Table of Contents

1 Introduction .................................................................................................................. 3

2 Browser Requirements ................................................................................................. 4
  2.1 Supported Browsers ................................................................................................. 4
  2.2 Allow Pop-Ups .......................................................................................................... 5

3 ADAMS 3.2 Changes .................................................................................................... 6
  3.1 Biological Passport ................................................................................................. 6
    3.1.1 Passport Custodian .............................................................................................. 6
    3.1.2 ABP, Software Integration .................................................................................. 7
    3.1.3 Athlete Passport Management Unit (APMU) ....................................................... 14
    3.1.4 Expert Users ....................................................................................................... 16
    3.1.5 Biological Passport Share ...................................................................................... 18
    3.1.6 Export Passport Functionality ............................................................................. 18
    3.1.7 Export Expert Report Functionality ........................................................................ 19
    3.1.8 Reset BP ID ........................................................................................................... 19
    3.1.9 Import Hemodilution and Validity Status ............................................................ 21
    3.1.10 Notifications ..................................................................................................... 23
    3.1.11 Upgrade Process ................................................................................................. 25
  3.2 Data Retention .......................................................................................................... 25
  3.3 SMS Enhancements ................................................................................................ 27
  3.4 TUE Diagnosis Class ............................................................................................... 28
  3.5 Missed Test ............................................................................................................... 29
  3.6 Negative Finding ....................................................................................................... 30
  3.7 Data Sharing ............................................................................................................. 31

4 Other Changes and Improvements ............................................................................. 32
  4.1 Blood / Steroid Parameter Precision ......................................................................... 32
  4.2 “Last Updated” in Whereabouts Calendar ................................................................ 32
  4.3 Testing Authority Label ............................................................................................ 32
1 Introduction

The Anti-Doping Administration and Management System (ADAMS) received a functional upgrade to Version 3.2 on 17-Sep-2012 at 14:00 Eastern Time. This document outlines the changes made to the application in Version 3.2.
2 Browser Requirements

2.1 Supported Browsers

ADAMS 3.1 supports Internet Explorer 8+, as well as Firefox 3.6+. ADAMS may work with other browsers and versions, however we recommend using a browser on the above list for better results.

The Safari browser on Macintosh platforms is not officially supported in this version of ADAMS, although most of the issues encountered in the previous version for athlete users have been resolved for Safari Version 5. Should athletes encounter any technical issues while using ADAMS on a Macintosh computer, you may report it to the ADAMS Help Desk and indicate the platform used (operating system and browser versions).

2.1 Clear Browser Cache

If you notice that some screens do not display correctly in the new application, it may be necessary for you to clear your browser cache.

- If you are using Internet Explorer: click Delete Browsing History from the Safety menu in the upper right. Deselect Preserve Favorites website data, select Temporary Internet files, then click Delete.
- If you are using Firefox, select Clear Recent History from the Tools menu (Clear Private Data in older versions). From the Time range to clear: drop-down menu, select Everything. Make sure that only the Cache checkbox is selected. Then click the Clear Now button.

2.2 Verify Bookmark if Any

If you have difficulty logging into ADAMS, it may be because your bookmark for ADAMS is not correct. For access to the production system, ensure that your bookmark is set to:
https://adams.wada-ama.org

Remove any extra characters following the URL.

- If you are using Internet Explorer, click the Favorites button on the far left side of the toolbar. Next, right-click the ADAMS bookmark, and select Properties. Ensure that the URL displayed exactly matches the one shown above.
- If you are using Firefox, click the Bookmark menu, right-click the ADAMS bookmark, and select Properties. Ensure that the Location displayed exactly matches the one shown above.

2.2 **Allow Pop-Ups**

ADAMS uses pop-ups in many of its functions and therefore requires them to be enabled. To enable them:

- If you are using Internet Explorer, select Pop-up Blocker from the Tools menu, then Pop-up Blocker Settings. Make sure that adams.wada-ama.org is shown in the list of Allowed Sites, otherwise type it in the Address of website to allow textbox, then click the Add button.
- If you are using Firefox, select Options from the Tools menu, then select the Content icon at the top. If the Block pop-up windows option is checked, then click the Exceptions... button next to it. Make sure that adams.wada-ama.org is shown in the list of sites, otherwise type it in the Address of web site: textbox, then click the Allow button.
3 ADAMS 3.2 Changes

3.1 Biological Passport

Version 3.2 incorporates a richer set of Biological Passport features and workflow. Mathematical calculations of the Passport are now performed automatically within ADAMS.

3.1.1 Passport Custodian

Each athlete in ADAMS will have a passport custodian. The custodian will have the responsibility of the results management via its APMU. The default custodian will be the international federation unless it does not have a passport program or has entered into an agreement with a NADO. The passport custodian organization would also be able to grant “read access” to other ADOs and transfer the passport custody of the athlete to another organization upon agreement.

If no suitable Passport Custodian is found then there shall be no Passport Custodian for the corresponding athlete.

If an athlete does not have a passport custodian then passport-related functionality is disabled for that athlete: no calculation of passport results will be made and the Passport link will not appear in the Athlete Tree.

When a new ADO is activated in ADAMS, the system will try to assign that new organization as the custodian to any unassigned biological passport.

In all other cases, the ADO administrator must manually transfer the custodianship. For example, if the athlete will have a new IF because of a change in their sport, the old IF must manually transfer custodianship to the new one.
Transfer of passport custodianship is done by the organization administrator’s “Manage access to athletes and non-athletes”.

3.1.2 **ABP, Software Integration**

Exporting and importing results to Statistical Labs has been deprecated in ADAMS 3.2. Instead, ADAMS performs the calculations.

Once a DCF with the status “Complete-Sample(s) collected” is matched with a BPLR, ADAMS will perform the biological passport calculations. A sample is included in the calculations only if and when its DCF is completed.

ADAMS will match BPLRS to DCFs with the same Sample Code, Sport and with the Blood Passport sample type.

**Validity**

Blood passport samples are considered to be “valid” for passport purposes only if the analysis occurred within 36 hours of the date and time of that the sample was collected.
Only valid samples are used for the BP calculations. However, invalid samples are also displayed in the BPLR table in the Passport page.

The validity of samples is shown on the DCF page once matched. Users can manually change the validity of the BPLR.

Any BPLRs created before the upgrade to Version 3.2 are set with a validity of Unknown. This status value will change if a match re-occurs. The user can also manually change it to either Valid or Invalid.

**Calculations**

For each new BP lab result, new passport data is calculated in ADAMS using the Passport Custodian's specificity and WADA’s specificity.

By default the specificity parameter is 99% for ADO organizations and 99.9% for WADA.
For each new result, the algorithm calculates:

- A value for the ABPS marker
- Expected/minimum/maximum values for the HGB, RET%, OFFS and ABPS markers
- A sequence normality for the HGB, RET%, OFFS and ABPS markers

The algorithm only requires values from a given result to compute the corresponding ABPS value.

The algorithm only requires data from the previous result (including some temporary parameters) in order to compute the expected/minimum/maximum values of the next result.

The sequence normality for each marker (HGB, RET%, OFFS, ABPS) is calculated from a series of one or more results.

There is only one sequence normality per marker and it is independent of the specificity. The sequence normality is calculated based on up to 20 previous results and the temporary parameters. For RET% the last 20 valid results are used, independently of the hemodilution. HGB, OFFS and ABPS sequence normality calculations include the last 20 results without hemodilution.

Certain changes outside of BPLR can cause the athlete’s passport to be recalculated. These are:
• DCF: changes to the sample validity, altitude, hemodilution, or collection date & time
• BPLR: changes to the result parameters or analysis date & time
• When a new BP lab result is added into ADAMS.
• Athlete Profile: changes to the date of birth or gender.
• When the Passport Custodian’s or WADA’s specificity is changed

For calculation purposes, if the athlete does not have a date of birth, the athlete is assumed to be 30 years old.

**Display**

Users who have the appropriate permissions can view an athlete’s biological passport by clicking on the BPID of the athlete in the athlete tree.

APMU users and Expert users can open a BP only by searching for the BP ID.
More than 100 passports found. Please refine your search.

<table>
<thead>
<tr>
<th>BP ID#</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A2R2</td>
<td></td>
</tr>
<tr>
<td>B2012</td>
<td></td>
</tr>
<tr>
<td>B2035</td>
<td></td>
</tr>
<tr>
<td>B6136</td>
<td></td>
</tr>
<tr>
<td>BPA7G8</td>
<td></td>
</tr>
<tr>
<td>BPA7G8</td>
<td></td>
</tr>
</tbody>
</table>
From here, the user can view the last 10 BPLRS in the table below as well as in the graphs.
Clicking on a graph will display an expanded and more detailed view of that graph.
As well, the user can manipulate what is shown on the graphs using the tick boxes next to the BPLRs in the table and by changing the specificity, and then clicking the “Recalculate” button. Clicking the “Reset” button redisplay the graphs using the original values.

For a shared passport, the results are displayed using the specificity of the source organization.

3.1.3 **Athlete Passport Management Unit (APMU)**

The APMU handles the reports of Biological Profiling experts and gives a final recommendation to the Passport Custodian about the findings on an athlete’s biological passport.

Any organization with the ADO role or the lab role can act as an APMU.

Such organizations will automatically be given a Default APMU role and user type to assign to its users. ADO’s will act as their own APMU by default.

Organizations can delegate the APMU role to another organization.

The Default APMU business role contains the following rights:

- Passport access (anonymous)
- BP lab result: read only
- BP lab result activity: read only
- DCF read and write (anonymous)
- BP expert report: read and write

To create an APMU user, the account needs to have the APMU user type and the Default APMU business role.
The APMU user can search for BPIIDs and view the associated passport.

The Expert Report button will bring the user to the APMU report page where the user can assign Experts to review the BPLR as well as submit the APMU’s final recommendation.
3.1.4 **Expert Users**

Expert Reports have shifted from being part of the BPLR to being part of (i.e., belonging to) the Biological Passport.

An expert user will get a notification when an APMU assigns him/her to a passport.
Clicking on the Reference Link within the Notification will open the Expert Report in Edit mode. The user can view the passport by clicking the Passport link at the top, save any changes they’ve made, or submit the report to the APMU.

Before saving or submitting, the Expert user can select a Recommendation and can provide Comments.

At the bottom of the page will appear any past reports they have submitted. Expert users will not be able to see the APMU report or other Experts’ reports. Once they have submitted a report, they will lose access to the
passport and the expert report page unless they are subsequently reassigned to the passport.
Submitting an expert report will also send an automatic notification to the APMU.

3.1.5 **Biological Passport Share**

Passport manager can share (read/write) the passports they manage with other organizations. This will also give the other organization access to the demographic data of those athletes (similar to giving athlete demographic read share.).

3.1.6 **Export Passport Functionality**

Passport Custodian, WADA and other ADO users with access can export the BPLRS on the passport page using the Export Results button.

<table>
<thead>
<tr>
<th>Athlete Biological Passport</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BPID</td>
<td>Gender</td>
<td>Sport</td>
</tr>
<tr>
<td>BP07Q29</td>
<td>Female</td>
<td>Underwater Sports</td>
</tr>
</tbody>
</table>

This will generate a csv file containing the following columns:

- ATHLETE ID
- GENDER
- SAMPLE CODE
- SAMPLE TYPE
- DATE
- TIME
- ANALYSIS DATE
- ANALYSIS TIME
- COMPETITION
- ANALYSER
- COUNTRY
- CITY
- ALTITUDE
The generated csv will also contain a column for each blood parameter:

| HCT | HGB | MCH | MCHC | MCV | OFF-SCORE | RBC | RET# | RET% |

3.1.7 Export Expert Report Functionality

The Passport Custodian and APMU users can export the submitted expert reports to a csv file.

The Export button is accessible in the APMU report page. The generated csv file will have the following columns:

| EXPERT NAME | SUBMISSION DATE | COMMENT | RECOMMENDATION | BPID | SPORT | GENDER |

3.1.8 Reset BP ID

Following the reintegration of an athlete to a sport or to protect their identity, the athlete’s BP ID may be reset by the athlete's Passport Custodian or by WADA.

The demographic page of the athlete contains the Reset BP ID button.
Clicking the Reset BP ID button invokes a popup where the user must enter the reason for resetting the ID as well as choose between two options to determine what should happen to any past data belonging to the BP ID.

**Option 1 – Transfer past data to new BPID**

This will transfer all the data to the new BP ID. The old BP ID will no longer be searchable or used.

**Option 2 – Keep past data with old BPID**

This will create a new blank BP ID, which will be used going forward to build the blood passport of the athlete.

All the data belonging to the old BP ID will by default only be available to the Passport Custodian and WADA.
The Passport Custodian has the right to allow the APMU and other organizations to view the old passport data. This can be done at the time of resetting the BP ID:

The access permission can also be changed via the checkboxes that appear when viewing a retired Passport:

3.1.9 *Import Hemodilution and Validity Status*

The administrator of the passport custodian organization can import a CSV file to update the hemodilution and validity status of multiple BPLRs at once.
The CSV file contains four columns:

- Sample Code
- BPID
- Hemodilution [y/n]
- Validity [true/false]

In order for the data to be imported successfully, the DCF must have the status “Complete samples collected” and must be matched to a BPLR.

ADAMS will try to import the data row by row. Once the process complete, the administrator can click on the Details button to view the results of the import.
After correcting any problems, the user can re-import the file.

### 3.1.10 Notifications

**Expert Assignment**

![Notification Screen](image)

Expert Users will receive a notification when an APMU assigns them to review a BPLR.
Expert report submission

The APMU is sent a notification when an Expert submits their report.

Abnormal Passport

This notification is sent out to the TA, Passport Custodian and the APMU when a BPLR is flagged as atypical by the system and to WADA if it is abnormal according to their specificity. The users must have Abnormal Biological Passport notification type.

This notification is sent only when the passport status is changed to atypical. If a recalculation is done and the passport still remains atypical, no new notification is sent.
**Likely Doping**

When the APMU submits a report with the recommendation as “Likely Doping”, a notification is sent to WADA users with the Likely Doping Notification type.

### 3.1.11 Upgrade Process

The upgrade process will make changes to configurations and settings to enable the use of the new Blood Passport workflow.

The statistical lab role is no longer in use. All associated rights and functionality will be removed from organizations during the upgrade process.

The process will try to reassign the Passport Custodian of an athlete based on the rules outlined in Section 3.1.1.

### 3.2 Data Retention
The rules governing the length of time that information is kept in ADAMS have changed in Version 3.2. The following table describes the duration and conditions for the automatic removal of data, for each module of ADAMS.

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete profile</td>
<td>An athlete's demographic information: last name, first name, date of birth, sport discipline, gender, and nationality; will never be deleted. An athlete's mailing address will be deleted 8 years after its last usage. An athlete's phone number and email address will be deleted 8 years after it was added to the athlete record.</td>
</tr>
<tr>
<td>Whereabouts</td>
<td>The whereabouts of an athlete that is or was included in a biological passport program are retained for 8 years after the whereabouts date. For athletes who are not in a BP program, their whereabouts are retained for 18 months.</td>
</tr>
<tr>
<td>Whereabouts failures</td>
<td>Whereabouts failures will be deleted 18 month after their reference date.</td>
</tr>
<tr>
<td>TUE</td>
<td>For a TUE that has not been approved, the TUE forms and associated information, including all tabs, attachments, activities, will be deleted 18 months after the TUE expiration date. 18 months after the expiration date of an approved TUE, the TUE certificate must replace the TUE form. For approved TUE, the system checks the expiry dates of the medications in the TUE. If the newest expiry date is older than 18 months, when the user clicks on the TUE node from the tree, instead of displaying the TUE page, the &quot;CERTIFICATE OF APPROVAL FOR THERAPEUTIC USE&quot; pdf file will be displayed. 8 years after the approval date, a CERTIFICATE OF APPROVAL FOR THERAPEUTIC USE will disappear from the TUE list on the athlete tree.</td>
</tr>
<tr>
<td>Test Planning</td>
<td>Mission Orders, Tests, Doping Control Forms, Chain of Custody forms, attachments and activities will be deleted 18 months after the date of test if they have no blood passport sample and are not linked to an ATF or AAF. Mission Orders, Tests, Doping Control Forms, chain of Custody forms, attachments and activities that are linked to an AAF or ATF are deleted 8 years after the date of test. Mission Orders, Tests, Doping Control Forms, chain of Custody forms, attachments and activities with a blood passport sample are retained for 8 years after the date of tests. Mission Orders and Tests forms that are not completed are retained for 18 month after the planned end date.</td>
</tr>
<tr>
<td>Lab results</td>
<td>Blood and urine lab results in ADAMS are retained indefinitely.</td>
</tr>
<tr>
<td>Lab results</td>
<td>When a DCF linked to an AAF or an ATF lab result is deleted, the lab result reverts to an unmatched state.</td>
</tr>
<tr>
<td>Module</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Negative lab results</td>
<td>When a DCF linked to a negative result is deleted due to the Data Retention rules, a &quot;Negative Finding&quot; record is created. The Negative Finding records will be accessible by any ADOs that have access to the athlete profile with appropriate permissions, as well as by the Testing Authority and by WADA. 18 months after a negative result, the DCF will be removed and the “Negative Finding” record will be created.</td>
</tr>
<tr>
<td>Negative Finding</td>
<td>Negative findings are deleted 8 years after the sample date of collection.</td>
</tr>
<tr>
<td>Biological lab results</td>
<td>Biological lab results (BPLRs) are deleted 8 years after the submission date. Non-submitted, non-analyzed and canceled BPLRs are deleted 8 years after their creation date.</td>
</tr>
<tr>
<td>AAF/ATF</td>
<td>AAF and ATF records are deleted 8 years after their creation date.</td>
</tr>
<tr>
<td>Sanctions</td>
<td>Sanctions are deleted 8 years after their effective end date. If the effective end date is missing, the creation date is used to determine the retention period.</td>
</tr>
<tr>
<td>ADRV</td>
<td>An ADRV is deleted 8 years after the end-date of the provisional suspension. If an ADRV does not have an “end of provisional suspension” date, then the ADRV is deleted 8 years after its creation date</td>
</tr>
<tr>
<td>TDP</td>
<td>Test Distribution Plans are deleted 18 month after their creation date.</td>
</tr>
<tr>
<td>EQAS</td>
<td>EQAS results are retained indefinitely.</td>
</tr>
</tbody>
</table>

### 3.3 SMS Enhancements

SMS messages that ADAMS sends to athletes are now sent in the language that is set in the athlete’s user preferences, provided that a translation of it exists in ADAMS.

After a user saves an athlete’s mobile phone number for use with SMS, a warning message will be displayed, as a reminder that the activation process must be done before ADAMS can accept SMS messages from that phone number.
After a phone number has been successfully activated, the “activate” button is replaced with a “reactivate” button.

When ADAMS receives whereabouts update SMS messages from an activated phone number, the text contents of the message are inserted into the athlete's whereabouts calendar.

3.4 **TUE Diagnosis Class**

When creating or editing a TUE, a Diagnosis Class dropdown control is now visible. ADAMS will automatically select the Class, if the Diagnosis selected by the user belongs to exactly one Class.

If the Diagnosis belongs to multiple classes, then the Class dropdown will be blank by default and the user must manually select the appropriate Class.
### 3.5 Missed Test

When an athlete accumulates three Whereabouts Failures of the type "Missed Test" during a period of 18 months, an ADRV with the category "Missed test" will be created automatically.

The 18-month period is calculated using the Reference Dates of the Whereabouts Failures. The Reference Date is now a mandatory field in the Whereabouts Failure. For past Whereabouts Failures that contain no Reference Date, the creation date of the record is used instead, in this calculation.

A Whereabouts Failure can correspond to (at most) one ADRV. An automatically generated ADRV has the status "created", and it contains all three reference dates, as well as comments and whereabouts owner information. The ADO that created at least 2 of the 3 whereabouts failures becomes the owner of the ADRV. If the three Whereabouts Failures are created by three different organizations, one of them will be chosen at random as the owner.
3.6  **Negative Finding**

When deleting a DCF linked to a negative result, ADAMS will create a "Negative Finding" record. The Negative findings records will be accessible by all ADOs who have access to the athlete profile and who have the user right to view Negative Findings.

There “Comment” text area is the only editable field and it is only available to Testing Authority users. The Testing Authority will also be set as the owner or the record.

The upgrade process will add the Negative Finding read/write role to the Default Business Roles of ADO organizations.
3.7 Data Sharing

The organization administrator can now restrict, in the Source Organization Relationships option, the access by athlete groups:

**Athlete Profile and Whereabouts based relationships:** Whereabouts share used to only give access to whereabouts if the target organization had explicit access to the athlete. In Version 3.2, there is now another way to allow the target organization to access the calendar of the source organization’s athletes: by specifying an Athlete Profile relationship and a Whereabouts relationship. If the athlete is in the user groups for both of those relationships, then the target organization will have access to the athlete’s calendar.

**DCF Sharing:** Only the DCFs of the athletes that are part of the shared user group will be accessible by the target organization. Tests are not automatically shared.

**Test Sharing:** Only the Tests of the athletes that are part of the shared user group will be accessible by the target organization.

**Mission Order Sharing:** If an athlete is in the Mission Order but not part of the shared user group, they are still visible in the Mission Order. However, their name is not a link to the test (the test is not viewable in this case).
**Blood Passport Sharing** has been added to Source Organization Relationships.

**ATTENTION:** The upgrade to Version 3.2 will automatically disable any existing relationship without athlete groups.

## 4 Other Changes and Improvements

### 4.1 Blood / Steroid Parameter Precision

When a user enters a Blood or steroid parameter with a precision greater than expected, ADAMS will round it up to the appropriate precision. The rounding will occur automatically when the user saves the lab result.

### 4.2 “Last Updated” in Whereabouts Calendar

In previous versions, the “Last updated” date and time values, displayed in the athlete’s Whereabouts calendar, was generated the moment a user accessed that quarter for the first time. In ADAMS 3.2, this information will be refreshed only when the contents of the calendar are changed.

### 4.3 Testing Authority Label

The label “Test Authorized by” has been changed to “Testing Authority” in the Test, DCF and Mission Order pages.