The Athlete Biological Passport: Shaping the Present and Future of the ABP

Athlete Biological Passport Symposium

5-7 November 2018
Rome, Italy

The ABP experience from Italy

Alessia Di Gianfrancesco PharmD, PhD
Head Testing Programme, TUE Committee & Education - NADO Italia
Member, WADA Health, Medical & Research Committee
Anti-Doping Control Committee

Composition:

- 2 Former Top Level Athletes
- 1 Full Professor of Statistics
- 1 Carabinieri Senior Officer
- 5 Physicians (specialist in sports medicine, haematology, endocrinology)

- Risk assessment
- TDP: In – Out of Competition
- RTP
- ABP
Athlete biological passport - ABP

STEROIDAL MODULE
- NADO Italia first adopted Steroidal Module;
- GC-C-IRMS on all samples having T/E > 4

HAEMATOLOGICAL MODULE
- Since 2017
Why this choice?

**ADAMS**
- Italian legislation on data protection and privacy
- Adaptive model fully integrated into ADAMS
- Athlete Passports through ADAMS can be shared and safely stored.

**Administrative Organization**
- Haematological Module: Experts outside the APMU and the ADO
- Steroidal Module: internal or external APMU
Benefits of an APMU within the Laboratory

**EFFICIENCY**
The APMU is placed between the Experts and the ADO

**PROFESSIONAL EXPERTISE**
The Expert Panel must have expertise mainly in the field of Laboratory Steroid analysis

**STEROIDAL PASSPORT**
The Expert Panel must have expertise mainly in the field of Laboratory Steroid analysis

**ANONYMOUS EVALUATION**
Only the Testing Authority is aware of athletes' identity in ABP while APMU and Experts identify the tests through code numbers.
ABP Administrative Sequence Chart

**Athlete Selection**

The ADO identifies the Athlete of interest for Testing.

**Timing of Test**

The ADO identifies the ideal timing for Sample collection, which could follow the recommendation of the APMU.

**Issuing Request**

The ADO issues a Sample collection request, which includes the type of Sample to be collected (ABP blood and/or urine) based on the recommendations of the APMU. Preferably, the request will be delivered via ADAMS to restrict the dissemination of this information.

**Accessing W/B**

The Sample Collection Authority accesses the pertinent whereabouts information of the Athlete via ADAMS (for only the period defined by the issuing organization), and any other relevant Testing instructions.

**Sample Collection**

The Sample Collection Personnel locate the Athlete and collect the biological Sample(s), following the appropriate protocol. An ABP Supplementary Doping Control form is to be completed as outlined in Annex K – ISTI (Section 3.1 below) where Doping Control includes an ABP blood Sample.

**Transport of Sample**

For blood ABP Samples, the Sample Collection Personnel ensure transport to a Laboratory or WADA-Approved Laboratory for the ABP, in accordance with Annex K – ISTI (Section 3.1 below). Urine Samples should be rapidly transported to a Laboratory with minimal exposure to high temperature.

**ADAMS Entry**

The Sample Collection Authority or the Sample Collection Personnel shall use its best effort to enter the ABP Doping Control form into ADAMS as soon as practicable. This connects the results of Sample analysis to the Athlete’s unique Passport, and links the new Sample data with the Athlete’s historical data for review by the APMU and ADO.

**Sample Analysis**

The Laboratory or WADA-Approved Laboratory for the ABP analyzes the Sample(s) following the established protocol for blood and/or urine, as appropriate (Section 3.2 and/or 3.3, respectively), and reports the biological results in ADAMS without delay.

**Passport Updated**

Once the new biological data are entered in ADAMS, the Adaptive Model in ADAMS automatically updates the Athlete’s Passport.

**APMU Report**

The APMU writes or updates the APMU Report in ADAMS including a review of the new or updated Passport with recommendations on intelligent Testing strategies.

**Review process**

In the event of an ATPF or when a review is otherwise justified, the APMU shall proceed with the mandatory steps outlined in Annex L – ISTI (see Section 3.4), which includes liaising with the Experts.
NADO Italia ABP

**Athlete Selection**
- Investigation – Carabinieri
- Target testing
- Sharing information

**Sample Collection**
- DCOs /BCOs are all physicians belonging to FMSI

**Expert Panel**
- Steroid ABP: Experts are within Laboratory FMSI, independent of the Passport Custodian (NADO Italia)
- Haematological ABP: external Experts

**Review Process**
- All the Experts do not have any contact with NADO Italia
- APMU and NADO Italia dialogue through ADAMS
Initial Review Phase

<table>
<thead>
<tr>
<th>Expert Evaluation</th>
<th>APMU Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Normal</strong>: Likely physiological condition</td>
<td>Continue normal <em>Testing</em> pattern.</td>
</tr>
<tr>
<td><strong>Passport suspicious</strong>: Further data is required.</td>
<td>Alert <em>ADO</em> to do Target <em>Testing</em> and provide recommendations.</td>
</tr>
<tr>
<td><strong>Likely doping</strong>: Considering the information within the <em>Athlete’s Passport</em>, it is likely that the <em>Passport</em> is the result the <em>Use</em> of a <em>Prohibited Substance</em> or <em>Prohibited Method</em> and it is highly unlikely that it may be the result of a normal physiological or pathological condition.</td>
<td>Send to a panel of three <em>Experts</em>, including the initial <em>Expert</em>, as per section 3 of this Annex L.</td>
</tr>
<tr>
<td><strong>Likely medical condition</strong>: Considering the information within the <em>Passport</em>, it is likely that the <em>Passport</em> is the result of a pathological condition</td>
<td>Inform the <em>Athlete</em> via the <em>ADO</em> (or send to other <em>Experts</em>).</td>
</tr>
</tbody>
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Consequences of the Initial Review

- ABP is a tool to detect the possible use of Prohibited Substances or Prohibited Method. It is not intended as a health check.

- The ADO must inform the athlete if the Passport suggests a possible pathology identified by the experts.
Likely medical condition
Passport evaluated by an international expert which consider it as "medical condition". The evaluation stated as it follows: "Male football player with normal haemoglobin but constantly very high reticulocytes. Red cell indices are normal, so I do not see any indication of a haematological abnormality at this stage. I suspect the athlete has a subclinical pathology which leads to a high red cell turnover with increased reticulocytes."

Cancelled by APMU

Report History

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<tr>
<th>Recommendation</th>
<th>Comment</th>
<th>Submitted by</th>
<th>Date/Time</th>
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<td></td>
<td>21-Feb-2018 07:53</td>
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<td>Trend con valori di %RET alti. Off score sempre basso</td>
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<td>19-Dec-2017 09:23</td>
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</table>
NADO ITALIA - ABP 2017

Tests performed = 220
Athletes included in ABP = 90
Male = 65  Female= 25
NADO ITALIA - ABP 2018

Tests performed = 262
Athletes included in ABP = 140
Male = 89   Female= 51
Thank you very much for your attention