

# IS RUBIN

ADVANCED INFORMATION SYSTEM FOR  
A NETWORK OF BLOOD TRANSFUSION FACILITIES

IS RUBIN COVERS ALL THE NEEDS FOR DATA PROCESSING IN ALL FIELDS OF ACTIVITIES AT BLOOD TRANSFUSION FACILITIES.

IS RUBIN uses the most advanced information technology and has been continuously extended and adjusted to the new requirements of healthcare professionals since its first installation. The information system RUBIN can be used for a centralized network of blood transfusion facilities with several donation and processing centres (e.g. a smaller number of facilities within a delimited territory / region but also a national level solution with a large number of donation and processing centres). Moreover, IS RUBIN supports fully-fledged work with current data without the need for internet connection during mobile blood donation.

The solution uses centralized basic code lists and a common data set, while individual facilities are also capable of working separately. IS RUBIN supports using barcodes for entering data as well as for communication with analyzers.

## [ CENTRAL PART OF THE SYSTEM ]

This part consists of:

- ▶ Common code lists necessary for information exchange between individual facilities
- ▶ Data of blood donors, blood donation sessions, final results of laboratory tests, blood types and phenotypes as well as on all transfusion pharmaceuticals in stock at all facilities
- ▶ Overviews of data stored in the central part of the system

## [ LOCAL PART - FACILITIES ]

IS RUBIN consists of several interconnected modules:

### Central registry

Database of registered blood donors and a registry of individual blood donation sessions and contributions for blood donors. This data can be managed and searched.

### Pre-donation room

It serves for recording results of pre-donation tests such as blood counts, methodology lab results and indicative blood type tests.

### Medical examination

The module is used by doctors for the evaluation of results of pre-donation tests and the assessment of the blood donor's health condition. The doctor can review all the previous blood donations of the donor regardless of the facility where the donations were taken.

### Donation room

This module records data immediately related to the blood donation itself (donation volume, duration, bags used etc.). It also enables the connection of automatic donation scales.

### Production

The module defines groups of products and products that can be produced from a given blood donation.

## PROPERTIES AND ADVANTAGES

- ▶ Centralized relational database server records all data on-line
- ▶ User friendly interface
- ▶ Works under operating systems MS Windows 7, 8.1, 10 (32bit/64bit)
- ▶ The solution can be further customized as per current requirements
- ▶ Easy adjustment to local legislation
- ▶ Uses the most advanced technology ensuring a longterm support for the solution



[ IS RUBIN ]

**Production records**

This module can be used for the creation of production data for blood plasma collectors.

**Methodology lab**

This module records the results of tests, which need to be carried out for blood donation. It allows entering several methodology results for repeated blood donations with reactive results or with results within the gray zone. Based on the results, the operator assesses the results of the given test as satisfactory or unsatisfactory. Individual facilities can use different methodologies for the evaluation of the same medical test. As a matter of course, the module allows the connection of analyzers and the automatic sending of work sheets, as well as the receipt of methodology results.

**Immunohaematology lab**

The module registers results of blood type and phenotype tests. It provides a well-arranged pre-test work sheet, which indicates the number of repeated occurrences of individual antigens. Similarly to the previous module, the results are verified in two steps.

**Release and label printing**

These are important modules, which allow the responsible staff, after carrying out all the necessary tests, to release the donations and print the final labels for the finished transfusion pharmaceuticals.

**Purchase**

The products purchased from suppliers can be registered and accepted to storage using the Purchase module. All operations are considerably easier and quicker thanks to the use of barcodes.

**Disposal**

The module disposes of damaged or expired products from the storage.

**Quarantine**

ISRUBIN enables the monitoring of different quarantine periods and defining the products, for which these periods are to be monitored. Based on the parameters set, it offers products allowed to be released from quarantine; the moment of releasing can correspond to taking a blood donation at any of the facilities.

**Lookback**

This module displays all products supplied to the given client based on the reactive results of the given blood donation or donor.

**Special production**

The module supports the preparation of products from already finished products. It allows all types of special production as well as the registration of all auxiliary material consumed. It keeps the complete history of the given product.

**Overview of donors**

The database of donors registered in the system can be searched using the data on donors as well as their blood donations. Using this module, the user can print invitations of various types and send SMS messages to the donors.

**Product identification**

This module provides all information on the given products, divided into five groups: Donor, Blood donation, Blood product, Shipment, Test results. For products of special production processes, information on „parent“ products is also displayed.

**Code lists**

Code lists are a prerequisite for the proper functioning of the system. This data is user-dependent and can be modified in the course of time.

**Delivery notes**

The module is used for releasing products entered in the production records for large-scale plasma consumers.

**Reports**

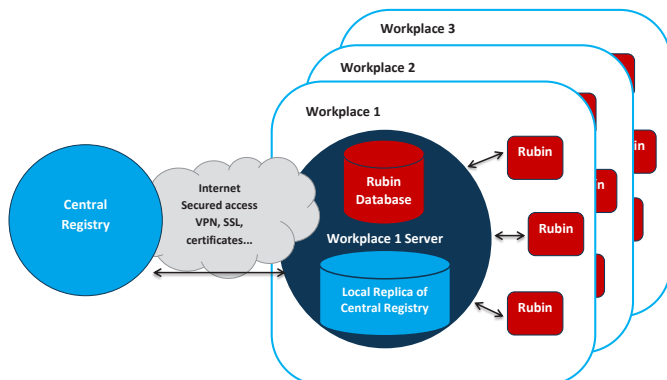
Reports can be edited based on various criteria and printed.

**Medical material storage**

This module keeps records and monitors overall flows and the condition of medical material at the given facilities. It is integrated with modules Donation room and Special production; the system automatically records any release of medical material when it is used.

[ OUR SOLUTION IS USED BY ]

- Slovak National Blood Transfusion Service national-level solution for Slovakia



■ Solution architecture

**COMMERCIAL CONTACT**

**ICZ SLOVAKIA a. s.**  
 Soblahovska 2050, 911 01 Trencin  
**TEL.:** +421 326 563 711  
**FAX:** +421 326 563 544  
**E-MAIL:** info@icz.sk