Hematological Passport - Software Integration

Upon the matching of a DCF with the blood passport results (BPLR), the following steps are undertaken:

- **Determination of the hematological sample validity**.

  Based on BSS calculation since 06 June 2017.

  Between 01 September 2014 and 05 June 2017, the blood passport sample validity was automatically calculated by comparing the time difference between the sample collection date and time, and the date and time received by the Lab. (36 hours) and by comparing the time difference between the sample collection date and time and the analysis date and time (48 hours) for each relevant sample.

  Samples received by Laboratories prior to 01 September 2014, are considered valid if the time difference between the sample collection date and time, and the analysis date and time is less than 36 hours.
  This validity value can be modified by either the Testing Authority or the Passport Custodian's APMU on the corresponding DCF.

- **Calculation of the individual limits by the Adaptive Model.** The limits are calculated for specific Markers (Hemoglobin, OFF-score, Reticulocyte% and ABPS) with the following inputs: *Athlete's* age, gender, blood variables, sample validity and hemodilution. Based on the Passport Custodian specificity (set to 99% by default and modifiable by the *ADAMS* administrator) Atypical Passport Findings are detected by the Adaptive Model.
  Note: the hematological passport is recalculated each time the DCF, laboratory result or *Athlete's* gender and age are modified.

- **Biological Result notifications.** A Biological Result notification is sent to the Testing Authority, the APMU and the Passport Custodian (if different from the Testing Authority) every time a DCF is matched with a BPLR. The APMU is able to assign expert(s) for anonymous reviews.

- **Atypical Passport Findings notifications.** Both the Passport Custodian (including APMU) and *WADA* receive automatic notifications if the passport is atypical based on their respective specificity.