

PLASMA VOLUME MARKER QUANTIFICATION WORKING GROUP

Terms of Reference

The WADA Plasma Volume Marker Quantification Working Group (PV Quantification WG) is a specific Working Group¹ created by WADA Management.

These Terms of Reference (ToR) are approved by the WADA Director General, following consultation with the responsible Director in charge of the Group and the Chair of the WADA Laboratory Expert Advisory Group (Lab EAG).

Purpose

Plasma volume (PV) fluctuations have a significant impact on the interpretation of hematological Passports. A panel of PV markers has been developed and validated that can be used to correct for fluctuations in PV in the Athlete Biological Passport (ABP) and has been approved by the WADA Hematological ABP Working Group for implementation.

Based on a recommendation from the WADA Hematological ABP WG, the PV Quantification WG will provide recommendations for harmonization of the analytical strategy for the quantification of PV markers in WADA accredited Laboratories.

The original mandate of the PV Quantification WG was from February to December 2023. The mandate was subject to a first extension until December 2024, which was then extended further until December 2025. It will continue to deliver recommendations to WADA during this extended period. The necessary meeting timelines will be framed with this in mind.

There may be future work for this group, and it will be evaluated at the end of this current period.

Objectives/Key Activities

The PV Quantification WG will:

- 1) Identify possible analytical strategies for the harmonized and cost-effective quantification of PV markers for the purposes of the ABP.
- 2) Carry out a thorough analysis of the pros and cons of each potential analytical approach.
- 3) Provide a recommendation for the optimal analytical strategy for the measurement of PV

¹ WGs are created on an as-needed basis only, and generally with a defined mandate requiring deliverables within a set timeframe. Where the expected deliverables are not met, an extension of mandate is possible, however it is not expected that WGs continue indefinitely. If it is considered that their work should be ongoing in nature, whether WG should be elevated to an Expert Advisory Group would need to be determined.

markers for the purposes of the ABP.

- 4) Define specific requirements for suitable internal and external quality controls for such an approach.
- 5) Provide recommendations for adaptation of existing International Standards and/or Technical Documents, or develop new regulation (i.e. new Technical Document or Laboratory Guidelines) if needed, for the quantification of PV markers for the ABP.
- 6) Advise WADA on the implementation phase of this tool to ensure reliable use among anti-doping partners including WADA accredited Laboratories and Anti-Doping Organizations.
- 7) Monitor existing and future trends in the PV Quantification WG's fields of expertise having the potential to impact the anti-doping system and propose new ideas to WADA for consideration.

Reporting Structure

The PV Quantification WG reports to WADA Management and will provide its final report to the WADA Lab EAG.

Membership/Composition

The composition of the PV Quantification WG shall not exceed a maximum of 8-10 members, however an exception may be applied if deemed necessary.

The WADA Director General, following consultation with the responsible Director in charge of PV Quantification WG and the Chair of the WADA Lab EAG will appoint members to the PV Quantification WG.

Members are selected on the basis of their relevant background and experience (e.g. expertise in the use of the ABP, the fields of clinical and laboratory hematology, clinical chemistry, and laboratory analysis).

The membership of the PV Quantification WG is published on the WADA website.

If required, additional experts may be called upon on an ad-hoc basis for their contributions.

Member terms² reflect the continued mandate of the PV Quantification WG, i.e., until 31 December 2025. If the work of the PV Quantification WG is not completed within this timeframe, and is further extended, the composition and terms of members will be reviewed to ensure their relevance remains.

² Should the member come from a WADA-accredited laboratory whose accreditation is revoked during their term, the member's term on the PV Quantification WG will cease immediately. If the Laboratory is suspended or under an Analytical Testing Restriction, subject to WADA's discretion, the member may continue on the PV Quantification WG.

Chair/Rapporteur

The PV Quantification WG Chair³ is selected based on their proven record and expertise in the use of the ABP, the fields of clinical and laboratory hematology, clinical chemistry, and laboratory analysis.

He/she shall act as the official Rapporteur who is responsible for ensuring appropriate coordination with WADA Management, delivering the final report to the Chair of the WADA Lab EAG and for providing accurate and timely information on all relevant issues.

WADA Liaison

The WADA Science and Medicine Department, and in particular the Associate Director ABP, will serve as the primary liaison between WADA and the PV Quantification WG.

The Associate Director ABP will be an observer⁴ to the PV Quantification WG in the sense that they contribute to and bring expertise to support the work of the PV Quantification WG but does not have a voting position. Additional WADA Science and Medicine Department staff may also participate in PV Quantification WG meetings as WADA experts on particular subject matters and to provide general support to the group where required.

Meetings and Working Norms

The PV Quantification WG carries out its work virtually via video or teleconference (as determined by WADA) as many times as is necessary to complete its mandate.

The PV Quantification WG normally operates on the basis of consensus and maintains as informal a manner as is possible or appropriate for the conduct of business. Consensus will be sought whenever possible. In the event of divergence of opinion or disagreement concerning recommendations, the absolute majority (determined by vote by hand) will rule. In the event of a tie, the Chair has the casting vote. There is presently no formal practice concerning a quorum. The Chair has the responsibility to determine if a quorum is present. Meeting notes will record any dissenting opinion on request.

The Chair may limit discussion of resurfacing issues by referring to previous recommendations or conclusions of previous discussions.

Meeting notes of the PV Quantification WG meetings, reports and correspondence relative to the group's work shall be retained at the WADA Headquarters.

Code of Ethics, Conflict of Interest, Confidentiality and Media

Upon their appointment and again annually, all PV Quantification WG members are required to sign a document, pursuant to which they undertake (i) to comply with the Code of Ethics adopted by the WADA Foundation Board (as amended from time to time); (ii) to comply with the Conflict of Interest policy adopted by the Foundation Board (as amended from time to time); (iii) to keep all matters related to WADA confidential; and (iv) to comply with the WADA Media Relations Policy issued by the Agency (as amended from time to time).

³ There are occasions where WADA staff may chair a WG, e.g. when an external chair is not deemed to be practical.

⁴ Unless they are appointed as the Chair of the WG.

A) Code of Ethics

The purpose of the WADA Code of Ethics is to establish clear ethical standards over the activities of WADA Officials (as defined in Section 2 of the Code of Ethics) to allow WADA to achieve its mission and protect its core values. WADA and all its Officials undertake to foster a culture of ethics, loyalty, and integrity within their respective areas of competence.

B) Conflict of Interest

PV Quantification WG members will be bound by the WADA Conflict of Interest policy. They will be required to annually complete and sign a Statement of Absence of Conflict of Interest in accordance with the policy, and to update such statement if and as necessary during the year.

C) Confidentiality

All PV Quantification WG members are required to sign a Confidentiality Declaration upon appointment and again annually. This ensures all members reflect on the confidential nature of their WADA work and confirm their adherence to such confidentiality rules.

D) Communications and Media

All PV Quantification WG members must read and comply with WADA's Media Relations policy. If a member should receive a request for an interview in relation to their role in WADA or WADA's work in the fight against doping in sport, they should first consult with the WADA Head of Media Relations or (if absent), with the WADA Communications Director.

Budget and Financial Support

WADA shall provide the necessary administrative and operational resources for meetings. WADA will cover certain expenses and compensate members for meetings in accordance with its applicable indemnity policy.

It is acknowledged that some experts go above and beyond, including providing extensive advice throughout the year, outside of annual meetings. WADA offers a further indemnity to experts for such work carried out. The specific indemnity details are outlined in the "Overview of WADA Working Groups" document provided to Members provided to Members each year.

Effective Date

These ToR originally came into effect in February 2023 and were updated in January 2024 to reflect the first extension and to make some administrative updates. These ToR have then been updated in January 2025 to reflect the current extended timeframe.

These ToR are published on the WADA website.