting competition that is not fair and meaningful.

ii. Most relevantly for present purposes, because of the significant advantages in size, strength and power enjoyed (on average) by Athletes Assigned Male at birth *(AMAB)* over Athletes Assigned Female at Birth *(AFAB)* from puberty onwards, due in large part to much higher levels of androgenic hormones and the impact that such advantages can have on sporting performance, it is necessary to have separate competition categories for males and females in order to preserve the safety, fairness and integrity of the sport, for the benefit of all of its participants and stakeholders.

b. TRI aims to be as inclusive as possible, to provide a clear path to participation in the sport for all:

i. TRI recognises that Transgender athletes may wish to compete in Triathlon in accordance with their gender identity. TRI wishes to encourage and facilitate such participation, on conditions that go only so far as is necessary to protect the safety of all participants and to deliver on the promise of fair and meaningful competition offered by the division of the sport into male and female categories of competition.

ii. The eligibility conditions established in these Regulations are driven solely by the desire to guarantee fairness and safety within the sport.

In no way are they intended as any kind of judgement on or questioning of the gender identity or the dignity of any Transgender athlete.

2.4. The need to respect and preserve the dignity and privacy of Transgender athletes, and to avoid improper discrimination and stigmatisation on grounds of gender identity, is paramount. The application of these Regulations must be handled and resolved in a fair, consistent and confidential manner, recognising the sensitive nature of such matters. TRI has revised these Regulations with reference to the most current medical, scientific and legal writings and expert opinions to achieve the imperatives identified above, which include::

a. The IOC Consensus Meeting on Sex Reassignment and Hyperandrogenism (2015)[1]

b. IOC Framework on Fairness, Inclusion And Non Discrimination Based On Gender Identity and Sex Variations (2021)

c. Integrating Transwomen and Female Athletes with Differences of Sex Development (DSD) into Elite Competition : the FIMS Consensus Statement Sport Medicine (2021)

d. Joint position statement of the International Federation of Sport Medicine (FIMS) and European Federation of Sport Medicine Association (EFSMA) on the IOC framework on fairness, inclusion and non-discrimination based on gender identity and sex variations BMJ Open Sp Ex Med 2022

e. Integrating transwomen athletes into elite competition: the case of elite archery and shooting Eur. J. of Sport Science 6/2021

f. The current knowledge on effects of gender-affirming treatment on markers of performance in transgender female cyclists. Xavier Bigard, June 2022.UCI documents.

g. The Impact of gender affirming hormone therapy on physical performance. Cheung A et al.J.Clin Endocrinol Metab 2023,00,1-11

h. World Athletics Eligibility Regulations for Transgender athletes. October 2019. WA documents.

i. The strength, power, and aerobic capacity of transgender athletes : a cross sectional study. Hamilton BR et al. Be J Sports Med 2024,0:1-12

j. Transsexuals and competitive sports. Gooren LJG et al. Eur J of Endocrinol.2004, 151(4):425-429

k. Cardiopulmonary capacity and muscle strength in transgender women on long -term gender-affirming hormone therapy : a cross sectional study.Alvares LAM et al Br J Sports Med 2022,56(22):1292-1298

l. How does hormone transition in transgender women change body

[1] See https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/IOC/Who-We-Are/Commissions/Medical-and-Scientific-Commission/EN-IOC-Consensus-Meeting-on-Sex-Reassignment-and-Hyperandrogenism.pdf

composition, muscle strength and haemoglobin ? Systematic review with a focus on the implication for sport participation. Harper et al, Br J Sport med.2021,55815):865-872

m. The subsequent discussions and exchanges between the TRI Executive Board and medical experts, sports physicians, legal counsel, human rights experts and transgender athlete participation working group (TAPP) representatives.

2.5. These Regulations will come into effect on 1 January 2025. They are binding on and must be complied with by athletes. These Regulations will be subject to annual review by the TRI Executive Board to take account of any relevant scientific, medical or legal developments and may be amended from time to time by TRI, with such amendments to take effect from the date specified by TRI when it issues the amendments.

2.6. Since the Regulations are intended to operate globally, regulating the conditions for participation in international elite level events, they are to be interpreted and applied not by reference to national or local laws, but rather as an independent and autonomous text, and in a manner that protects and advances the imperatives identified above.

2.7. In the event an issue arises that is not foreseen in these Regulations, it will be addressed by TRI in a manner that protects and promotes the imperatives identified above.

3. Application

3.1. These Regulations establish the conditions enabling Transgender athletes to compete in International Elite Competitions, in the category that is consistent with their gender identity. Further guidance on certain medical aspects can be found in Appendix 1.

3.2. A Transgender athlete who wishes to participate in an International Elite Competition, agrees, as a condition to such participation:

a. To comply in full with these Regulations and to complete the form set out in Appendix 4;

b. To participate in the TRI academic research programme described in clause 6 below;

c. To cooperate promptly and in good faith with the Inclusion Officer, the selected Universities and the Expert Panel in the discharge of their respective responsibilities under these Regulations, including providing them with all of the information and evidence they request to assess their compliance and/or monitor his/her continuing compliance with the eligibility conditions referred to in these Regulations;

d. To the fullest extent permitted and required under applicable data protection laws to the collection, processing, disclosure and use of information (including his/her sensitive personal information) as required to implement and apply these Regulations effectively and efficiently;

e. To follow exclusively the procedures set out in clause 8 to challenge these Regulations and/or to appeal decisions made under these Regulations, and the TRI Constitution.

3.3. An athlete may revoke at any time, with or without giving reasons, the consent that they/them has granted in accordance with clause 3.2. In that event, the athlete will be deemed to have withdrawn any claim to satisfy the eligibility conditions for Transgender athletes set out in clause 4.

3.4. Every person and entity under the jurisdiction of TRI (including any person who brings him/herself within the jurisdiction of TRI by providing information to TRI pursuant to clause 5 of these Regulations):

a. Is bound by and must comply in full with these Regulations, including in particular only providing accurate and complete information, and not providing any information in bad faith or for any improper purpose; and

b. Must cooperate promptly and in good faith with the Inclusion Officer, the selected Universities and the Expert Panel in the discharge of their respective responsibilities under these Regulations.

4. Eligibility Conditions for Transgender Athletes

4.1. Those who transition from AFAB to Male (Transgender Male) are eligible to compete in the Male category under the following conditions:

a. The athlete must provide a written and signed declaration that his gender identity is Male and he wishes to participate in the male category of competition.

b. Athletes are eligible to compete in the Male category without restriction (although athletes subject to doping control must still comply with applicable anti-doping rules, including any requirement to obtain a Therapeutic Use Exemption (TUE) for the use of a substance on the WADA Prohibited List, such as testosterone (WADA TUE Physician Guidelines for Transgender Athletes)).

c. To ensure that certification is received in good time, the athlete should provide the declaration to the Inclusion Officer at least six weeks in advance of the first International Competition in which he wishes to participate in the male category of competition.

4.2. Those who transition from AMAB to Female (Transgender Female) are eligible to compete in the Female category under the following conditions:

a. Written declaration of gender identity and intention to participate in the female elite category as indicated in Appendix 4.

b. Participation in the TRI Academic Research Program from year 2 going forward.

c. Eligibility criteria of testosterone below 2.5nmol/L for 3 years while competing

in the Open Category of TRI Age-Group races.

i. **Year 1**: own testosterone monitoring and submit results to TRI. Participation in at least 2 Age-Group competitions in the TRI calendar in Open Category.

ii. **Year 2 and Year 3**: own and TRI testosterone monitoring to provide TRI with the opportunity to verify data. Monitoring of testosterone, as well as physiological, mechanical and performance bio-markers by TRI may be both in and out of competition. Participation in at least 3 Age-Group competitions in the TRI calendar in Open Category**.**

iii. **Year 4:** compete in Elite category – on a separate basis i.e. separate results (overall, and cis women only). Prize money will be paid according to both overall and cis women results, one athlete can be eligible for only one prize money from the same event. The TRI Ranking points will be allocated via the cis women results. Monitoring and reporting of testosterone levels as well as physiological, mechanical and performance bio-markers remains on-going. The athlete must compete in at least 3 TRI races.

d. Those who transition from AMAB to Female (Transgender Female) are eligible to compete in the Female Para Triathlon category under the same conditions as set-out in 4.2 b. and 4.2 c. above, except that in the first three years of the eligibility pathway (4.2 b.) racing must be in the elite male category, as there are no TRI Para Triathlon Age-Group races.

4.3. For the avoidance of doubt, no athlete will be forced to undergo any medical assessment and/or treatment. It is the athlete's responsibility, in close consultation with his/her medical team, to decide on the advisability of proceeding with any assessment and/or treatment.

4.4. For the further avoidance of doubt, the following are not required:

a. Legal recognition of the athlete's gender identity as the athlete's sex; or

b. Surgical anatomical changes.

4.5. Once a Transgender athlete has satisfied the relevant eligibility requirements and has started participating in International Elite Competitions in the category of competition consistent with their gender identity, they may not then switch back to participating in the other gender category in International Competitions unless and until they satisfy all of the conditions for eligibility to compete in the other gender category.

4.6. For the avoidance of doubt, the eligibility conditions for Transgender athletes set out in this clause 4 operate without prejudice to the other eligibility requirements that are applicable to all athletes (Transgender or otherwise) under the Rules of TRI, which must also be satisfied at all relevant times. In particular, nothing in these Regulations is intended to undermine or affect in any way any of the requirements of the World Anti-Doping Code, of the WADA International Standards (including the International Standard for Therapeutic Use Exemptions), or of the TRI Anti- Doping Rules. Nothing in these Regulations permits, excuses or justifies non- compliance

with any of those requirements, including any requirement for an athlete to obtain a Therapeutic Use Exemption for the use of substances on the WADA Prohibited List, such as testosterone, spironolactone, or GnRH agonists[2].[3]

5. Assessment by the Expert Panel

5.1. A Transgender female athlete who wishes to compete in the female category of an International Elite Competition must file a declaration as set out in Appendix 4 with the Inclusion Officer, along with a comprehensive medical history and such other evidence as is required to strengthen the application. The athlete is responsible for ensuring that the information provided is accurate and complete, and that nothing relevant to the Expert Panel's assessment of the case is withheld. The athlete must also provide the appropriate consents and waivers to enable her physician(s) to disclose to the Inclusion Officer and the Expert Panel any information that the Expert Panel deems necessary to its assessment.

5.2. Subject always to clause 5.6 of these Regulations, to ensure that certification is received in good time, the athlete should provide the declaration to the Inclusion Officer at least six weeks in advance of the first International Age-Group Open Competition in which she wishes to participate to mark the start of her 4-year eligibility period.

5.3. The Inclusion Officer will receive and review the submission and, after communicating with the athlete and/or the athlete's physician to address any queries, will refer the file to the Expert Panel for assessment in accordance with the following provisions of this clause 5.

5.4. The Expert Panel will assess cases referred to it by the Inclusion Officer to determine whether the Transgender Female Eligibility Conditions have been met (or, if not, then what else the athlete must do to satisfy those conditions). It may make such enquiries or investigations as it considers necessary to carry out the required assessment effectively, including requesting further information from the athlete or the athlete's physician(s) and/or obtaining additional expert opinion(s).

5.5. In making its assessment, which will be based on the guidance set out in Appendix 1 to these Regulations, the Expert Panel will take into consider all relevant and reliable evidence, including:

a. Any reassignment surgeries the athlete has undertaken, including the date(s) of any such procedures and whether they took place before or after

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[2] For purposes of these Regulations, all measurements of serum testosterone must be conducted by means of liquid chromatography coupled with mass spectrometry. The level of testosterone circulating in cis women for the 95% confidence interval is 0,12-1,79 nmol/L (Handelsman et al, Circulating Testosterone as the Hormonal Basis of Sex Differences in Athletic Performance, Endocrine Reviews 2018, October 1;39 (5): 803-829; Bermon et al, Serum androgen level in elite female athletes,J Clin Endocrin Metab, 2014,99 (11): 4328-4335) . Considering the 99,99% confidence interval the highest value of serum testosterone is 2.44 nmol/L, therefore the maximum serum testosterone concentration required is 2,5 nmol/L. The decision limit also takes into consideration that, for clinical purposes, the Endocrine Society Clinical Practice Guideline for Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons recommends that transgender females should have serum testosterone levels of less than 50 ng/dL (i.e. approximately 1.7 nmol/L) (Hembree et al, Endocrine Treatment of Gender-Dysphoric/Gender- Incongruent Persons: An Endocrine Society Clinical Practice Guideline, J Clin Endocrinol Metab, November 2017, 102(11):1–35. doi: 10.1210/jc.2017-01658).

[3] See, further the WADA Transgender Athletes TUE Physician Guidelines, available at www.wada- ama.org.

puberty;

b. Any other relevant treatment the athlete has received (including any pre- or post gender affirming treatment), including the dosage and frequency of such treatment;

c. The levels of testosterone in the athlete's serum during the relevant 24-month period, as well as the current level of testosterone in the athlete's serum; and

d. The results of any pre- or post-gender affirming monitoring.

5.6. If the Expert Panel has any concerns about the adequacy of the evidence provided by the athlete on any particular point, it must give the athlete a fair opportunity to try to address those concerns before it comes to its final decision.

5.7. The Expert Panel will complete its assessment as soon as is reasonably practicable in all of the circumstances of the case. However, in no circumstance will TRI or any member of the Expert Panel be liable for any detriment allegedly suffered by the athlete or anyone else as a result of the length of time taken by the Expert Panel to complete its assessment.

5.8. Once it has completed its assessment, the Expert Panel will send its decision in writing to the Inclusion Officer.

a. If the Expert Panel decides that the Transgender Female Eligibility Conditions have not (yet) been met, it must explain in writing the reasons for its decision. Where applicable, it should also specify what else the athlete may do in order to satisfy those conditions (including, for example, maintaining the concentration of testosterone in her serum at less than 2.5 nmol/L for a longer period; monitoring; reporting; and further reviews).

b. If the Expert Panel decides that the Transgender Female Eligibility Conditions have been met, the Inclusion Officer will issue a written certification of that athlete's eligibility to compete in the female category of competition in International Elite Competition. That eligibility will be subject in every case to the athlete's continuing satisfaction of the Transgender Female Eligibility Conditions, including continuously maintaining her serum testosterone at a concentration of less than 2.5 nmol/L. The Expert Panel may specify particular means of demonstrating such continuing compliance. In any event, the athlete must produce, on request, evidence satisfactory to the Inclusion Officer of such continuing compliance.

5.9. The Expert Panel's decision will be binding on all parties. It may only be challenged by way of appeal in accordance with clause 8.

6. Academic Research Program

6.1. In order to further academic research in relation to the in-field performance of elite transgender athletes, TRI will identify universities with whom to collaborate over a 5 year period in the design and implementation of such research (TRI Academic Research Program). The research will include, inter alia, physiological, mechanical and performance bio-markers. Athletes of all genders (cis man, cis woman, tansgender male and transender female) will be invited to participate.

7. Monitoring / Investigating Compliance

7.1. The Expert Panel may monitor an athlete's compliance with the Transgender Female Eligibility Conditions at any time, with or without notice, whether by random or targeted testing of the athlete's serum testosterone levels or by any other appropriate means.

7.2. In addition to the general power to monitor continuing compliance with the Transgender Female Eligibility Conditions, the Expert Panel may investigate, at any time:

a. Whether an athlete who has not filed a declaration under these Regulations is a Transgender athlete who needs to establish his/her eligibility to compete in a particular competition category in accordance with these Regulations;

b. Whether (because of a subsequent change in circumstances, subsequent learning or experience, or otherwise) it is necessary to require a Transgender athlete who has previously been determined to satisfy the Transgender Female Eligibility Conditions to undergo further assessment by the Expert Panel to determine whether she still satisfies those conditions; and/or

c. Any circumstances that indicate potential non-compliance with these Regulations;

And in such cases, the athlete in question must cooperate fully and in good faith with that investigation, including by providing blood samples and/or results upon request. Where necessary to safeguard the fairness and/or integrity of competition and/or the safety of the competitors, the Expert Panel (acting on behalf of TRI) may provisionally suspend the athlete from competing in International Elite Competition pending resolution of the matter, provided that in such cases all reasonable endeavours should be used to complete the investigation as expeditiously as possible.

7.3. Expert Panel may initiate an investigation under clause 5.1, and they should only do so in good faith and on reasonable grounds based on information derived from reliable sources, such as (for example) information from the affected athlete himself/herself, the National Federation to which the affected athlete is affiliated, results from a routine pre-participation health examination.

7.4. The dignity of every individual will be respected. All forms of abuse and/or harassment are prohibited. In particular (but without limitation):

a. Any person or entity (including, without limitation, any other athlete, official or National Federation) that provides information to the Inclusion Officer for consideration under these Regulations is under a strict obligation:

i. To ensure that the information is accurate and complete;

ii. Not to provide any information in bad faith, to harass, stigmatise or otherwise injure an athlete, or for any other improper purpose.

b. No stigmatisation or improper discrimination on grounds of gender identity

will be tolerated. In particular (but without limitation), persecution or campaigns against athletes simply on the basis that their appearance does not conform to gender stereotypes are unacceptable.

7.5. Where the Expert Panel determines that a Transgender Female athlete who has previously been declared eligible to compete in the female category of competition in International Elite Competition has failed to maintain her serum testosterone level at a concentration of less than 2.5 nmol/L, she may not compete in the female category of competition in any Elite Competition until such time as she demonstrates to the satisfaction of the Expert Panel that she has met the requirements as set-out in Section 4/B above.

7.6. If it is determined at any time that a Transgender Female athlete has competed in the female category of competition at an International Elite Competition while having serum testosterone levels of 2.5 nmol/L or more, then (without prejudice to any other action that may be taken, but subject to clause 5.6) the Inclusion Officer, may in consultation with the Expert Panel refer the case to the TRI Tribunal.

7.7. In cases arising under clause 5, the athlete will be given an opportunity to provide any explanations or comments she sees fit before any action is taken. If the Inclusion Officer (following consultation with the chair of the Expert Panel, if necessary) is satisfied that the athlete's failure to maintain her circulating levels of blood testosterone below 2.5 nmol/L was temporary and inadvertent, the Inclusion Officer will not impose any period of ineligibility or disqualify any results pursuant to clause 5.

8. Appeals

8.1. A decision by the Expert Panel can be appealed at the TRI Tribunal. The Tribunal Panel will be assisted by a medical advisor from the TRI Medical Committee.

9. Confidentiality

9.1. All cases arising under these Regulations, and in particular all athlete information provided to TRI under these Regulations, and all results of examinations and assessments conducted under these Regulations, will be dealt with in strict confidence at all times. All medical information and data relating to an athlete will be treated as sensitive personal information and the Inclusion Officer will ensure at all times that it is processed as such in accordance with applicable data protection and privacy laws. Such information will not be used for any purpose not contemplated in these Regulations and will not be disclosed to any third party save:

a. as is strictly necessary for the effective application and enforcement of these Regulations; or
b. as is required by law.

9.2. TRI will not comment publicly on the specific facts of a pending case (as opposed to general descriptions of the process and science involved) except in response to public comments attributed to the athlete or the athlete's representatives.

9.3. Each member of the Expert Panel must sign an appropriate conflict of interest declaration and confidentiality undertaking in relation to his/her work as a member of the panel.

10. Costs

10.1. The costs of any medical assessment, examination, treatment, monitoring, reporting, and any other costs involved in complying with the Regulations will be borne by the relevant athlete.

11. Mutual Recognition

11.1. Where a Transgender athlete from another sport wishes to participate in the sport of Triathlon, TRI may elect to recognise and give effect to the eligibility decision of the international federation of the other sport with respect to that athlete, provided that it is consistent with the principles set out in these Regulations, and subject to ongoing compliance by the athlete with the requirements of these Regulations.

12. Limitation of Liability

12.1. In no circumstances will TRI, any member of the Expert Panel, or any of TRI staff, officers, agents, representatives and other persons involved in the administration of these Regulations be liable in any way in relation to acts done or omitted to be done in good faith in connection with the administration of these Regulations.

APPENDIX 1: MEDICAL GUIDELINES

The application of these Regulations will necessarily be highly individualised and specific to the circumstances of the particular case. These medical guidelines are only intended to provide some general guidance on certain medical aspects of these Regulations, to assist with their application in practice. All information detailed in this Appendix 1 is based on existing literature applicable to such cases and TRI or any of its representatives cannot be liable in any way for any results obtained by the procedures adopted.

1. General Background Medical Information

1.1 Gender identity refers to an individual's self-perceived gender. This may be different to the individual's sexual anatomy, chromosomal, gonadal or hormonal sex, gender role or assigned sex at birth.

1.2 The World Health Organization (WHO) 11th edition of its International Classification of Diseases (ICD-11) defines the following:

- Gender Incongruence of Adolescence and Adulthood is characterized by a marked and persistent incongruence between an individual´s experienced gender and the assigned sex, which often leads to a desire to 'transition', in order to live and be accepted as a person of the experienced gender, through hormonal treatment, surgery or other health care services to make the individual´s body align, as much as desired and to the extent possible, with the experienced gender. The diagnosis cannot be assigned prior the onset of puberty. Gender variant behaviour and preferences alone are not a basis for assigning the diagnosis.

- Gender incongruence of childhood is characterised by a marked incongruence between an individual's experienced/expressed gender and the assigned sex in pre-pubertal children. It includes a strong desire to be a different gender than the assigned sex; a strong dislike on the child's part of his or her sexual anatomy or anticipated secondary sex characteristics and/or a strong desire for the primary and/or anticipated secondary sex characteristics that match the experienced gender; and make-believe or fantasy play, toys, games, or activities and playmates that are typical of the experienced gender rather than the assigned sex. The incongruence must have persisted for about 2 years. Gender variant behaviour and preferences alone are not a basis for assigning the diagnosis.

- Puberty blockers (GnRH analogs) are taken by trans people whose bodies are just about to undergo puberty and might be taken while making a decision about beginning or waiting to be allowed to begin hormonal affirmation. In most countries, access to GnRH analogs is challenging and costly. For those who are pre-pubertal, gender affirmation is only ever social. Masculinising and feminising hormones are only commenced after puberty would have, or did, occur.

- Transgender people share many of the same health needs as the general population, but may have other specialist health-care needs, such as gender-affirming hormone therapy and surgery. However, evidence suggests that transgender people often experience a disproportionately high burden of disease, including in the domains of mental, sexual and reproductive health.

Some transgender people seek medical or surgical transition, others do not.

- Gender-affirmative health care can include any single or combination of a number of social, psychological, behavioural or medical (including hormonal treatment or surgery) interventions designed to support and affirm an individual's gender identity.

1.3 Medical treatment. The mainstay of medical treatment is gender-affirming hormone therapy.

1.4 Gender-affirming hormone treatment of transgender individuals follows conventional hormone paradigms, with the same concerns and effects as are seen when using the same hormones for other purposes.

1.5 As referenced at clause 4.6 of these Regulations, it is also important for transgender athletes to consider whether any medical treatment sought requires them to obtain a Therapeutic Use Exemption for the use of a substance on the WADA Prohibited List (such as testosterone, spironolactone or GnRH agonists). Further information can be found in the WADA Transgender Athletes TUE Physician Guidelines, available at www.wada-ama.org.

Transgender male treatment strategy and typical regimens

1.6 Typically, Gender-affirming hormone treatment for transgender men consists of administration of testosterone to bring the serum testosterone level up from the female range (approximately < 1.79 nmol/L) to the male range (approximately 7.7 to 29.4 nmol/L). The doses required are similar to those used for treatment of hypogonadal males. Testosterone is administered parenterally (either intramuscularly or subcutaneously) or transdermally (via gel, solution or patch).

1.7 A typical testosterone regimen is as follows:

Parenteral

- Testosterone esters (enanthate, cypionate, mixed): 50 – 250 mg IM or SC every 1-3 weeks
- Testosterone undecanoate: 750 or 1000 mg every 8-12 or 10-14 weeks

Transdermal

- Testosterone gel, cream or solution: 50 – 100 mg/day
- Testosterone transdermal patch: 2.5 – 7.5 mg/day

1.8 Most transgender men who seek medical intervention will also want chest reconstruction surgery (mastectomy). However, most transgender men will not seek genital reconstruction surgeries (phalloplasty or metoidioplasty) because of the high rate of complications, the cost (in countries where it is not part of general healthcare), and the potential for multiple surgeries (Kailas et al, Endocr Pract. 2017; 23).

Transgender female treatment strategy and typical regimens

1.9 For transgender women, the strategy is to decrease serum testosterone levels from the male range to the female range (i.e., from around 7.7 to 29.4 nmol/L down to 0.12 to 1.79 nmol/L (95% two-sided confidence limit)).

1.10 For transgender women treated medically, the typical gender-affirming hormone treatment consists of oestrogen supplementation and an androgen-lowering or -blocking agent.

1.11 Multiple oestrogen options exist. The most popular are oral estradiol, transdermal estradiol, estradiol implants or injectable formulations of estradiol. Depending on the individual, doses may double to quadruple those typically given to postmenopausal women. The doses sometimes need to be higher still for individuals with testes present in order to achieve serum estradiol concentrations in the female range.

1.12 There are reports that the thrombogenicity of oestrogens can be mitigated if oral administration is avoided. Although the data are not conclusive, transdermal and injectable oestrogens are recommended in some countries. While transdermal estradiol is easy to monitor, injectable estradiol is more difficult to monitor than oral oestrogens. The strongest data regarding oestrogens relate to increased thrombogenicity with oral ethinyl estradiol specifically. Therefore, current guidelines discourage its use in favor of the other agents available.

1.13 Testosterone levels are often not adequately suppressed with estradiol alone, so many trans people AMAB require an additional antiandrogen medication to lower testosterone levels or block the effects of testosterone. Spironolactone and cyproterone acetate are two common options. Spironolactone may have diuresis side-effects and it's an androgen receptor blocker, blocking the effects of testosterone. Higher doses are used than are required for blood pressure control, with doses of approximately 200 mg/day not unusual and doses as high as 400 mg/day sometimes observed (in divided doses if needed for the patient to tolerate).

1.14 Another commonly used anti-androgen is cyproterone acetate, but this is not available in all countries. Cyproterone acetate is effective at lowering testosterone concentrations and blocking testosterone effects. Due to possible adverse effects of depression and a dose-dependent risk of meningioma and prolactinoma with treatment, the lowest effective dose is recommended (12.5mg oral twice weekly up to 50mg daily in some individuals).

1.15 A third anti-androgen is depot GnRH agonist therapy, used for transgender children following the regimens typical for precocious puberty. However, GnRH agonist therapy can be very effective in lowering serum testosterone levels for adult transgender women also. There are no long-term safety data for GnRH therapy in such patients. Its use is further limited by being substantially more expensive than either spironolactone or cyproterone acetate, as well as being administered parenterally, whereas the other two are administered orally.

1.16 Some transgender women may also use the androgen-blocking drug finasteride, a 5α- reductase inhibitor that (among other things) is intended to mitigate male-pattern baldness.

1.17 A typical regimen for transgender women is as follows:

Oestrogens

Transdermal

- Estradiol transdermal patch: 0.025 – 0.2 mg/day (new patch placed 1-2 times per week)
- Estradiol gel: 1 – 2 mg/day

Parenteral

- Estradiol valerate or cypionate: 2 – 30 mg IM every 1-2 weeks
- Polyestradiol phosphate: 80 mg every 3-4 weeks

Oral

- Estradiol: 2.0 – 8.0 mg/day
- Conjugated oestrogens: 2.5 – 10.0 mg/day

Testosterone lowering or blocking agents

- Spironolactone: 100 – 400 mg/day
- Cyproterone acetate: 25 – 50 mg/day
- GnRH agonist: 3.75 – 11.25 mg SC monthly (longer interval regimens are common too)
- Finasteride: 1 – 5 mg/day

Many transgender women will supplement medical treatment with gender-affirming surgeries such as (1) facial feminisation surgeries (especially sought by transgender women transitioning later in life after having been exposed to male androgen levels for a longer time period); (2) breast augmentation surgery; and (3) genital reconstruction surgery. Although society has tended to focus on genital surgery as the defining gender- affirming surgery, transgender individuals demonstrate great heterogeneity in surgical choices. Notably, less surgery may be sought than previously expected, and a higher priority than commonly appreciated may be placed on visible surgeries like facial feminisation procedures and breast augmentation rather than on genital surgeries (Kailas et al, Endocr Pract. 2017; 23).

Monitoring of medical treatment

Transgender male monitoring

The most significant risk of testosterone therapy is an increase in haematocrit (with a possible increased thrombosis risk). This risk is greatest with excessive testosterone dosage.

The typical monitoring regime includes indicated clinical assessment every 3 months when making changes to the regimen and then every 6-12 months thereafter. Usual monitoring includes measurement of serum testosterone (to determine success of therapy), haematocrit and monitoring of cardiovascular risk factors such as lipids and glucose.

Malignancy screening should be as per local recommendations for the general population and based on the presence of organs (i.e. cervix, prostate, breasts) and not on gender.

Transgender female monitoring

The most significant risk of oestrogen therapy is an increased thrombosis risk, which can lead to deep venous thromboses, pulmonary embolism, or stroke. There is an elevated risk of myocardial infarction, stroke and venous thromboembolism relative to cisgender men and cisgender women in the general population

Anti-androgen therapy has specific adverse effects depending on the drug. Spironolactone may have diuresis or blood pressure lowering side-effects. Potassium elevation is rare if renal function is normal. Cyproterone acetate has possible adverse effects of depression and a dose-dependent risk of meningioma and prolactinoma with treatment. The lowest effective dose should be used.

The typical monitoring regimen includes clinical assessment every 3 months when making changes to the regimen and then every 6-12 months thereafter. Usual monitoring includes measurement of serum testosterone, serum estradiol, haematocrit, renal function if on spironolactone and monitoring of cardiovascular risk factors such as lipids and glucose Malignancy screening should be as per local recommendations for the general population and based on the presence of organs (i.e. cervix, prostate, breasts) and not on gender. Note that even after vaginoplasty, the prostate remains insitu.

References

The following (non-exhaustive) references may be of interest:

- *Fung et al, Differential Effects of Cyproterone Acetate vs Spironolactone on Serum High-Density Lipoprotein and Prolactin Concentrations in the Hormonal Treatment of Transgender Women*, J Sex Med 2016; 13: 1765e1772.
- Hembree et al, *Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline*, J Clin Endocrinol Metab, November 2017, 102(11):1–35.
- Irwig, *Testosterone therapy for transgender men*, Lancet Diabetes Endocrinol. 2017; Apr;5(4):301-311.
- Kailas et al, *Prevalence And Types Of Gender-Affirming Surgery Among A Sample Of Transgender Endocrinology Patients Prior To State Expansion Of Insurance Coverage, Endocr Pract*. 2017; 23.
- Mamoojee, Yaasir et al, *Transgender hormone therapy: understanding international variation in practice*, The Lancet Diabetes & Endocrinology, Volume 5, Issue 4, p243-246, April 2017.
- Saraswat et al, *Evidence Supporting the Biologic Nature of Gender Identity*, Endocr Pract. 2015; 21: 199-204.
- World Professional Association for Transgender Health, *Standards of Care*, available at www.wpath.org.
- www.uptodate.com/contents/transgender-men-evaluation-and-management
- www.uptodate.com/contents/transgender-women-evaluation-and- management

2. Guidance On Monitoring Serum Testosterone Levels In Transgender Female Athletes For Eligibility Purposes

As discussed above, for transgender women there are a number of different treatment strategies to decrease serum testosterone from the male reference range to the female reference range. The typical clinical monitoring regime is detailed above.

For eligibility purposes, under the Regulations TRI may monitor an athlete's compliance with the Transgender Female Eligibility Conditions at any time, with or without notice, whether by random or targeted testing of the athlete's serum testosterone levels, or by any other appropriate means.

Monitoring programmes will necessarily be highly individualised and specific to the circumstances of the particular case and should be established with the support of an endocrinologist/gynaecologist or an hormone prescribing physician experienced in the field. Particular factors to consider might include:

- Whether the athlete is pre- or post-puberty.
- Whether the athlete has undergone orchidectomy.

The type of medical treatment used by the athlete. For example, an orchiectomised athlete may require only a limited amount of monitoring. Athletes using daily oestrogen medications (oral, transdermal) that have short-term testosterone suppressive effects may require unannounced testing from time to time (every month or every two months at the beginning and less in the next years if the athlete has show regular compliance), whereas depot estradiol implants require less surveillance due to their longer duration of action. Similarly, athletes using daily oral spironolactone or cyproterone acetate in the form of oral daily capsules will likely need to be monitored more closely (every month or every two months) than athletes using depot gonadotropin-releasing hormone (GnRH) agonists administered every 1-3 months (two/three times per year at the beginning).

The physiological demands of the sport and the likely performance-enhancing effect of testosterone.

Other information collected during the course of establishing and maintaining eligibility (for example, any evidence of medication non-compliance, previous loss of eligibility, or other risk factors).

In some cases, the laboratory data obtained from an athlete's routine clinical follow-up might provide an acceptable or sufficient level of monitoring. In other cases, additional monitoring may be required.

3. Guidance on The Method for Measuring Serum Testosterone Levels For Eligibility Purposes

For purposes of the Regulations, all measurements of serum testosterone levels must be conducted by means of liquid chromatography coupled with mass spectrometry (e.g. LC-MS/MS or LC-HRMS), which provides much better specificity than traditional immunoassay methods.

The method used must be validated by the laboratory carrying out the test and must also be accredited to the ISO/IEC-17025 or 15189 international standards by a recognised accreditation body that is a full member of the International Laboratory Accreditation Cooperation (ILAC). These requirements may be met by clinical laboratories as well as by WADA-accredited laboratories.

The method used must comply with assay performance criteria, including a measurement uncertainty (estimated during method validation at testosterone concentration levels close to the threshold of 2.5 nmol/L) of not more than 20%.

The performance of the method must be monitored through participation of the performing laboratory in appropriate proficiency testing (PT) and/or external quality assessment scheme (EQAS) round(s).

Serum samples should be collected using standardised sample collection procedures (for example, those used for anti-doping purposes). Such procedures might include the following:

It is recommended that samples are collected in the morning (as testosterone concentration in serum decreases during the day).

Venous blood should be collected, with the athlete remaining in a normal seated position with feet on the floor for at least ten minutes prior to providing the sample. Samples should not be collected within two hours of any physical exertion.

A collection tube containing a clotting agent and a gel separator should be used e.g. BD Vacutainer SST-II Advance (a single sample only will be sufficient, but TRI may decide to collect a reserve sample as well, at its discretion).

The sample should be transported to the laboratory in a refrigerated state. The sample should not be allowed to freeze, and temperature should preferably be maintained between 2-12°C (ideally around 4°C). A temperature data logger should be used to record the temperature of the sample during transport.

The sample should arrive at the laboratory within 48 hours of sample collection. The sample should be centrifuged as soon as possible on arrival and stored frozen if it cannot be analysed immediately.

APPENDIX 2: Eligibility conditions to compete in the Age-Group Female and in the Age-Group Open categories:

1. To be eligible to compete in the Female category of the Age-Group competitions, athletes have to be Assigned Female at Birth not transitioning to male.

2. There is no gender limitation to compete in the Open category of the Age-Group competitions.

3. Athletes must compete in the same category (Female or Open) throughout the whole calendar year.

APPENDIX 3: EXPERT PANEL

The Expert panel is appointed for four years, commencing 1 January 2025.
These Experts are Officials, and must comply with the Constitution of TRI.

Name	Area of Expertise (e.g. Endocrinology)

APPENDIX 4: PARTICIPANT DECLARATION

DECLARATION BY THE PARTICIPANT

As the participant I declare that:

- My gender identity is _____ and it is my intention to compete in the elite category of my gender identity as set out in these Regulations.
- I have read and understood these eligibility guidelines and regulations.
- I have had a chance to ask questions and all my questions have been answered.
- All issues related to privacy, and the confidentiality and the use of the information I provide, have been explained.
- I agree to abide by the requirements as set out in these Regulations.
- I provide a copy of the consent given to the treating physician(s) to disclose the relevant medical information to the Expert Panel.

Name of participant

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Signature of participant

_---------- Date----------