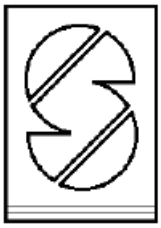
Information system for Stem Cell Registries – Donor Centers – Transplant centers

Prometheus

Part 1 : Donor and Cord Blood management



Steiner

Marrow Donor Program Belgium – Registry

User documentation MDPB-R Version 7.0 (October 2020)

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PROCEDURE – Prometheus manual Donor Center

Version control

Describe briefly the changes made between versions:

Date	Author	Version	Comment
April 2014	H. Broos	3.0	
April 2018	H. Broos	4.0	Updates in green, overview see page 5.
May 2019	H. Broos	5.0	Updates in green, overview see page 5.
June 2020	H. Broos	6.0	Updates in yellow, overview see page 6.
October 2020	H. Broos	7.0	Updates in blue, overview see page 6.

Distribution

The table below lists all individuals who received a copy of this new version.

Function	Department - Institution
MDPB-R Staff	MDPB-R
Posted on the https://www.stemcelldonor.be/professionals/	All MDBP cooperative centers

Approval

Final version of this procedure will be approved by:

Department - Institution	Function	Name	Approval date	Signature
MDPB-R	Project leader Prometheus	H. Broos	25/10/2020	

I. INTRODUCTION 7
I.I. PROGRAM START 7
I.I.1. Program start up 7
I.I.2. Login 9
I.I.3. User password change 9
I.I.4. Multiple access rights 10
I.II. MAIN PROGRAM WINDOW 12
I.II.1.1. File 12
I.II.1.2. Donor 12
I.II.1.3. EMDIS 13
I.II.1.4. Service 14
I.II.1.5. Help 14
I.II.2. Quick select buttons 14
I.II.2.1. Select donor 14
I.II.2.2. New donor 16
I.II.3. Hot Keys 16
I.II.4. Behavior of input fields 16
I.II.4.1. Date field 16
I.II.4.2. Selection from static code list 16
I.II.4.3. Selection from dynamic code list 17
I.II.4.4. Form control 17
I.II.4.5. HLA DATA 18
I.II.4.5.a. Serology 18
I.II.4.5.b. DNA typing results 20
I.III. WORK PANEL DONOR 21
I.III.1. Upper panel 21
I.III.2. Panel on second row 22
I.III.2.1. Donor record 22
I.III.2.2. Messages 23
I.III.2.3. Requests 24
I.III.2.4. Files 24
I.III.2.5. Notes 26
I.III.2.6. Letters 26
II. DONOR MENU 27
II.I. Donor select 27
II.II. Donor close 27
II.III. Donor edit – CONSULTATION – UPDATE OF DONOR 27
II.III.1. Donor status: temporarily unavailable – reservation - cancellation 28
II.IV. New donor 33
II.V. Donor data change history 42

II.VI. HLA « Data typing history »....43
II.VII. Validate....44
II.VII.1. Records to be validated....44
II.VII.1.a. Validation of a new registered donor....44
II.VII.1.b. Validation of typing update....48
II.VII.2. Failed validation....50
II.VII.2.a. Failed validation of new registered donor....50
II.VI.2.b. Failed validation of typing update....54
II.VIII. Stack....55
II.IX. Reports....56
II.X Analytical tool....59
III. CORD BLOOD MENU....60
III.I. Select....60
III.II. Close....60
III.III. Edit – consultation – update of cord blood record....60
III.IV. New cord blood....67
III.V. History....67
III.VI. Validate....67
III.VII. Stack....67
III.VIII. Reports....67
III.IX. Analytical tool....69
IV. EMDIS....70
IV.I. Introduction....70
IV.II. EMDIS messages....70
IV.II.1. New and old messages – requests without answers....70
IV.II.2. Window panel EMDIS messages....73
IV.II.3. Status of messages....74
IV.II.4. Message contenance....74
IV.II.5. Overview of message types....75
IV.II.6. Automatic warnings and message denials....75
IV.III. Receiving requests – reporting results....76
IV.III.1. Typing request (TYP_REQ)....77
IV.III.2. Sample request....89
IV.III.3. Infectious disease marker requests (IDM request)....99
IV.III.4. CBU report request (CBU_REQ)....100
IV.III.5. Reservation request (RSV_REQ)....100
IV.VI. Analytical tool: incoming typing requests – incoming sample requests....101
IV.VII. EMDIS reports....102

Changes – upgrade version 2.0 – September 2013.

Change in window panel (user interface/screen-layout).

Other changes

Changes – upgrade version 3.0 – April 2014.

New EMDIS connections. (since 10- 02-2014)

EN: British Bone Marrow Registry / British Bone Marrow Registry – cord blood

RO: Romanian Registry of Hematopoïetic Stem Cells Voluntary Donors

Donor manual : Initial validation date for donors available.

Maximum of 10 selected donors is stored in the Select button history.

Reminder option for confirmatory typing results (reminder button in the SMP-ARR button).

Changes – upgrade version 4.0 – May 2018.

New CITRIX version.

IV.VIII. EMDIS connections.

II.III. 2. Panel on second row: additional tab “Messages” “Requests”.

II.IV. New donor

ION: prefilled : 4201 (the ION Issuing Organization number) assigned by the ICCBBA.

EMDIS Ethnic: donor Ethnic Group.

II.VI. HLA Data typing history. (typing updates are logged and discrepant typings are better illustrated).

III. Cord Blood. EMDIS cord project, extended Cord dataset.

IV.III.2. Sample request: new option: New sample info.

New WMDA reports.

New EMDIS reports.

(Comment: on request of other registries using Prometheus the patient name is replaced by Hidden when printing the EMDIS messages - for GDPR reasons – General Data Protection Regulation). (The patient name is available when printing the WMDA report).

Changes – upgrade version 5.0 – April 2019.

NEW items are highlighted in green.

GRID: implementation of GRID code – GRID codes are upload to BMDW, so that both the old donor code and the GRID codes are available in the WMDA search system. There is no impact on the search-workup communication – the existing donor code will still be used in the workflow.
WMDA collaborated with ICCBBA (*International Council for Commonality in Blood Banking Automation)* to create a system for assigning a globally unique identifier for potential volunteer blood stem cell donors.

Changes – upgrade version 6.0 – June 2020.

NEW items are highlighted in yellow.

Page 35:

Donor category: prefilled “not available for EMDIS till validation.

After validation it changes to: Registry donor.

Donor report: Grid code is printed.

Changes – upgrade version 7.0 – October 2020.

All changes as a result of the GRID adaptation are highlighted in blue.

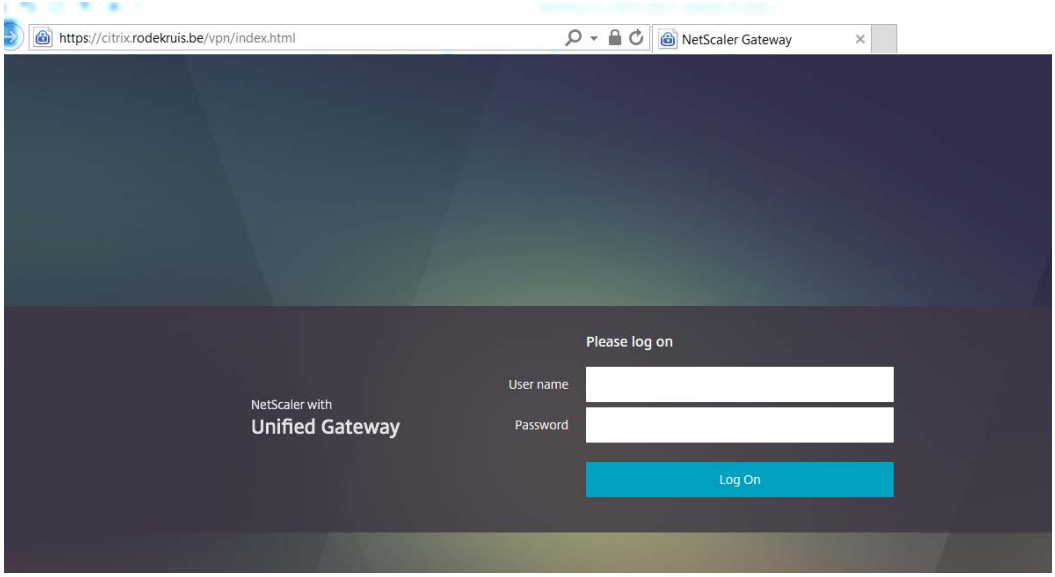
I. INTRODUCTION

I.I. PROGRAM START

I.I.1. Program start up

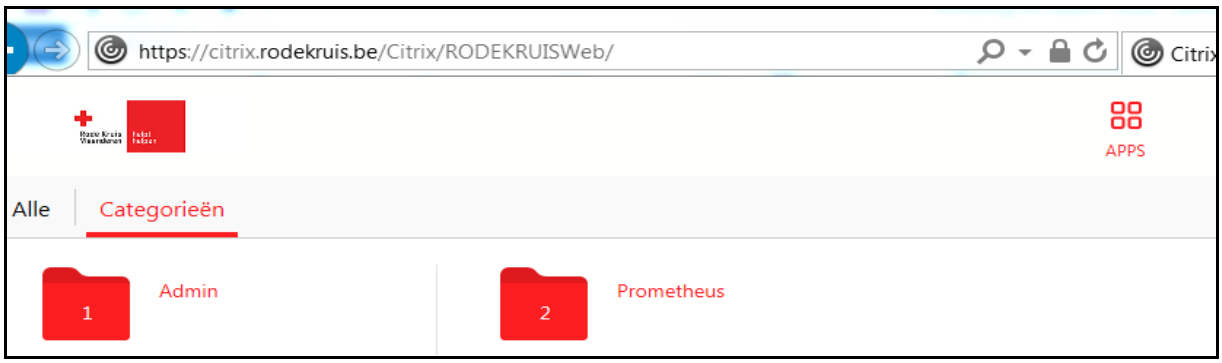
To start the application you need a Citrix username and password and a Prometheus password.

To login go to https://citrix.rodekruis.be and enter your Citrix username and password:



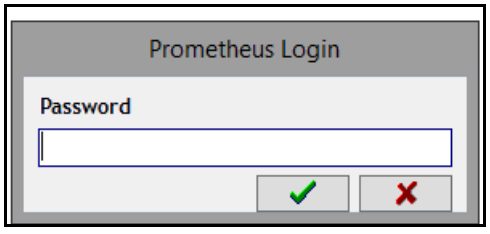
In case you have problems, you need to install the receiver first:
https://www.citrix.nl/products/receiver/

After successful download, the following screen will be displayed: select **Prometheus:**



Select Prometheus **Productie**:

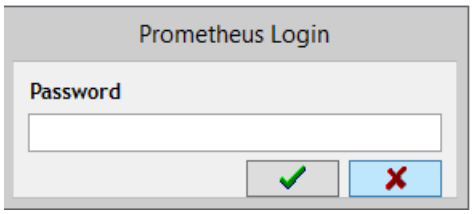
The following screen will be opened, enter your Prometheus login:



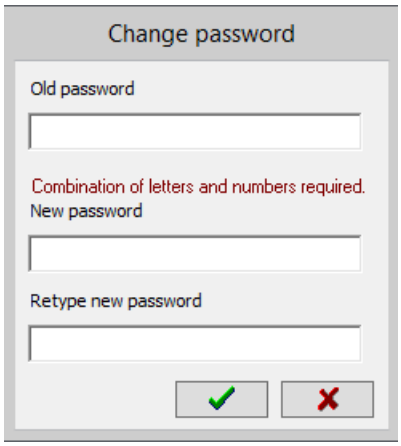
I.I.2. Login

You have 3 attempts to enter the right password. When the third attempt in a row fails, the user account will be locked. The user has to ask the Registry coordinator to unlock the account . When the ID and the password are correct the program will initialize and the main program window screen will be displayed.

FIRST LOGIN

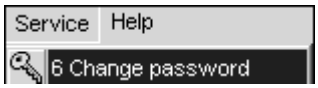


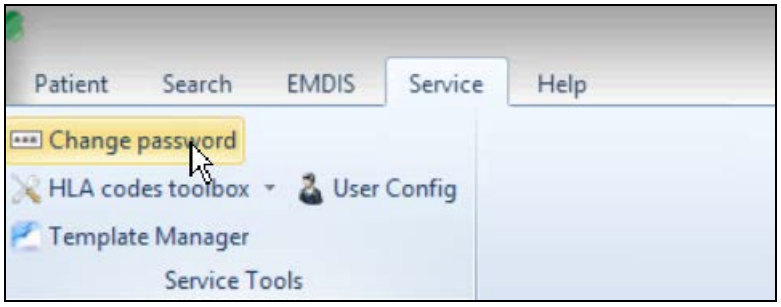
To access the application for the first time, please log in by entering the password type **"23 23"** (23space23) that was sent to you. You will be required immediately to change your password. Your new password must be in format **23** shoe1 (**23**space**shoe1**). (combination of letters and numbers required).
23space**shoe1)**.



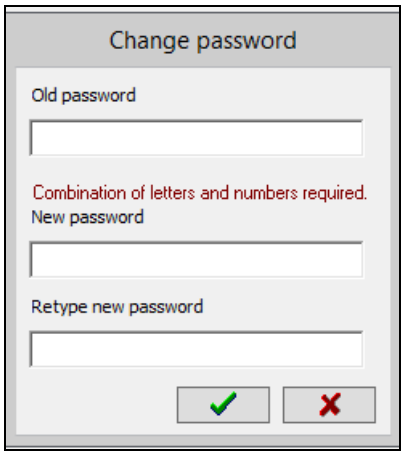
I.I.3. User password change

Go to **SERVICE** and select **"Change password**" to change your password:





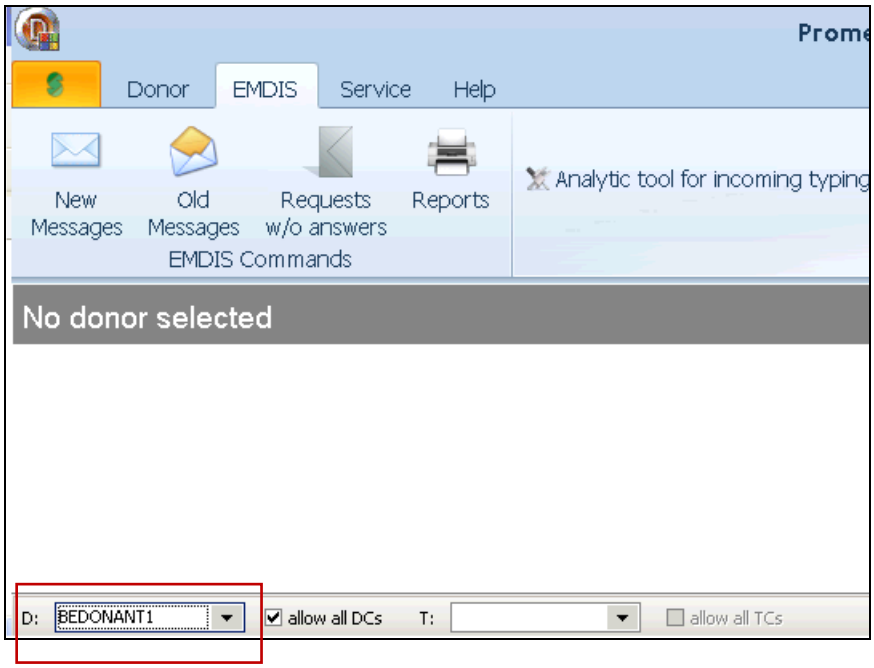
Enter your present password, a new password and confirm the new password.

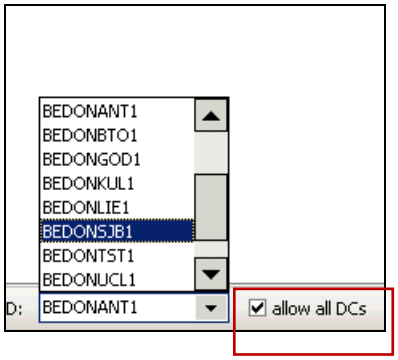


I.I.4. Multiple access rights

Some users have rights for multiple Donor Centers. When logging in you will be guided to one Donor Center, it is however possible to change the Donor Center without ending the application.

Select the arrow to change the Donor Center.

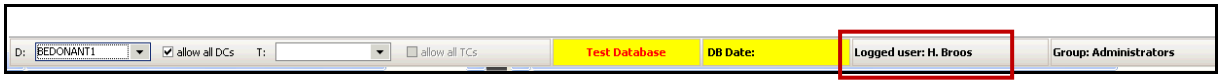




Allow all DCs – this check-box allows the user to work simultaneously with data from all Donor Centers he has access to.

Select the arrow to change the active center, you can switch between Donor Centers, Transplant Centers, Cord Blood Banks. You can simultaneously display data from multiple Donor Centers or multiple Transplant Centers. A mix between donor and Transplant Center however, is not possible.

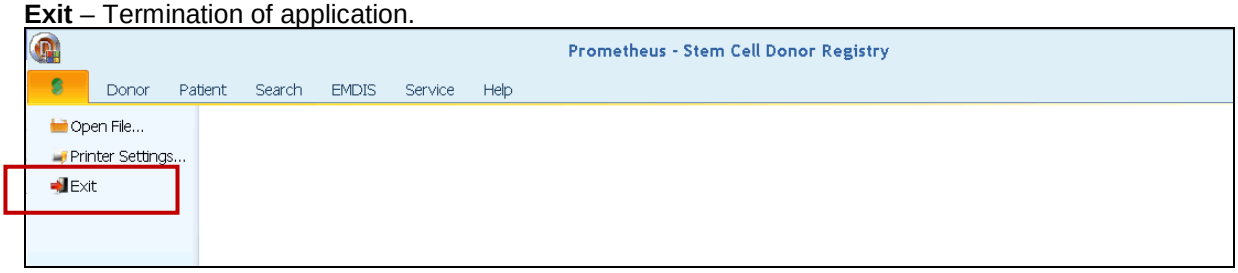
User Box – The user box shows the name of the person currently logged into the system, below the user group.



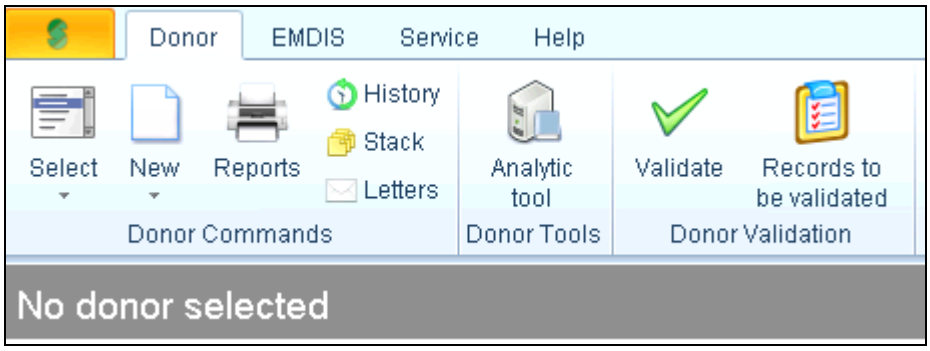
Double blind data entry includes data typed by one individual, then typed by a second individual, with the computer comparing each difference. Differences are noted in red after pressing the “check all” button. In Prometheus the profile “single managed” have rights to enter and validate HLA typing data.

We have 2 profiles:
* person with only **registration** rights
* person with **registration and validation** rights

Exit – Termination of application.

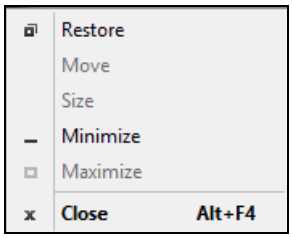


I.II. MAIN PROGRAM WINDOW



The upper part of the panel exists of the following menu options:

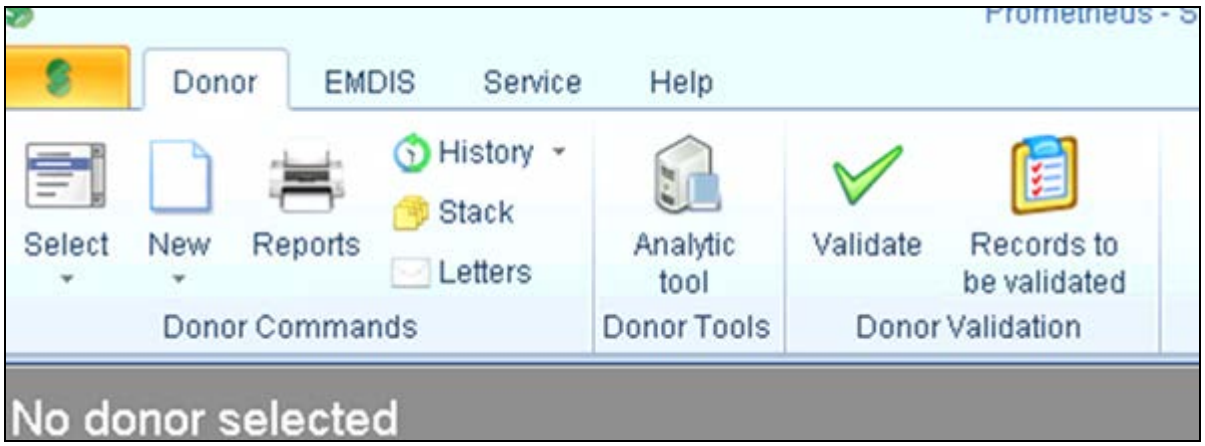
I.II.1.1. File



Minimize – minimizes your window screen

Close – lets you end the session

I.II.1.2. Donor



The donor program functions are available in menu “Donor”. Via Select or (**F3**) the donor can be selected, via close or (**F2**) the donor record will be closed.

The currently opened record is automatically closed at shutdown of the program, as well as when opening a record of another donor.

The program remembers the last selected donors and can be opened via

(use the small arrow below to the “select” button).

Use the command

to create a new donor or (**Ctrl+N**).

The

“**History”** command displays the donor data change history.

allows you to validate updated typings of new registered donor typings.

The command

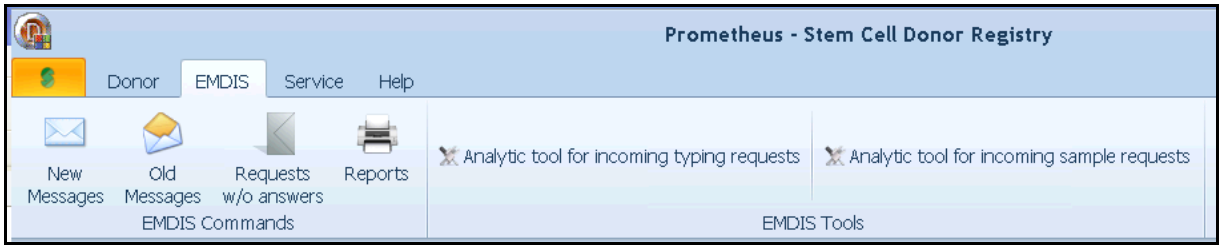
(**Ctrl+R**) offers you a list of donor reports.

Command

opens the tool for donor analysis.

The donor menu will be explained in chapter II. Donor menu.

I.II.1.3. EMDIS



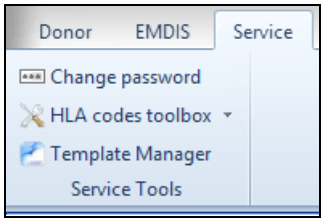
“New messages” – “old messages” - allows you to view the arrival of new EMDIS messages and to display the old messages you already consulted.

“Analytic tool for incoming typing requests” – “Analytical tool for incoming sample requests”
The use of analytic tools is further explained in chapter II.X. Analytical tool.

“Reports” Allows you to print EMDIS reports.

"Requests without answers" Allows you to consult the pending requests.

I.II.1.4. Service

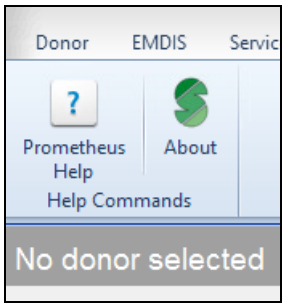


Change password – allows you to change your password.

HLA codes toolbox – allows you to consult the renamed and deleted alleles.

Template Manager – see addendum manual "Template Manager"

I.II.1.5. Help



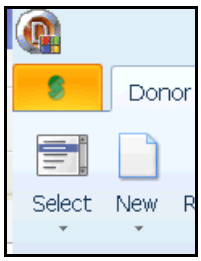
Prometheus Help – enables you to consult the Prometheus user documentation. (general from Steiner – not the Belgian version.) Not operational.

About – Prometheus version

I.II.2. Quick select buttons

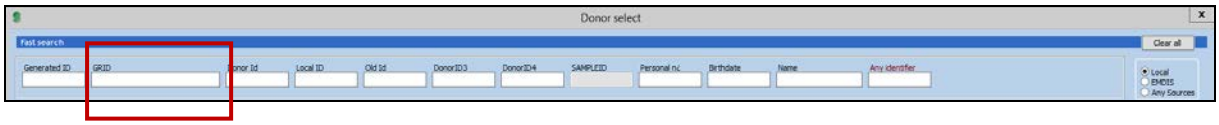
I.II.2.1. Select donor

Select donor – the selection of a donor.



Click the „**select** " button to go to the **„donor select**" screen, the following screen will be opened:

The order of the select has been changed: GRID has been moved to the second position.



The GRID code will be the only identifier, but it is still possible to look up the donor records by using the old donor code (now called the secondary code).

You can search donors by several parameters:

- **Search by:**

- **Generated ID:** is the internal Prometheus ID
- **GRID NR:** Global Registration Identifier for Donors.
- Donor ID: the Syrenad code or code from the Cord Blood Bank
- **Local center ID:** Local center ID field.
- **Old ID:** ?
- **Personal number:** NA
- **Birthdate:** fill in year (YYYY), year and month (MMYYYY) or full date (DD/MM/YYYY)
- **Name:** fill in full name or several characters of last name (at least 3 characters needed).
- **Any identifier**

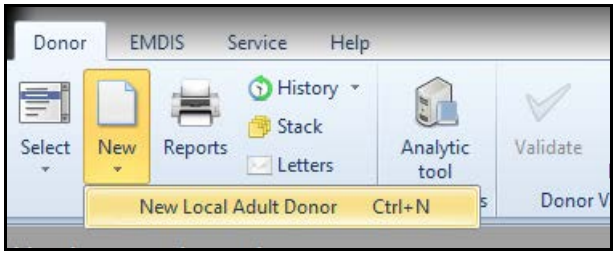
Note: new donors will be attributed a GRID code by Prometheus.

NEW FEATURE:

When you copy/paste the GRID code with spaces, the spaces will be removed:

4201 0000 0000 0167 306 -> 4201000000000167306

I.II.2.2. New donor



This menu selection allows you to register a new donor in the national database. The donor registration is explained in chapter II.IV New donor.

I.II.3. Hot Keys

Table of keyboard shortcuts:

Hot key	Function	Hot key	Function
F3	Donor select	F2	Donor close
Ctrl-N	New donor	Ctrl-D	Donor edit
Alt-Q	Program shutdown	Esc	Option abort
Alt-X	Option confirm		

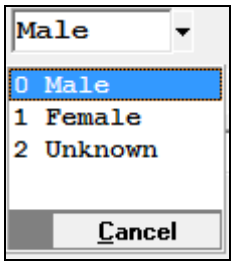
I.II.4. Behavior of input fields

I.II.4.1. Date field

- date format: "**dd.mm.yyyy**", e.g. "26.01.2009";
- press "**d**" for today's date;
- type "**17**" to select day in actual month, e.g. January 17, 2009 (if current month is January and year is 2009);
- type "**17 6"** to select day and month in actual year, e.g. June 17, 2009 (if current year is 2009);
- type "**6 12 7**" to select December 6, 2007;
- **F3** for calendar selection.

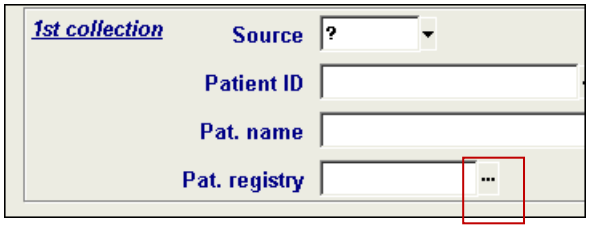
I.II.4.2. Selection from static code list

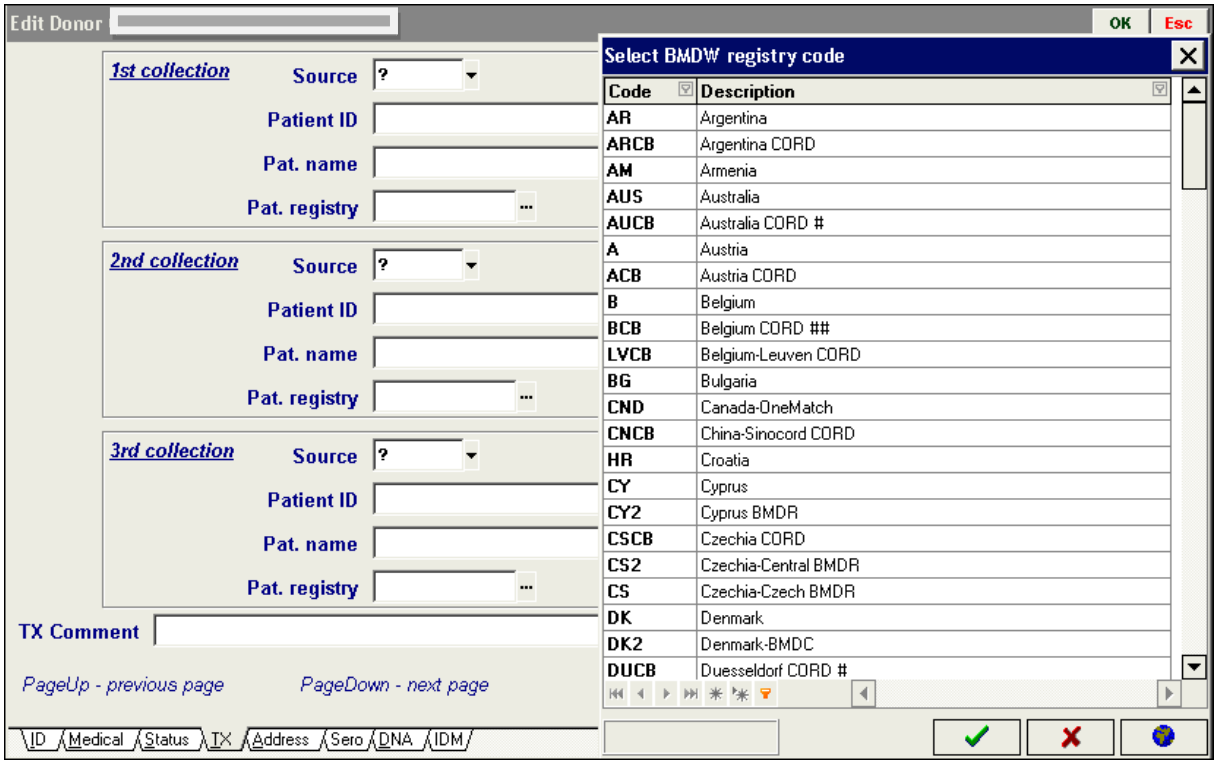
- press **space** for next value;
- **F3** for selection by list, **Esc** to leave selection list;
- press **number** (0, 1, 2 or +, -) as shortcut of selection.



I.II.4.3. Selection from dynamic code list

- Type **code** of the selection;
- **F3** for selection by list, type first **characters of code** to filter the list, **backspace** to clear filter, **enter** to confirm selection, **Esc** to leave selection list.

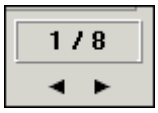




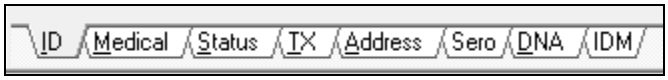
I.II.4.4. Form control

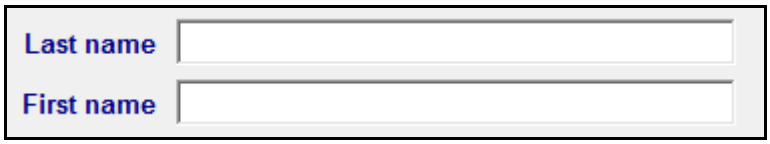
Pressing the **OK** button confirms data entry, changes will be saved in the database and the record will be closed. The command can also be called up by using the shortcut **Alt-X**.

This button is used to undo all the changes made to the current record.



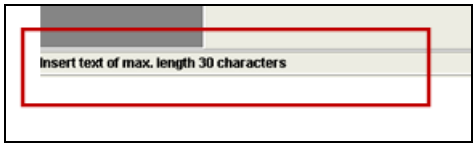
Most forms are multi-page forms, the arrow enables to browse between the different tabs.





You can use enter, the down arrow or tab to go to the next field. (Shift-tab – the up arrow to go to the previous field).

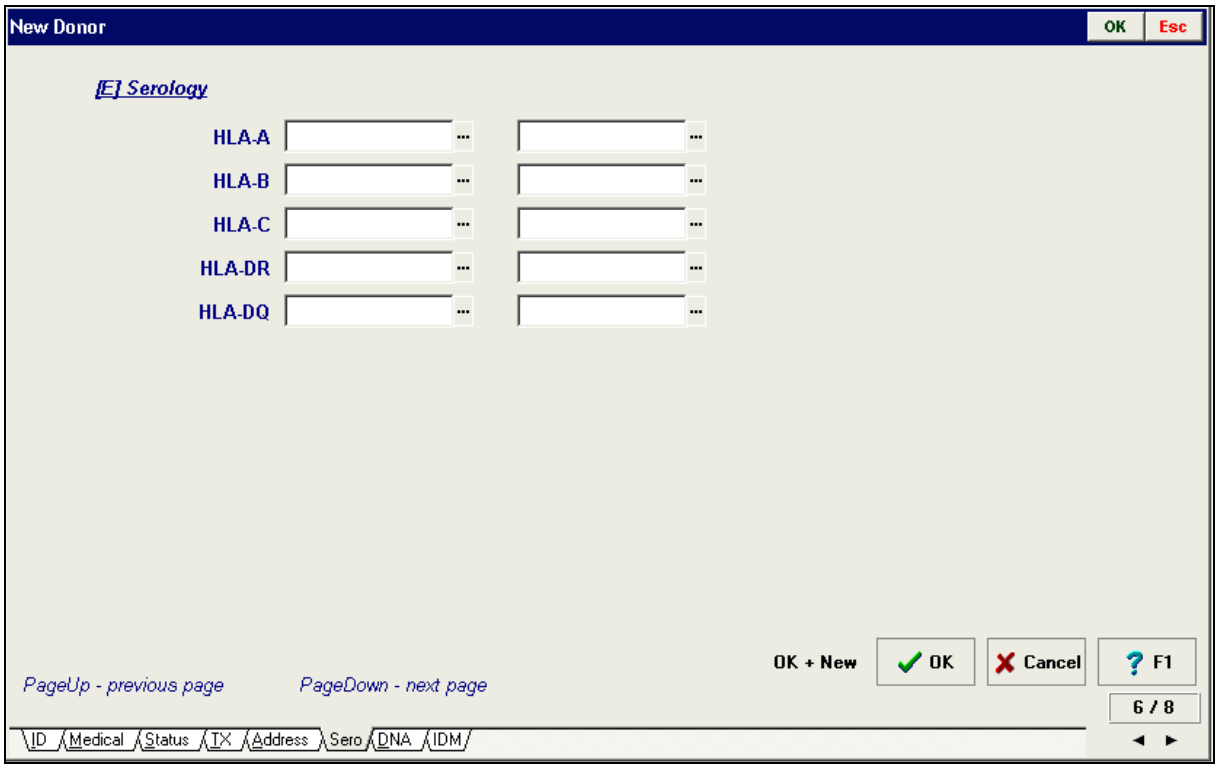
The bottom part of the window screens gives you contextual help for data entry:



I.II.4.5. HLA DATA

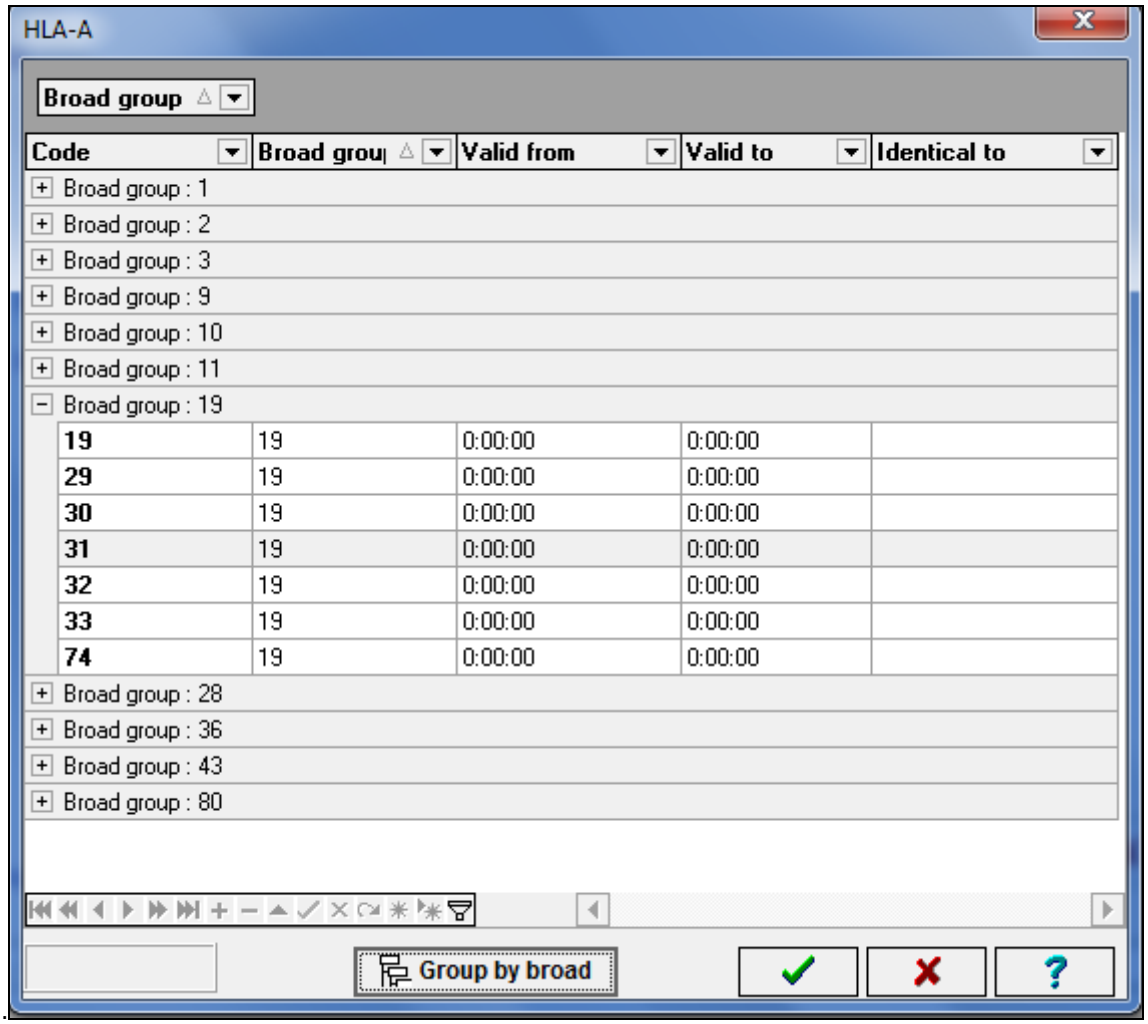
I.II.4.5.a. Serology

The following screen is offered for serology typing, but it is not mandatory to enter serology if molecular typing is available.



List of valid values appear when clicking the dots ... right from input field or by pressing **F3**.

Codes can be grouped by broad group Group by broad or filtered by custom criteria



Group by broad view

I.II.4.5.b. DNA typing results

Enter high resolution code, XX code or MAC code. System warns you when you enter an invalid code or a code not matching serology.

DNA typing results respect the new nomenclature. When entering a value in an old format (e.g. 0301) system corrects it automatically to the new format (e.g. 03:01).

Values as 1, 01, 01xx, 01XX, 01:xx are automatically changed into 01:XX. Values as 701 are automatically changed to 07:01.

Type 1301-4 6 8 10 for B*13:VVS = B*1301/1302/1303/1304/1306/1308/1310.

Codes are automatically converted to MAC:

A* „0101/0102“ to 01:FWEY

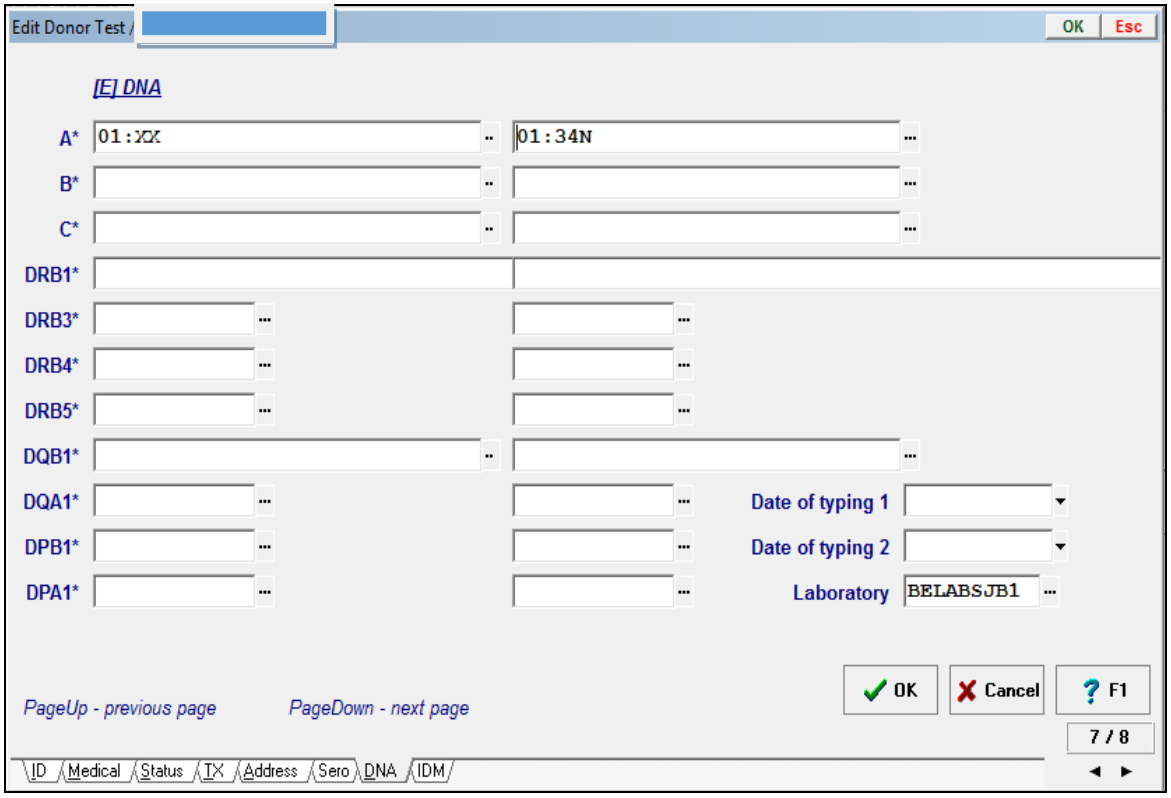
A* „0101/2“ to 01:FWEY

A* „0101 2“ to 01:FWEY

B* „1301-4 6 8 10“ to 13:DMYV

Valid codes are updated each four days.

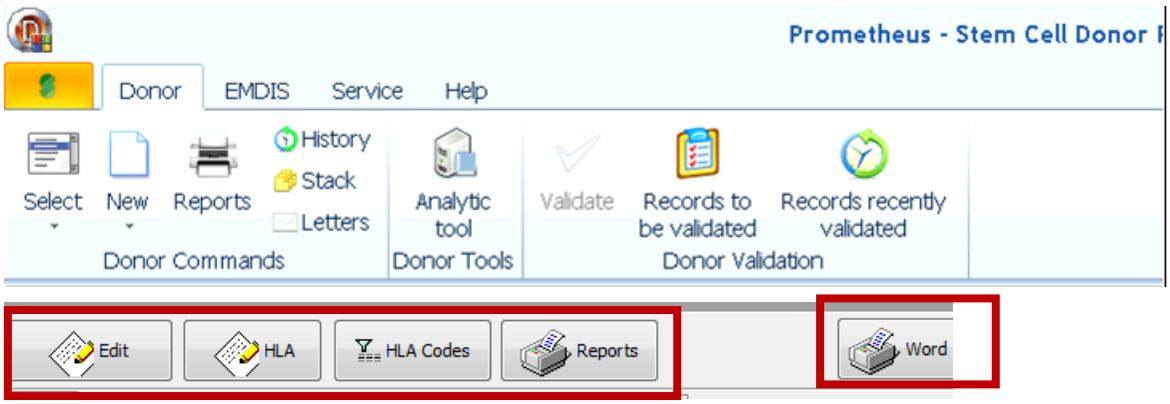
Note: Serology or search determinant are not needed in Prometheus: the serology or search determinant will be removed when migrating donors and cord bloods to Prometheus : if the molecular value is available, the serology or search determinant will not be migrated.
When doing a **typing update** the serology must be removed when entering a molecular value.
Regular serology removal will be performed by the Registry.



DNA Typing results view

I.III. WORK PANEL DONOR

I.III.1. Upper panel



Edit: this button allows you to enter and edit the donor's data.

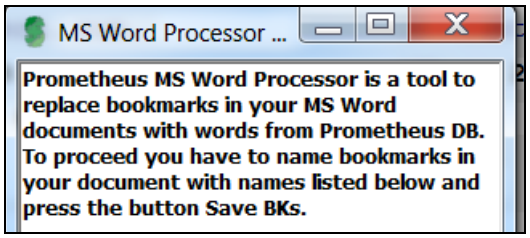
HLA: data typing history

HLA codes: allows you to consult the renamed and deleted alleles

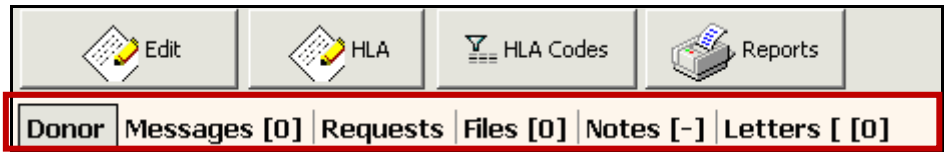
Reports: this button opens the donor reports application.

Word :

New is the MS word processor.(not implemented in MDPB).



I.III.2. Panel on second row



The donor data consists of 5 tabs: "**Donor record**", "**Messages**", "**Requests**", "**Files**", "**Notes**", "**Letters**". (New)

Letter History (will be explained in additional manual "letter templates")..

I.III.2.1. Donor record

The "**Donor Record"** tab shows the basic information of the donor, also available in the different tabs when editing the donor record. (Chapter II.III. Donor edit).

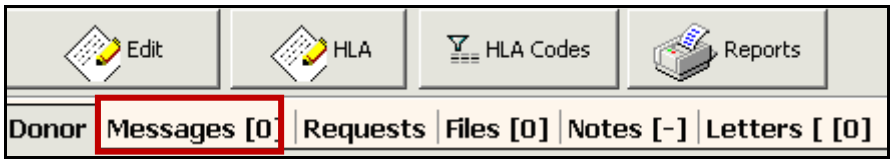
At the bottom of the window screen will be indicated:

Record changed on: last change of the record : date – time – user
Record inserted on: date when record inserted
HLA/DNA validated on: date when the HLA/DNA data have been validated (after first registration or hla typing update) – time – user
First validation: date of first validation

If the record has not yet been validated, the text **"HLA/DNA to be validated"** will be highlighted in red, or when the typing validation failed, **"failed HLA/DNA validation"**, waiting for a typing update.

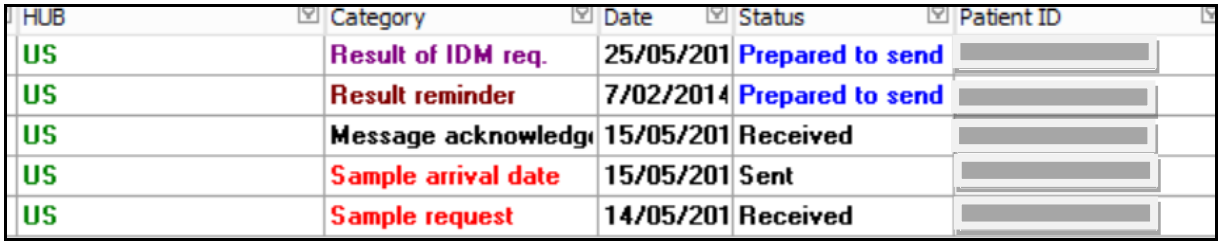
I.III.2.2. Messages

The "**Messages"** tab allows you to see all specific EMDIS messages received for this donor.



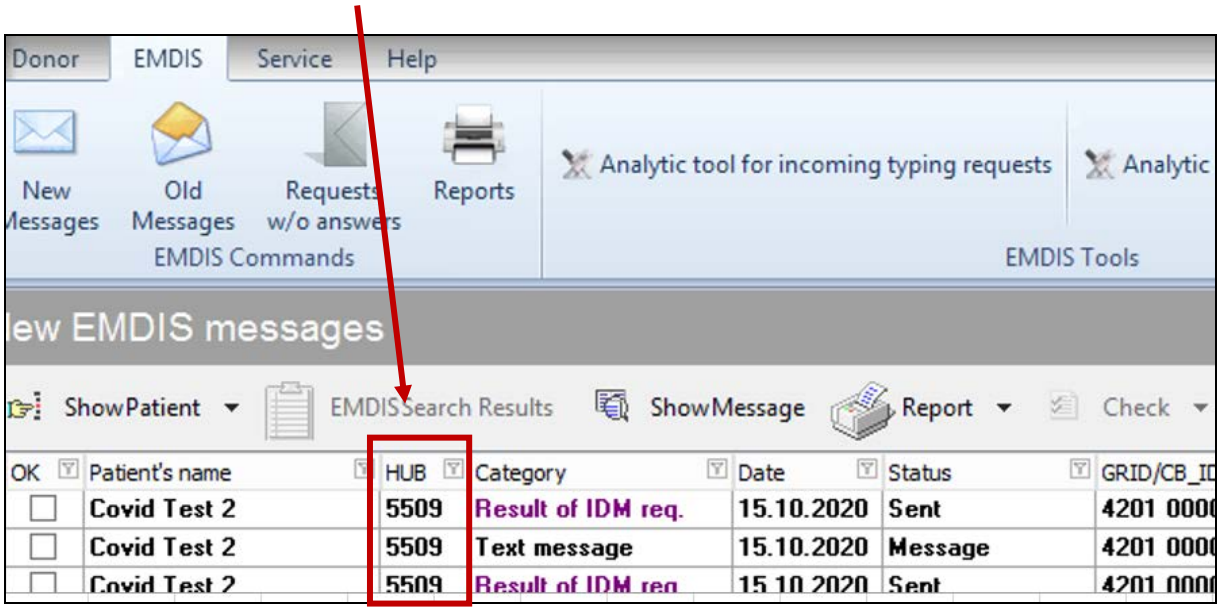
The old **"EMDIS messages"** tab has been expanded by 2 different tabs: **"Messages"** and **"Requests".**

The tab "Messages" will list all incoming and outgoing messages as in the previous "EMDIS messages".



HUB	Category	Date	Status	Patient ID
US	Result of IDM req.	25/05/201	Prepared to send	
US	Result reminder	7/02/2014	Prepared to send	
US	Message acknowledg	15/05/201	Received	
US	Sample arrival date	15/05/201	Sent	
US	Sample request	14/05/201	Received	

New in version 188: the ION CODE will be displayed in the HUB instead of the Country code.

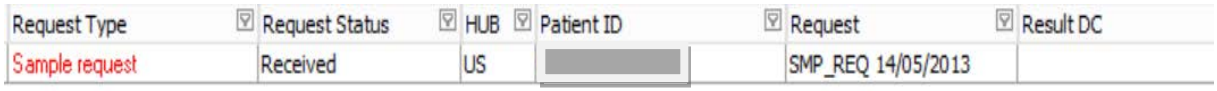


The ION Codes are available on:

https://share.wmda.info/display/WMDAREG/Database

I.III.2.3. Requests

The tab **"Requests"** lists the different requests you received and the status of the request:



I.III.2.4. Files

It is possible to attach external files to a donor record: open the donor record and select the "**Files**" tab in the donor work panel.

You can upload Excel, Word and PDF files, e-mails, pictures, ... by selecting the button **"New file"**.

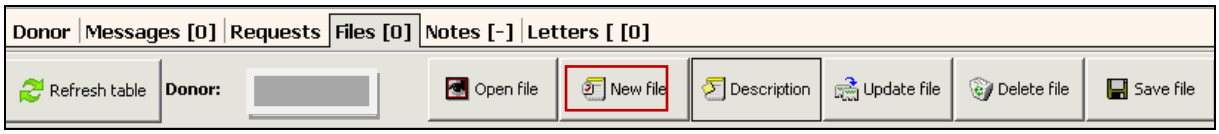
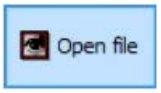


Table description:

- **File name column**: the name of the file, as it was imported;
- **Description:** a short text description of the file;
- **Date edit**: date and time of last change;
- **Edited by**: name of the user that made the last change.

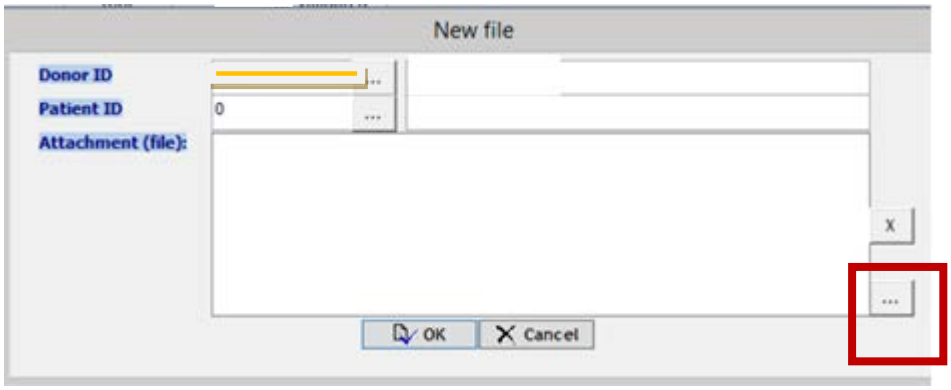
File management:



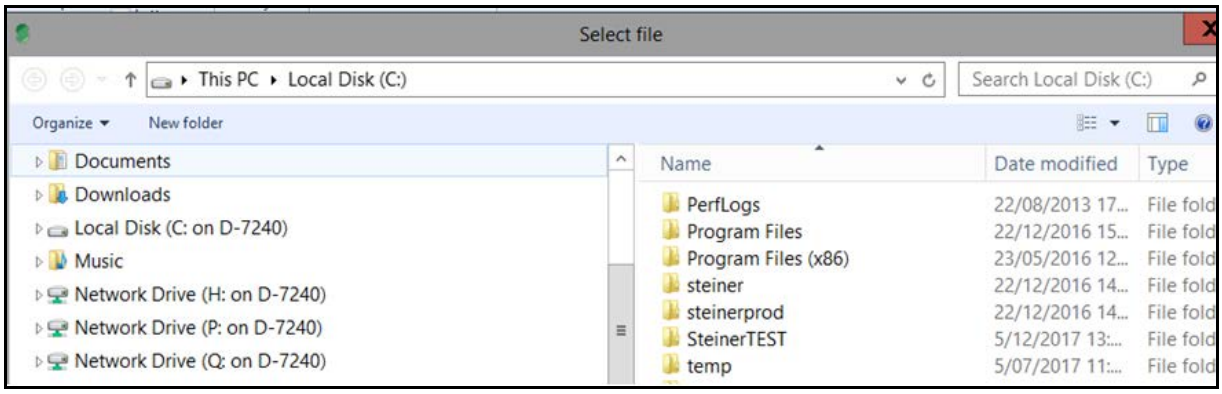
Open file button: open the highlighted file in the attached files table.

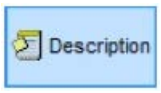
New file button: attach a file to the donor record.

Click on to open the “Select File” window screen:



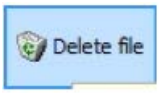
And browse for the document you wish to upload:



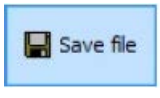


Describe file button: enter a text description of the file highlighted in the attached files table.

Update file button: replaces the highlighted file in the attached files table with a new or updated version of the document.

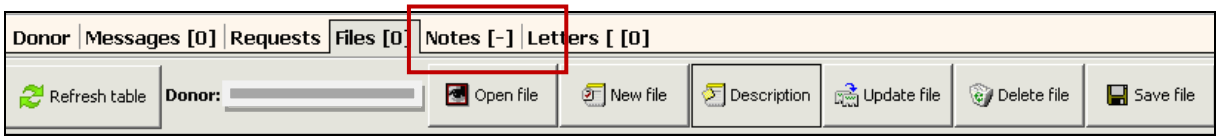


Delete file: delete the highlighted file in the attached files table.

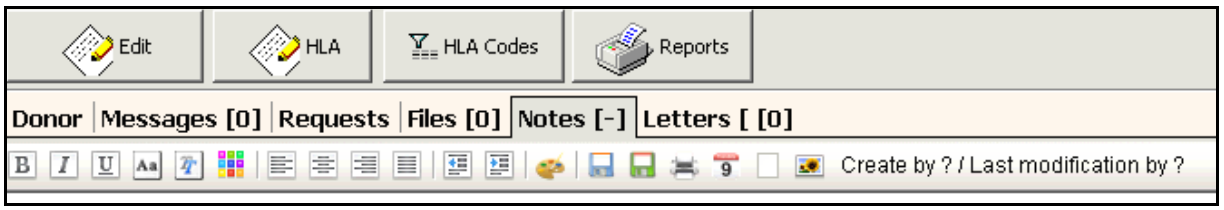


Save file: save a copy of the highlighted file in the attached files table on your pc.

I.III.2.5. Notes



It is possible to add an unlimited free text note to the donors records. The text can be edited with the similar tools as available in Windows Word pad.
Select the **"Notes"** tab to open the window screen. .

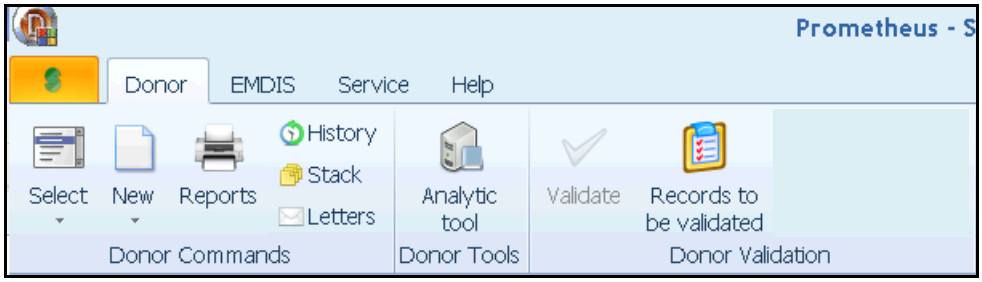


To add a note, type the text.
To export or save the note to a different location, use the "save" icon on the tool bar. The text will be saved as a text file.

I.III.2.6. Letters

Is explained in the Addendum Letter template manager 4.0. 2017.

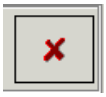
II. DONOR MENU



II.I. DONOR SELECT

The select option is explained in chapter I.II.2. Quick select buttons.

II.II. DONOR CLOSE

Select Donor Close or F2 or press  to end the donor editing.

II.III. DONOR EDIT – CONSULTATION – UPDATE OF DONOR

Edit can be used for consulting the donors record, change donor data (medical data – availability - address coordinates – HLA data) and cancel the donor from the national database.
If there is a change of HLA data (sero – DNA) the record must be validated. Validation rules are explained in chapter II.VII. Validate.

Press

to open the donors record: the ID tab will be opened (other tabs are Medical – Status – TX – Address – Sero – DNA – IDM). You'll find more detailed information in next chapter II.IV. New donor.

New : the GRID code:

WMDA collaborated with ICCBBA (*International Council for Commonality in Blood Banking Automation)* to create a system for assigning a globally unique identifier for potential volunteer blood stem cell donors. This was needed to facilitate communication and prevent errors in identification of donors (not applicable for cords).

First part: ION for Belgium is 4201

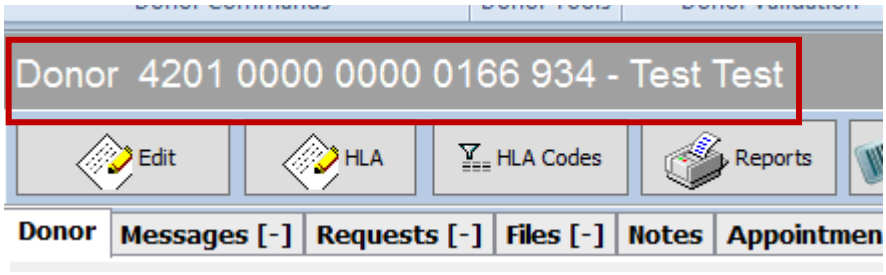
Second part: 13 digits:

= the internal Prometheus code of the donor record prefilled with leading zeros as the code is shorter than 13 digits.

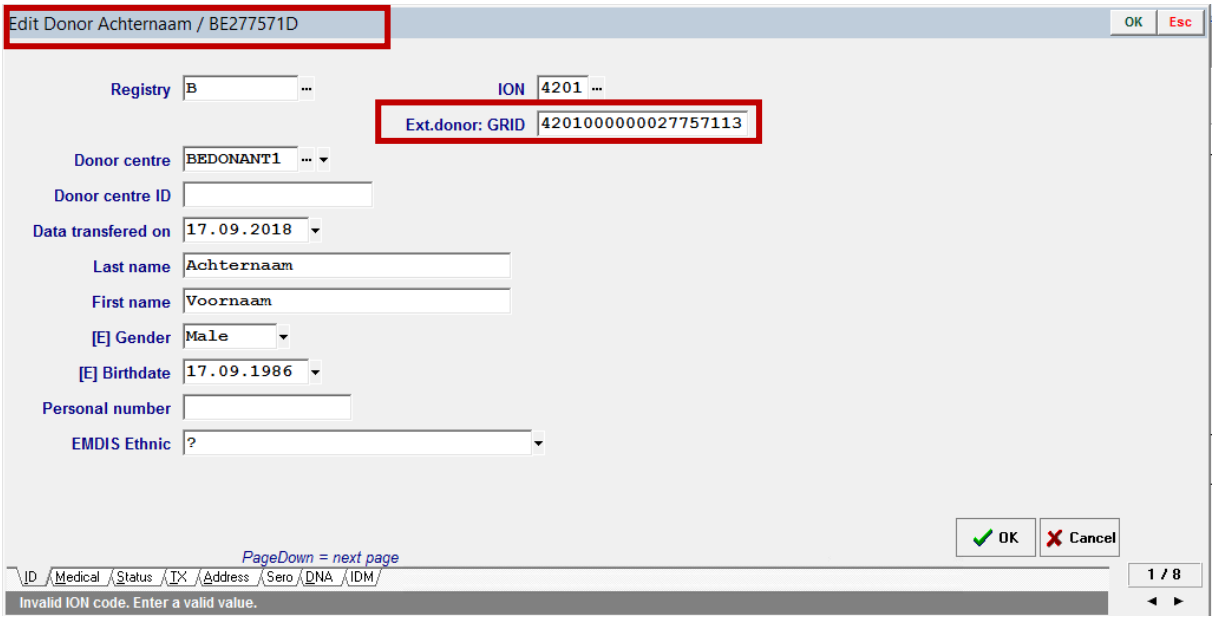
Third part: Checksum – will be calculated by Prometheus.

(is an algorithm – used to validate and check the GRID to ensure that the input data is genuine and error free).

The GRID code is the identifier in the grey bar of the first view of the donor card:



The old code will only be available when editing the donor

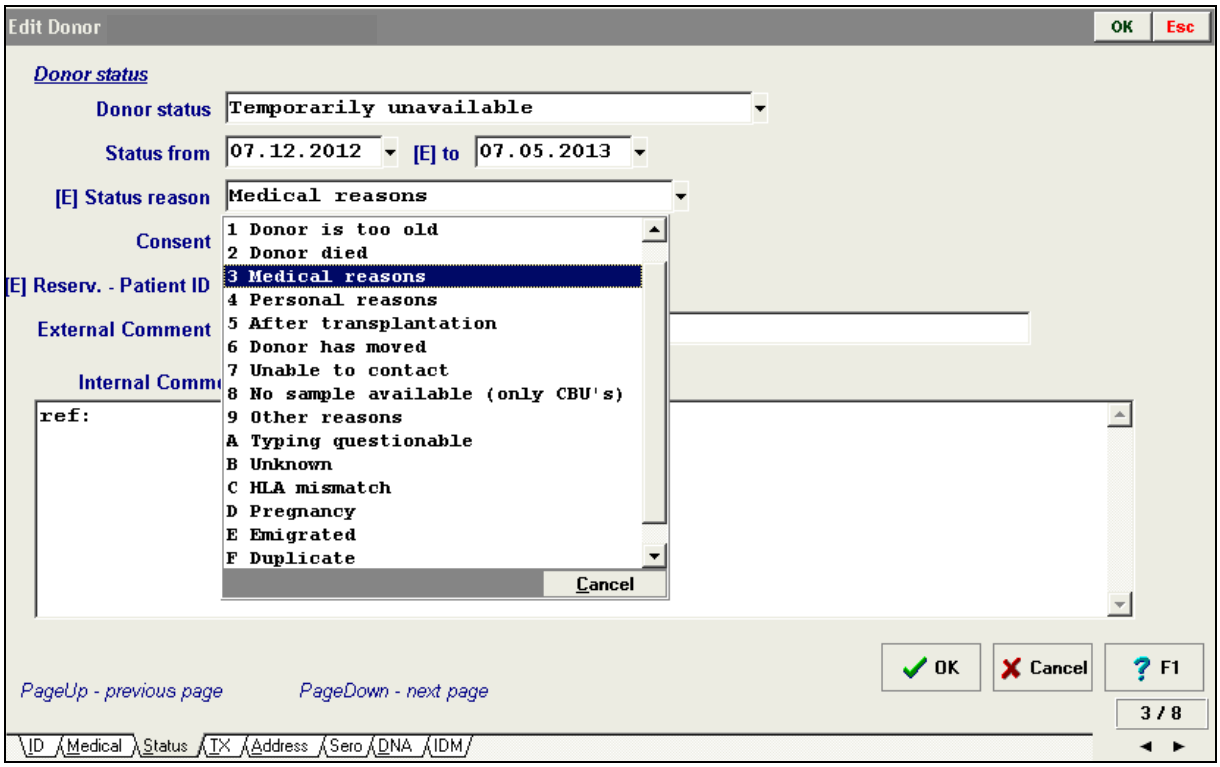


When reporting HLA typing results or IDM results for national and international patients, the results must be edited before sending the EMDIS message. When doing a typing update, the new HLA values will not be available for EMDIS as long as the typing has not been validated.

II.III.1. Donor status: temporarily unavailable – reservation - cancellation

a. Temporarily unavailable

If a donor is not available for a period, the status must be set to “Temporarily unavailable”. Indicate the time period by filling in “status from… to…. “ and select the reason:



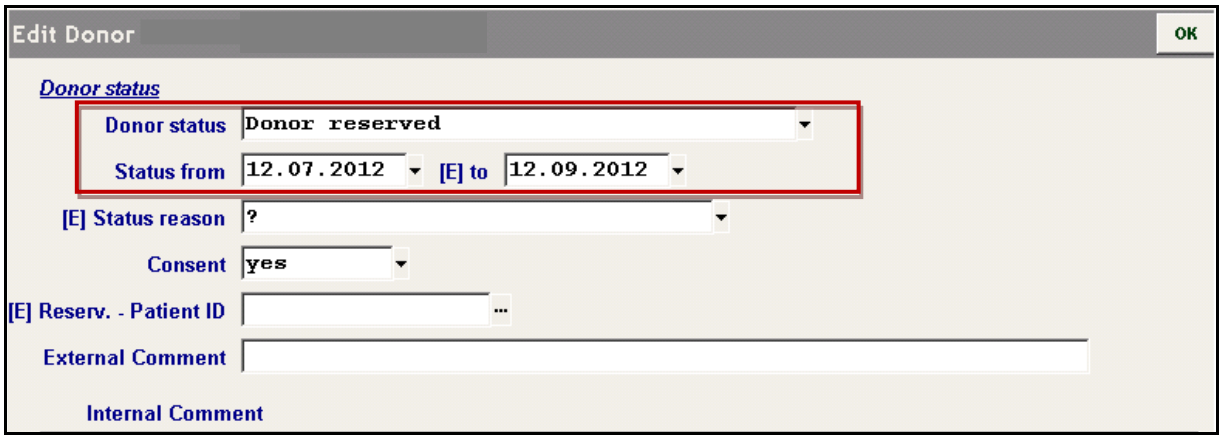
A pregnant donor must be temporarily suspended from the Registry's database file during the entire time of the pregnancy and up to a period of six months after delivery when requested for a typing request or blood sample request.

When the end of TCI has been reached, Prometheus will set the status to availability again.

b. Reservation

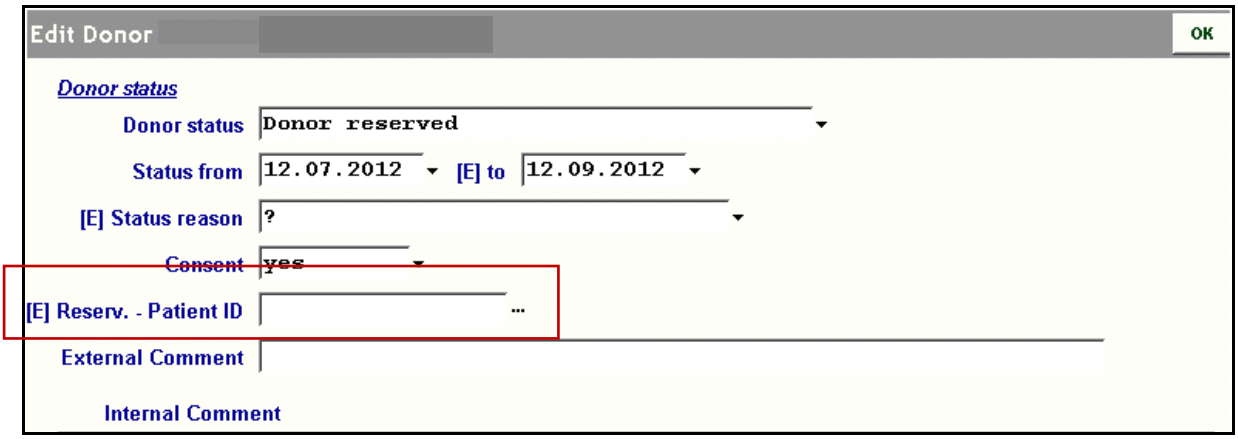
When a donor has been requested for additional typing or a blood sample shipment, the donor will be reserved for 2 months. The user must change the availability status and reserve to donor for a period of 2 months (cfr MDPB-R SOP).

Donor status: donor reserved
Status from: date of today to 60 days from now on (These data will be sent via EMDIS).



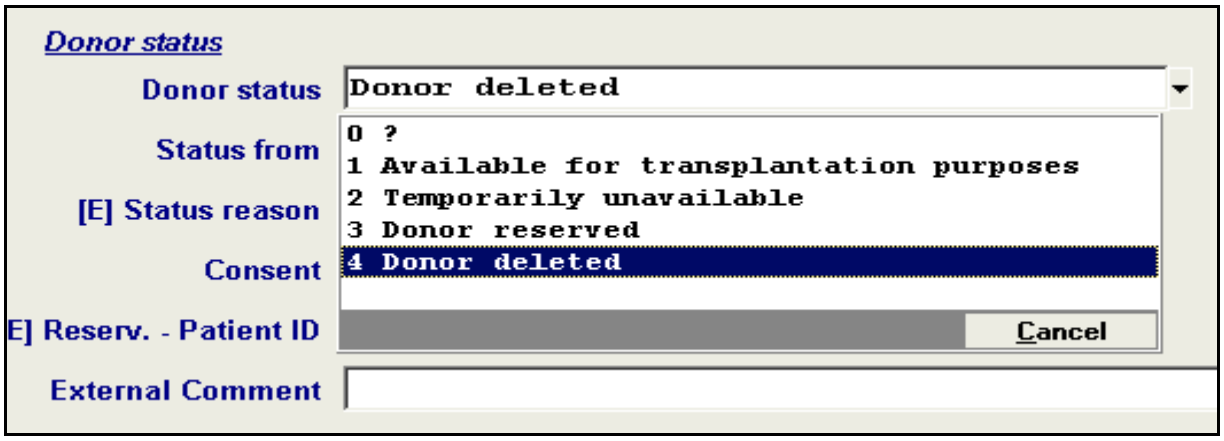
By pointing the actual month a drop-down list will be opened. You can also navigate with the arrows.

It's mandatory to enter the patient ID for which the donor has been reserved, clicking on the --- the list of patients linked with your donor will be displayed. Select the patient for which you would like to do the reservation. The message will be sent via EMDIS. The HUB of the patient will be informed consequently.

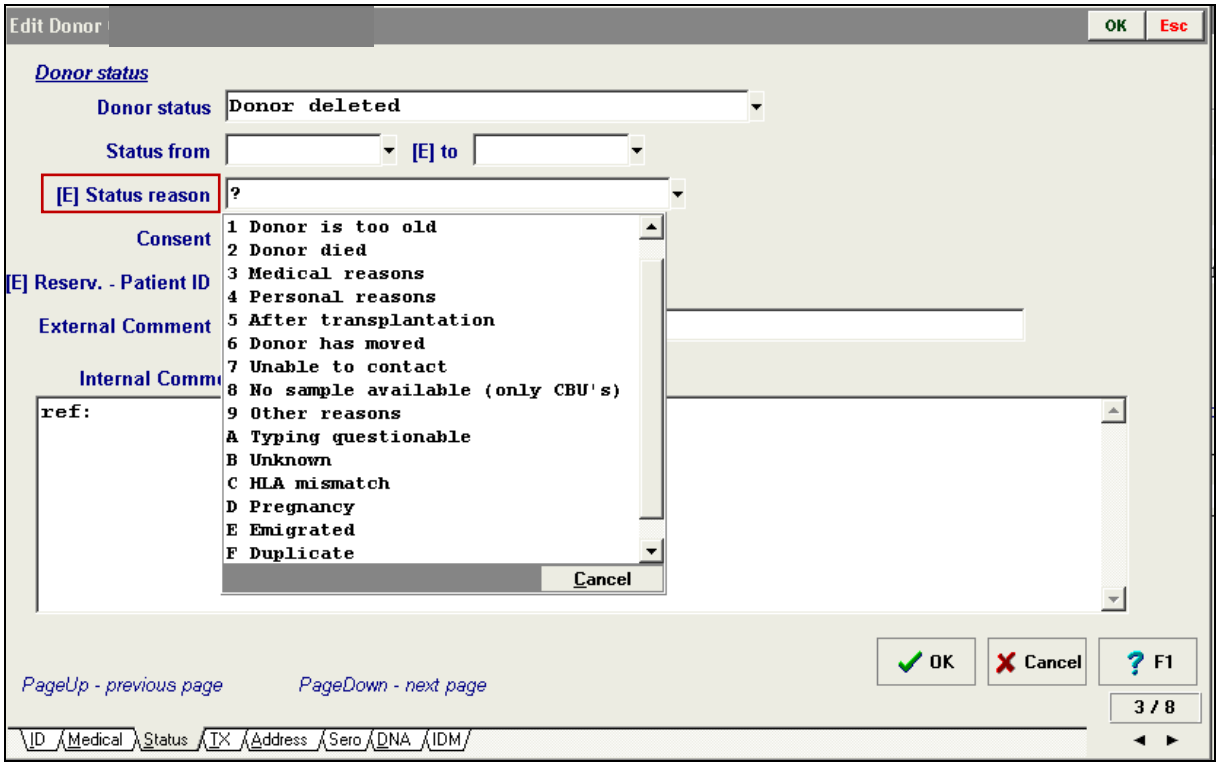


c. Cancellation

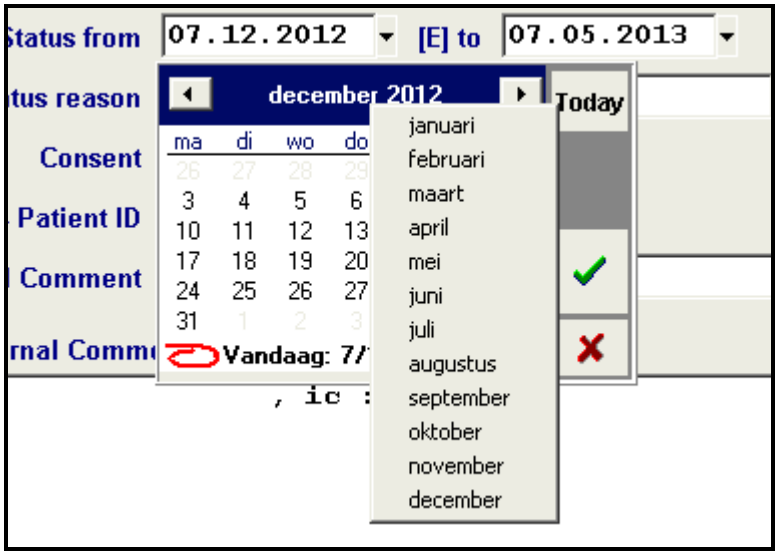
You should use the edit option to cancel a donor from the database. First select the donor, and then press Edit. Go to the **S**tatus tab: select the donor status option "4 **Donor deleted"**.



Specify the reason and date of cancellation, this information will be sent via EMDIS. All patients linked to this donor will receive the information that the donor is no longer available.



By pointing the actual month a drop-down list will be opened. You can also navigate with the arrows.

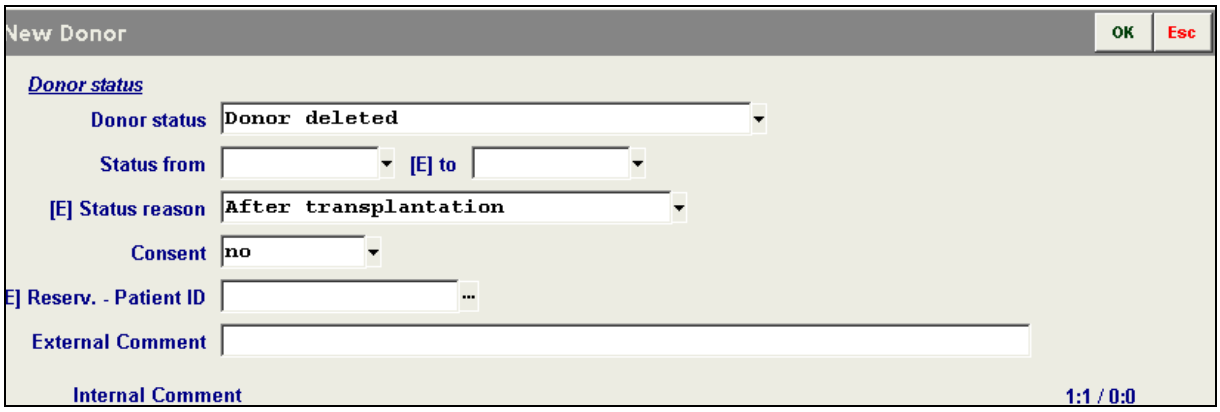


Status reason:

1. Donor is too old
2. Donor died
3. Medical reason
4. Personal reason
5. After transplantation
6. Donor has moved

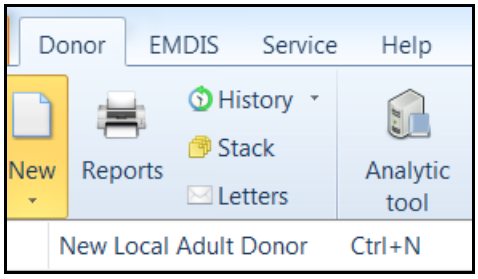
7. Unable to contact
8. No sample available
9. Other reasons
A. Typing questionable
B. Unknown
C. HLA mismatch
D. Pregnancy
E. Emigrated
F. Duplicate
L. Donor currently abroad. (new: will be mapped to EMDIS value PR – personal reasons).

A volunteer donor must be prevented from donating again (unless he or she donates for the same recipient). After donation the donor must be cancelled from the database.



When cancelling the donor after donation, information of the transplantation can be entered in the tab TX: source, patient ID, patient name, patient Registry, date of collection and date of TX.
Even if the donor has been cancelled from the database, the data will be available for consultation and it is possible to enter consecutive transplantations for the same patient.
Donors reaching cancellation age (60 years) will be deleted automatically, the user will be informed by the Quality check.

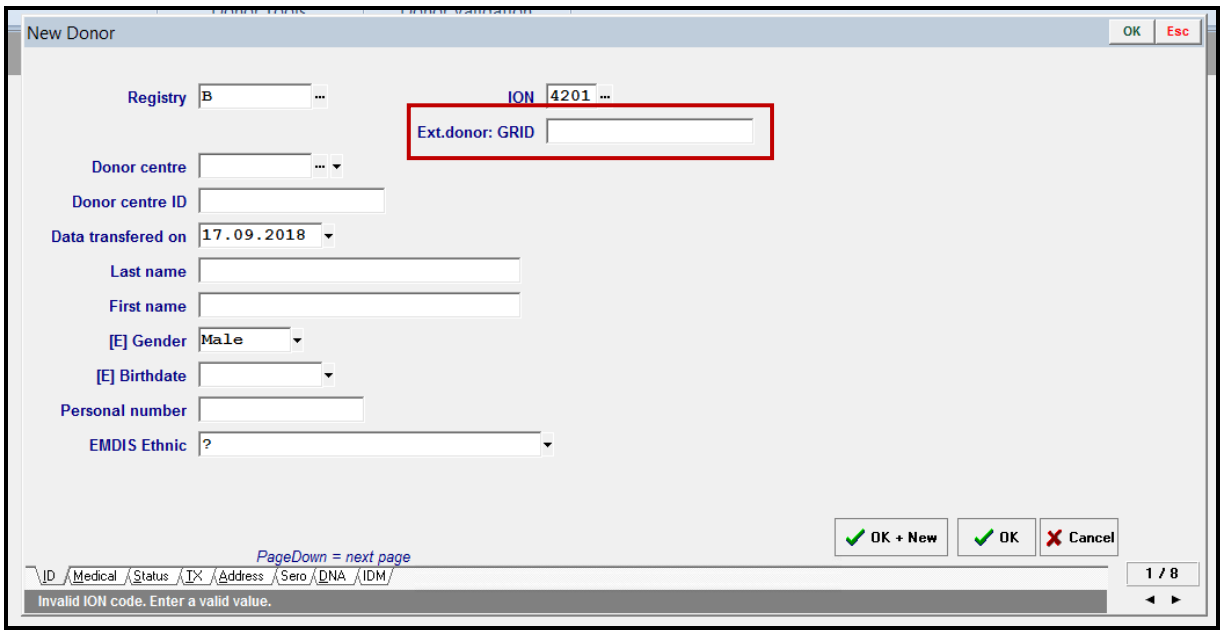
II.IV. NEW DONOR

Go to donor command  to register a new donor.

This menu includes the following tabs:

- ID,
- Medical,
- Status,
- TX,
- Address,
- Sero,
- DNA,
- IDM.

1. TAB ID



Registry:	prefilled B
ION:	prefilled 4201
	The ION (Issuing Organization number) assigned by the ICCBBA.
GRID:	Will be assigned by Prometheus.
Donor center:	prefilled donor center code
Donor center ID:	local Donor Center code, not mandatory (max. length 17 characters)
Data transferred on :	prefilled date of today
Last name:	please enter last name, not mandatory (max. length 30)
First name:	please enter first name, not mandatory (max. length 30)
(E) Gender:	please enter Gender, **mandatory**, EMDIS field (default value male)
(E) Birthdate:	please enter birth date, **mandatory**, EMDIS field
Personal number:	Social security number, not mandatory.
EMDIS Ethnic:	Donor ethnic group:

AFNA = African: North Africa
AFSS = African: Sub-Sahara Africa
ASSW = Asian: Southwest Asia (Middle East, Turkey)
ASSO = Asian: Southern Asia (India, Pakistan, Bangladesh, Sri Lanka, Bhutan, Nepal)
ASCE = Asian: Central Asia (Eastern Russia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan)
ASSE = Asian: Southeast Asia (China, Mongolia, Burma, Laos, Cambodia, Thailand, Vietnam, Taiwan)
ASNE = Asian: North and Northeast Asia (Japan, North Korea, South Korea)
ASOC = Asian: Oceania (Pacific Islands, excluding Japan, Australia, Taiwan, Sakhalin, Aleutian Islands)
CAEU = Caucasian: Mainland Europe, Greenland, Iceland, Western Russia
CAER = Caucasian: Eastern Russia
CANA = Caucasian: North America (USA, Canada, Mexico)
CAAU = Caucasian: Australia (Australia, New Zealand)
HICA = Hispanic: Central America, Caribbean
HISA = Hispanic: South America
MX = Mixed / multiple
OT = Other (e.g. Australian Aborigine)
UK = Unknown

To be able to be registered within the MDPB-R, donors must have passed their **18th birthday** but must not have passed their **40th birthday.**

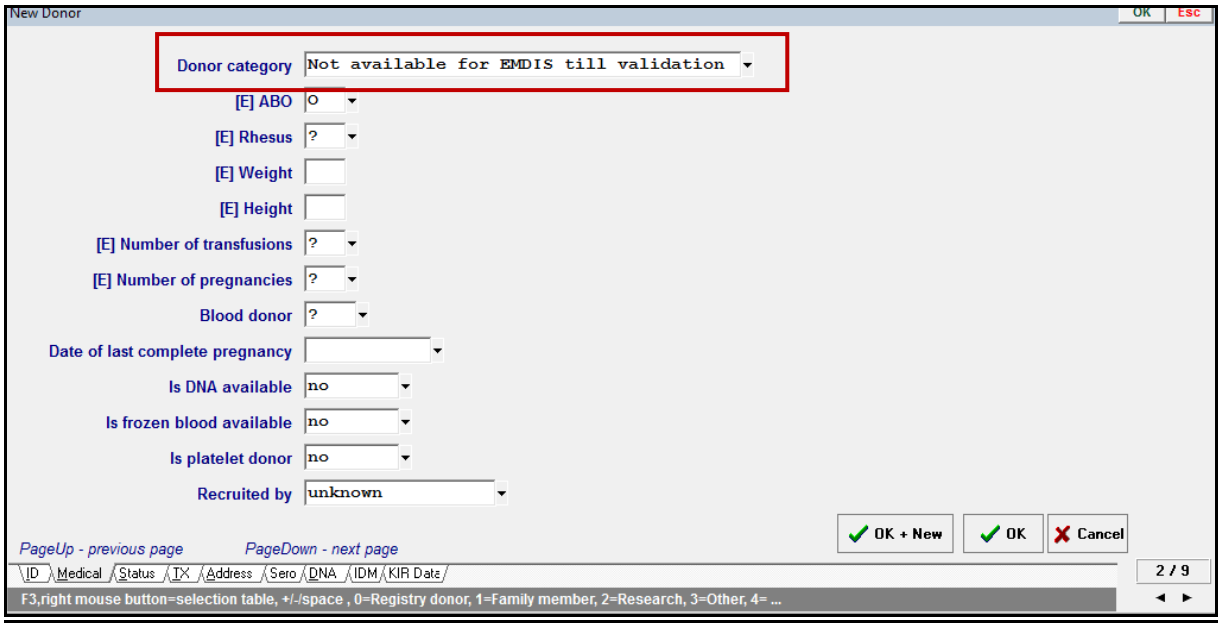
The duration of the registration will be until the age of **60**. When a donor reaches the age of **60,** the status will change automatically to "**4 Donor deleted**".

The identification code will be attributed by Prometheus after ending the donor registration:

New Prometheus numbering: **BE123456D**.

2.TAB MEDICAL

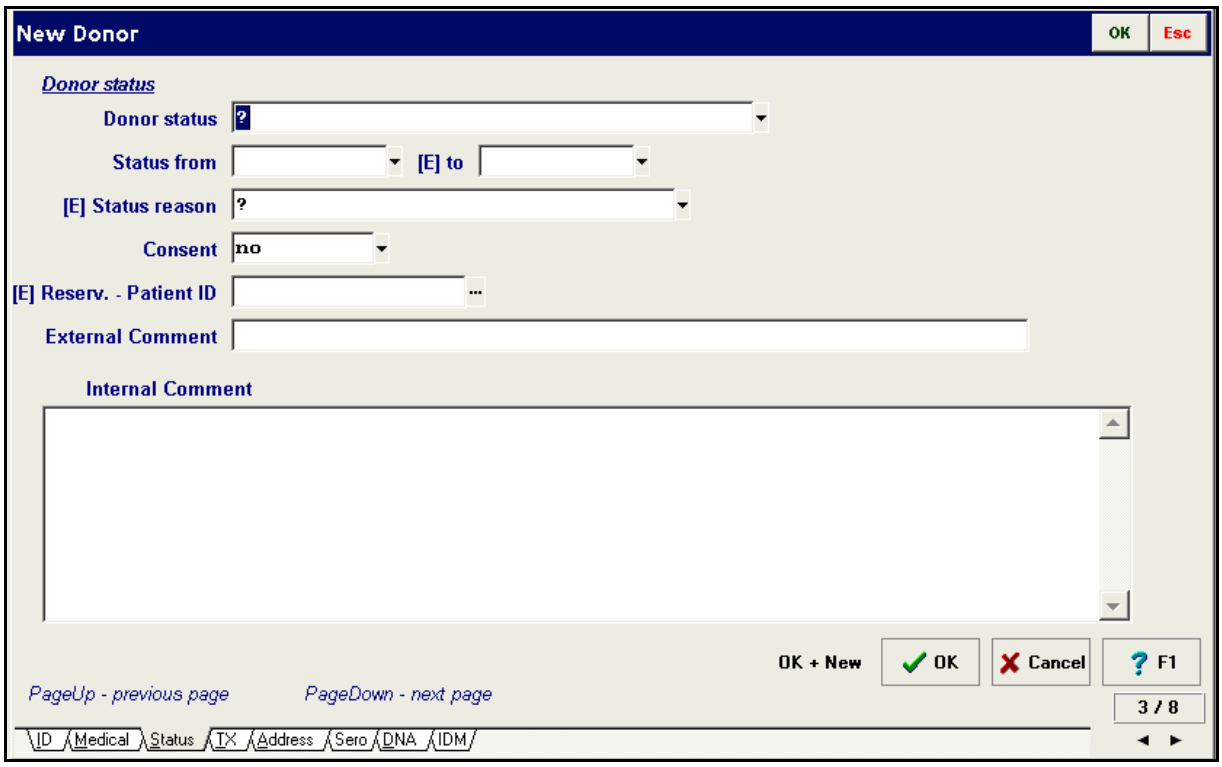
Press **"Medical"** to go to the following tab.



(E) = sent via EMDIS

Donor category:	prefilled “not available for EMDIS till validation.
After validation it changes to:	Registry donor.
(E) ABO:	0.? - 1.O – 2.A – 3.B – 4.AB (optional field)
(E) Rhesus:	0.? - 1.+ - 2.- (optional field)
(E) Weight:	value between 0-250 (optional field)
(E) Height:	value between 0-300 (optional field)
(E) Number of transfusions:	value between 0-9 or ? (optional field)
(E) Number of pregnancies:	value between 0-9 or ? (optional field)
Date of last pregnancy:	date (optional field) (new field)
Blood donor:	yes or no (optional field)
Is DNA available:	yes or no (optional field)
Is frozen blood available:	0. no – 1. yes – 2. unknown (optional field)
Is platelet donor:	yes or no (optional field)
Recruited by:	default value: unknown 0. Unknown – 1. Associations – 2. Entourage - 3. Blood donor info – 4. Press – 5. Website - 6. Other

3.TAB STATUS



Donor status: cancellation and reservation rules are explained in chapter II.III. Donor edit – consultation – update of donor .

Consent: mandatory field

following the MDPB-R SOP each potential volunteer donor should be, at a first stage, provided with a written document containing specific information on BM, PBSC donation to be specified in this field:

1.Yes (both BM, PBSC consent).

2.Only PBSC consent

3.Only BM consent.

Reservation Patient ID: when a donor is reserved for a patient, the patient ID must be entered in this field. The information will be sent via EMDIS to inform the international Registry**.**

External comment: information is not sent via EMDIS

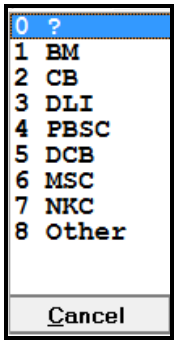
Internal comment: information from Syrenad has been uploaded into this field.

(Fi. The history of Syrenad mailing letters generated in PDF)

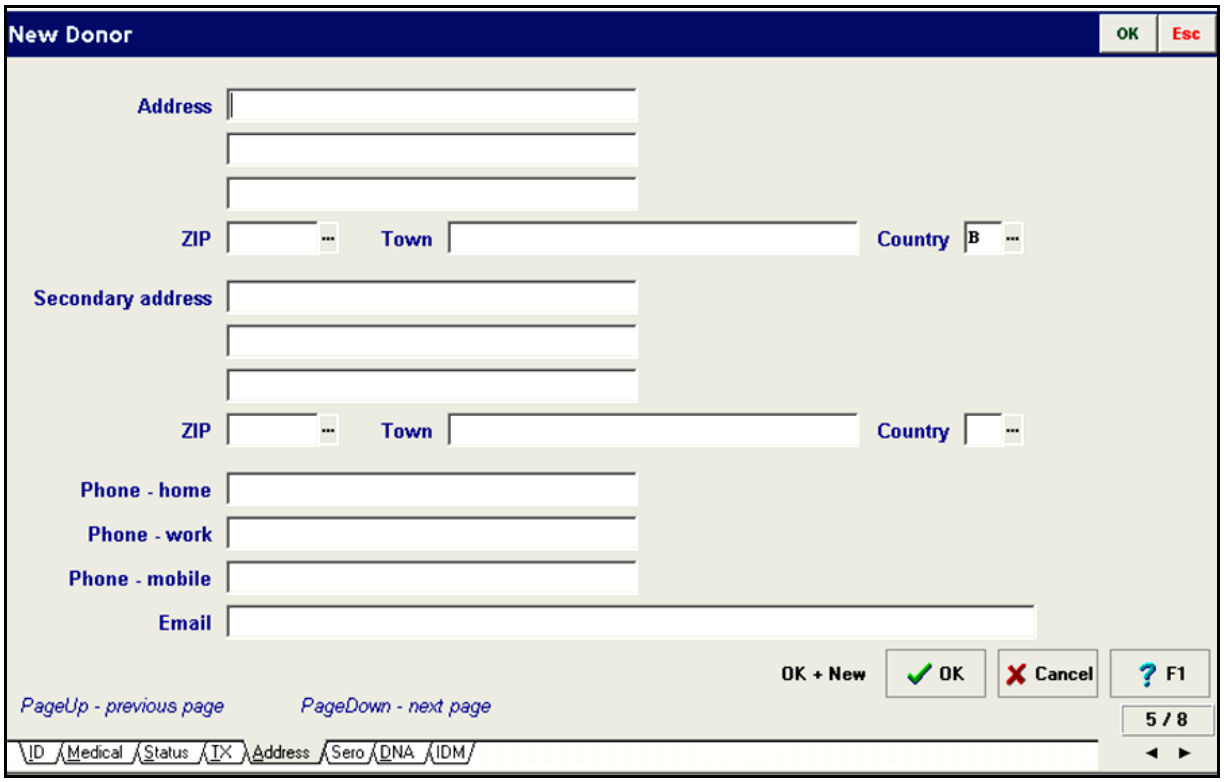
4.TAB TX

The transplantation data are not sent via EMDIS. After a transplantation took place, the source of cells (BM, CB, DLI, PBSC, Other), patient ID, patient name, patient Registry, date of collection, date of TX and TX center can be entered for 3 collections.

In case of more than 3 please put the info at the TX comment section.



5.TAB ADDRESS



Data not mandatory.

Address: enter street and number

ZIP: enter ZIP code or select ... to go to the select zip code screen: clicking on “description” will set the towns in alphabetical order.

Town: town selection via ZIP code.

Country: prefilled

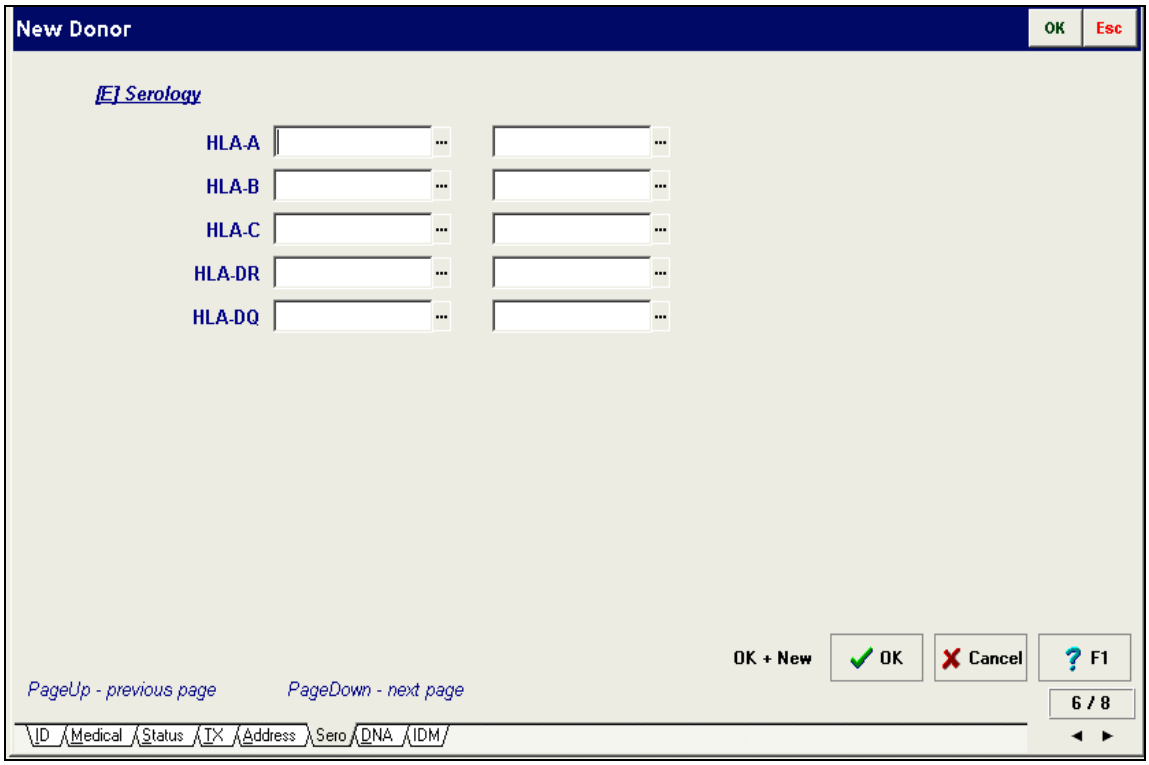
Secondary address: data entry of additional address

Phone: home – work – mobile

Email

6.TAB SERO

For information about the serology typing input go to I.II.4.5.a HLA data – serology. It is however not necessary to enter serology typing results, because of the molecular typing methods. Data entry of search determinant is not necessary.

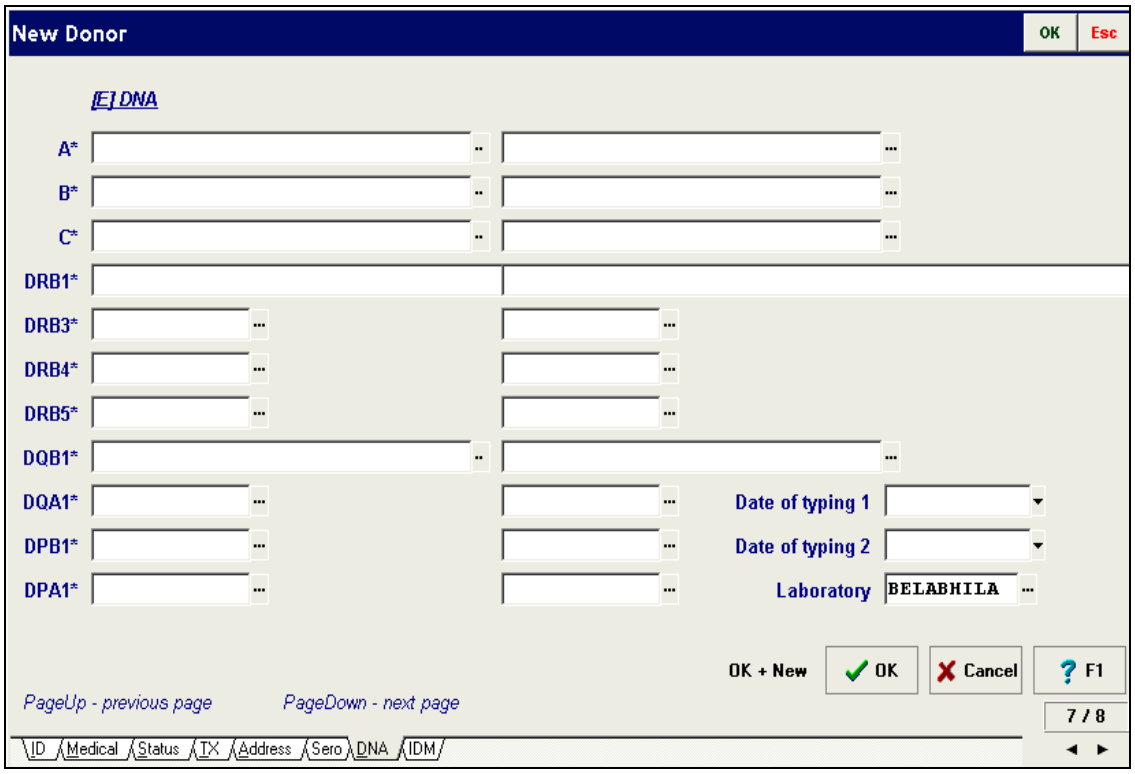


7.TAB DNA

All typings done on a newly recruited donor must be done with molecular methods. All new donors must be at least HLA-A, B and C typed in low resolution (2 digits) and DRB1 typed in high resolution (4 digits).

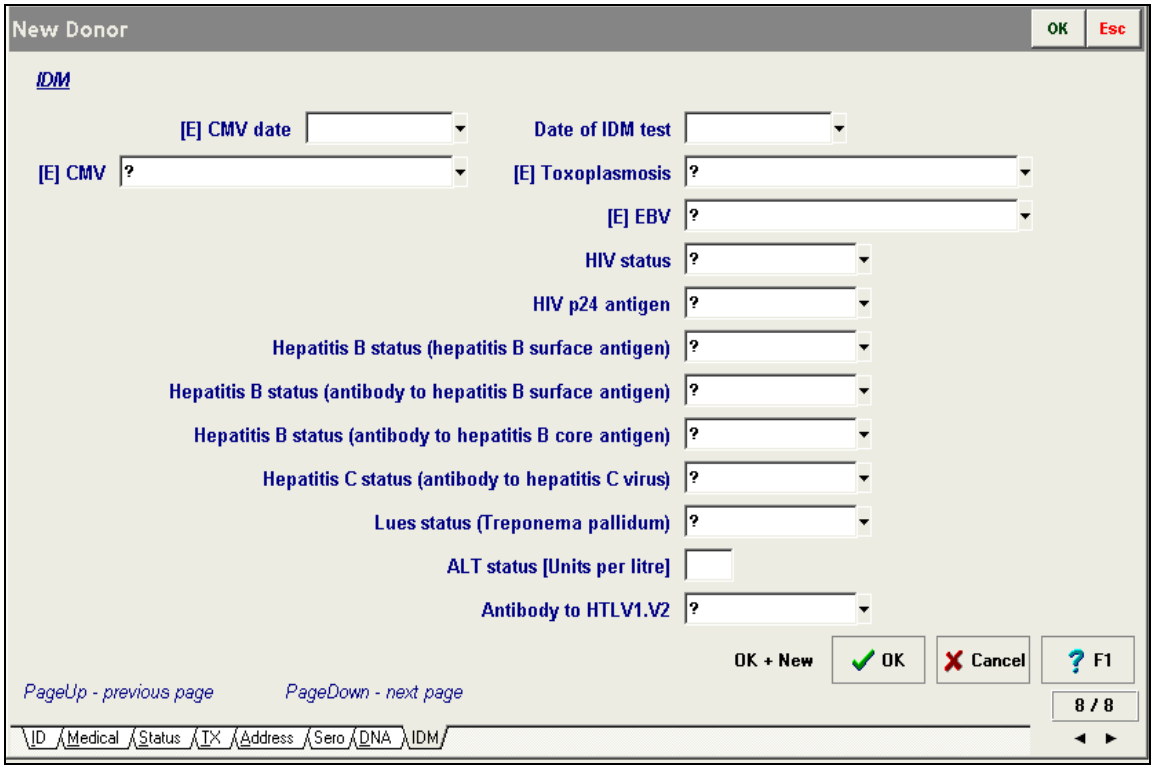
List of valid values appear when clicking the dots right from input field or by pressing F3. (only high resolution, intermediate codes must be entered manually).
For information about the DNA typing input go to I.II.5.4. HLA data – DNA.

Date of typing 1 – 2: fields where dates of typing can be entered.
Laboratory: HLA typing lab



8.TAB IDM

This window screen allows to enter Infectious Disease Marker results; all fields are optional.



(E) CMV date: if the CMV value is given, CMV date is mandatory

(E) CMV: 0. ?

1. Both negative
2. unclear
3. IgG-posit; IgM-negat
4. IgG-negat; IgM-posit
5. both positive
6. IgG or IgM posit
7. IgG posit; IgM not tested
8. IgG negat; IgM not tested

Date of IDM test: IDM test date is mandatory when IDM test results are given

(E) Toxoplasmosis:

0. ?
1. Both negative
2. unclear
3. IgG-posit; IgM-negat
4. IgG-negat; IgM-posit
5. both positive
6. IgG or IgM posit
7. IgG posit; IgM not tested
8. IgG negat; IgM not tested

(E) EBV:

0. ?
1. Both negative
2. unclear
3. IgG-posit; IgM-negat
4. IgG-negat; IgM-posit
5. both positive
6. IgG or IgM posit
7. IgG posit; IgM not tested
8. IgG negat; IgM not tested

HIV status: 0.? – 1.Positive – 2.Negative – 3.Questionable

HIV p24 antigen: 0.? – 1.Positive – 2.Negative – 3.Questionable

Hepatitis B status (hepatitis B surface antigen): 0.? – 1.Positive – 2.Negative – 3.Questionable

Hepatitis B status (antibody to hepatitis B core antigen): 0.? – 1.Positive – 2.Negative – 3.Questionable

Hepatitis C status (antibody to hepatitis C virus): 0.? – 1.Positive – 2.Negative – 3.Questionable

Lues status (Treponema pallidum): 0.? – 1.Positive – 2. Negative – 3. Questionable

ALT status (units per litre): value from 0 to 999

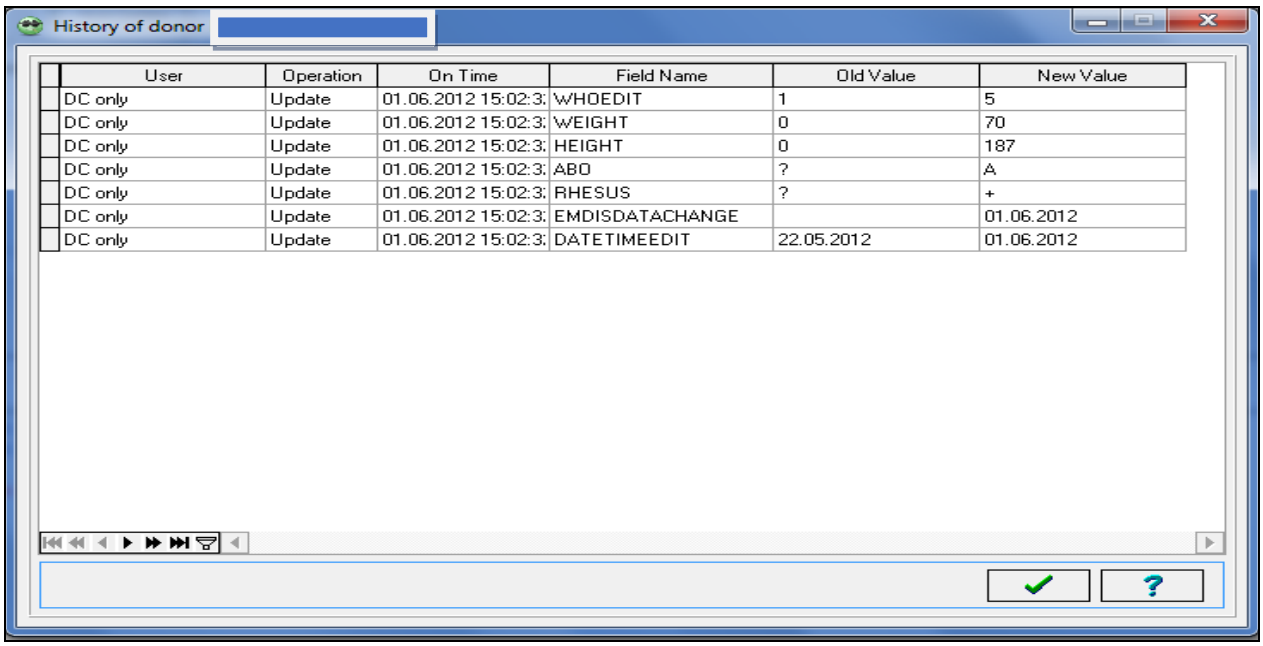
Antibody to HTLV1.V2: 0.? – 1.Positive – 2.Negative – 3.Questionable

II.V. DONOR DATA CHANGE HISTORY

The history of donor data change is called up by the menu command

. Open the donor's record and then go to "donor – history". If a history for the donor exists, the table with his data will appear, otherwise a blank table will be opened. The user's individual actions will be logged in this history tracking audit.

GRID code will be shown in the bar:



Donor data change history

History window description

Title bar: donor code

User: the individual who did the "operation"

On time: time of operation

Field name: changed value names

Old value: original value before the update

New name: contains the new value

Navigation

There is a navigation panel on the bottom-left, right above the data result. Navigation arrows allow movement in the table (left to right): first record, previous record, next and last record. Filtering and sorting are equally possible.

Termination

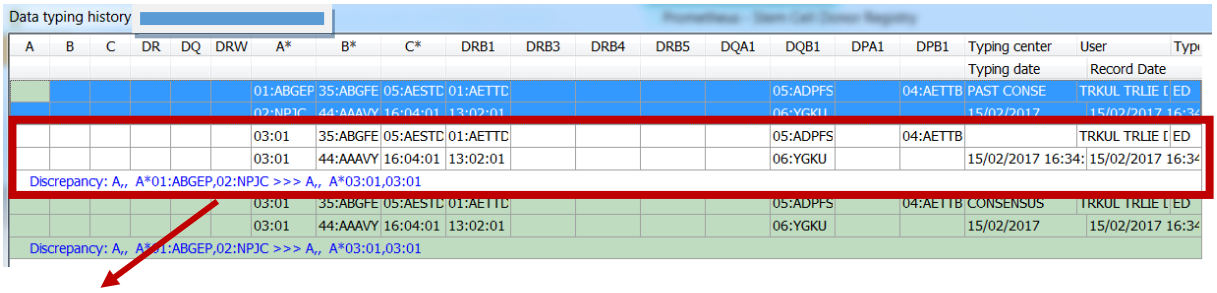
Press or to terminate the history window screen.

II.VI. HLA « DATA TYPING HISTORY »

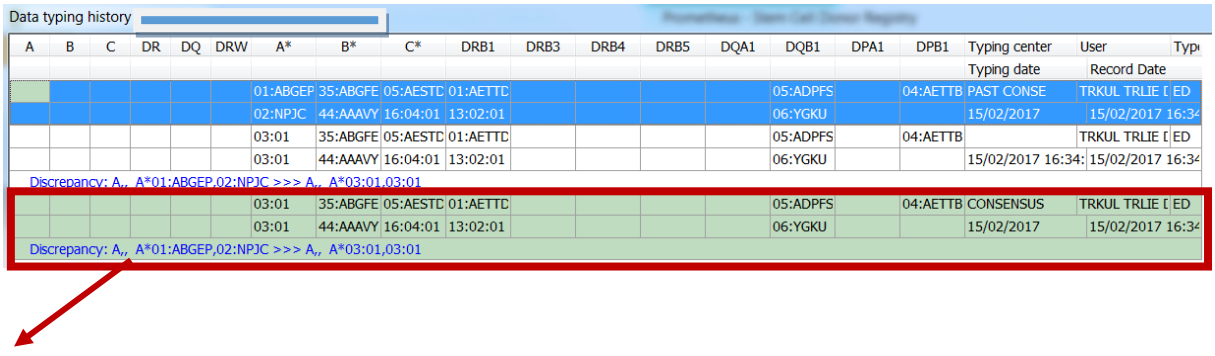
A new functionality is the “HLA data typing history”. **This tool is only available for consultation purposes.**

Press “HLA” to open the “Data typing history window screens”. Another option is to open the window screens by the History tab:

In this window screen typing updates are logged and discrepant typings are better illustrated:



Typing update: the new typings are logged: discrepancy is explained.



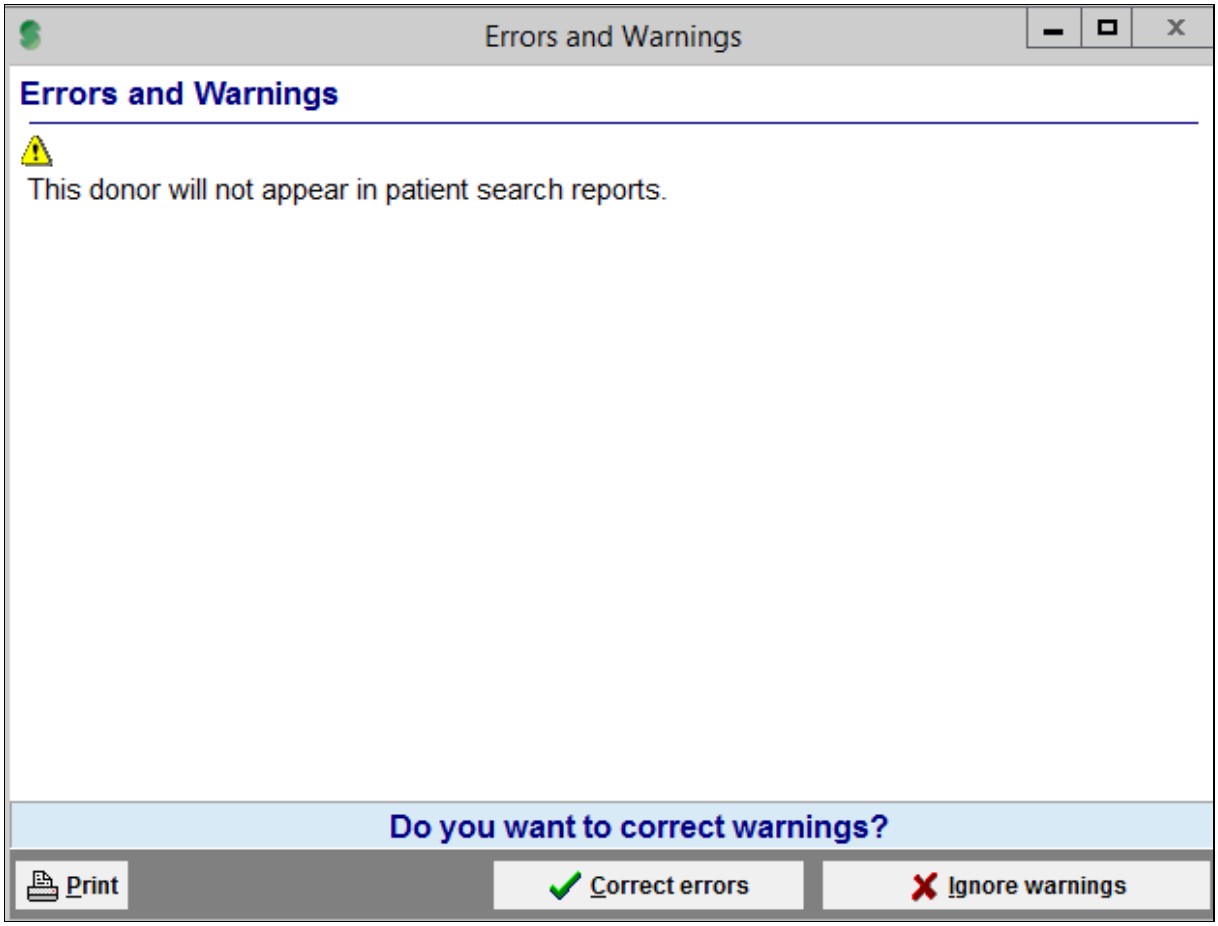
Copy of the previous lines, this means that the entry has been validated.

II.VII. VALIDATE

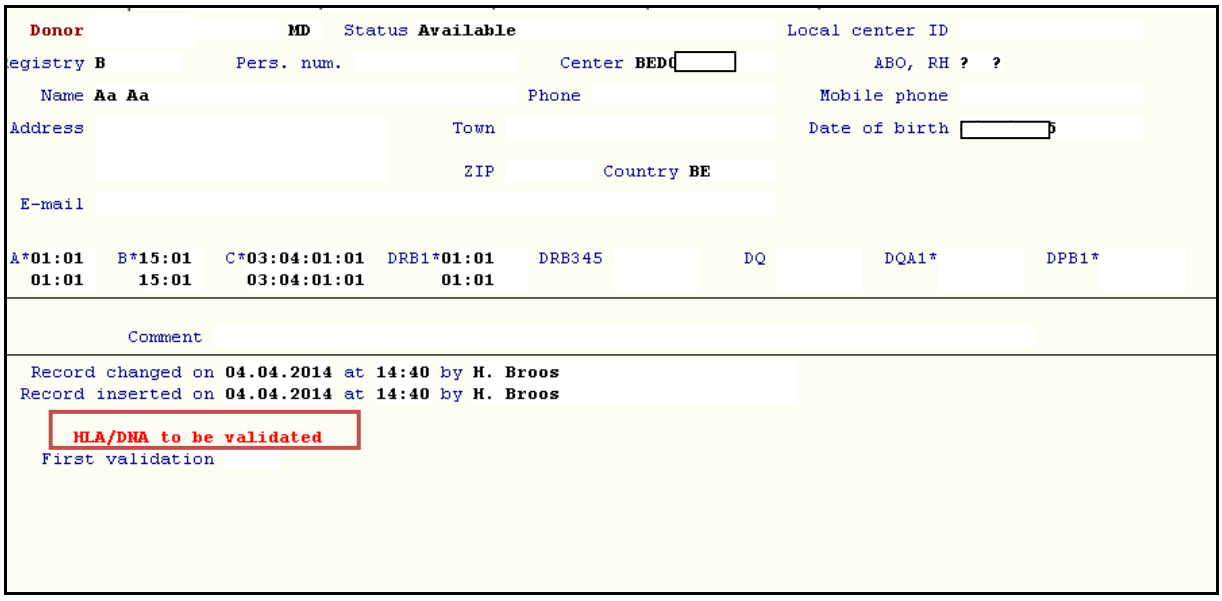
II.VII.1. Records to be validated

II.VII.1.a. Validation of a new registered donor

After a donor registration a donor record must be validated in the national database before the record will be available in EMDIS: the record will receive **"HLA/DNA to be validated"** status. (before validating the donor's record must be opened, via select).
After registration of a new donor, the following message will be displayed:

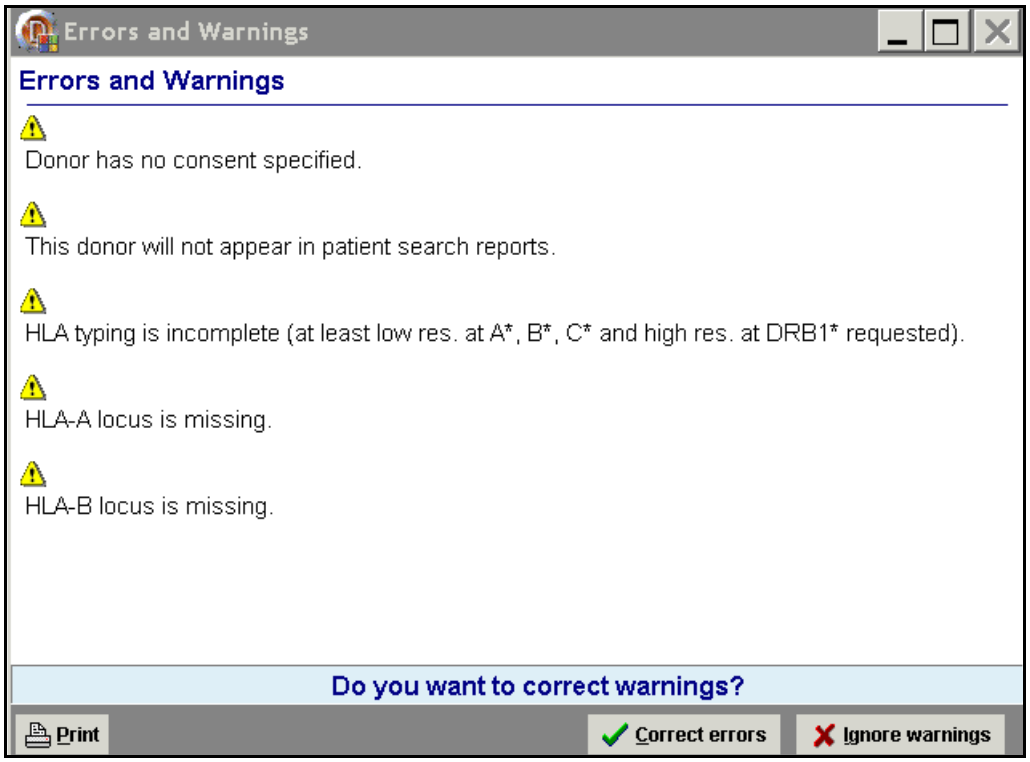


This means that the donor still need to be validated, before being available for the EMDIS communication, in other words before begin available for patient searches.
Press Ignore warnings, you will see the donor record you just registered: HLA/DNA to be validated will be highlighted in red: this means that you need to validate the HLA/DNA typing as explained later.

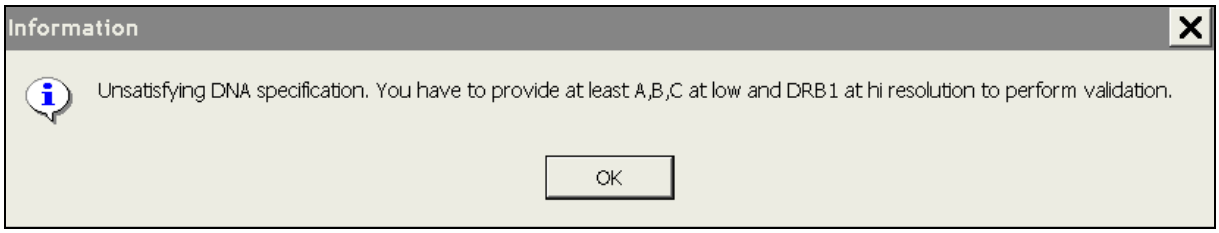


VALIDATION RULES

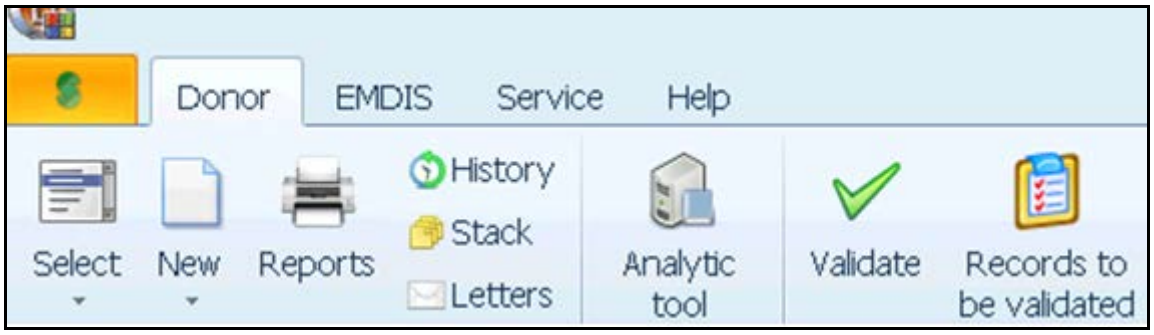
It is possible to register a donor without any typing: Prometheus will display yellow warnings, which can be passed. As long as a donor has not been properly validated, the donor will not be sent by EMDIS and will not be available for patient search reports:



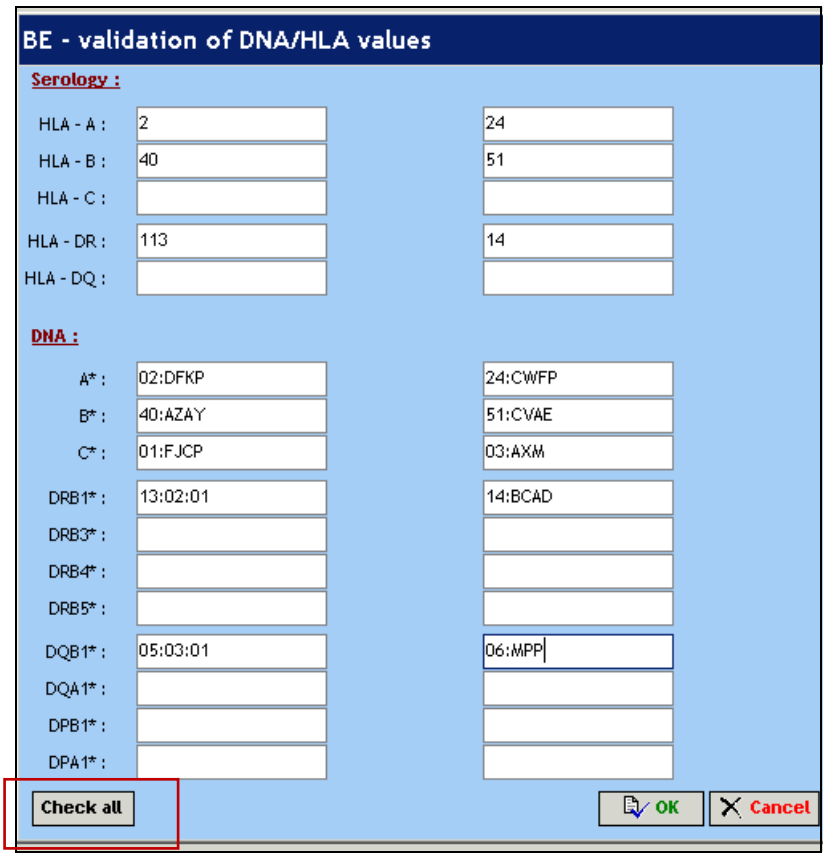
When you try to validate this specific donor, the following alert will be displayed :



Go to the **"donor"** menu and press **:**

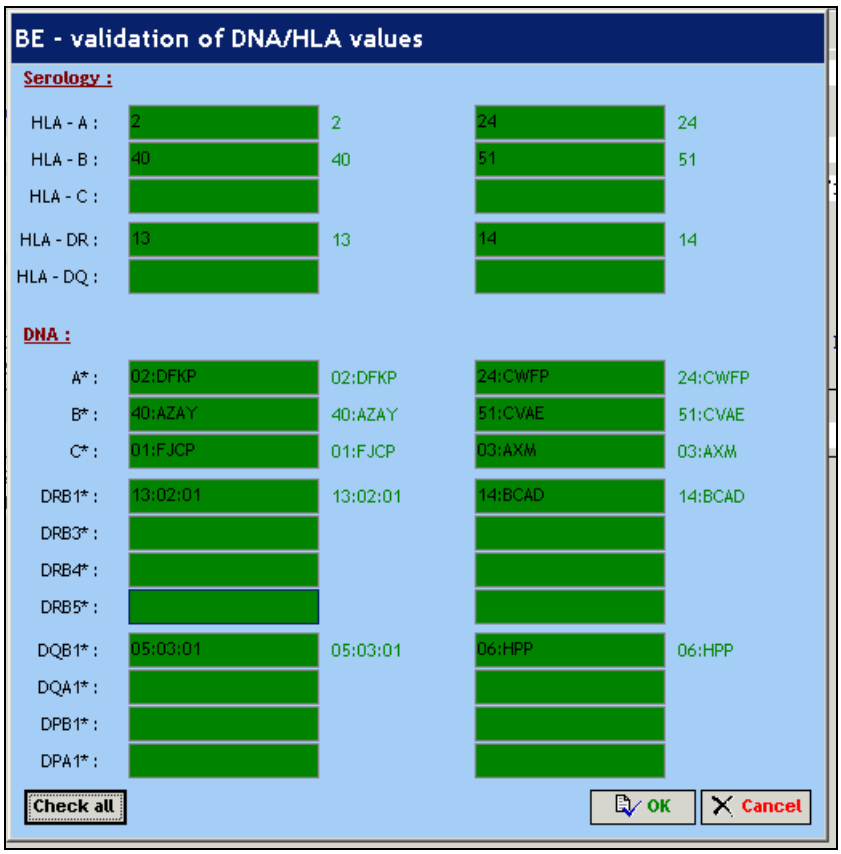


The following validation screen will be opened for entry of the typing fields by double blind input:

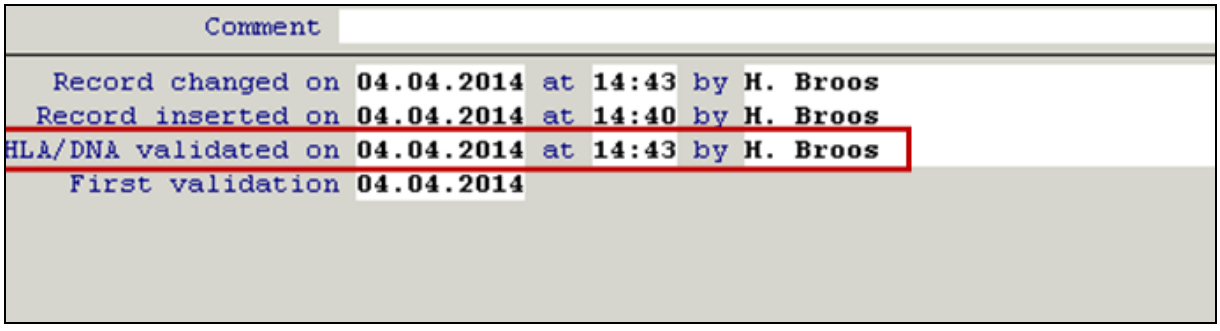


The "**check all**" button will be available as soon as all applicable fields have been entered:

Press **"check all"** to check the validation – if the validation is correct, all fields will be highlighted in green.



Press OK, to confirm the validation and the record is validated.

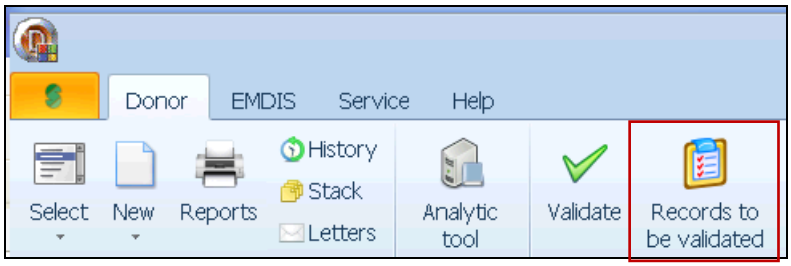


The HLA/DNA validation date will be displayed on the donor record file (will be updated when validating further HLA typing updates). The first validation date will be available.

II.VII.1.b. Validation of typing update

After a typing update the records waiting for validation will be offered in a table after selection of the **"Donor menu"** and then

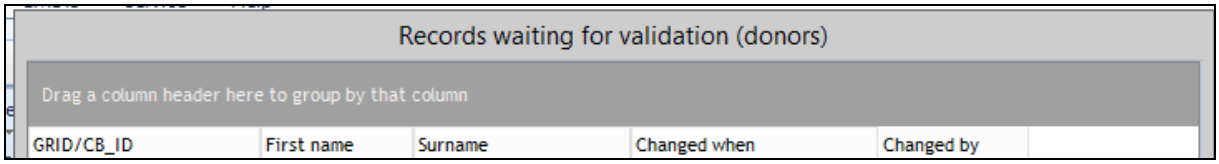
:

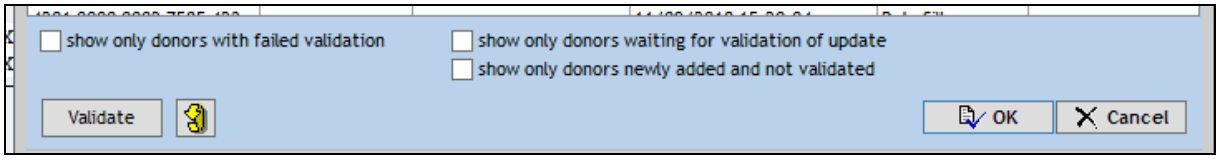


Tick

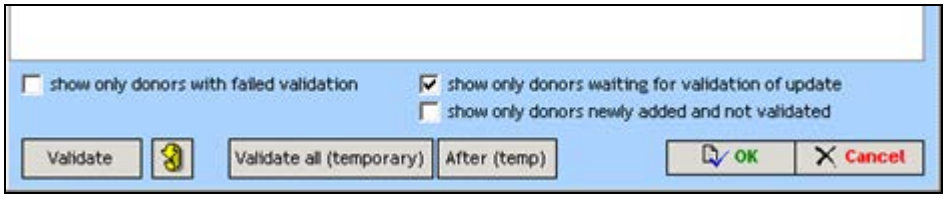
will display the updated donors waiting for validation:

The GRID code / CB_ID will be displayed in the first column:

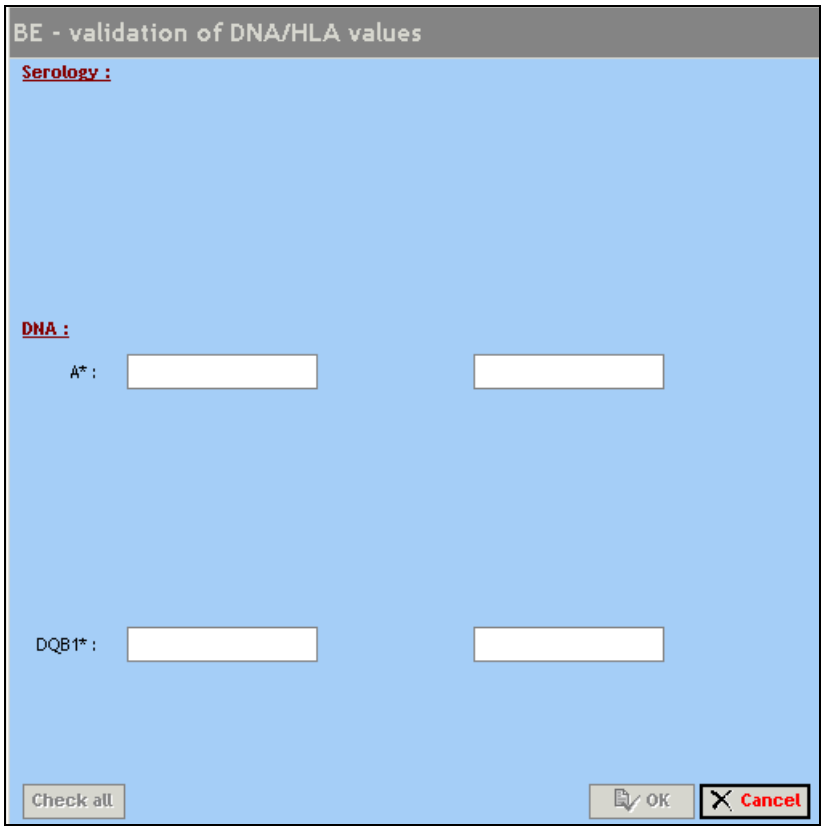




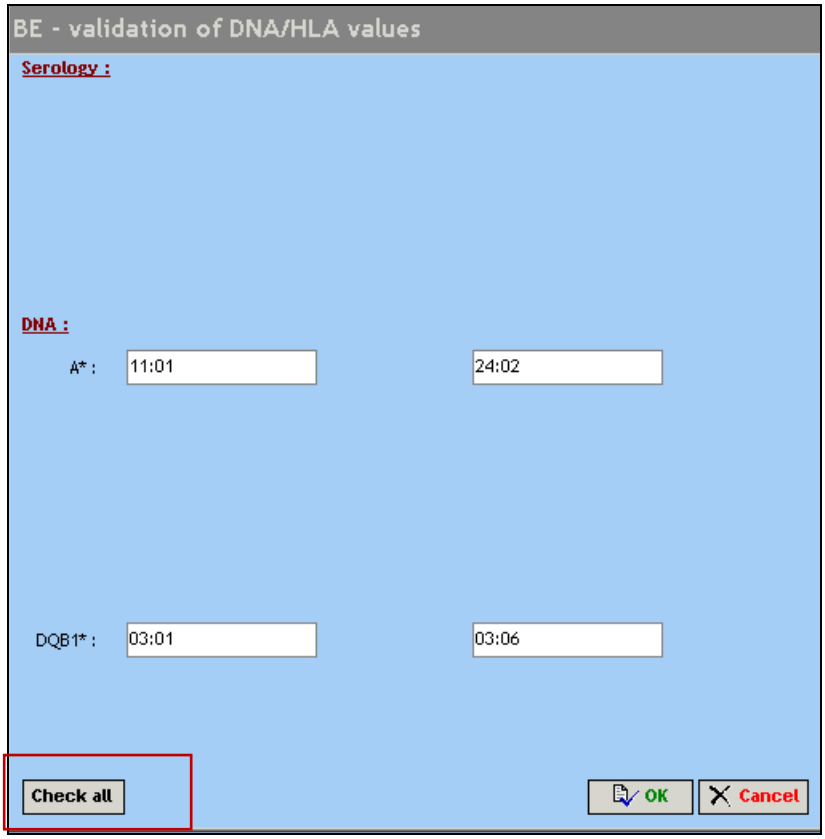
Select the donor you wish to validate, then press **"validate"**:



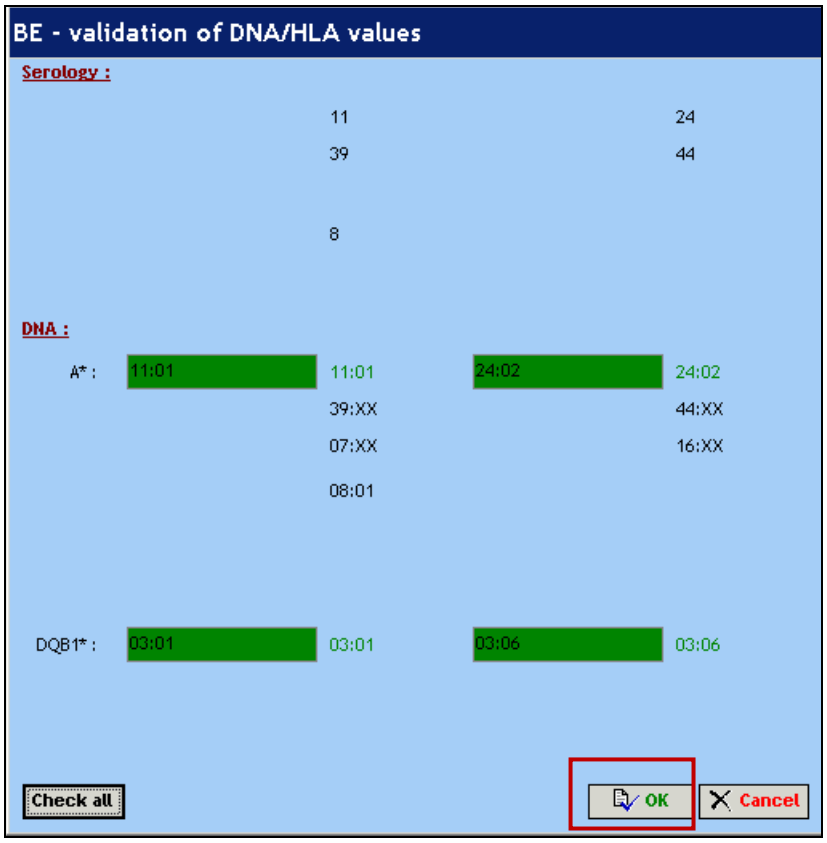
The following screen will be displayed for data entry:



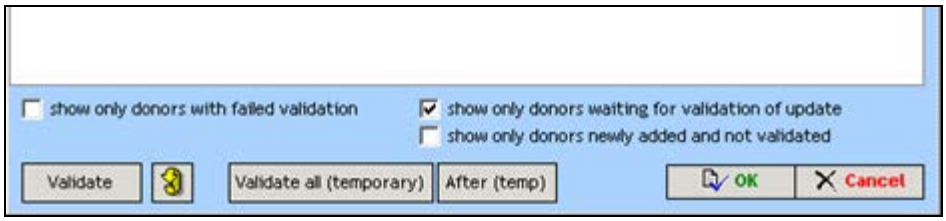
Blank fields will be offered, all fields have to be filled before the **"check all"** button will become visible:



Press "**Check all**":



The correct validated fields will be highlighted in green, then press OK to terminate the validation.



Click to refresh the window screen, the validated record will disappear from the list.

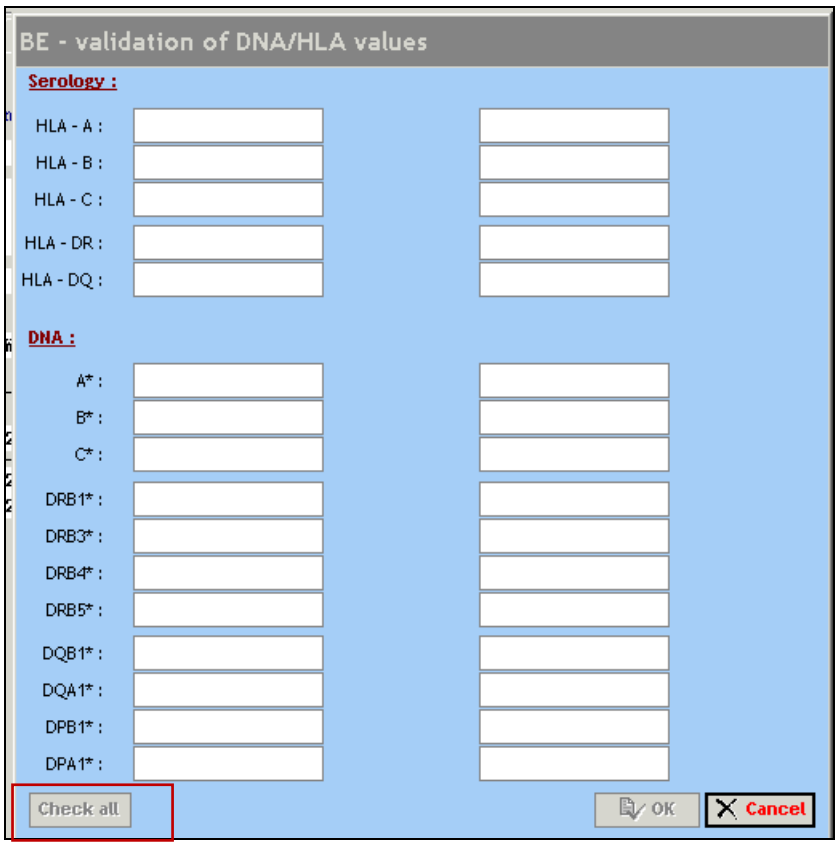
Note: in case of a typing update it is recommended to validate the typing as soon as possible. As the record is linked by EMDIS to patients, the old value will still be sent out by updates as long as the update has not been validated.

II.VII.2. Failed validation

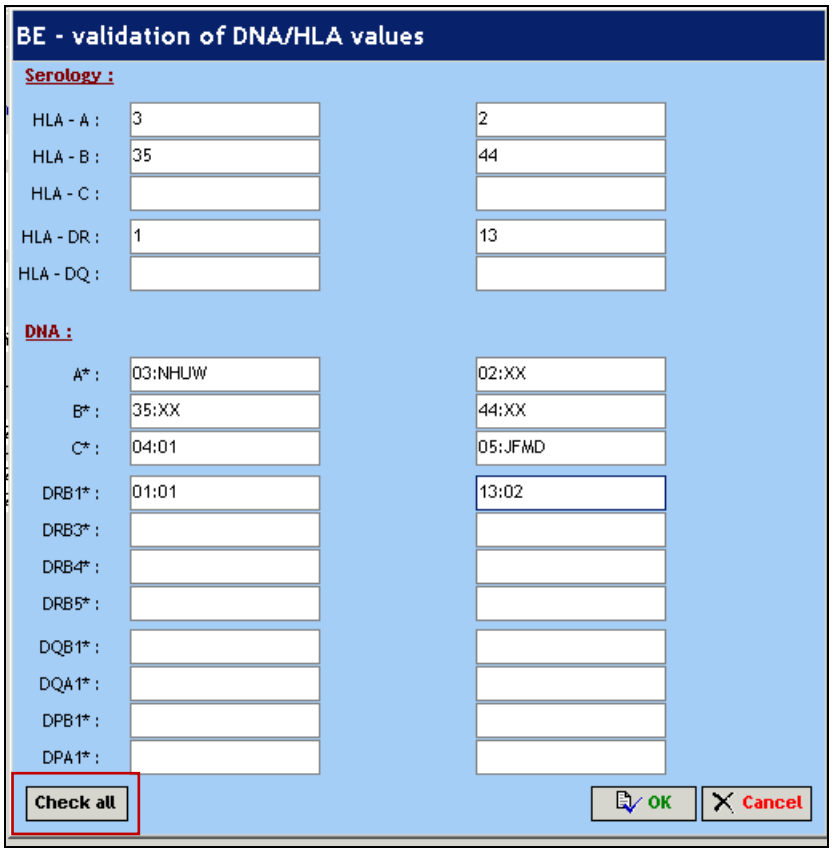
II.VII.2.a. Failed validation of new registered donor

As double blind data entry includes data typed one individual, and then typed by second individual (in case of single managed profile, by the same user again), differences will be noted in red after pressing the "**check all**" button.

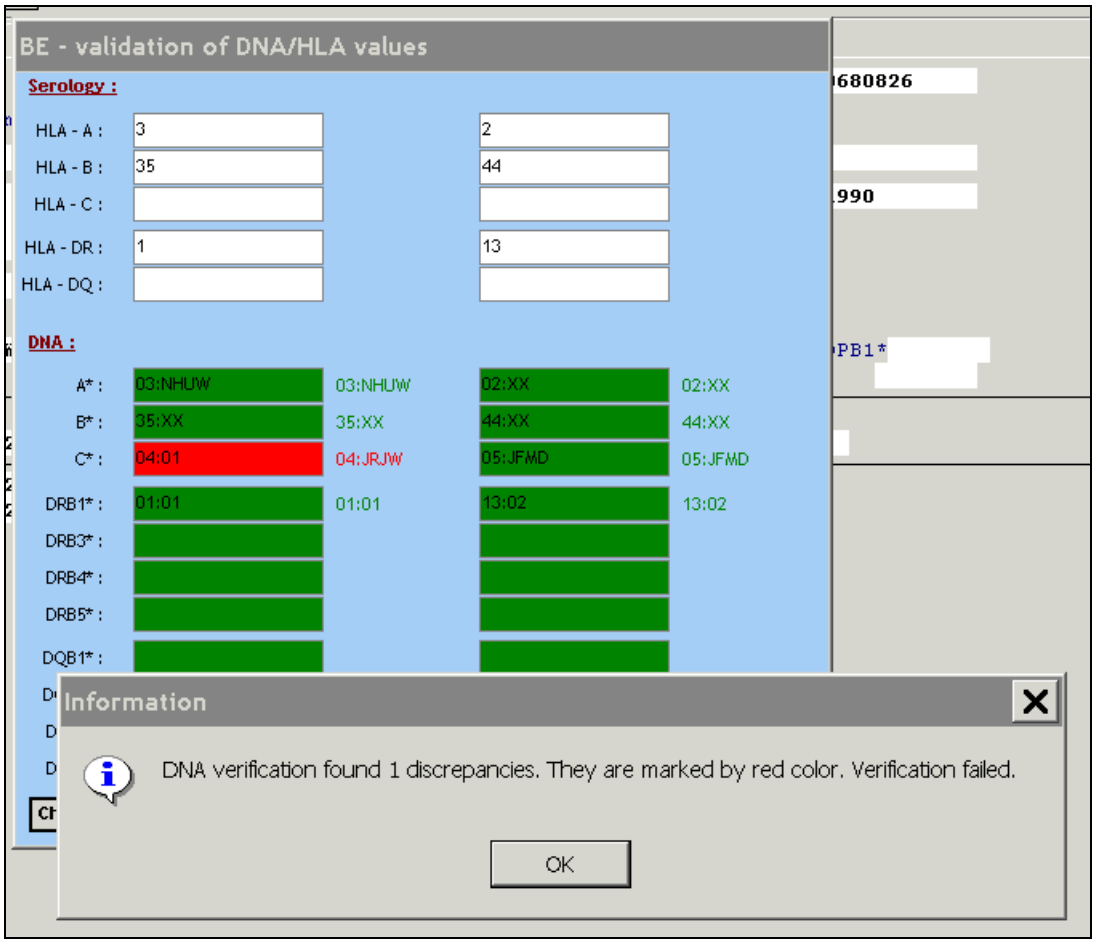
Before validating the donor record must be opened: go to “**Donor**” “**Validate**”: the following screen will be opened:



Enter the data waiting for validation, all data need to be entered before the **“check all”** button will be displayed:



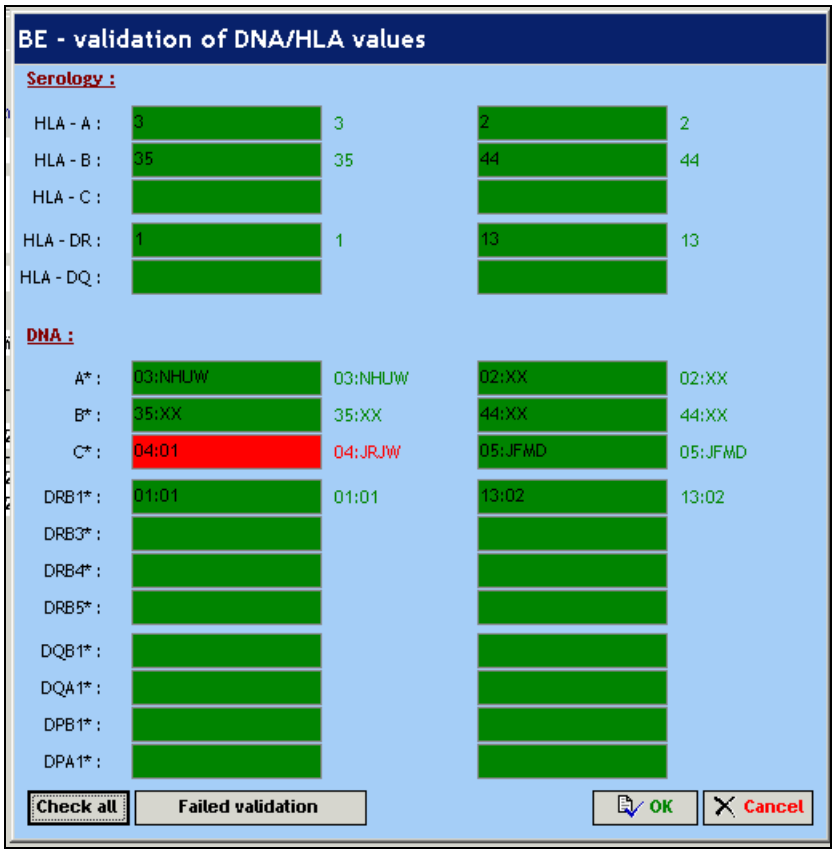
Press “**select all**” to have the system compared the entered data:



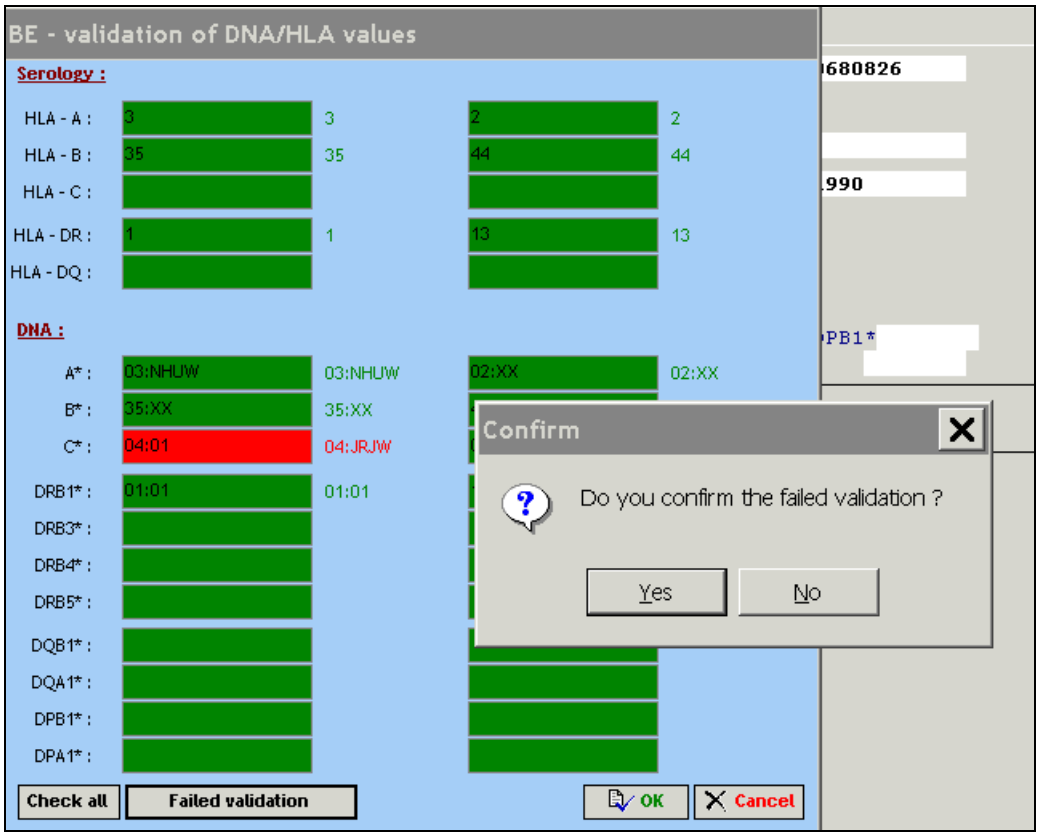
If not all data are correct: the system will display an alert, the discrepancies will be highlighted in red. If the validator made a mistake, he or she can then correct, press “**check all**”, and the DNA verification will be done again. The record will be approved for validation and gets status **“HLA/DNA validated”.**

If the initial data entry is not correct the following steps are to be followed:

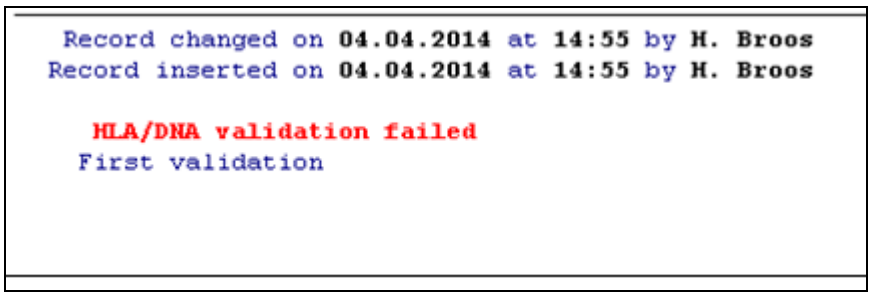
Press “**OK**” to go to the validation window:



The C DNA value should be 04:01, the individual responsible for initial data input should be informed: press "**failed validation**" to return the record for data input.

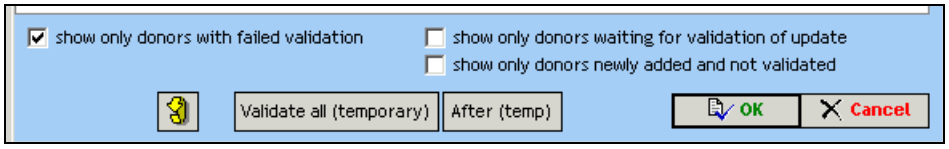


Press "**yes**" for confirmation.



The record will have status **"HLA/DNA validation failed":** the record will not be available in EMDIS in this stage.

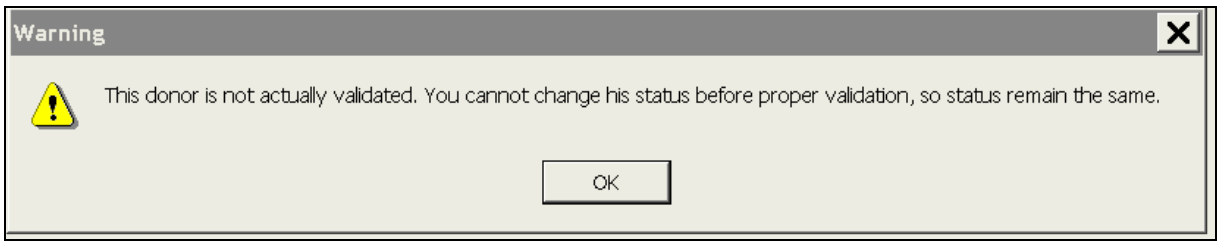
The records with failed validation, waiting for validation will be listed in the following table when pressing **"Y"**:



Click the cursor on the donor you wish to correct and double click to open the donor's record and then press "**OK**":

Your donor record needs to be validated again and will get status **"HLA/DNA to be validated"** again. The validation flow as explained in chapter II.VII.I. will be applicable again.

A donor availability status cannot be changed as long as the record has not been validated, you will be informed by the following warning:



II.VI.2.b. Failed validation of typing update

The discrepancy discovered when validating a typing update follows the same process flow. The failed validation will be also be displayed in the **"update record with failed validation"**.

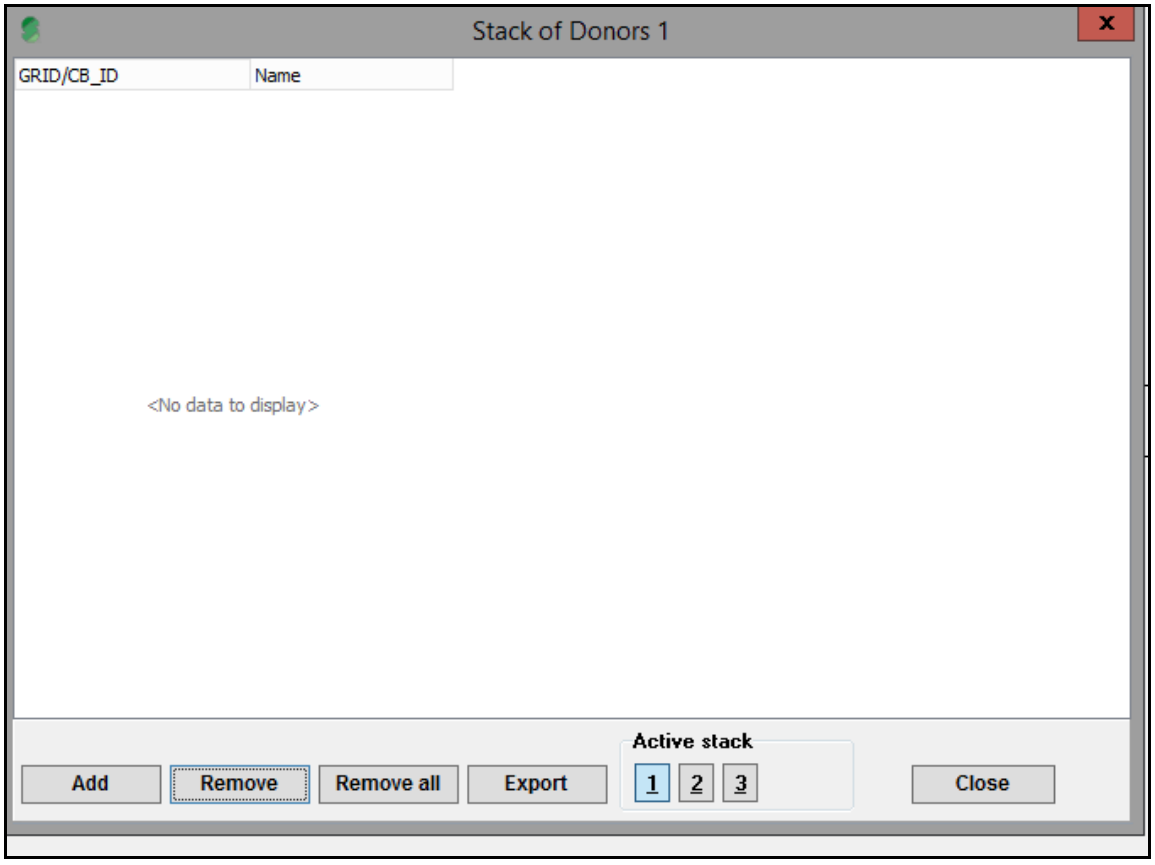
II.VIII. STACK

The donor stack allows working with more donors together and is mainly used when printing donor reports. The content of a donor stack (set of donors) is saved in a database - it means that the content will stay saved even after termination and restart of the program. Each user works with his own donor stack: each user has at his disposal three sets (stacks) of donors, those are marked by numbers 1, 2 and 3. Data can be stored in all three stacks at once but only one stack is always actively used.

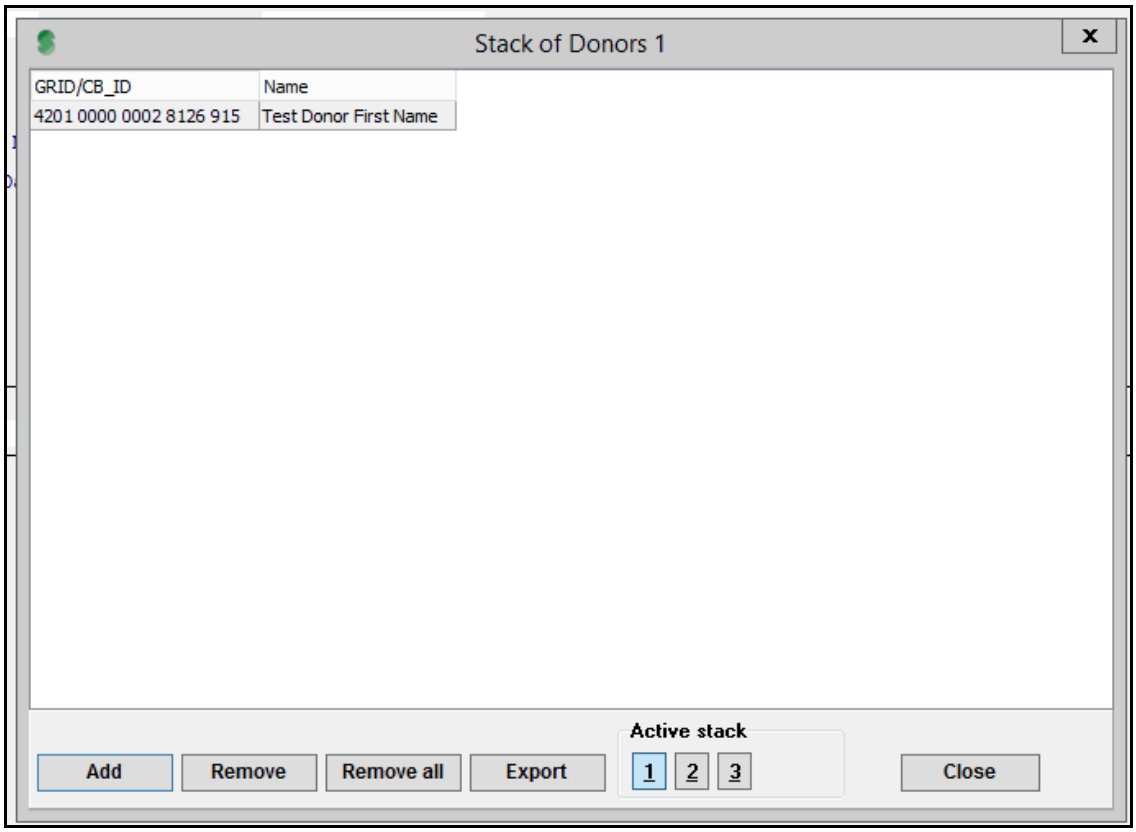
Active stack: select the stack (stack 1 – 2 – 3);
Add: adds a donor to the stack;
Remove: removes a selected donor from the active stack, the donor is deleted from the stack, but will not be cancelled from the donor database;
Remove all: deletes all donors from the active stack;
Export: enables to export your data to an external excel – text – html – xml file.

You can open the donor stack through the use of the button

. The following screen will be opened:



Add the GRID code via the select to the stack:

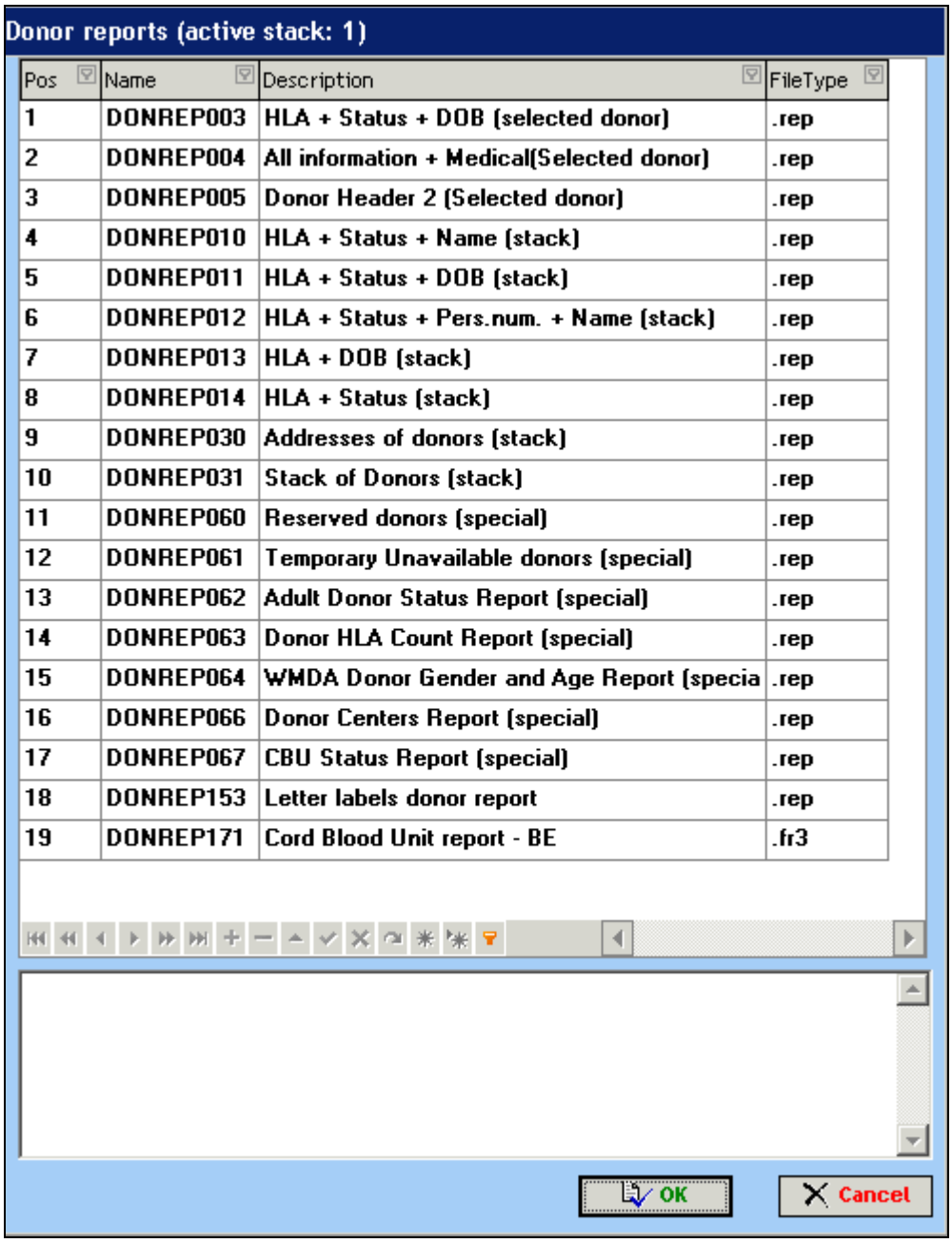


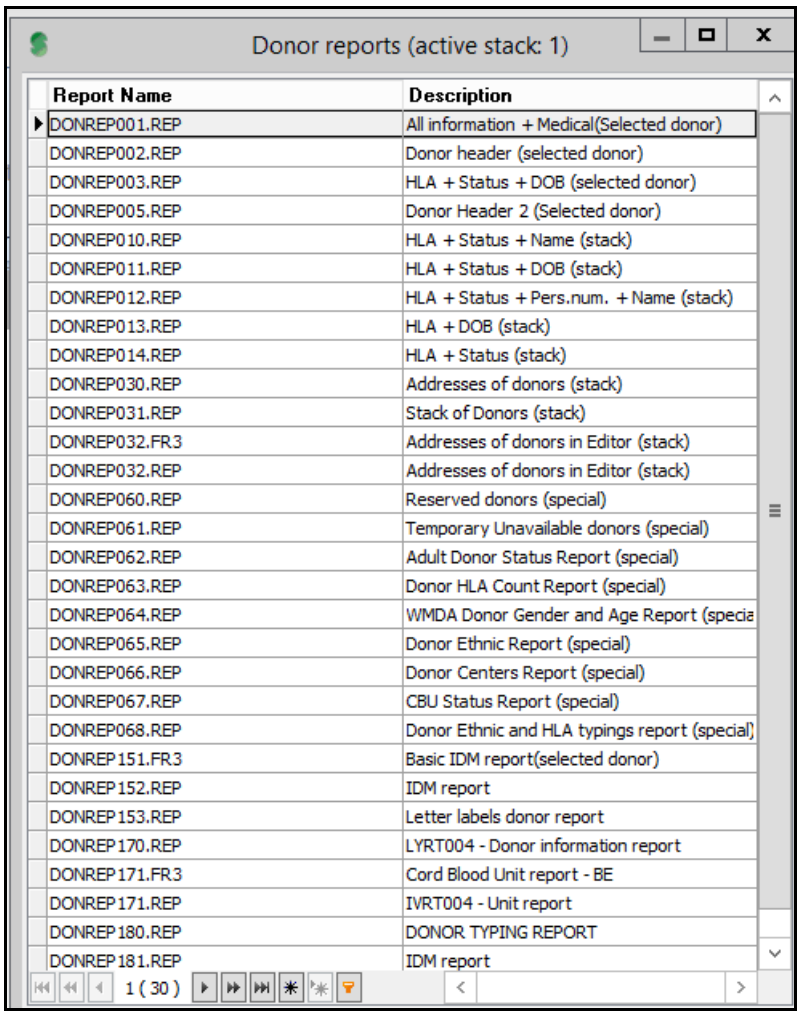
Press “close” to end your stack creation, your stack number 1 will be saved. To call up your different stacks, go to menu|stack, the above window screen will be opened, it is possible to browse between the different stacks you created.

II.IX. REPORTS

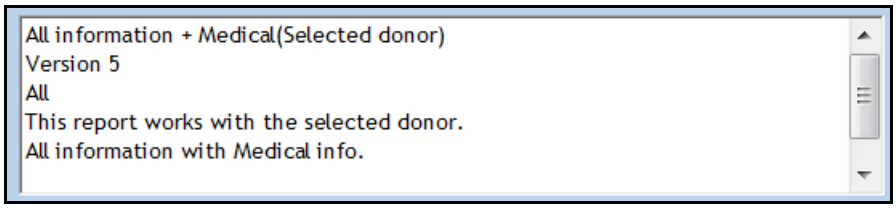
The menu of print reports can be called up by the menu button

:


Donor reports (active stack: 1)
Pos
Name
Description
FileType
1 DONREP003 HLA + Status + DOB (selected donor) .rep
2 DONREP004 All information + Medical(Selected donor) .rep
3 DONREP005 Donor Header 2 (Selected donor) .rep
4 DONREP010 HLA + Status + Name (stack) .rep
5 DONREP011 HLA + Status + DOB (stack) .rep
6 DONREP012 HLA + Status + Pers.num. + Name (stack) .rep
7 DONREP013 HLA + DOB (stack) .rep
8 DONREP014 HLA + Status (stack) .rep
9 DONREP030 Addresses of donors (stack) .rep
10 DONREP031 Stack of Donors (stack) .rep
11 DONREP060 Reserved donors (special) .rep
12 DONREP061 Temporary Unavailable donors (special) .rep
13 DONREP062 Adult Donor Status Report (special) .rep
14 DONREP063 Donor HLA Count Report (special) .rep
15 DONREP064 WMDA Donor Gender and Age Report (specia .rep
16 DONREP066 Donor Centers Report (special) .rep
17 DONREP067 CBU Status Report (special) .rep
18 DONREP153 Letter labels donor report .rep
19 DONREP171 Cord Blood Unit report - BE .fr3
OK
Cancel



In the window screen below, information about the report is provided.

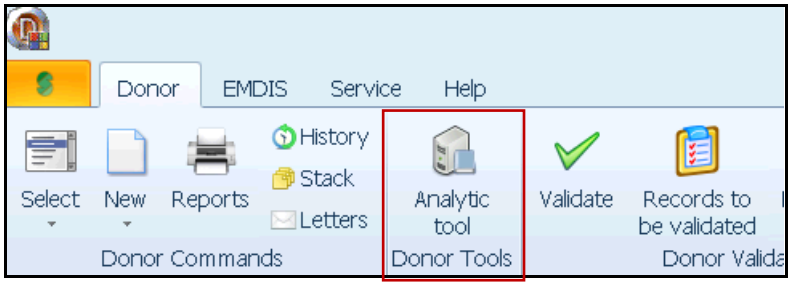


The old code (pre GRID code) will be printed in the external Donor ID 2:

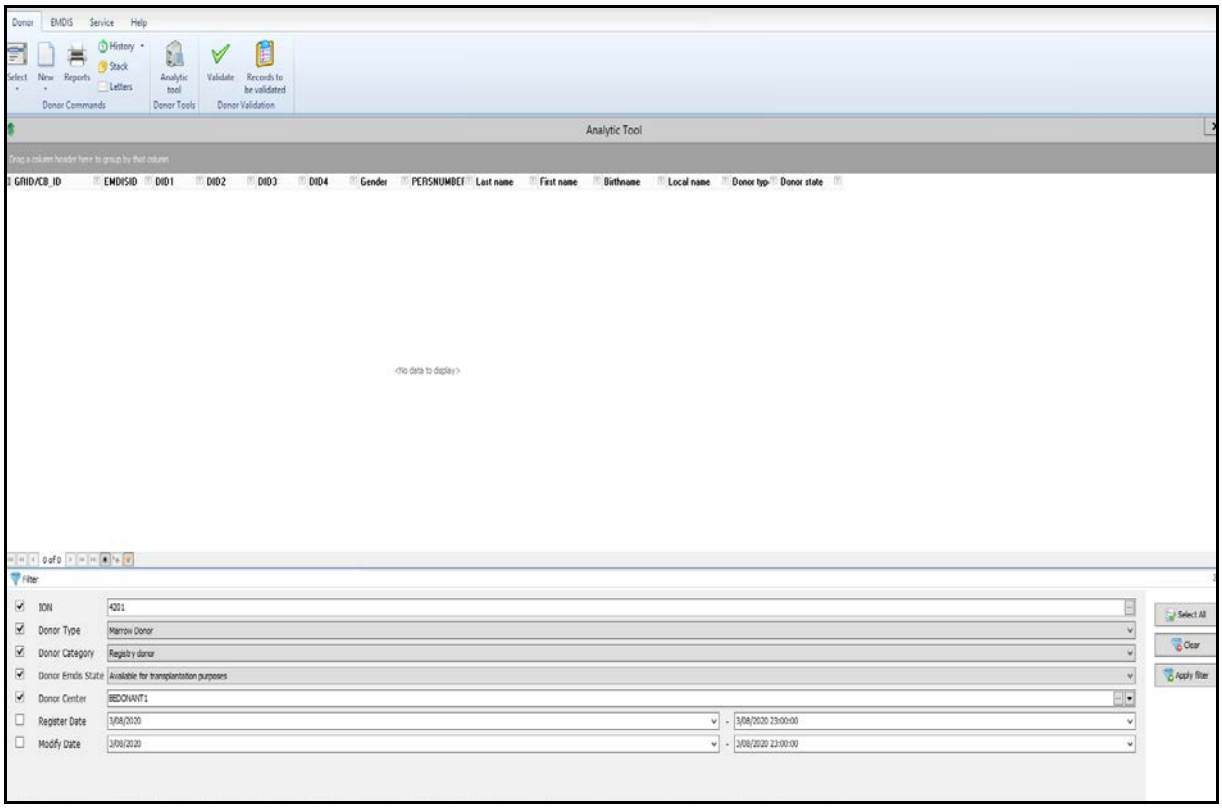
```
GRID/CB_ID  . . . . . .
External donor ID 1 . . . . . .
External donor ID 2 . . . . . .
```

II.X ANALYTICAL TOOL

Your donor database is available for analysis via the software tool donor tools (main menu -> Donor -> Analytic tool). Click on “Analytical tool”:



The following screen will be opened:



It is possible to specify certain parameters to limit the amount of data loaded from the database and to speed up the loading process. The old pre GRID code is available for selection.

First use the check-boxes to select which parameter to apply before loading the data. Buttons: **Select all** and **Clear** work only with the check-boxes.

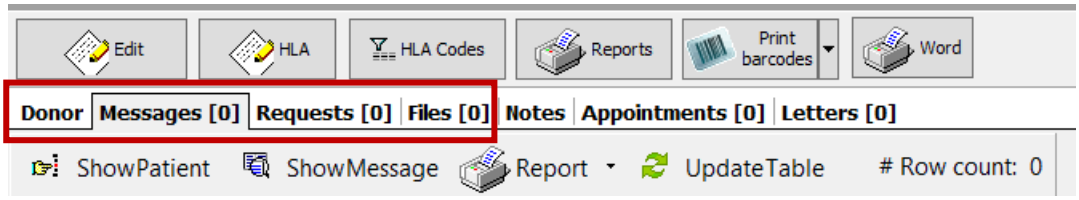
Button **Apply filter** starts loading donors from database to the analytic tool.

III. CORD BLOOD MENU

Since version 184 the cord dataset includes the extended EMDIS cord dataset, and the cord window screens have been updated consequently.
The explanation of the EMDIS cord data are explained in the latest version of the EMDIS cord Data Dictionary and the latest version of the Mapping version of the CBU EMDIS cord import.

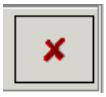
III.I. SELECT

Cord blood selection follows same rules as applicable for the donor: donor select is explained in chapter I.II.2. Quick select buttons.



Notes – Appointments – Letters : are not applicable for cord bloods.

III.II. CLOSE

Select Donor Close or F2 or press  to end the donor editing.

III.III. EDIT – CONSULTATION – UPDATE OF CORD BLOOD RECORD

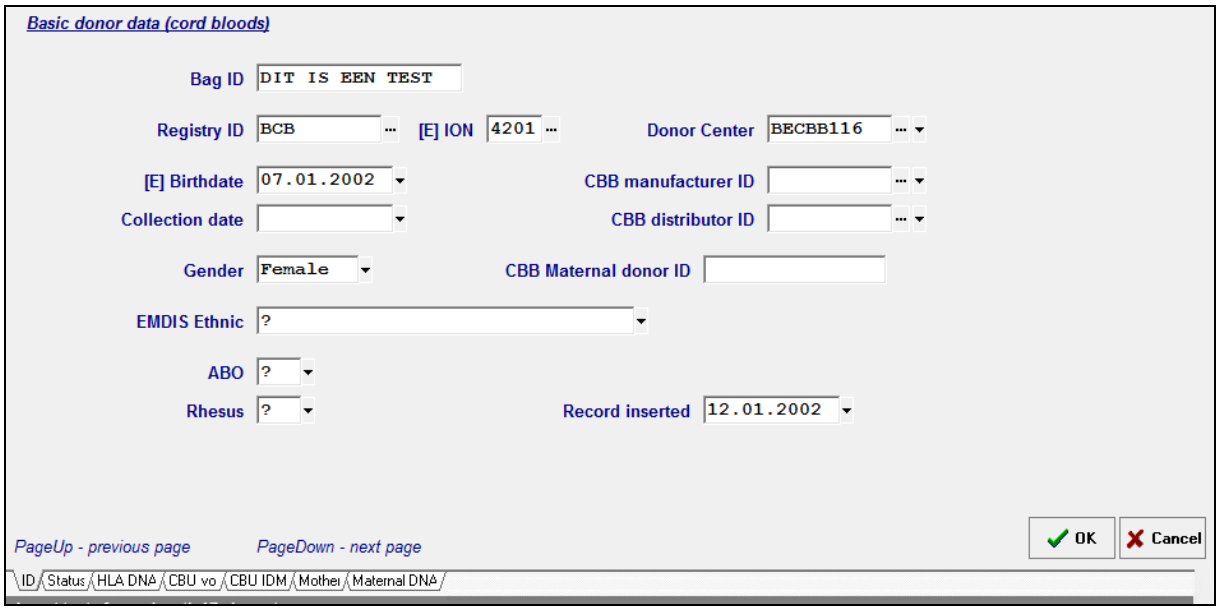
Edit can be used for consulting the cord blood record, change data (medical, availability, ... and change the availability status (Prometheus does not allow to delete any record).
If there is a change of HLA data (sero – DNA) the record must be validated. Validation rules are explained in chapter II.VII. Validate.

Press

to open the cord blood record: the ID tab will be opened (other tabs are Status – TX – Address – Sero – DNA – CBU).

1.TAB ID

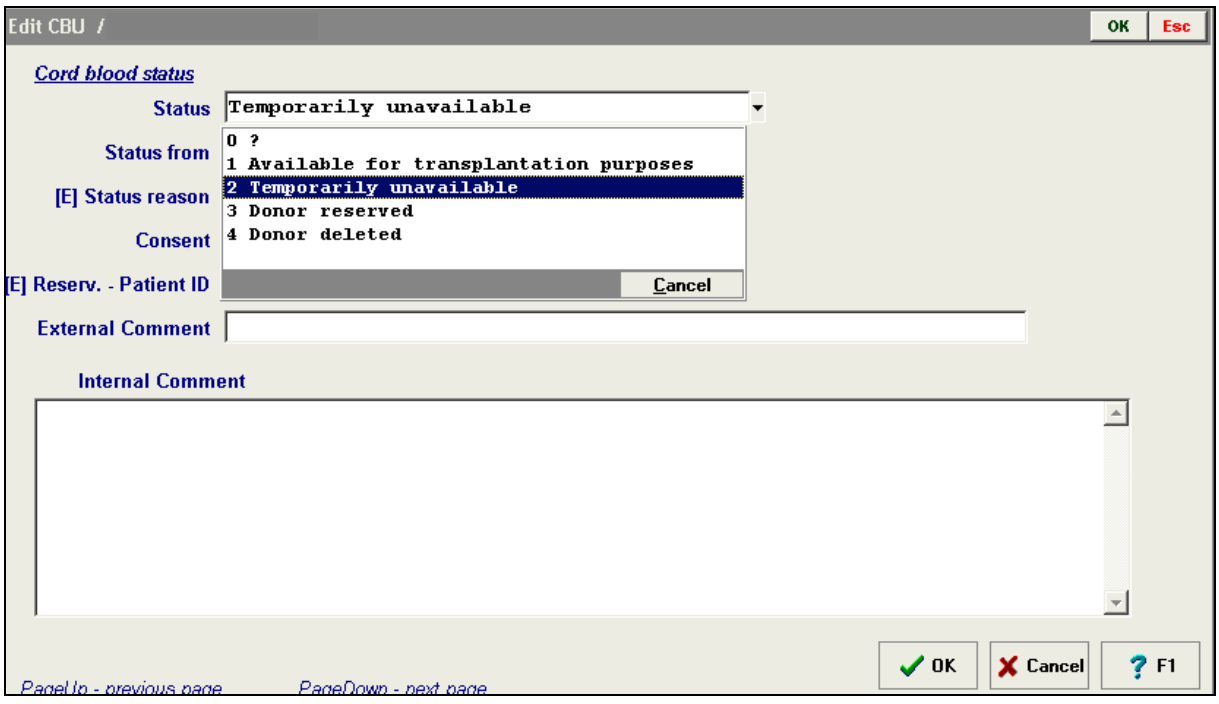
Basic cord blood data:



2.TAB STATUS

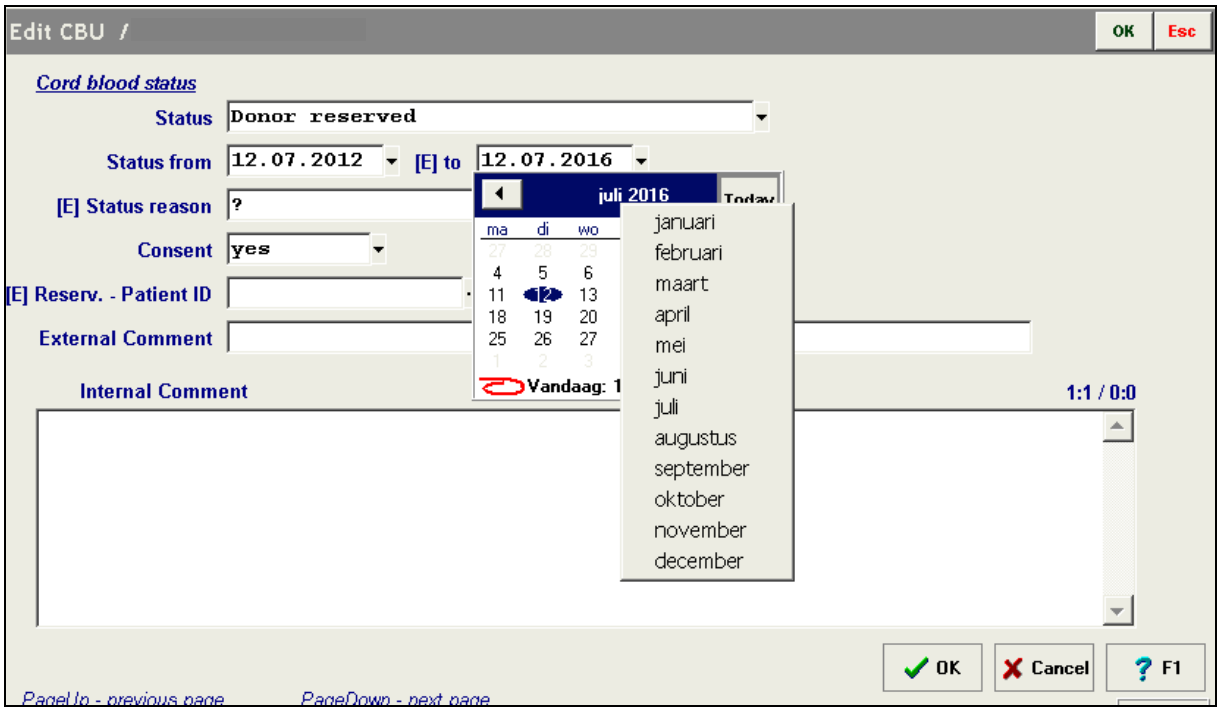
This screen serves to manage the cord availability status

a. Temporarily unavailable

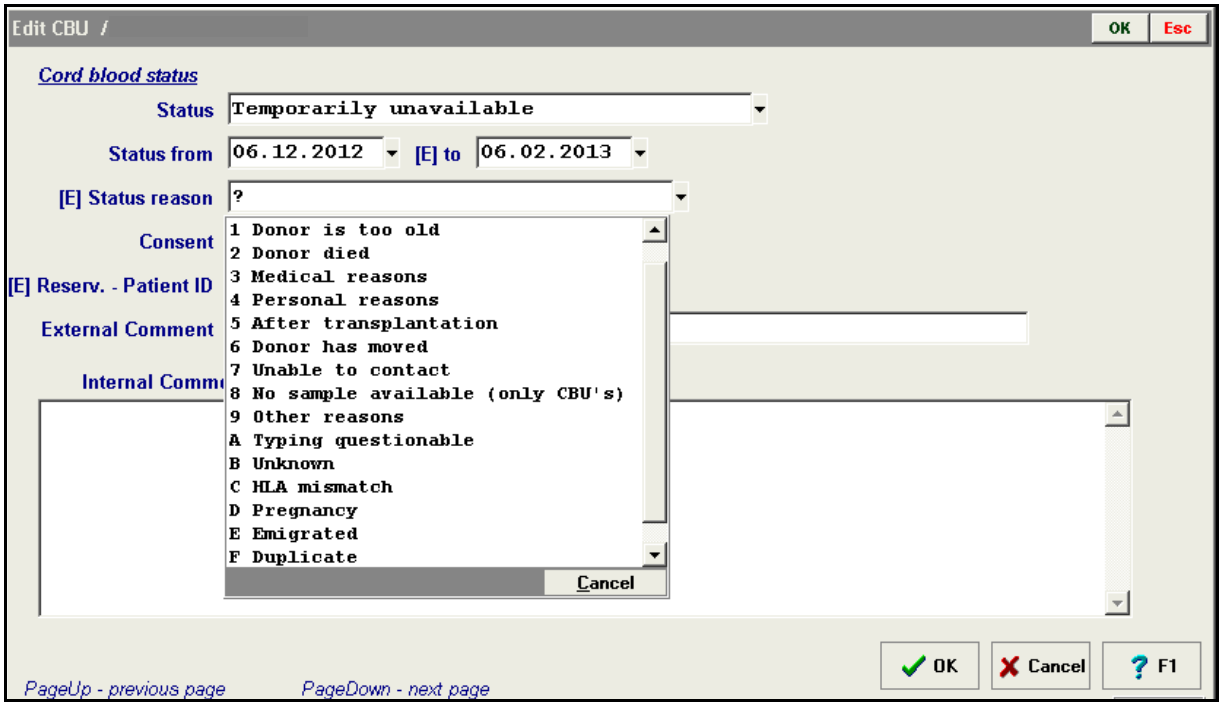


When the cord has been requested for additional typing or shipment of a DNA sample, the user must change the availability status to “2 Temporarily unavailable”, and reserve the cord for a period of 60 days cfr MDPB-R SOP:

Click on the actual month to display the drop list and select the month 60 days ahead to enter the end of availability date:

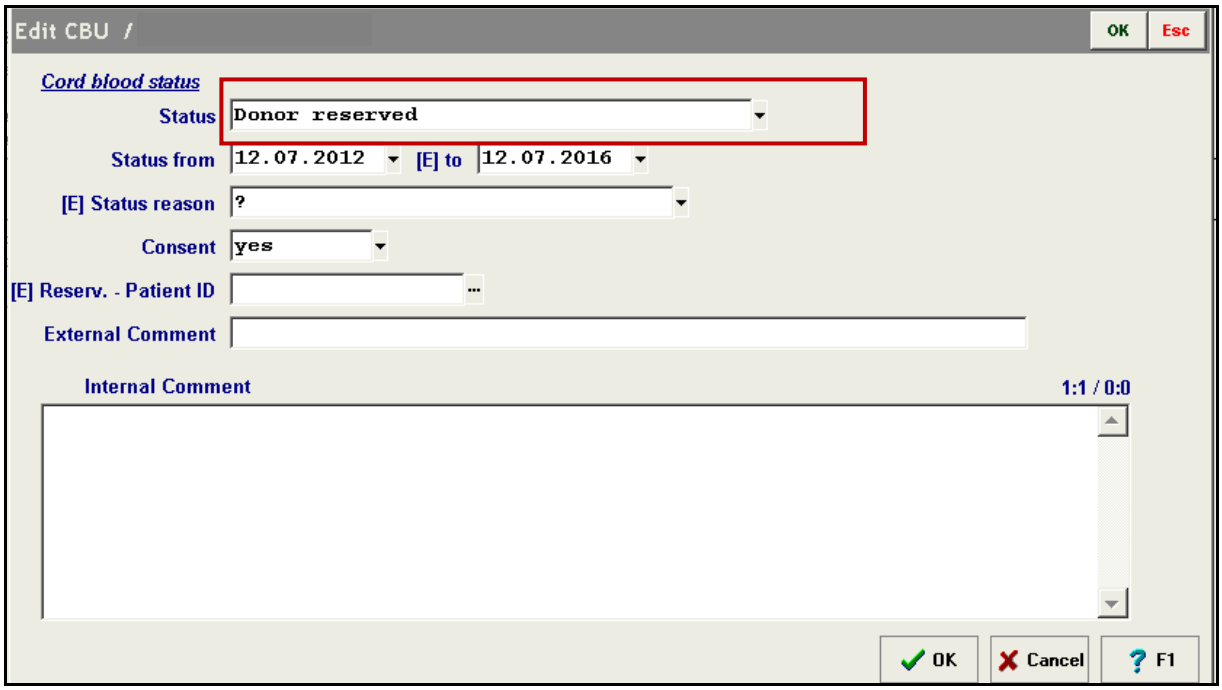


It is mandatory to put a status reason. You need to choose “9 Other reason”.



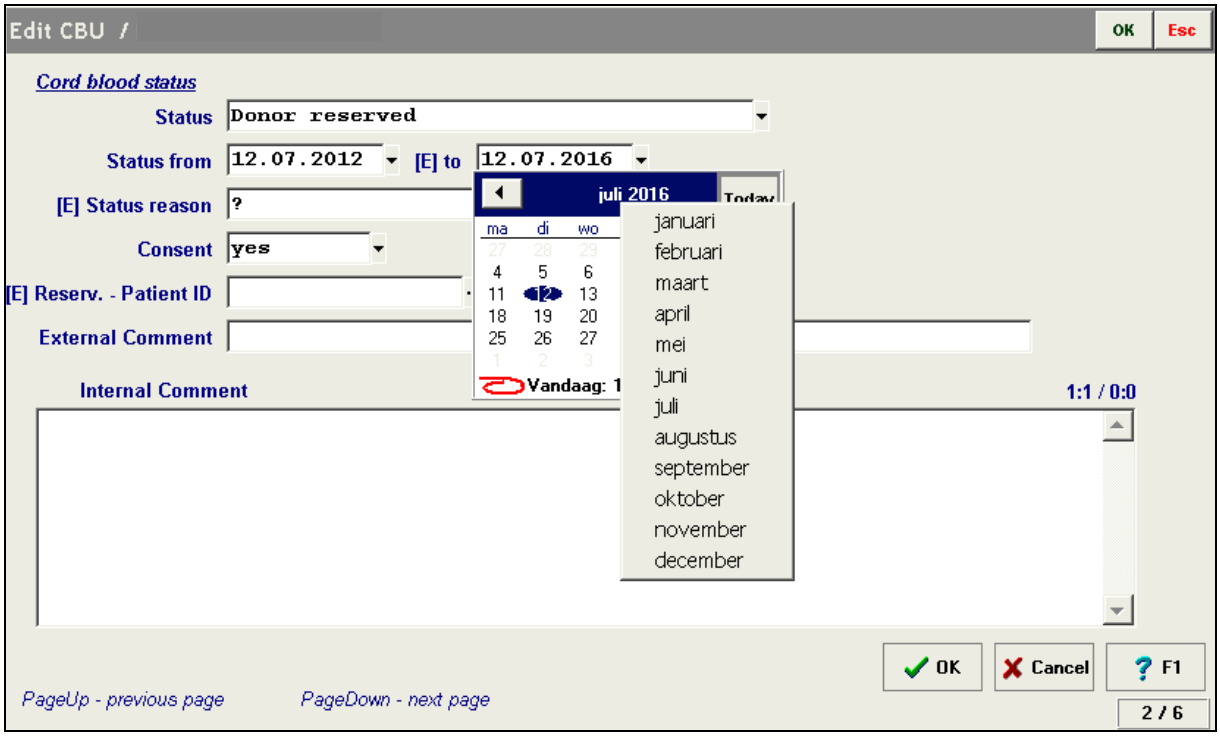
b. Reservation

When a TC is requiring a reservation of a unit you need to edit the status into “3 Donor reserved”.



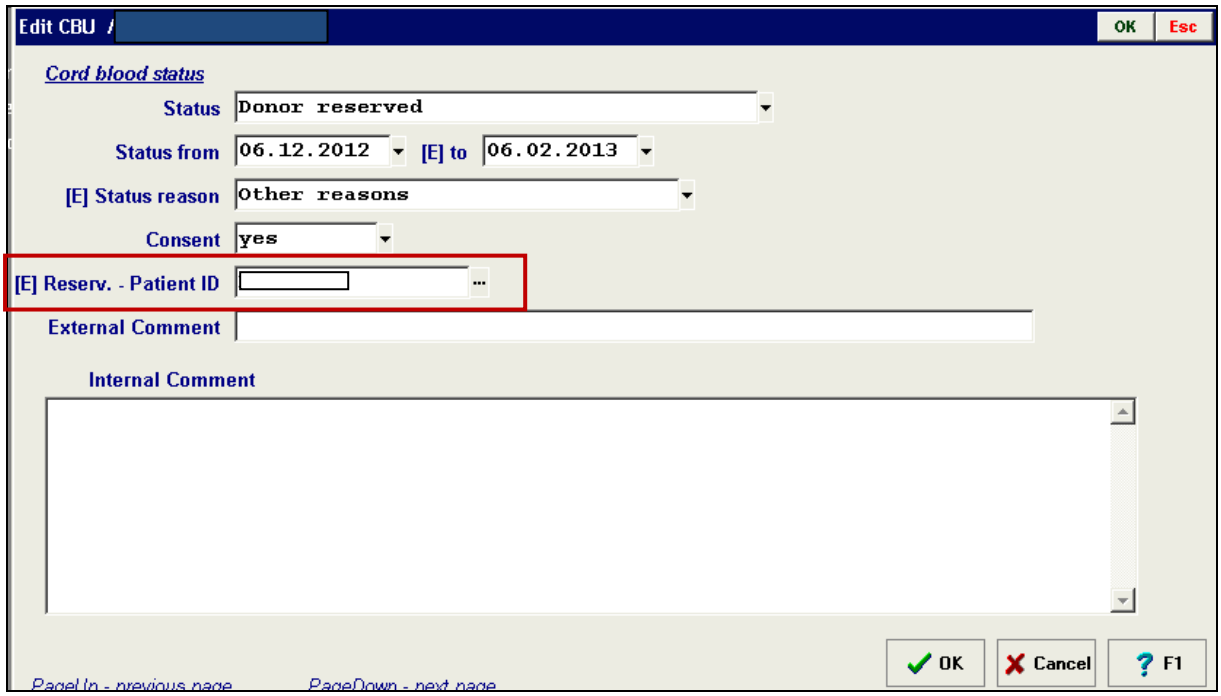
It is mandatory to enter the reservation period by indicating the start date and the end date of reservation.

Click on the actual month to display the drop list and select the month 60 days ahead to enter the end of availability date:



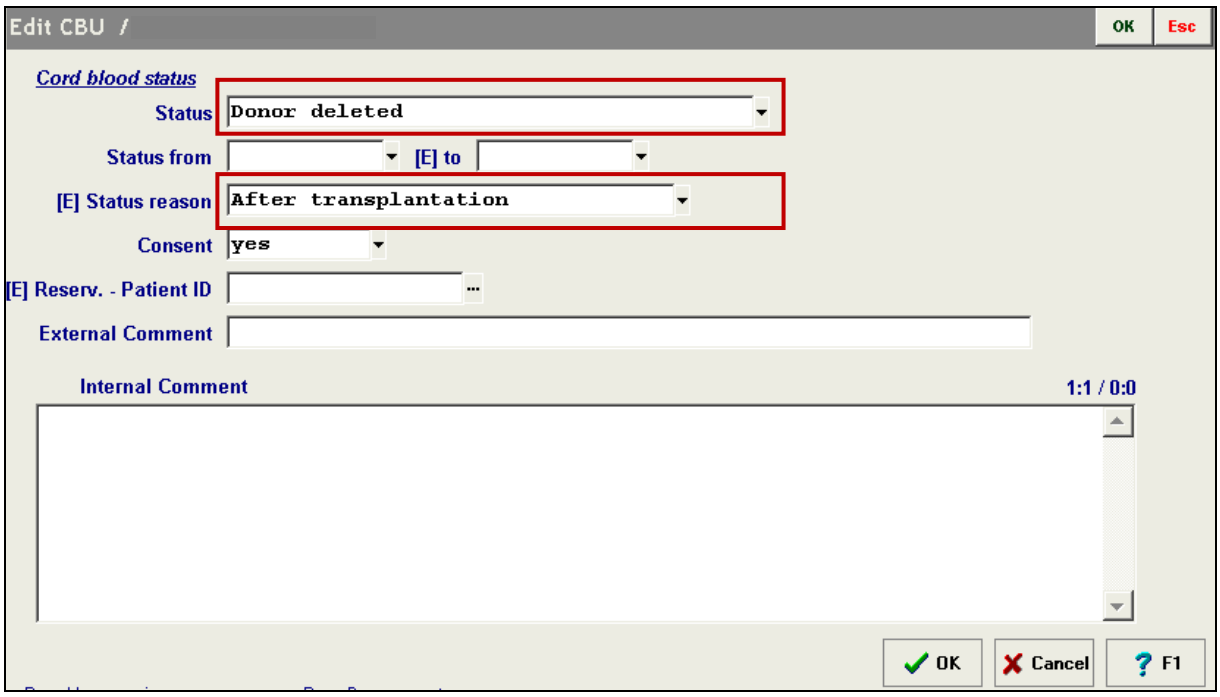
There will be an alert for CBU reservation expiration via the system (warnings: donor database quality check).

It's mandatory to enter the patient ID for which the CBU is reserved, the message will be sent via EMDIS. The HUB of the patient will be informed consequently.



c. Cancellation

When a cord blood has been shipped for transplantation, the record must be set to deleted status, otherwise the cord search results will be sent out for national and international patients. (in Prometheus the record will not be deleted but receive the status 'deleted'.)



The information will be sent out via EMDIS.

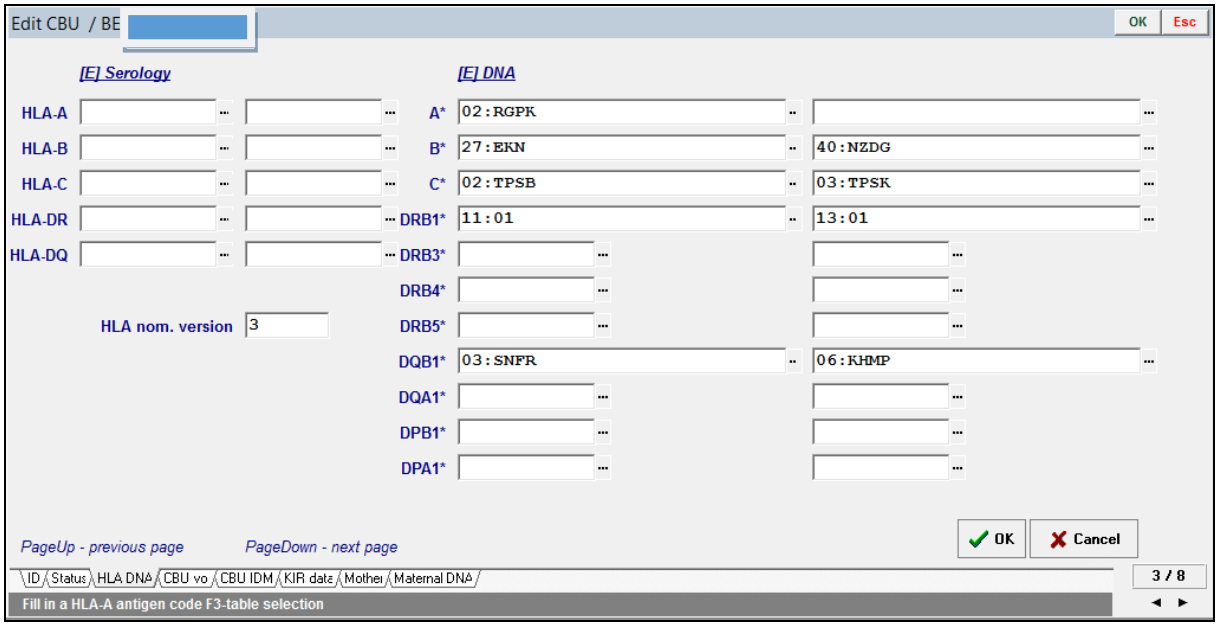
Go to the tab TX to add complementary information in the cord blood delivery field.

3. TAB HLA DNA

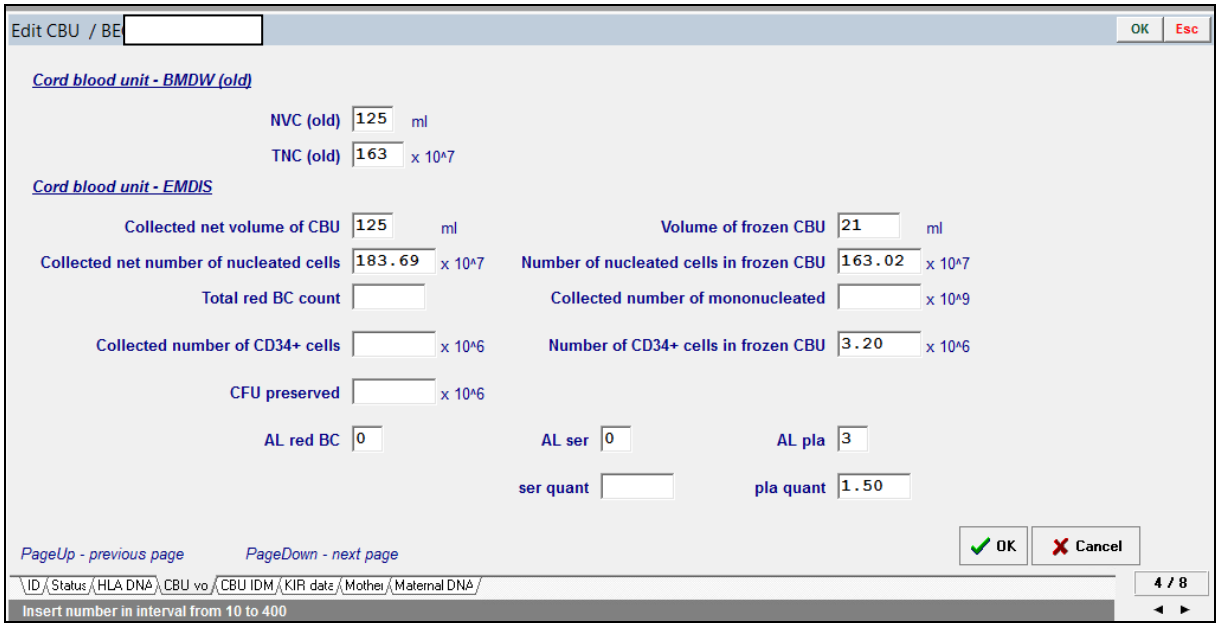
List of valid values appear when clicking the dots right from input field or by pressing F3.

For information about the serology typing go to chapter I.II.4.5.a HLA data – serology

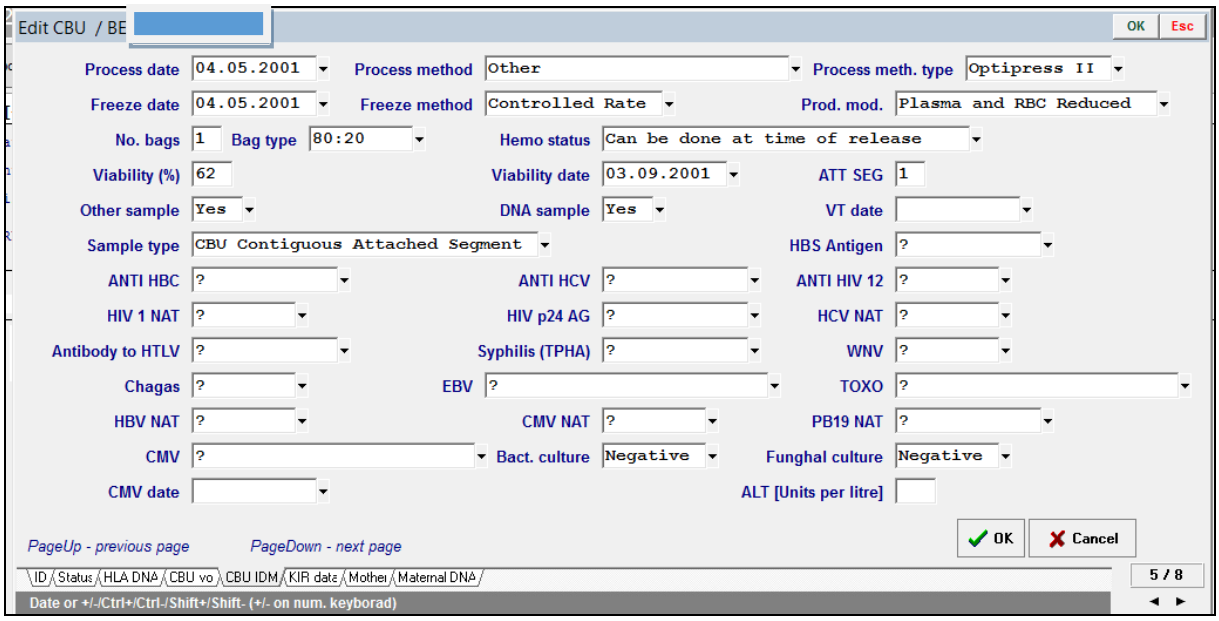
For information about the DNA typing input go to chapter I.II.4.5.b HLA data – DNA.



4. TAB CBU vol



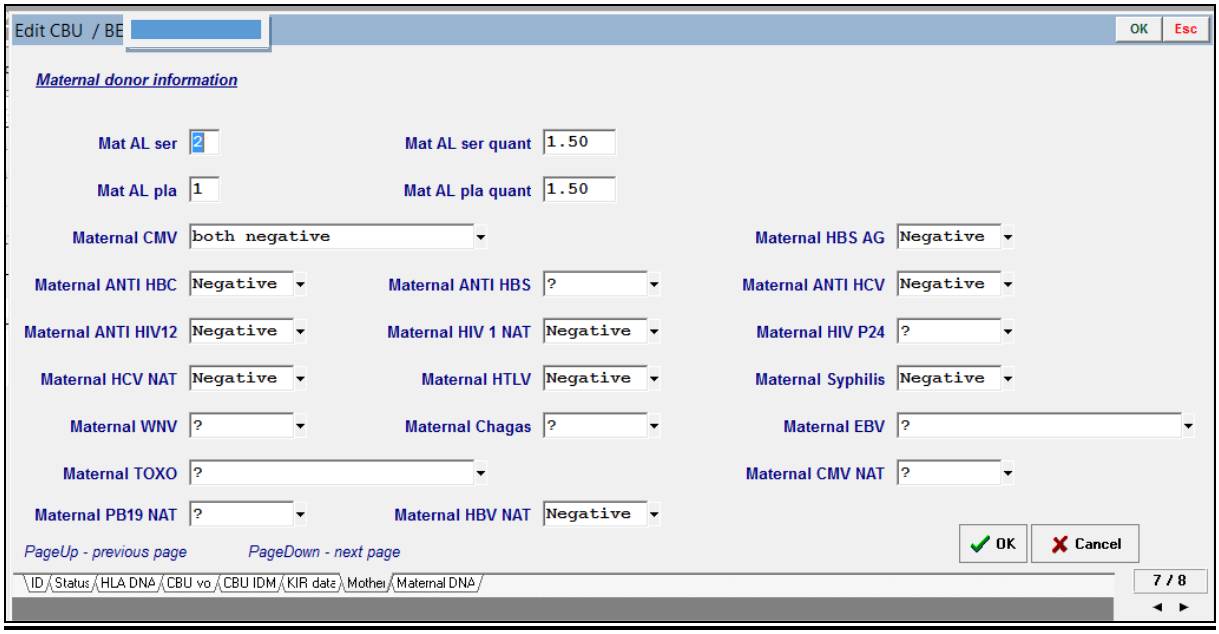
5. TAB CBU IDM



6. TAB KIR DATA

NA

6. TAB MOTHER



6. TAB MATERNAL DNA

NA

III.IV. NEW CORD BLOOD

The tool to create new records is not available for cord blood: the cord bloods will be uploaded via interface.

III.V. HISTORY

The history of cord blood data change is available by the command

. Open the cord blood's record and then go to "donor – history". If a history exists, the table with his data will appear, otherwise a blank table will be opened.

III.VI. VALIDATE

The validation of a typing update follows the same rules as for donor validation and is further explained in chapter II.VII. Validate.

III.VII. STACK

Please see chapter II.VIII. Stack.

III.VIII. REPORTS

The same reports as explained in chapter II.IX. Reports are available for the Cord Blood Bank user. Two reports are especially for CBU's:

a. DONREP067 CBU status Report

Report DON067 is created for Cord Blood Bank use: the report displays counts of cords and their respective availability status:

CBU Status Report

Report DON067

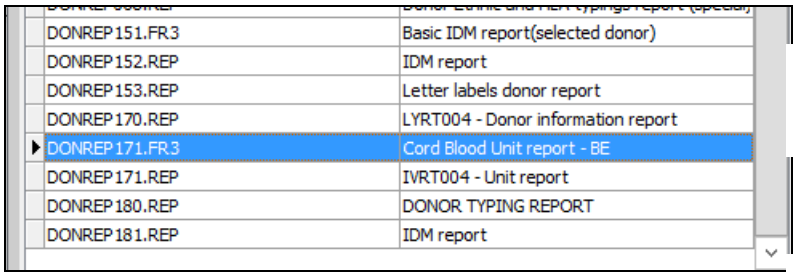
Marrow Donor Program Belgium - Registry
Motstraat 40
2800 Mechelen
Belgium

Donor Status	Count
Available	6791
Temporarily unavailable	11
Donor deleted	156
Donor reserved	36
TOTAL	6994

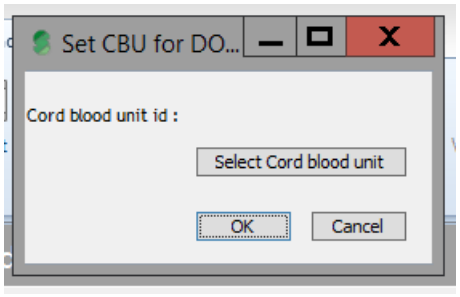
Donor Status	Status Reason	Count
Available		6788
Temporarily unavailable	Quarantined (CBU)	6
Donor deleted	After transplantation	61
Available	no sample available (for CBU´s only)	2
Donor deleted	Expired (CBU)	2
Donor deleted	Distributed for infusion (CBU)	2
Temporarily unavailable		3
Available	Medical reasons	1
Donor reserved		36
Donor deleted	Cord Destroyed or Damaged (CBU)	2
Donor deleted	Other reasons	41
Donor deleted		48
Temporarily unavailable	Administrative (CBU)	2

b. DONREP171 BE Cord Blood Unit report:

Report DON171 is created for Cord Blood Bank use: the report displays characteristics of the unit.



DONREP171 will open the next window screen:



Then press OK : the cord blood report will be edited:

UNIT HLA TYPING

A or A*	B or B*	C or C*	DR or DRB1	DRB3	DRB4	DRB5	DQ or DQB1	DPB1
02:RGPK	**27:EKN**	**02:TP SB**	**11:01**				**03:SNFR**	
	40:NZDG	**03:TP SK**	**13:01**				**06:KHMP**	

UNIT CHARACTERISTICS

Collected net volume of CBU	**125**	ml
Volume frozen CBU	**21**	ml
Collected net number of nucleated cells	**183,69**	10^7
Number of nucleated cells in frozen CBU	**163,02**	10^7
Collected number of CD34+ cells	**0**	10^6
Number of CD34+ cells in frozen CBU	**3,2**	10^6
Collected number of mononucleated cells	**0**	10^9
CFU preserved	**0**	10^9
Method of volume reduction	**Other**	

Bookmark CBU II

Bag ID	
Bag type	CBU Contiguous Attached Segment
No. bags	1
Sample type	CBU Contiguous Attached Segment
Collection date	3/05/2001
CT complete date	
Bacterial culture	Negative
Process meth	Optipress
Process date	4/05/2001
Freeze meth.	Controlled Rate
Freeze date	4/05/2001
Funghal culture	Negative
Prod. mod.	Plasma and RBC Reduced
Hemo status	Can be done at time of release
RED BC	0
Viability	62
Viability date	3/09/2001

CBU MATERNAL

Mat AL ser	2	Mat AL ser quant	1,5
Mat AL pla	1	Mat AL pla quant	1,5
Maternal CMV	Both IgG and IgM negative		
EBV			
TOXO			
HBS AG pos./neg.	Negative		
ANTI HBC	Negative	WNV	?
ANTI HBS	?	Chagas	?
ANTI HCV	Negative	HBV NAT	Negative
ANTI HIV12	Negative	CMV NAT	?
HIV 1 NAT	Negative	PB19 NAT	?
HIV P24	?		
HCV NAT	Negative		
HTLV	Negative		

Bookmark CBU IV

ANTI HBC		ATT SEG	1
ANTI HCV		OTH SMPL	Y
ANTI HIV 12	?	DNA SMPL	Y
HIV 1 NAT	?		
WNV	?		
Chagas	?	HCV NAT	?
HBV NAT	?	ALred BC	0
CMV NAT	?		
AL ser	0	ser quant	0
AL pla	3	pla quant	1,5

III.IX. ANALYTICAL TOOL

Please see chapter II.X. Analytical tool.

IV. EMDIS

IV.I. INTRODUCTION

EMDIS (European Marrow Donor Information System) is a communication system for the data exchange between bone Marrow Donor Registries, Transplant Centers, Donor Centers, HLA labs, and Cord Blood Banks.

The term **HUB** is used for the Donor Center or Transplant Center sending or receiving EMDIS messages. In Prometheus **Belgium** is considered as an EMDIS country. The activation of a Belgian search will be processed as an EMDIS search activation, as well as the reported results from Belgian donors.

The term **"donor"** means **"stem cell donor"** or **"cord blood unit".**

Each request is uniquely determined by the donor, patient identifier, the category of request and the date of request.

The user is not allowed to create duplicate requests, if necessary, cancel the previously created request before creating new ones. The request received from abroad will be rejected if it is duplicate.

The donor status in the EMDIS system can take following values:

AV (Available):	the donor is available for transplantation.
TU (Temporarily Unavailable):	the donor is temporarily unavailable. The reason why and the period of unavailability must be indicated.
RS (Reserved):	the donor is reserved.
OP (Other Patient):	the donor is reserved for another patient.
DE (Deleted):	the donor is deleted from the Registry. The reason is indicated.

IV.II. EMDIS MESSAGES

IV.II.1. New and old messages – requests without answers

In the Emdis window panel the requests without answer, new and old messages will be displayed.

This panel allows to print reports, and analytic tool for incoming typing and sample requests.

Rq. w/o answer – pending messages

New – all recently received or sent messages

Old – messages marked by the user as processed will be listed under the EMDIS – old section.

Reports – EMDREP001 – EMDIS messages

Analytic tool for incoming typing requests

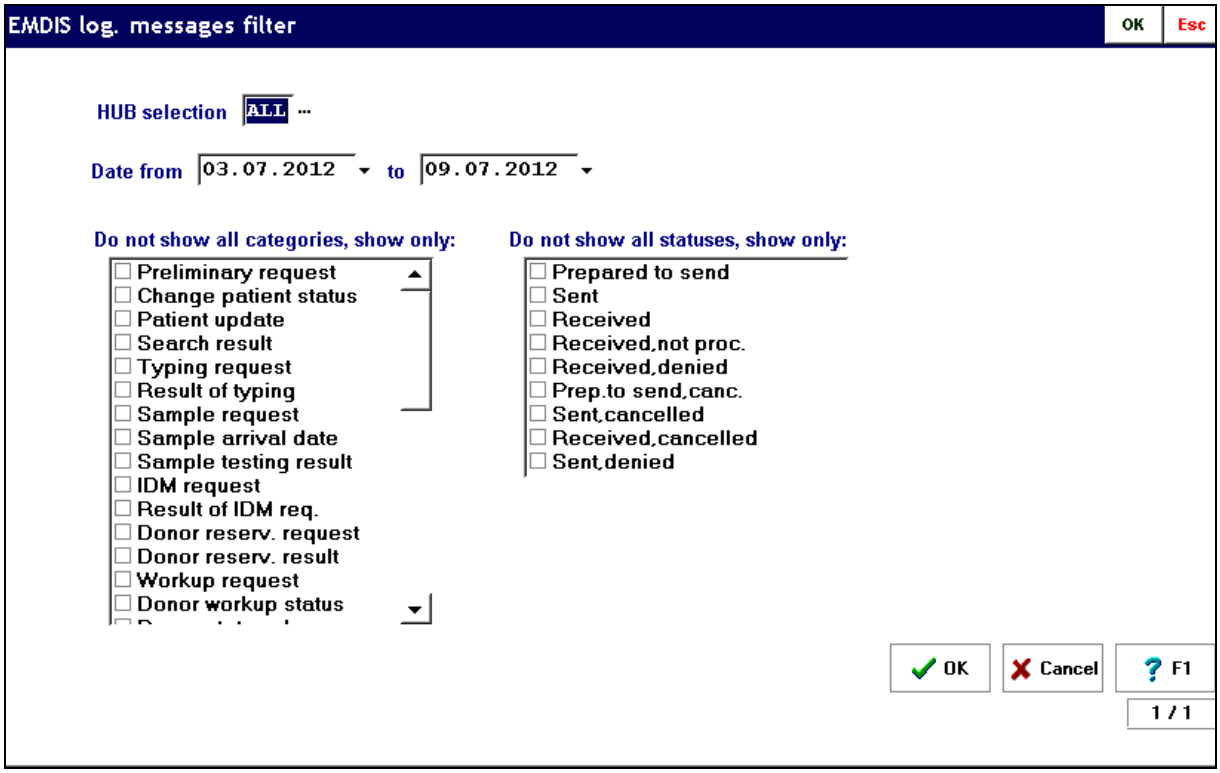
Analytic tool for incoming sample requests

New messages:

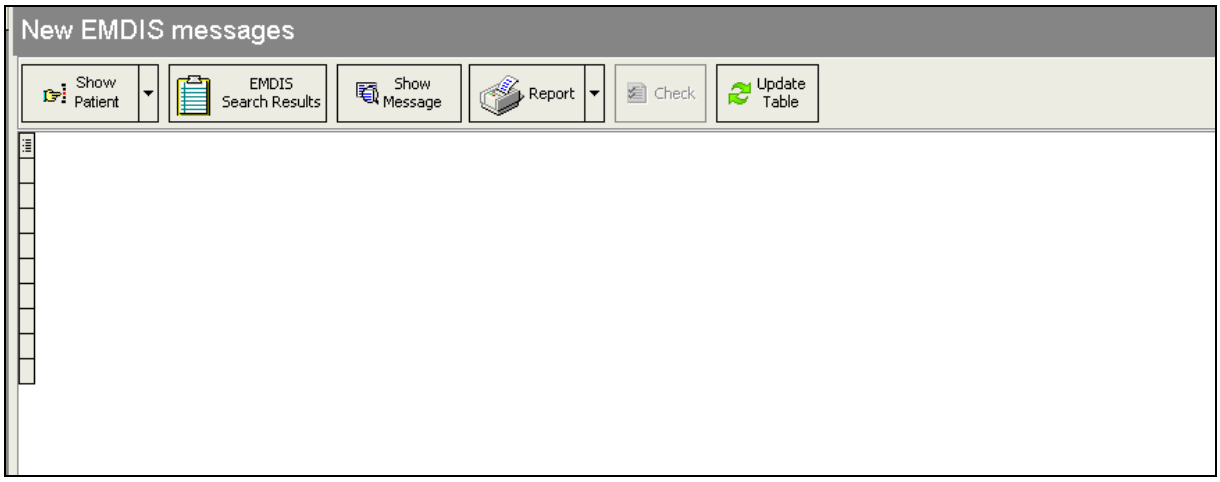
Another way to check new arrival of messages or old messages is by going to the "EMDIS menu" and when you press EMDIS the new messages will be displayed on the window screen:

Old EMDIS messages:

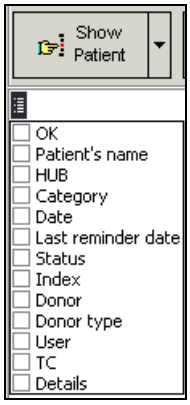
It is possible to use the filter to add some conditions to the messages you want to display. You can limite e.g. the date range (date from … to …) and make a selection of message type.



The first time you login the Emdis new – old – Requests without answer will be an empty screen:

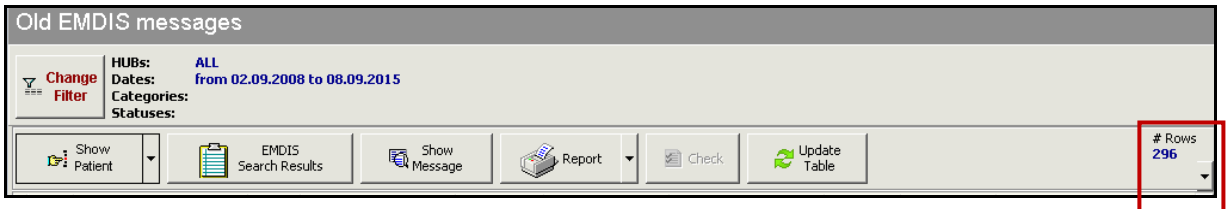


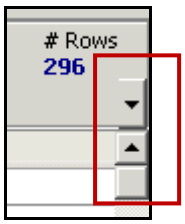
Click on the small button in the left upper corner , to display all available columns :

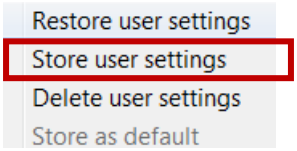


Your selection will be saved for your following login sessions. Don't forget to select the **"OK",** as this option serves to change the status of the Emdis from new to old.

You can store the user settings by selecting the arrow on the right:

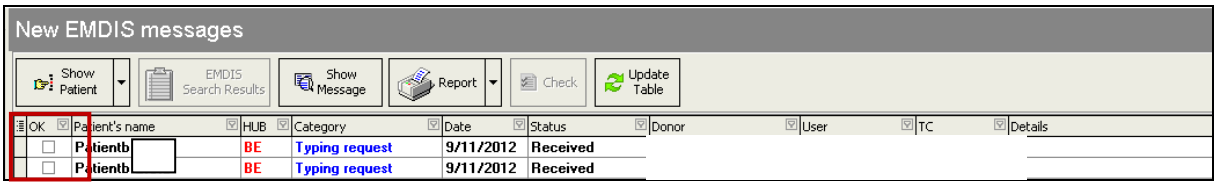






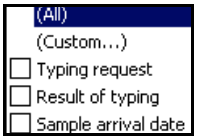
IV.II.2. Window panel EMDIS messages

- When you tick the OK box (in the table of the messages), you indicate that you have consulted the message and it will be saved in the **old messages** category.



Press update table to update the new EMDIS messages list, the message you consulted will be removed from the list.

- Column headings of the table behave intelligent: if you click on them, you can sort them by ascending or descending order.
- You can **filter** the displayed values in this column by the click on the arrow in the column heading.



- You can edit the column **width.**
- You can change the displayed order of the columns by the "drag & drop" of the column heading between two other column headings.
- The title bar of a message consist of the following tabs:

Patient's name:	patient name;
HUB:	code of the Registry;
Category:	type of request;
Date:	request date;
Status:	EMDIS status of the message: received, cancelled, … ;
Donor:	donor code;
TC:	in some cases the Transplant Centers TC codes are included in the message;

IV.II.3. Status of messages

The status of the message can be consulted in the status field**:**

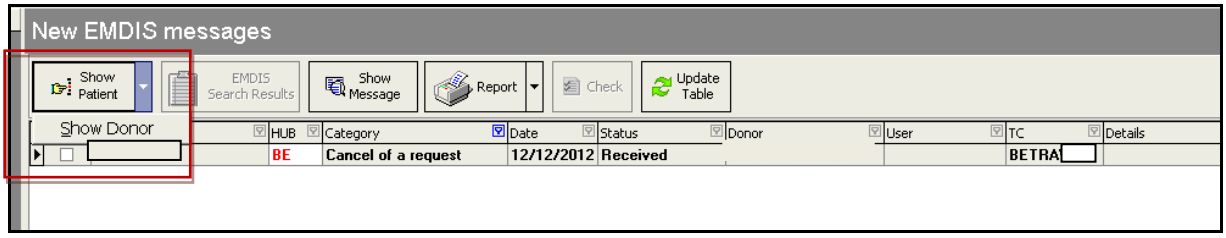
The different options:

- **Prepared to send**: the message has not yet been sent, will be sent with next processing session
- **Sent**: the message has been sent
- **Received**: message received
- **Prep. to send, canc.**: the message was cancelled before being sent
- **Sent, cancelled**: the message has been sent, but cancelled afterwards
- **Received, cancelled**: the message has been received, but cancelled later by the sender
- **Received, not proc**.: received search request but the system has not yet done a search. This is a very temporary state.
- **Received, denied**: a formal message denial because breaking EMDIS rules

IV.II.4. Message contenance

This chapter describes the window browsing of the messages:

Clicking on the message or selecting “show message”’ will open the message:



Show patient – not applicable for donor management

Show donor - you can switch to the donor records file to consult the donor record and the list of donor messages

The message consists of 3 tabs: **G**eneral – **P**hysical messages – **C**ontent.

When you open the message the **Content tab** will be immediately opened.

The basic information of your message (request – result) is available in the screen: the buttons below will allow you either print the message, create a WMDA report or to send an answer (result, warning, reminder, cancellation, …) to the other HUB (or Belgium).

The EMDIS system data message is available in the **Physical message tab**, technical information about the message (inserted in the database, status, message number, ….) is available in the **General** tab.

IV.II.5. Overview of message types

In the table below of the different message types (donors, but patients as well).

Message title	Description
PAT_UPD	New patient registration
PAT_STAT	Patient status change
PAT_ALTPH	Patient alternative phenotype registration (IS NOT USED ANY MORE)
DONOR_CB	List item of convenient donors for patient (one donor or cord blood)
PHEN_LIST	List item of convenient phenotypes for patient (one phenotype).
MATCH_SUM	Summary of search result for patient.
TYP_REQ	Request of further donor type testing.
TYP_RES	Result of further donor type testing
SMP_REQ	Request of sending of donor blood sample.
SMP_ARR	Supposed date of delivery of donor blood sample.
SMP_RES	Sample test result.
IDM_REQ	Request of sending of infectious illness sample.
IDM_RES	Result of request of sending of infectious illness sample.
RSV_REQ	Request of donor reservation for transplantation purpose.
RSV_RES	Result of reservation.
REQ_CAN	Request cancel.
WOR_REQ	Request of starting work on transplantation.
MARR_STAT	State of „work“ with donor.
NEW_ADD	Register data update.
MSG_DEN	Request rejection.
WARNING	Warning message.
TXT_MSG	Text message.
DON_UPD	Donor downloading. (not used)
SEA_RES	Search result. (not used)
NO_RES	No result. Service cannot be settled.
MSG_ACK	Received messaged confirmation.
RES_REM	Unsettled request remind.
ALM_REQ	Donor alternative phenotype reservation.
ALM_RES	Same as DONOR_CB, but it is used as answer to ALM_REQ
CBR_REQ	Request of supplemental information about Cord blood unit

IV.II.6. Automatic warnings and message denials

- **Patient status changed**

  Type: warning
- **Institution is not registered in HUB XX**

  Type: warning

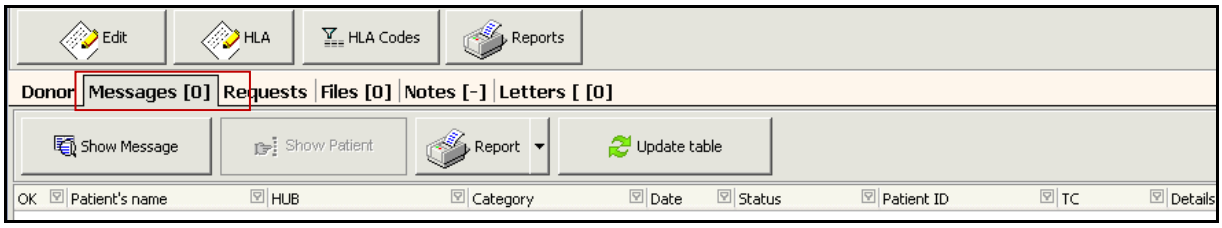
- **Cannot change patient status**
  Type: Message denial
- **Cannot change patient status**
  Type: Message denial
- **Invalid fax or phone format**
  Type: Message denial
- **Invalid institution type**
  Type: Message denial
- **Request has already result**
  Type: Message denial
- **Request has already result or it has been already cancelled**
  Type: Message denial
- **Request does not exist or it has been denied or cancelled**
  Type: Message denial
- **Your request has been denied**
  Type: Message denial
- **Our request has been cancelled**
  Type: Message denial
- **Your request has been cancelled**
  Type: Message denial
- **Our request has been denied**
  Type: Message denial

IV.III. RECEIVING REQUESTS – REPORTING RESULTS

A Donor Center (Cord Blood Bank) can receive requests from 3 parties : EMDIS patients, Belgian patients and non EMDIS patients (entered by the MDPB-R search coordinator).
The following messages will arrive :

a. Typing request
b. Sample request
c. IDM request
d. CBU unit report
e. Reservation request

The tools offered in these messages (reporting result, printouts, WMDA forms) are the same for the different folders and are explained below.
Click on **Messages** to display the list of received and sent messages (the number of available messages between brackets);



Show message - will open the message

Show patient - not applicable for donor management

Report - offers the possibility the print the message or the WMDA form

Update table - to display new messages or replies you sent

NEW:

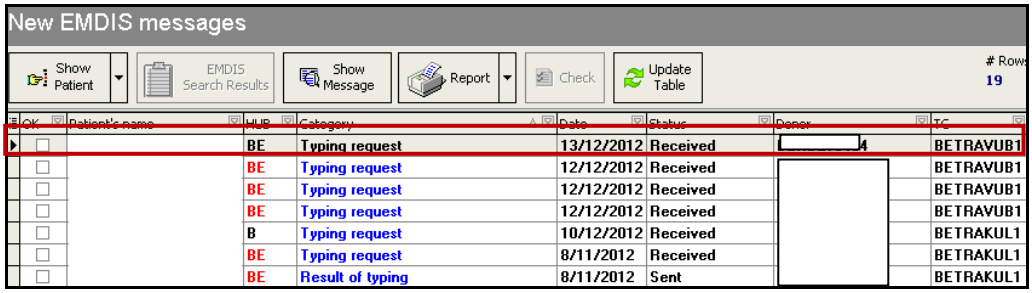
"Messages": all messages will be listed under messages.

"Requests": all requests will be listed under requests with additional status info .

IV.III.1. Typing request (TYP_REQ)

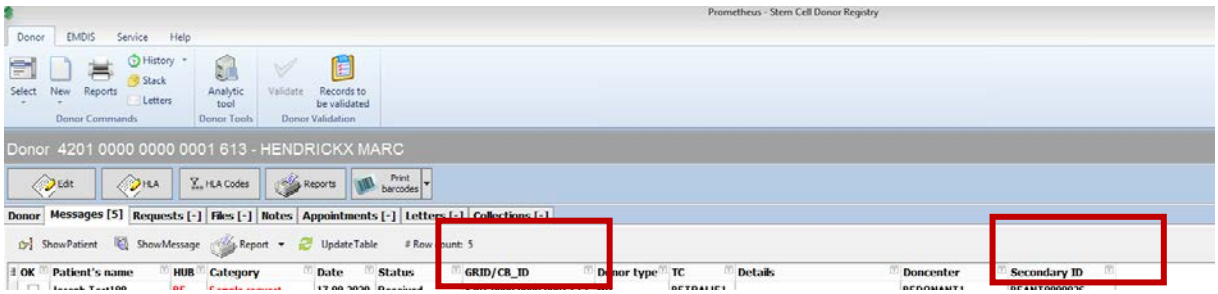
Double click or click on

to open the request screen:



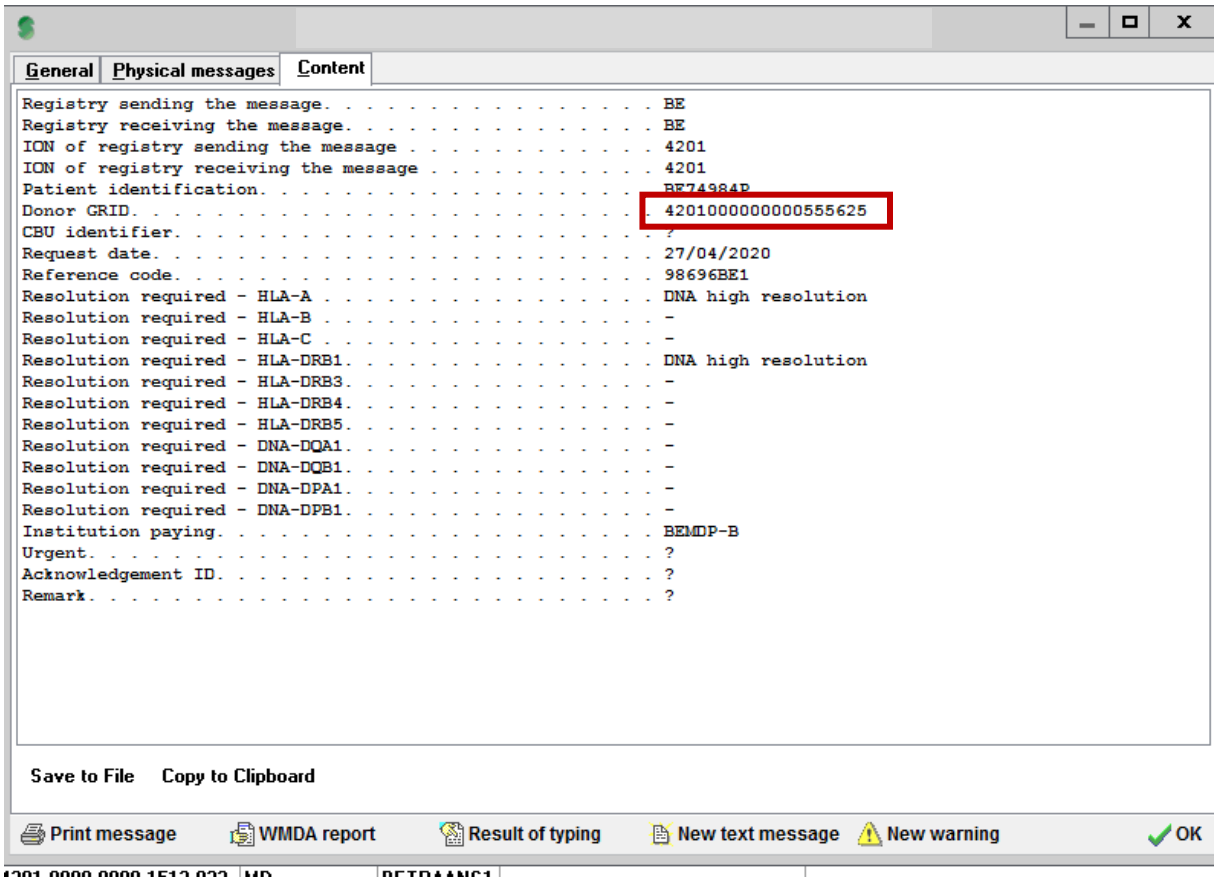
NEW: field donor GRID.

The old code (now called the secondary ID) will still be displayed for historical reasons.



Double click and go to the tab “content”: patient ID, requesting country, donor ID, request date and the requesting resolutions will be displayed. The tab “Content” allows you to have printouts or report the result by clicking on the buttons below:

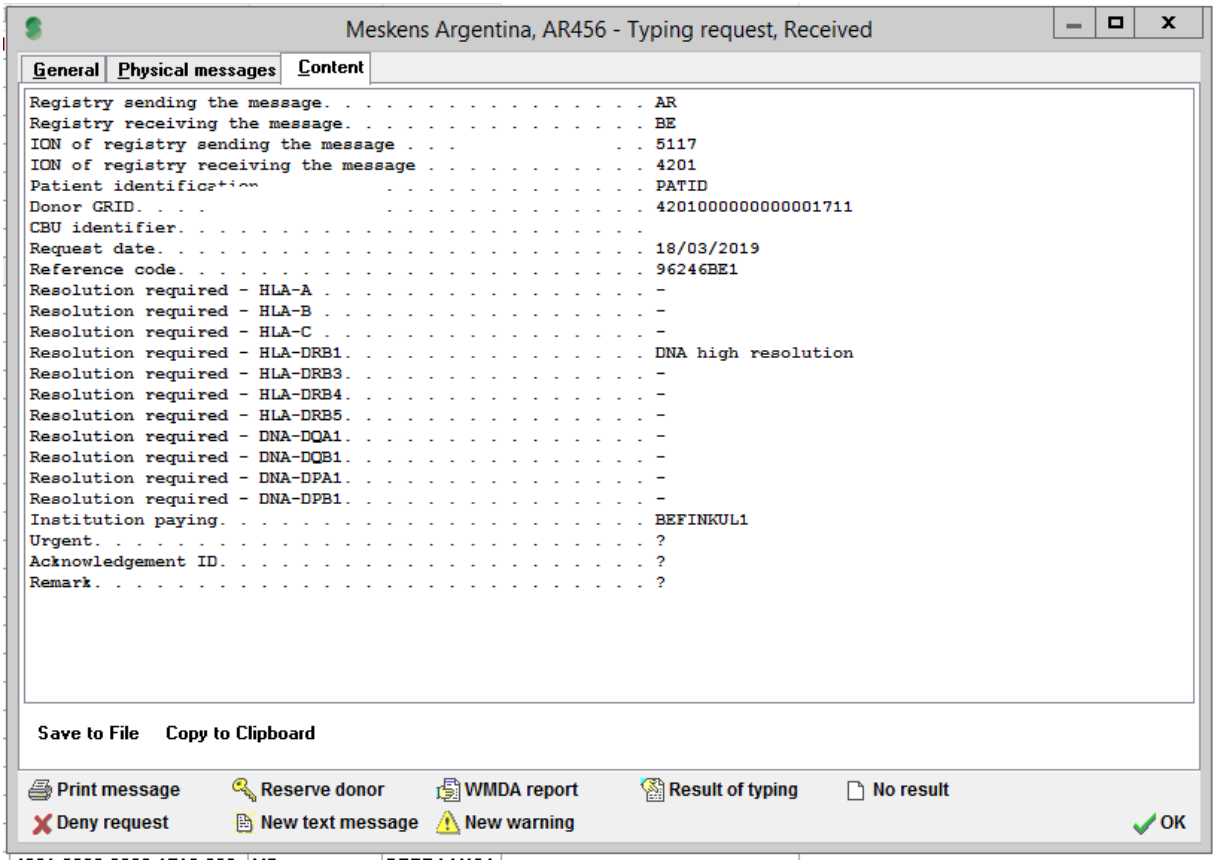
In the message the old code (the secondary ID) will no longer be displayed, as this information is sent to international partners.



The following actions are possible:

- **Print message**
- **Print WMDA report**
- **Result of typing**
- **No result**
- **Deny request**
- **New text message**
- **Reserve donor**
- **New warning**

1. Print message:



When printed, the old secondary code will not be displayed.

2. Print WMDA report:

The request can also be printed on a prefilled WMDA form by clicking:

.:

The WMDA S20 Request for extended donor HLA typing report will be printed:

Marrow Donor Program Belgium - Registry
Motstraat 40
2800 Mechelen
2800, Mechelen
+32-15443396
+32-15443656
mdpb-registry@rodekruis.be

S20 REQUEST FOR EXTENDED DONOR HLA TYPING

Page 2 of 2

☐ Urgent request

PATIENT DATA			
Patient name:	Meskens Argentina		
Patient registry:	AR		
Diagnosis:	Acute Myelogenous Leukaemia		
Patient ID: (assigned by patient registry)	AR456	Patient ID: (assigned by donor registry)	PATID
Date of birth: (YYYY-MM-DD)	1970-03-18		

HLA TYPING REQUEST DONOR 1,2,3	
Donor ID:	BEANT0000030
GRID number:	4201000000000001711
A	☐
B	☐
C	☐
DRB1	☑
DRB3/4/5	☐
DQA1	☐
DQB1	☐
DPA1	☐
DPB1	☐

Comments:

The old pre GRID code (secondary code) will still be printed.

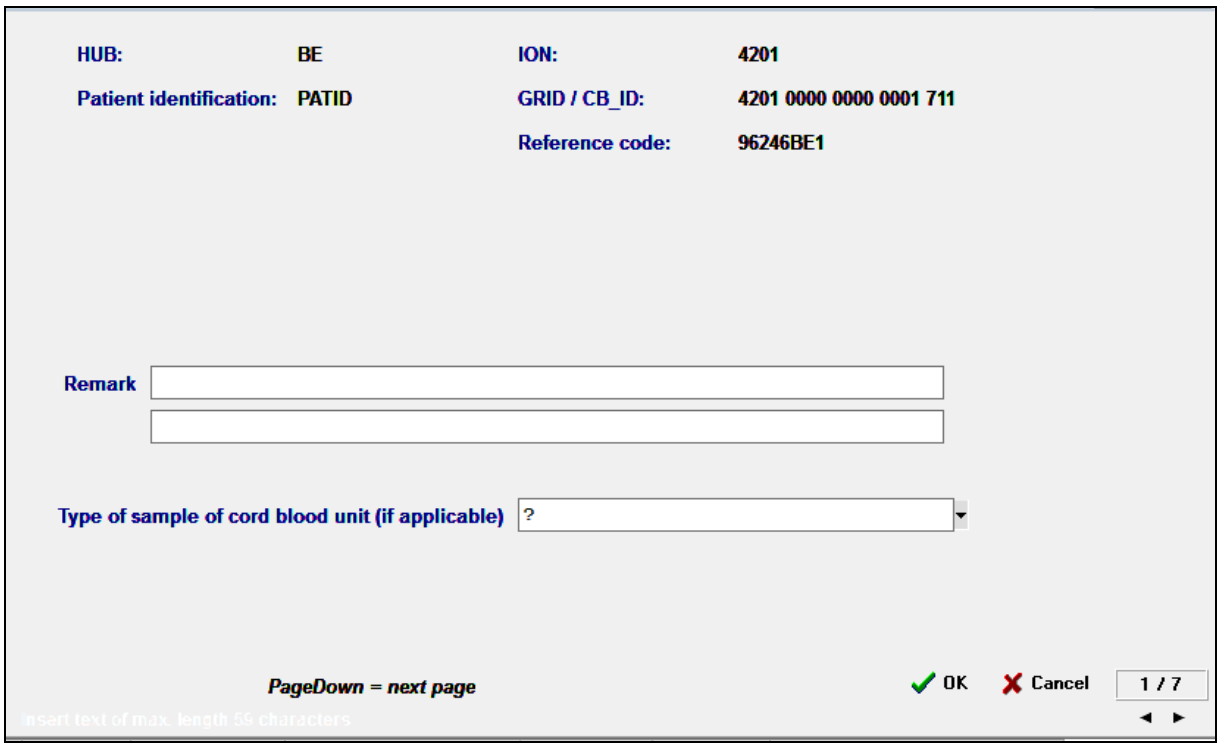
3. Result of typing

To enter a typing result, you first need to **Edit** the donor file (HLA typing update) and validate afterwards before you can send the result to the requesting Registry.

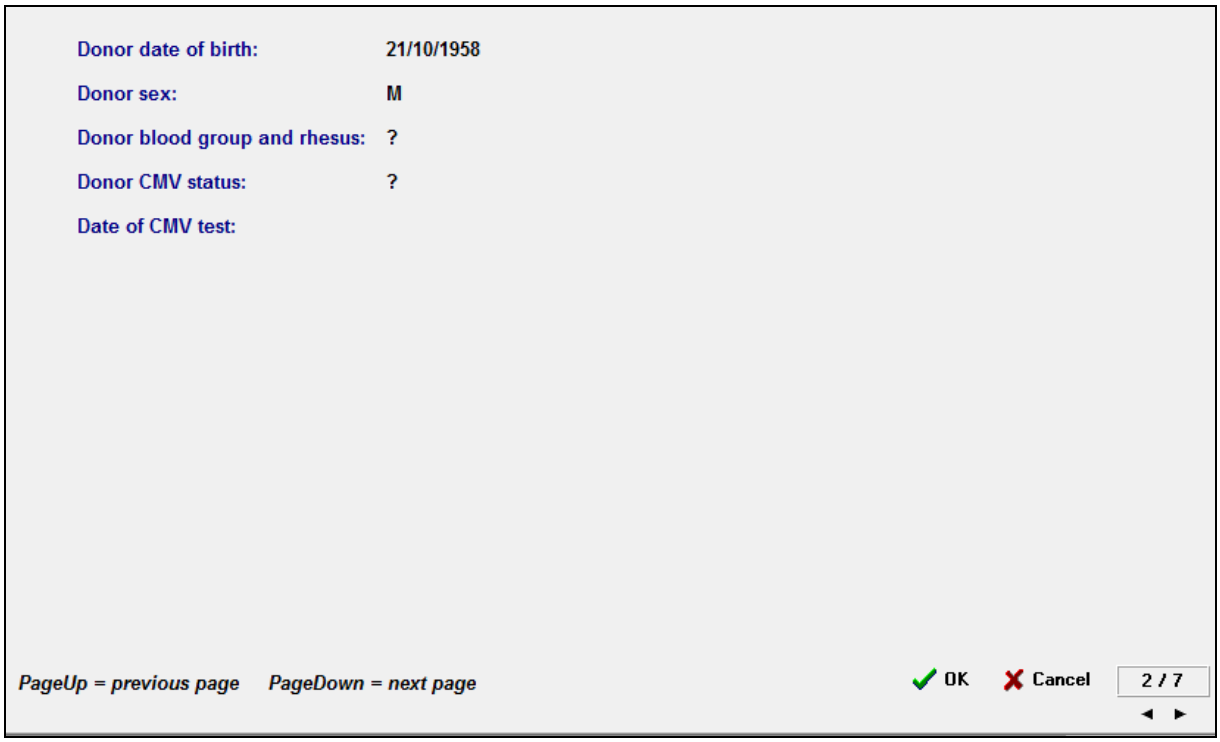
When the update has been done, you can immediately go to the EMDIS message to send the result via EMDIS:

Press

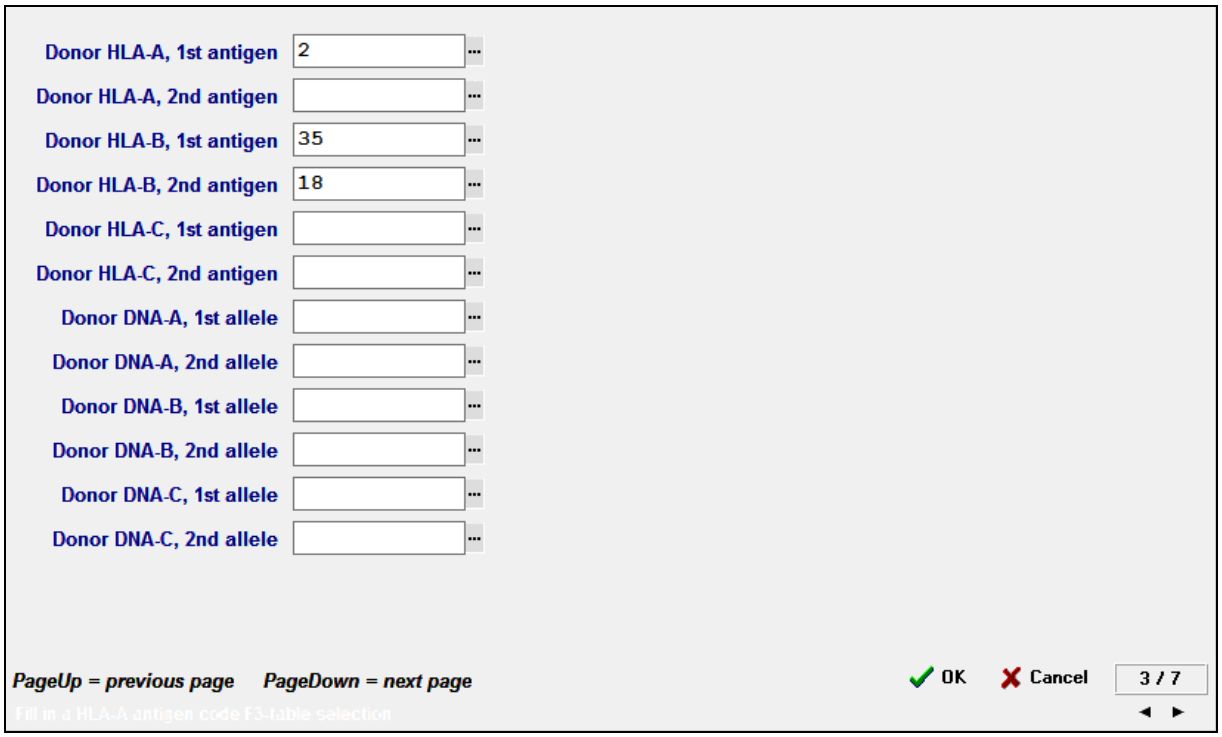
and the first screen (of 4) will be displayed:
Enter a remark if necessary, type of sample of cord blood unit is not applicable for donors.

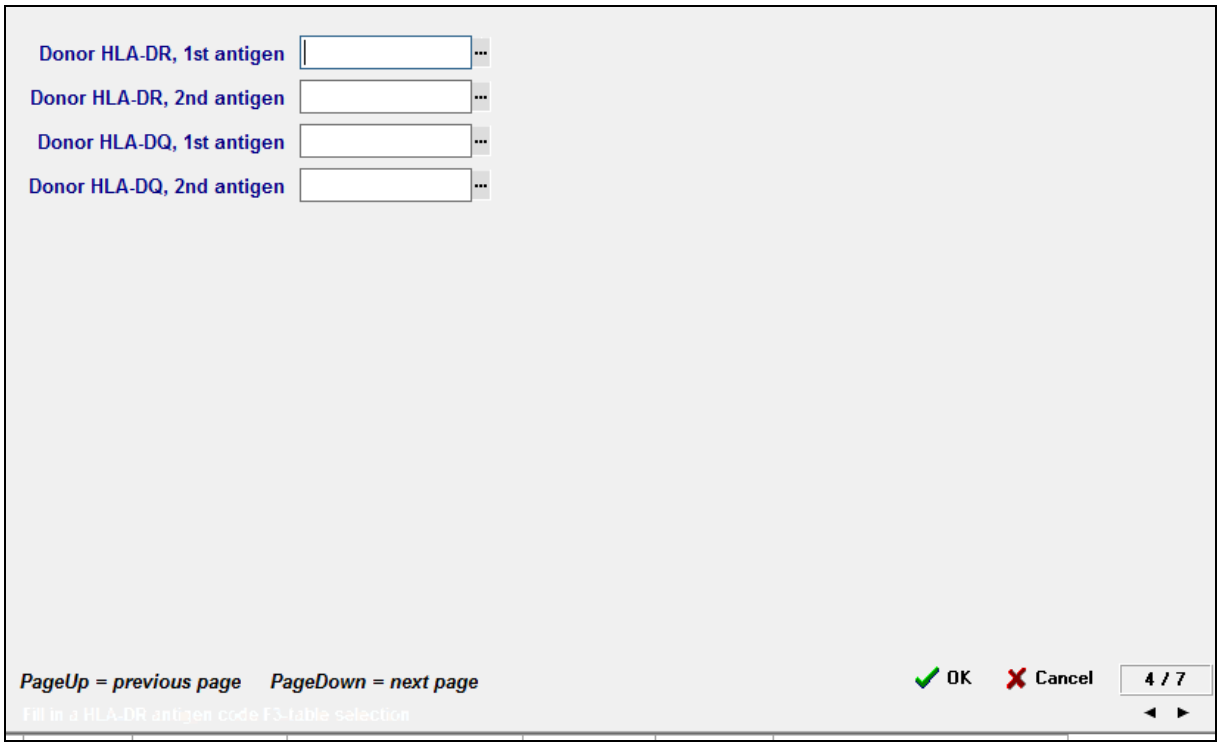


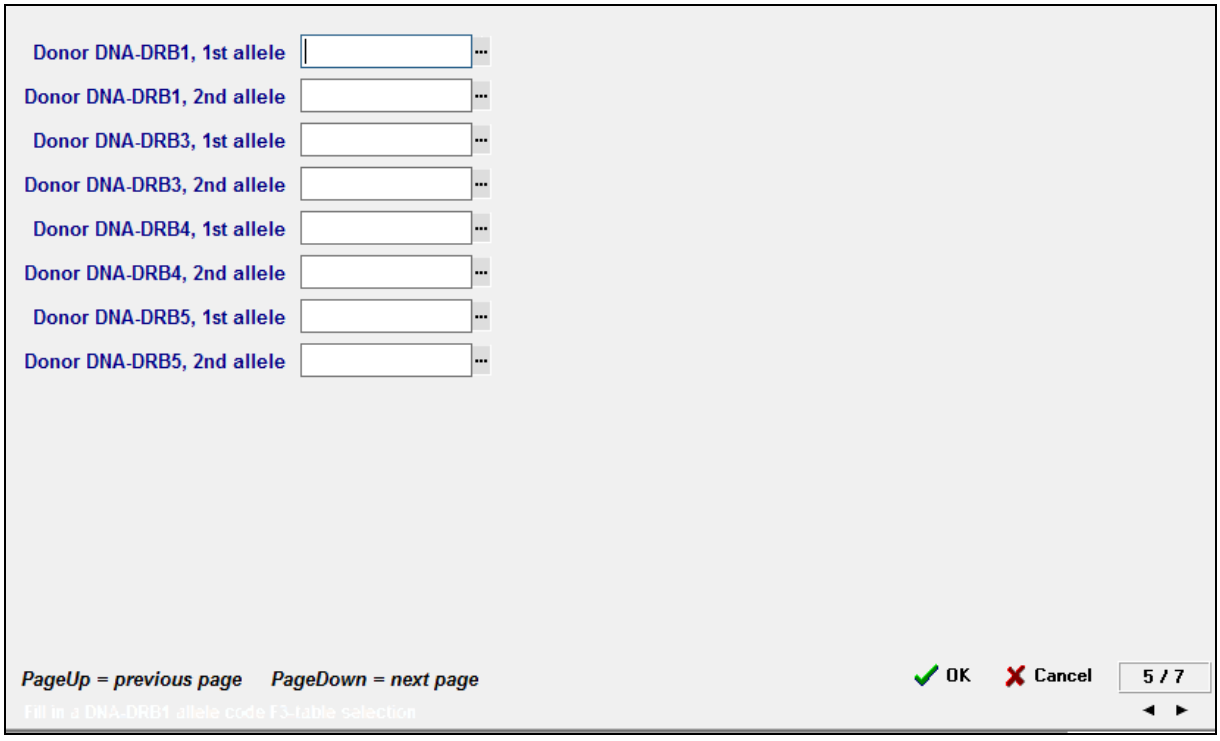
Screen 2/7 : DOB – sex – blood group – CMV are displayed:

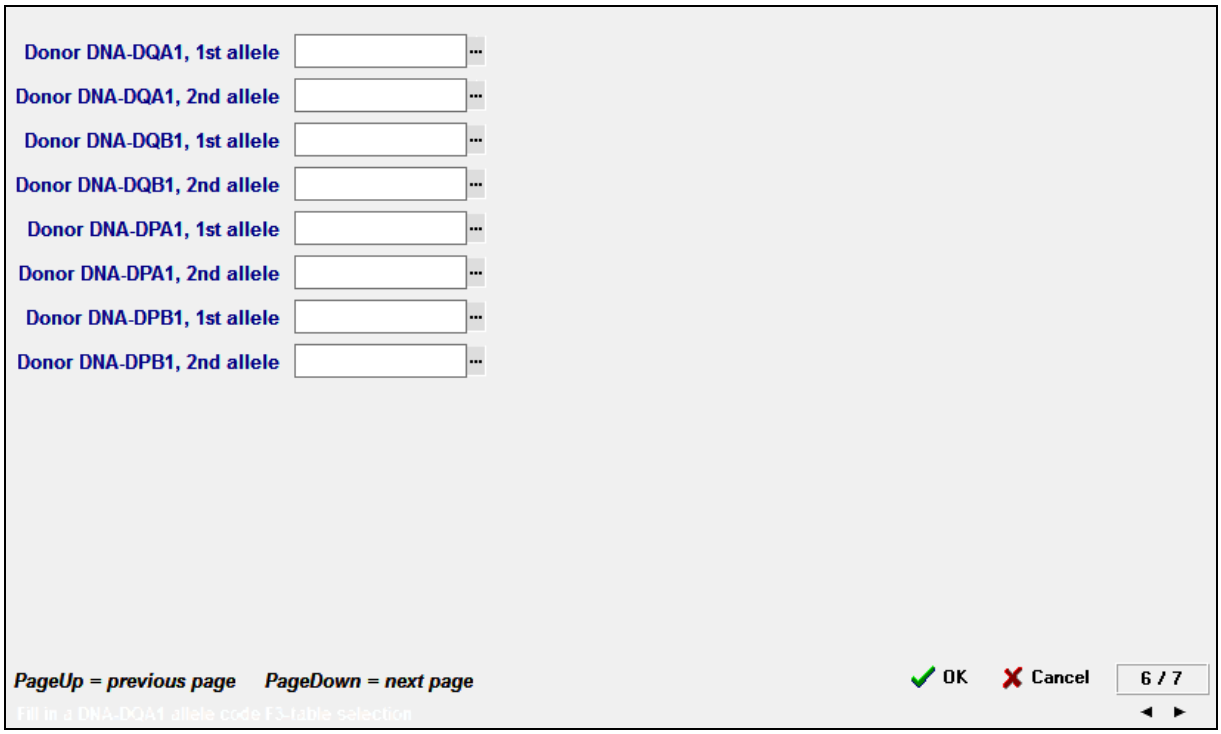


Screen 3/7 -> 6/7 : Complete HLA data are displayed

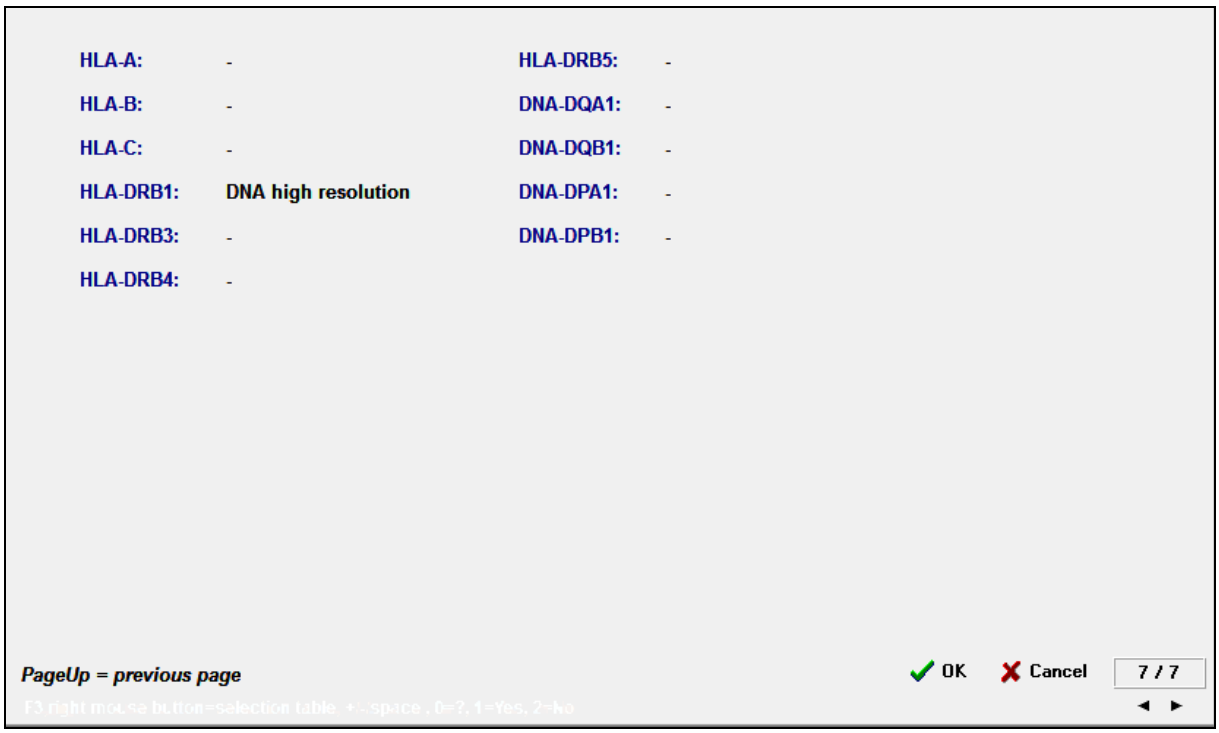



Donor HLA-DR, 1st antigen
Donor HLA-DR, 2nd antigen
Donor HLA-DQ, 1st antigen
Donor HLA-DQ, 2nd antigen
PageUp = previous page
PageDown = next page
OK
Cancel
4 / 7
Fill in a HLA-DR antigen code F3-table selection

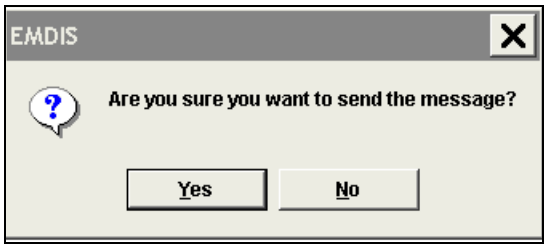

Donor DNA-DRB1, 1st allele
Donor DNA-DRB1, 2nd allele
Donor DNA-DRB3, 1st allele
Donor DNA-DRB3, 2nd allele
Donor DNA-DRB4, 1st allele
Donor DNA-DRB4, 2nd allele
Donor DNA-DRB5, 1st allele
Donor DNA-DRB5, 2nd allele
PageUp = previous page
PageDown = next page
OK
Cancel
5 / 7
Fill in a DNA-DRB1 allele code F3-table selection



Screen 7/7 : Display of requested typing resolutions :



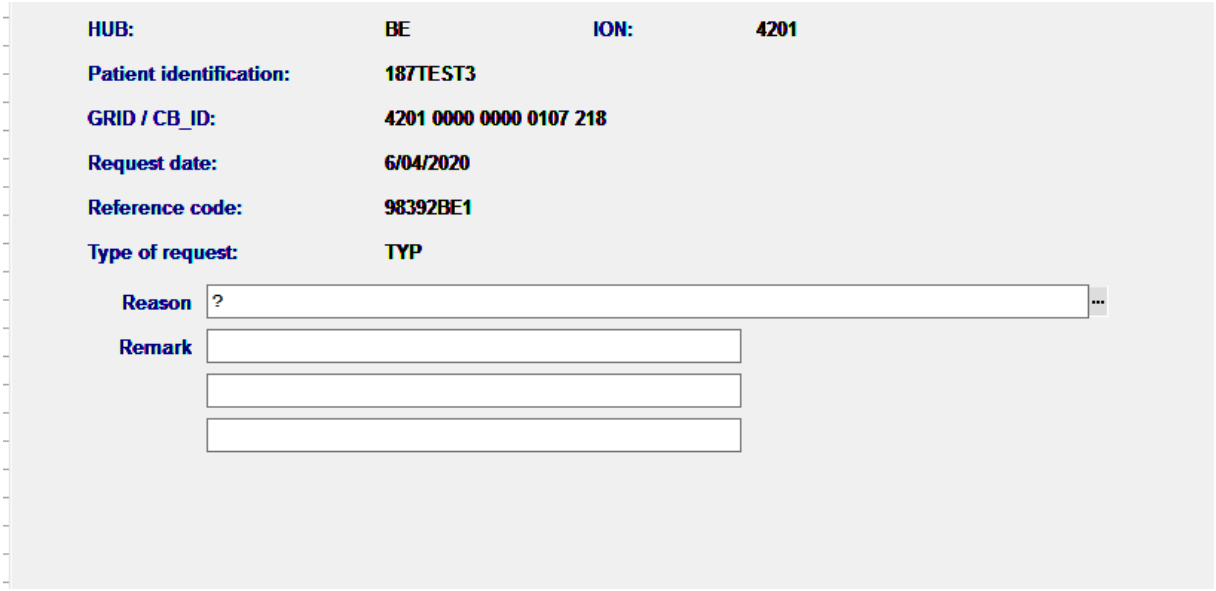
Press “**OK**” to send the message:



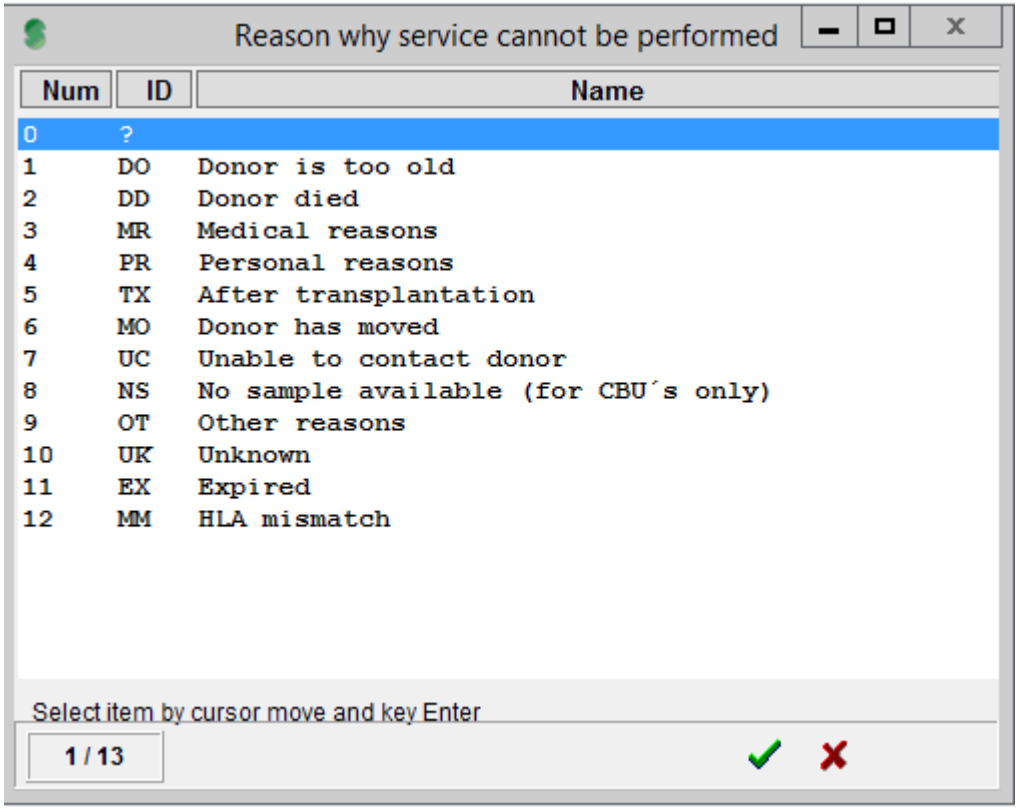
The typing results will be queued in the messages, and receive status **"prepared to send" :** the message will be sent with the next processing session. Afterwards it will receive status **"message has been sent".**

4. No result : service cannot be performed (NO_RES)

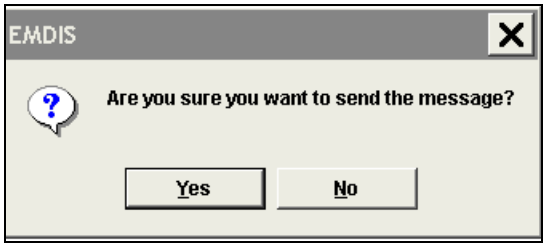
The no result message informs the requesting hub that a service cannot be performed. Several no result messages are allowed for the same request since they can be considered as an update to the result.



Select the appropriate reason and press :



Press to confirm your message :

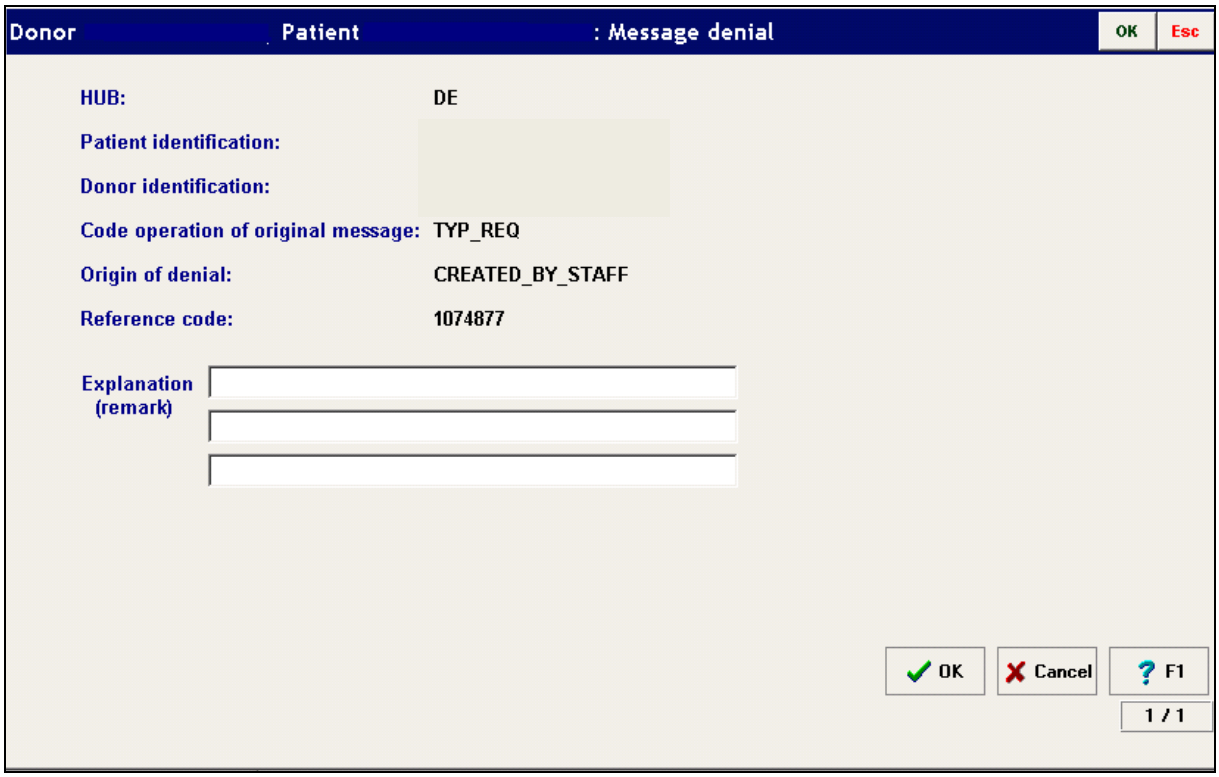


Press “yes” and the message will be queued for the next processing session.

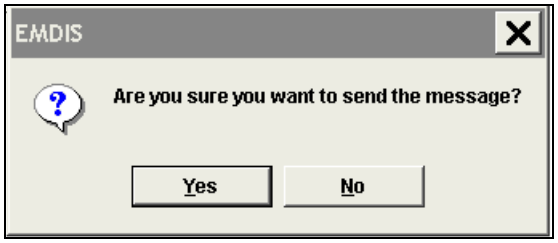
5. Deny request: message denial (MSG_DEN)

The software contains functions to automatically send out message denials. This message will not be processed at the other side and has to be resent.

Press to open the “message denial screen”:

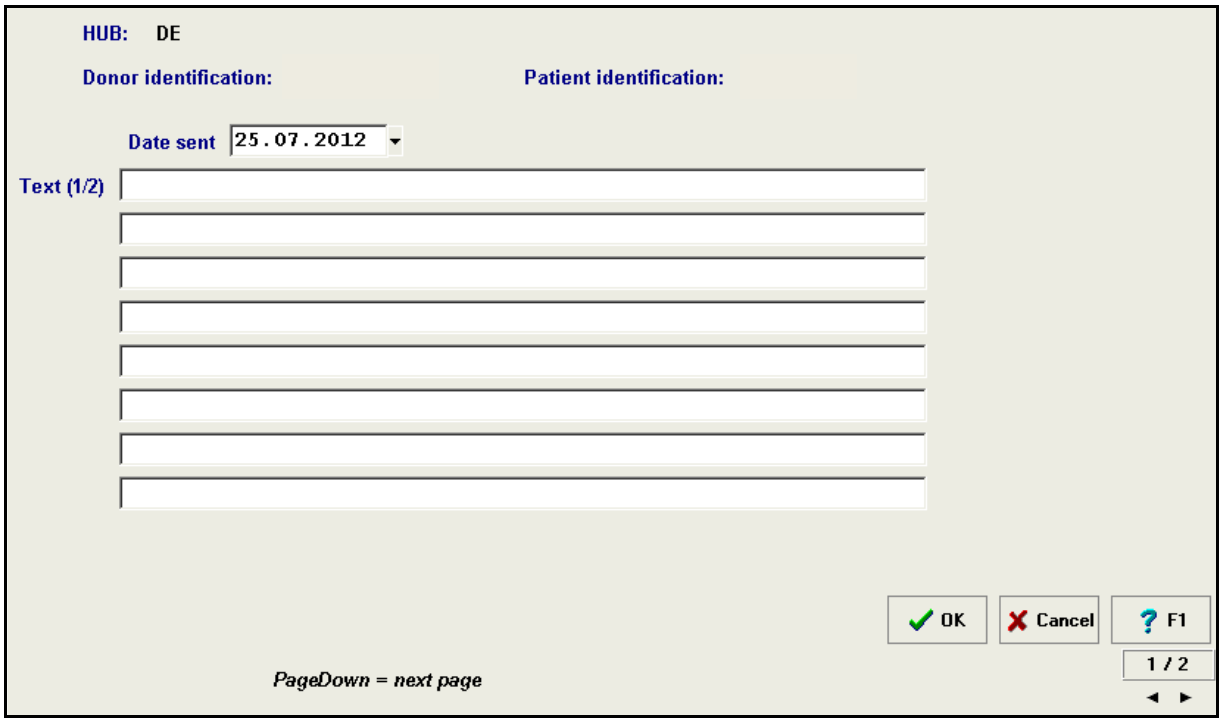


Enter the reason why the service cannot be performed and press "**yes**" to confirm:



6. New text message (TXT_MSG)

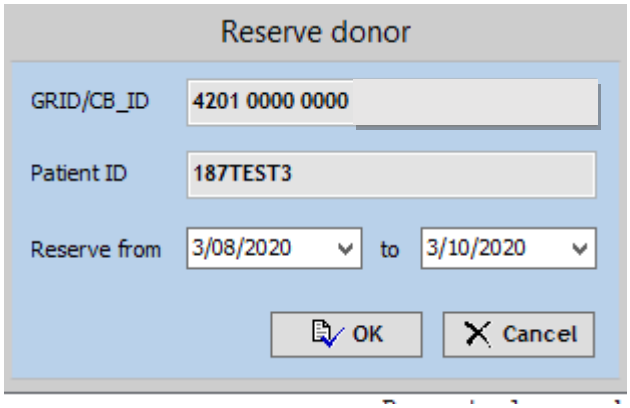
The text message has a comment function for a patient/donor pair to send to the remote database. It can be used to transmit free text messages between hubs, however this communication should be limited (email).



7. Reserve donor

Press

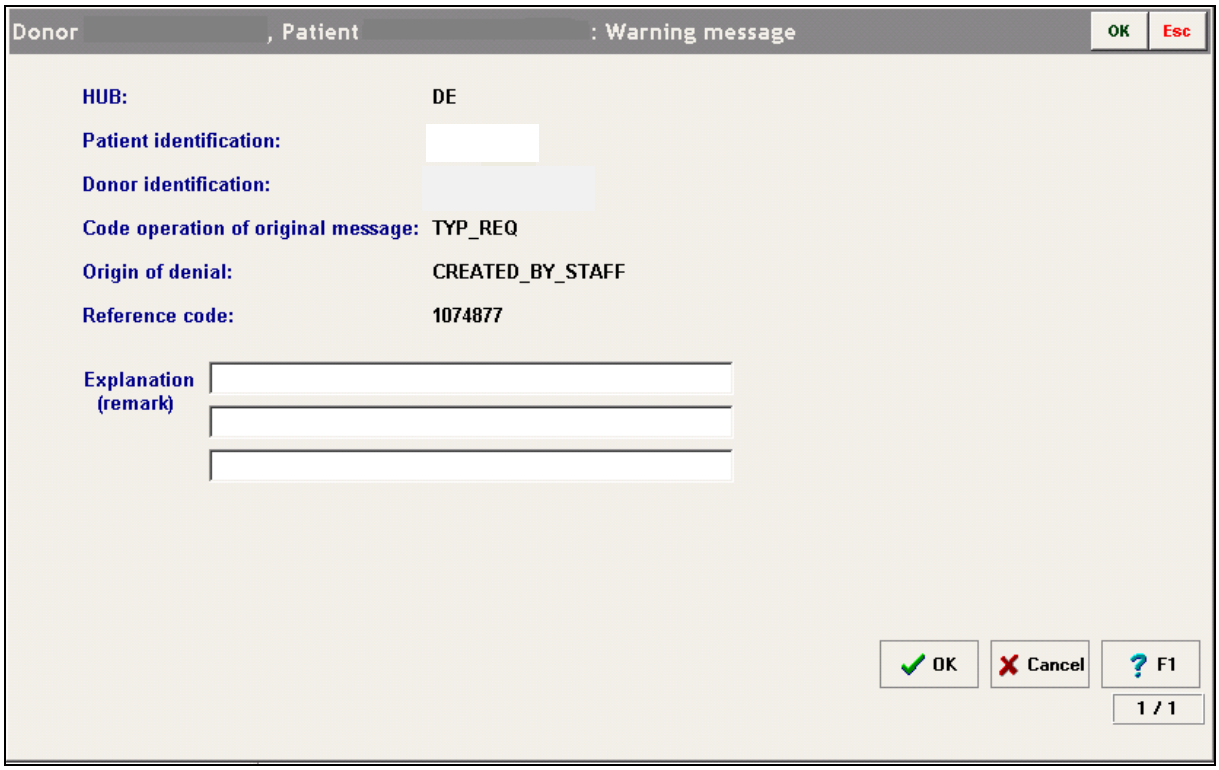
to open the donor reservation window screen, set time frame. The donor record will be updated, and the record will be reserved for this patient until the defined end of reservation period.



8. New warning

It is possible to send a warning message to the Hub via the

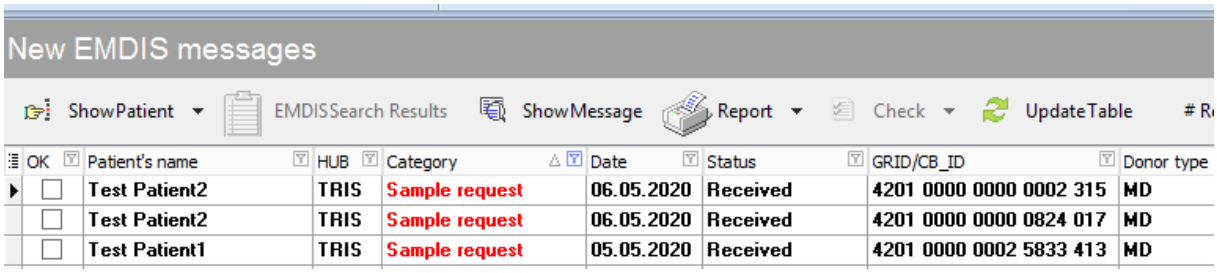
The warning has an informational character. The message is processed, but has not to be resent.



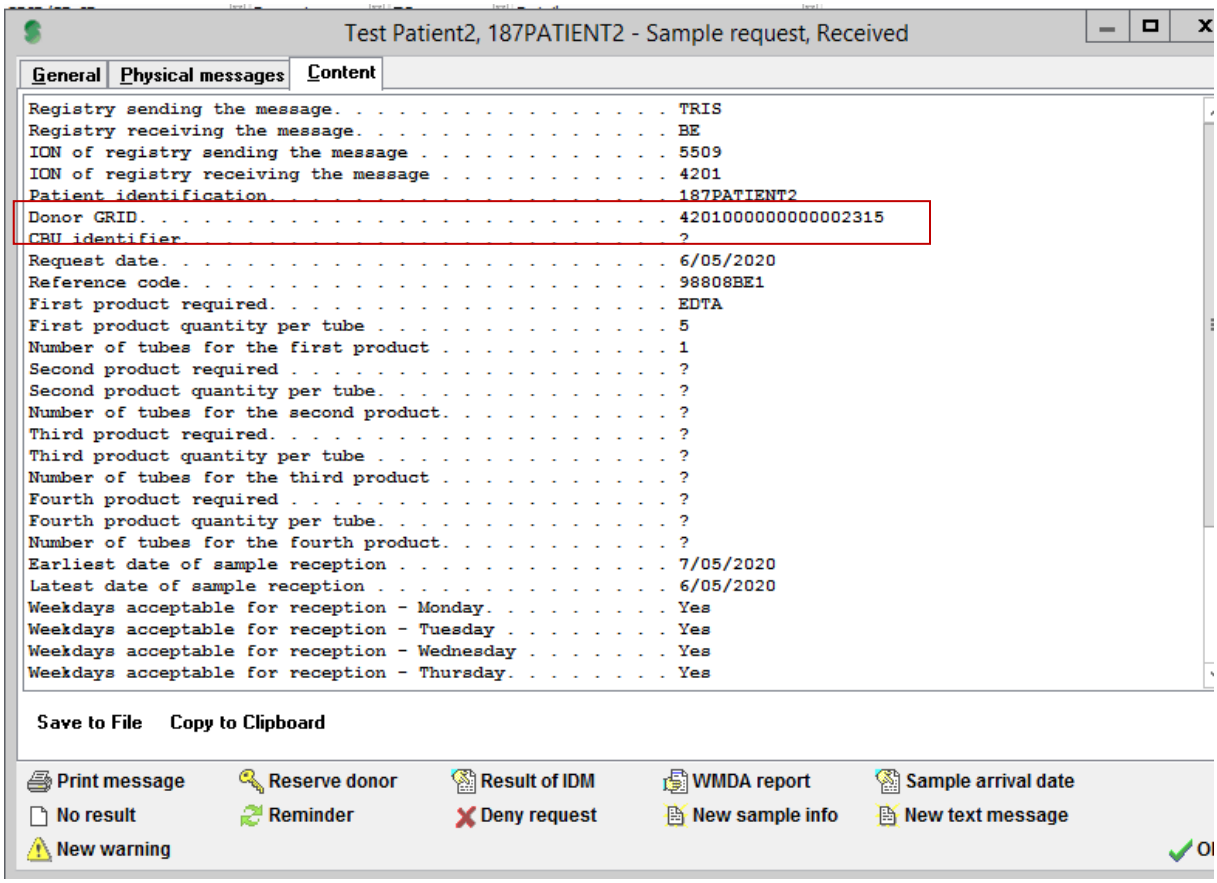
IV.III.2. Sample request

The following actions are possible:

- Print message
- Print WMDA report
- Sample arrival date
- Result of IDM
- No result (same as typing request)
- Deny request (*same as typing request*)
- New text message (*same as typing request*)
- Reserve donor (*same as typing request*)
- New warning (*same as typing request*)
- New sample info

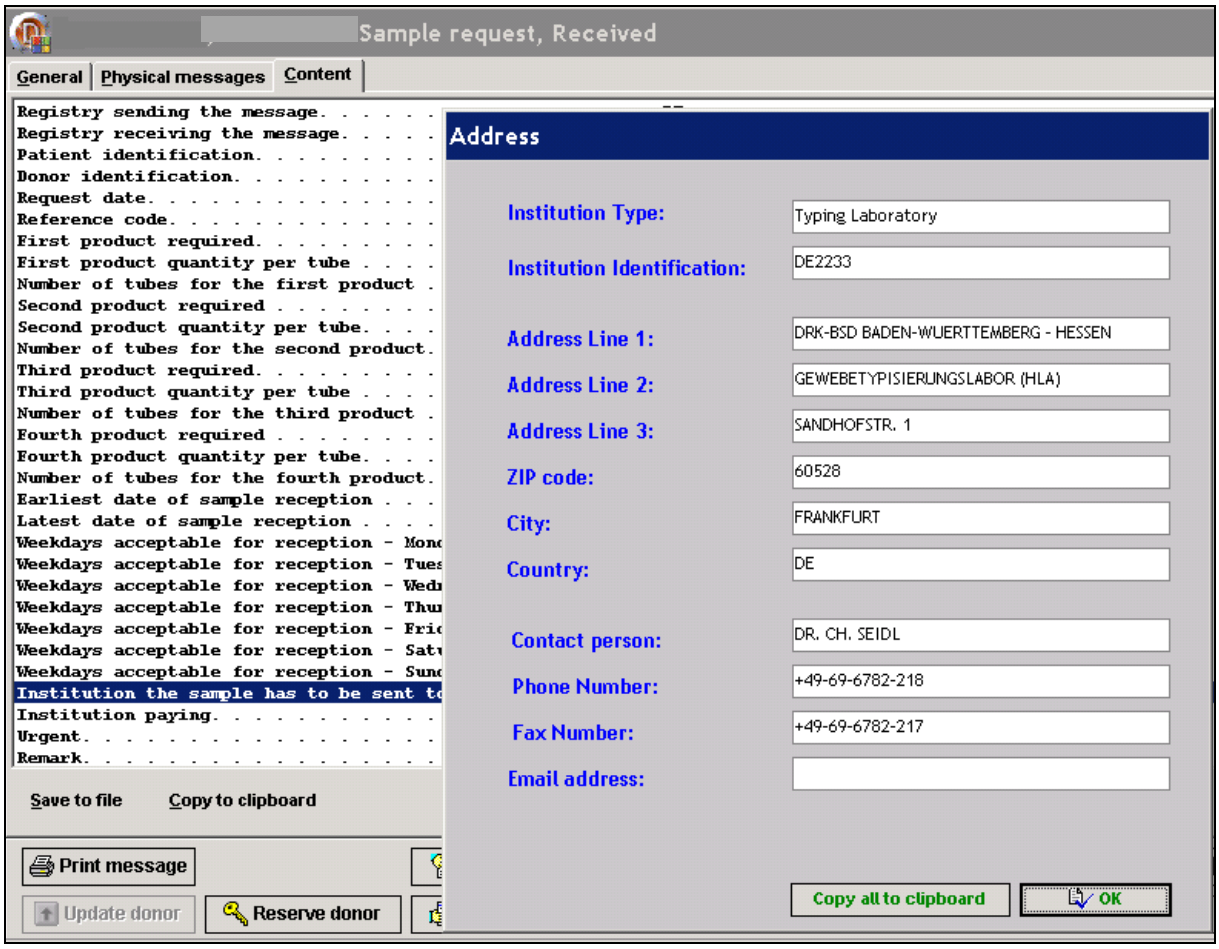


Select the “sample request” and double click to open the request screen. Details and blood sample requirements of the request are displayed in the **Content tab**:



The fields “earliest and latest date of sample reception” represent the lower and upper limit of a period of time in which the blood sample has to be received. If the second date is missing, the sample may be received any time after the first date.

Only one sample request can be open for a patient / donor pair.
You can click on the institution line to open the address coordinates:



1. The message can be printed via the

or

.

2. **WMDA report: S40 Blood sample request for verification typing.**

   Both the GRID code as the old donor code (Pre GRID) will be printed on the form.

Marrow Donor Program Belgium - Registry
Motstraat 40
2800 Mechelen
2800, Mechelen
+32-15443396
+32-15443656
mdpb-registry@rodekruis.be

S40 BLOOD SAMPLE REQUEST FOR VERIFICATION TYPING

PATIENT DATA			
Patient name:	Test Patient2		
Patient registry:	TRIS		
Diagnosis:	Acute Lymphoblastic Leukaemia		
Patient ID: (assigned by patient registry)	187PATIENT2	Patient ID: (assigned by donor registry)	187PATIENT2
Date of birth: (YYYY-MM-DD)	1971-07-15	Gender:	
Transplant center:	BETCFRGN		

DONOR(s)						
	Donor ID(s)	GRID number(s)				
1	BEANT0000036	4201	0000	0000	0002	315
2						
3						
4						
5						
6						

BLOOD SAMPLE REQUIREMENTS (recommended maximum = 50 mL - please provide clinical reasons for greater volumes)			
5 mls EDTA	Acceptable days of the week to receive samples: (check all that apply)		
mls heparin	☑ Monday	☑ Tuesday	☑ Wednesday
mls ACD	☑ Thursday	☑ Friday	☐ Saturday
mls no anticoagulant	☐ Sunday		
mls			

DISCLAIMER: The cell products collected from the donor are intended solely for the purpose of diagnostic testing on behalf of the above mentioned patient. No other use is permissible. Excess blood volume is allowed for quality control testing only but not for research purposes. Any portion of the cells not used for the intended testing must be disposed of properly. By accepting these cells, the transplant physician also accepts these terms and conditions. Requests for deviations from these terms must be submitted in writing to the donor registry for approval.

Courier Service: VT samples will automatically be shipped using a courier service chosen by the donor center. The fees for this VT sample are based on the use of this courier service. If you prefer that the samples be shipped using a specific courier service, please list that courier service below. Additional fees may be applied.

Preferred courier service:

S40 **BLOOD SAMPLE REQUEST FOR VERIFICATION TYPING**

Page 2 of 2

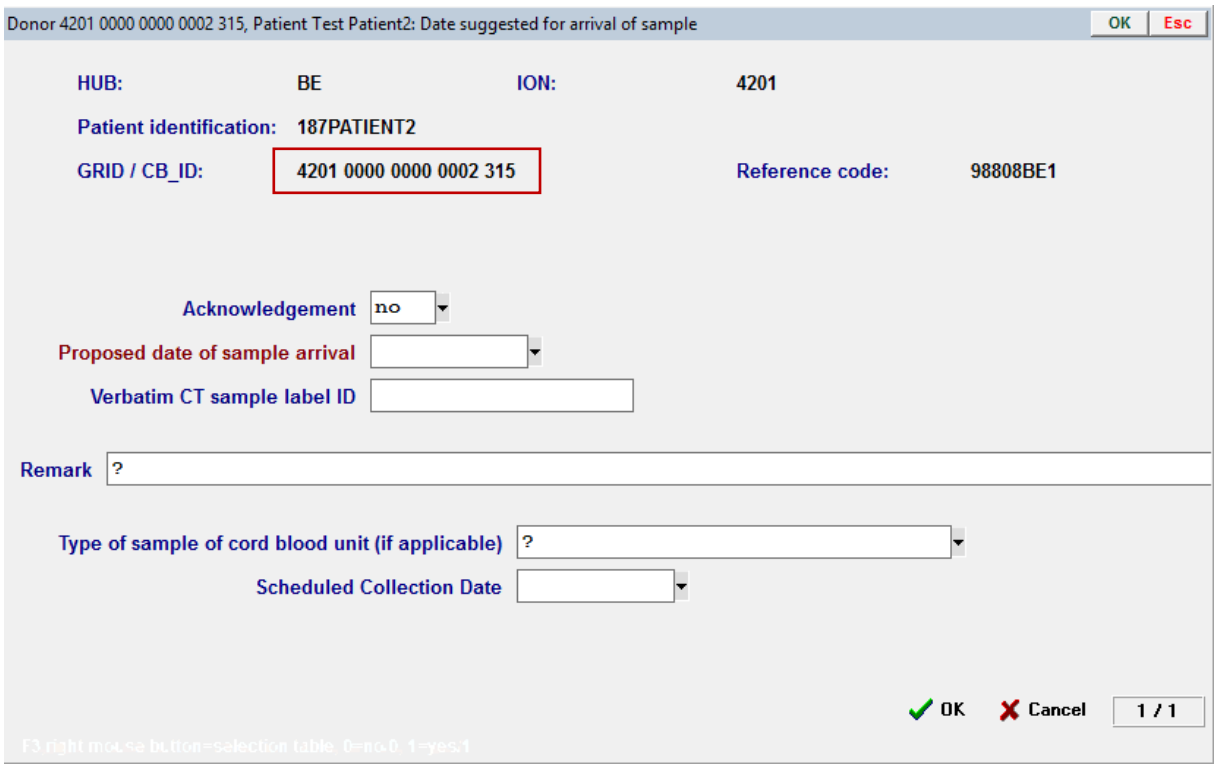
PATIENT DATA			
Patient name:	Test Patient2		
Patient registry:	TRIS		
Patient ID: (assigned by patient registry)	187PATIENT2	Patient ID: (assigned by donor registry)	187PATIENT2

Samples to be shipped to:		**Invoice(s)** to be sent to: Copy shipping address	
Institution:	FRMU02	Institution:	BEFINKUL1
Address:	LABORATOIRE DE CULTURES MIXTES Centre Regional de Transfusion Sanguine	Address:	U.Z. LEUVEN CAMPUS GASTHUISBERG Sofhea
ZIP code:		ZIP code:	3000
City:	67085 STRASBOURG	City:	LEUVEN
Country:	FR	Country:	BE
Attention:	Dr URLACHER / Dr TONGIO	Attention:	Carla Collijs / Diane Reggers
Phone:		Phone:	+32-16-346882
Fax:		Fax:	+32-16-346883
E-mail:		E-mail:	sofhea@uz.kuleuven.be

Comments:

Person completing form:	Date: (YYYY-MM-DD)	Signature:
	2020-08-03	

3. Click the Sample arrival date to enter the blood sample arrival date:



New : “Scheduled collection date”: new EMDIS release requires scheduled collection date:

Acknowledgement Id – if you wish to receive a message from the Transplant Center that they received the message select yes.

Proposed date of sample arrival - suggested arrival date.

Verbatim Ct sample label ID – donor label ID (if not used unknown).

Remark - optional (120 characters)

(in case of cord blood)

Type of sample of cord blood unit (if applicable): CB sample type

0: ?

1: CBU contiguous Attached Segment

2: whole Blood sample

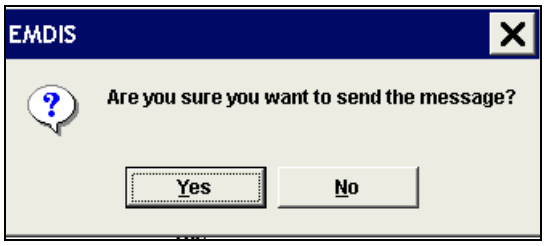
3: Red cell Fraction (pellet)

4: Blood Spotted Filter Paper

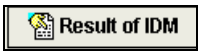
5: Extracted DNA

Scheduled collection date: date of blood sample collection

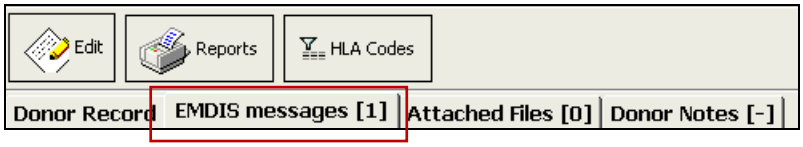
Press to confirm the date, and press “yes” to send the EMDIS message:



The message will be queued for processing, and receive status **“prepared to send”**.

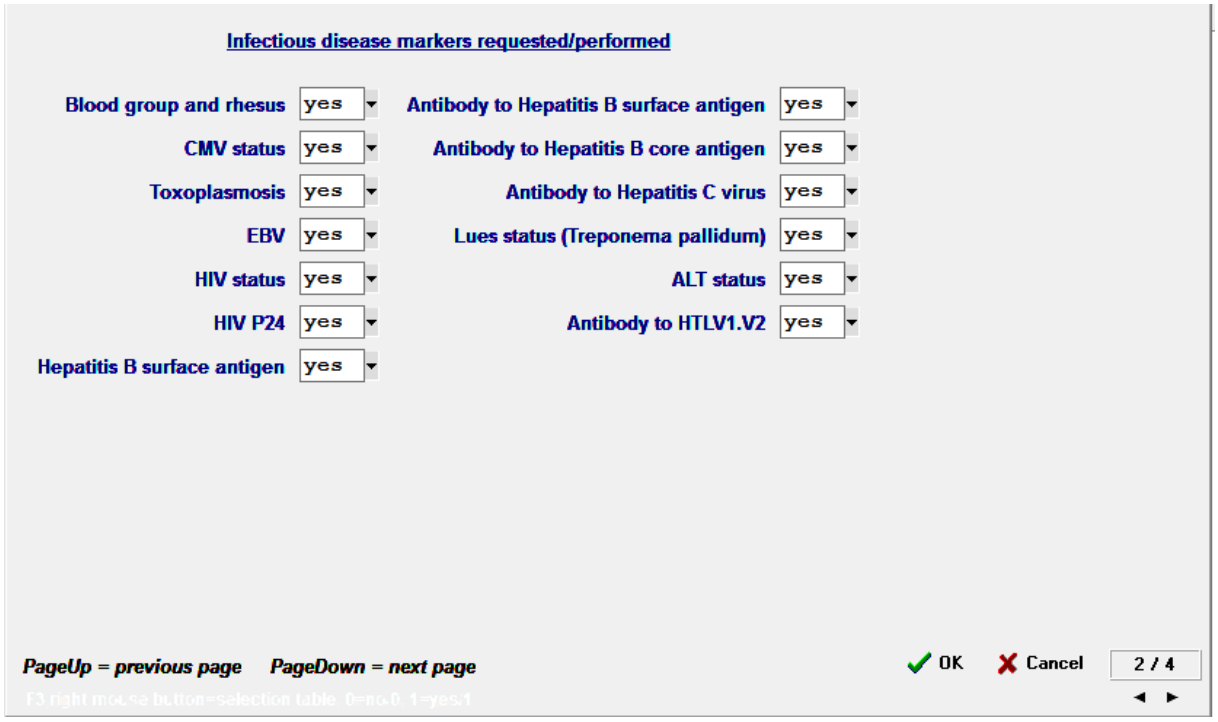
4. Click the  button, to open the window screens (4 pages):

The first screen of 4 pages will be opened. Don’t forget that this tool will send the IDM results, but does not offer data entry: **the IDM results need to be entered in the donor record via edit.** When you select the donor for editing, you can immediately go to the tab “EMDIS messages” to send the message:

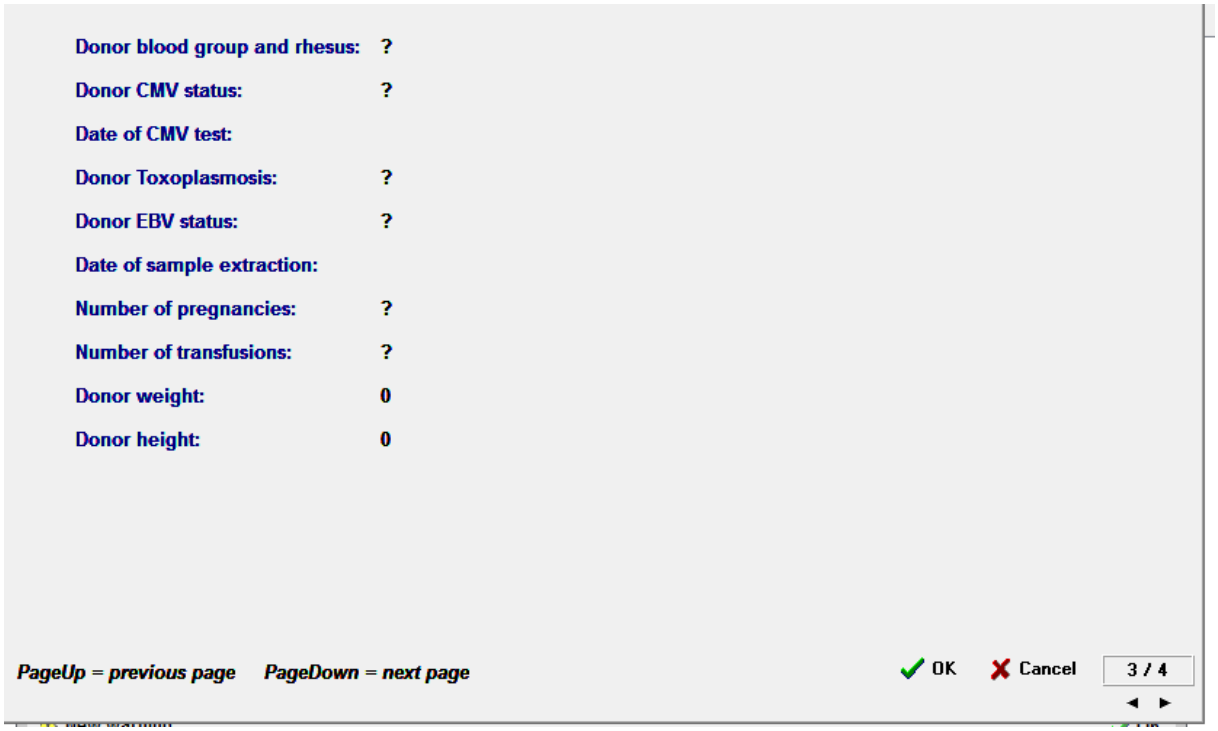


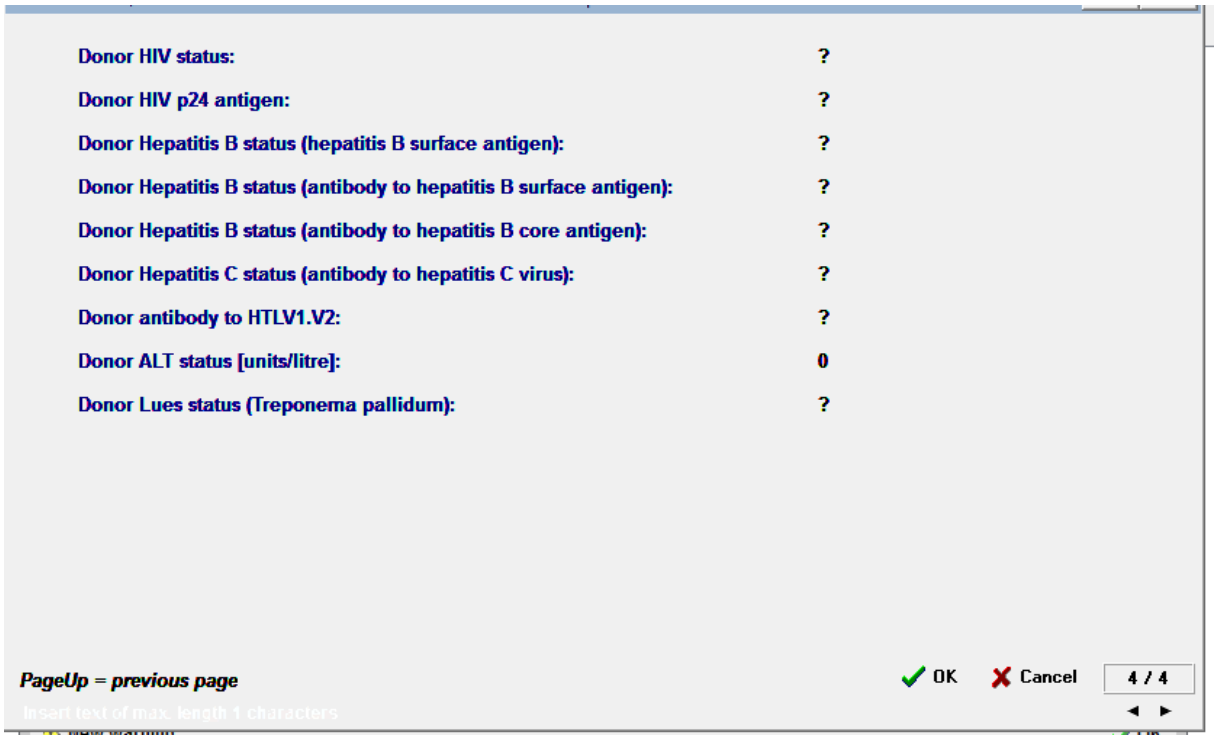
At the first screen a remark (120 characters) can be added:

The requested markers are indicated in screen 2/4:

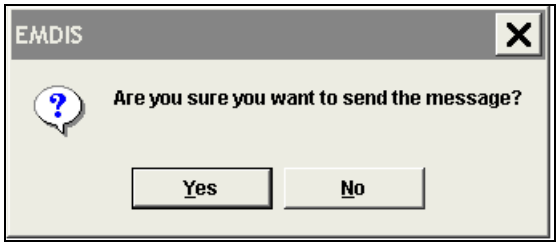


The reported infectious disease markers updated in the donor record are displayed in window screen 3 and 4:



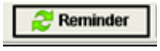


Press “OK” to confirm:

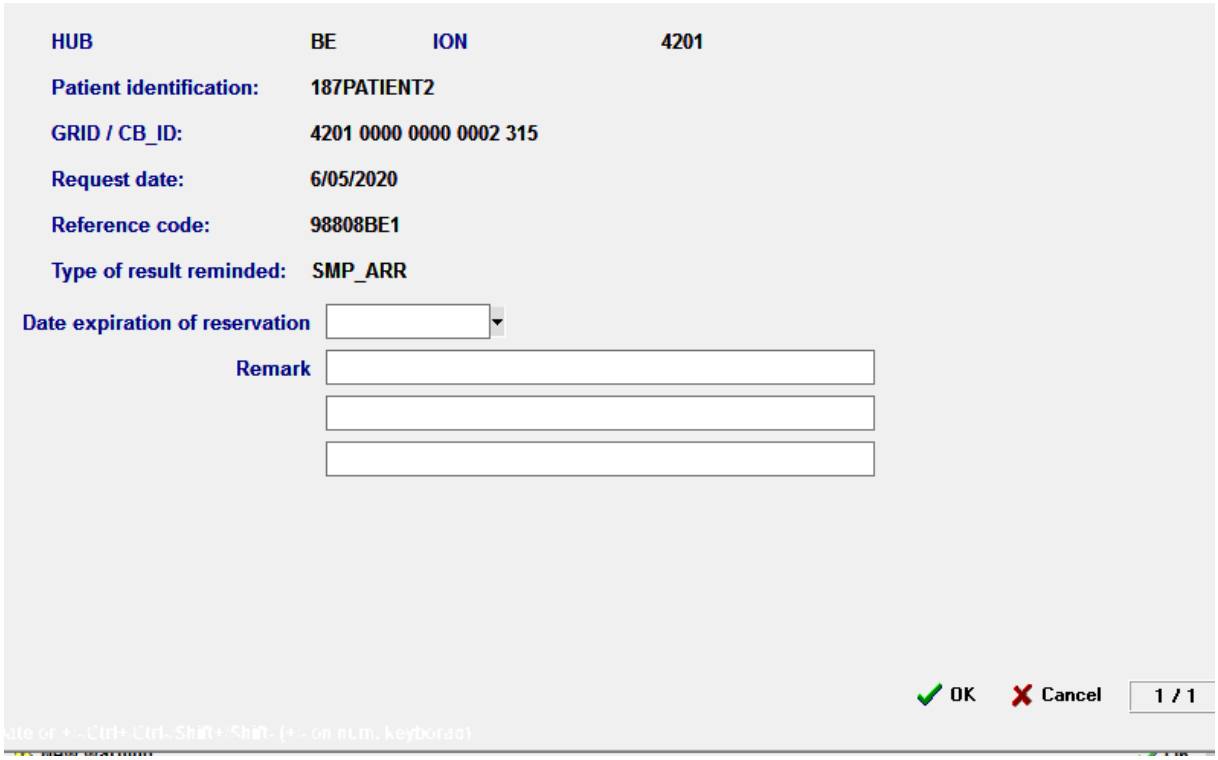


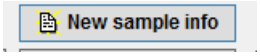
Press ‘yes’ and the message will be queued for processing, and receive status “prepared to send”.

No result, Deny request, New text message, Reserve donor, New warning are the same window screens as for typing request.

It is possible for the donor center to remind the transplant center (Belgian and international) to send the confirmatory typing results: go to the sample arrival message and click on the 

button to open the following window screen:

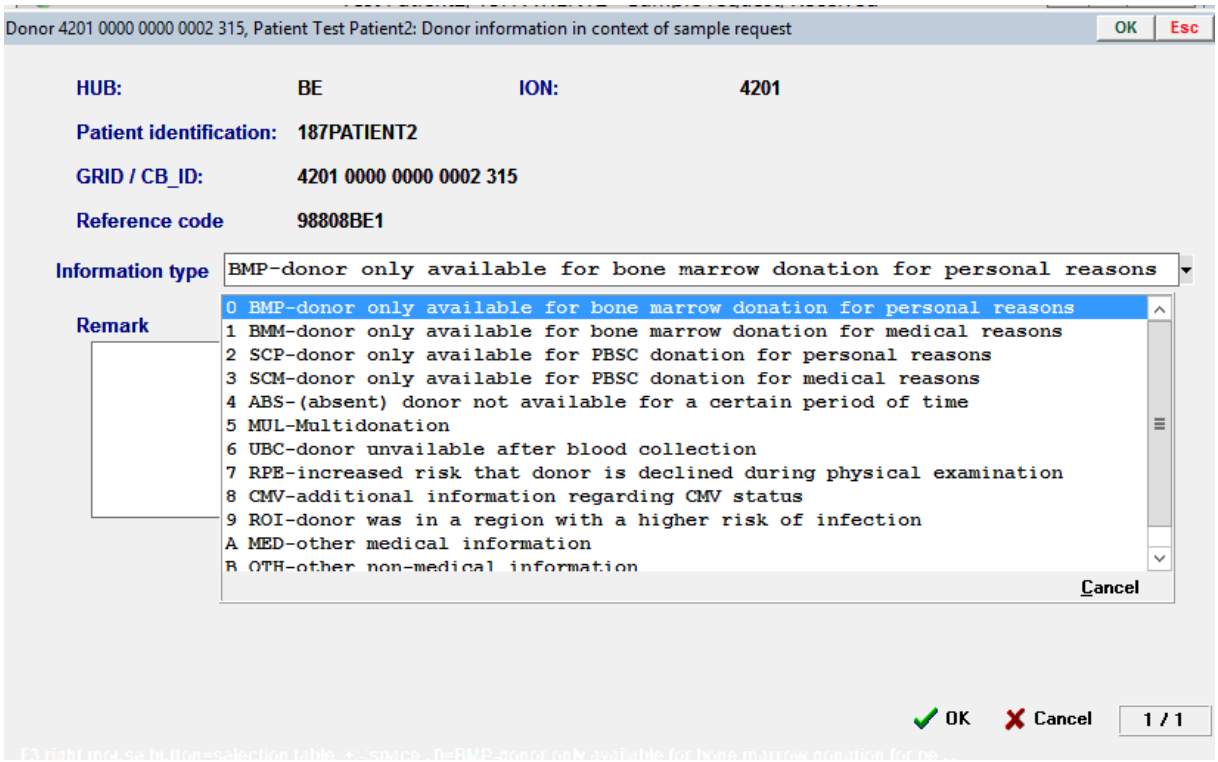


5. Click the 

button, to open the window screen to send additional information about the donor.

This message can only be exchanged in one direction, from the donor side to the patient side, and the message always refers to sample information. There might be several sample information messages within the context of one sample request, subsequent sample information is regarded as new or additional information.

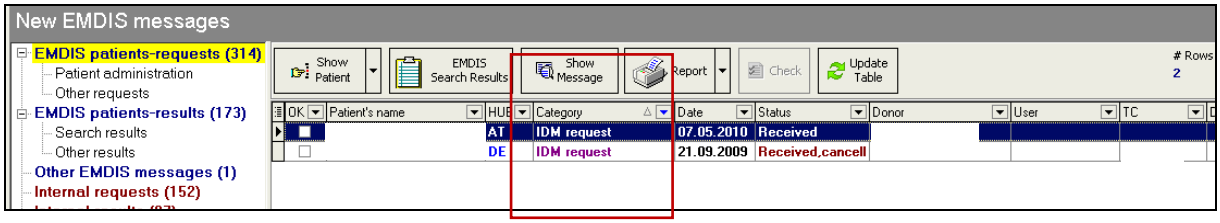
A remark is available for detailed information



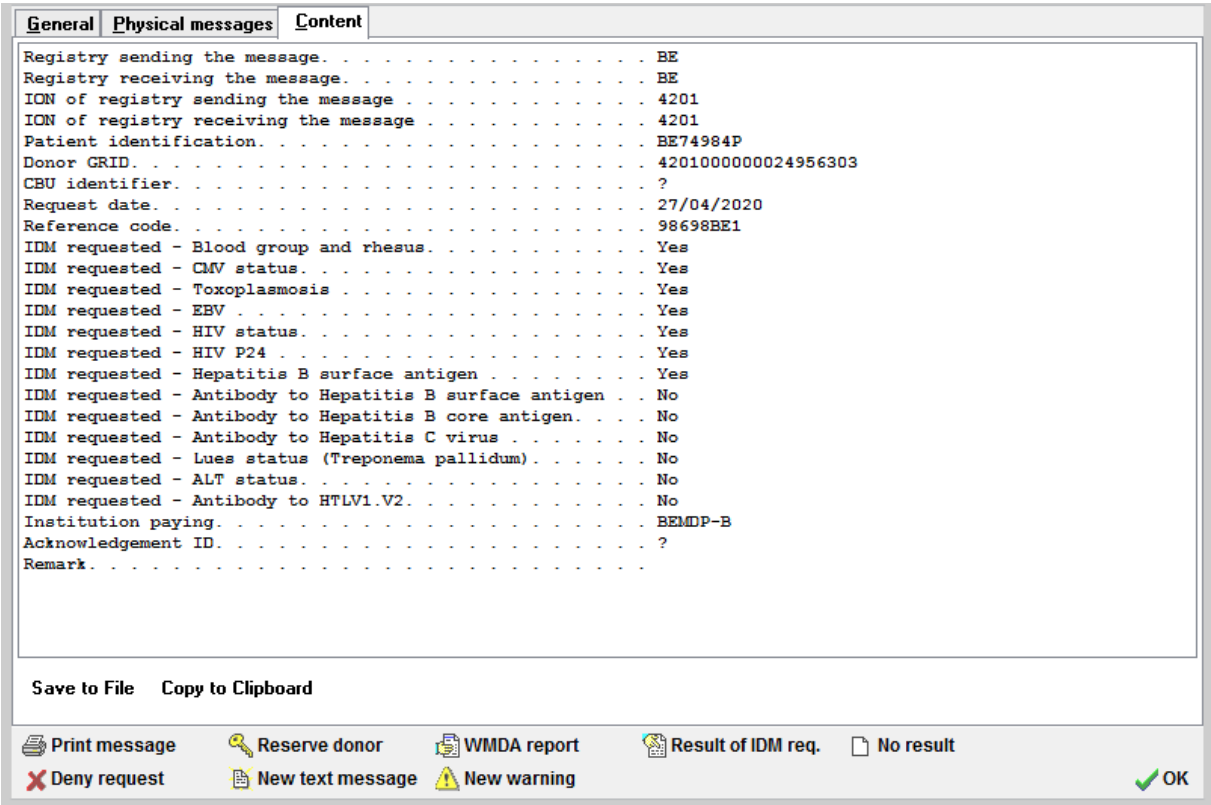
Explanation of the list of codes:

BMP: donor only available for bone marrow donation for personal reasons
BMM: donor only available for bone marrow donation for medical reasons
SCP: donor only available for PBSC donation for personal reasons
SCM: donor only available for PBSC donation for medical reasons
ABS: (absent) donor not available for a certain period of time
MUL: Multi donation
UBC: donor unavailable after blood collection
RPE: increased risk that donor is declined during physical examination
CMV: additional information regarding CMV status
ROI: donor was in a region with a higher risk of infection
MED: other medical information
OTH: other non-medical information

IV.III.3. Infectious disease marker requests (IDM request)



Click the IDM request to open the request screen, the IDM's requested are displayed in the content tab:



The requested IDM's include : the blood group and rhesus, CMV status, toxoplasmosis, EBV, HIV status, HIV p24 antigen, Antibody to hepatitis B surface antigen, Antibody to hepatits B core antigen, Antigen to hepatitis C virus, Lues status, Alt (alanine aminotransferase) and Antibody to HTLV1.V2.

Several requests for the same patient – donor pair are possible, but each message has to be answered by a result message, but it is recommended to avoid multiple requests.

The result has to be sent by clicking on

, the same window screens will be offered as in the result screen after a blood sample request. Please note that the IDM's have to be updated in the donor's record, before being able to send via EMDIS

IV.III.4. CBU report request (CBU_REQ)

It is possible to print the message, have a WMDA printout, reserve the donor, send txt messages and warnings, and deny the request.

IV.III.5. Reservation request (RSV_REQ)

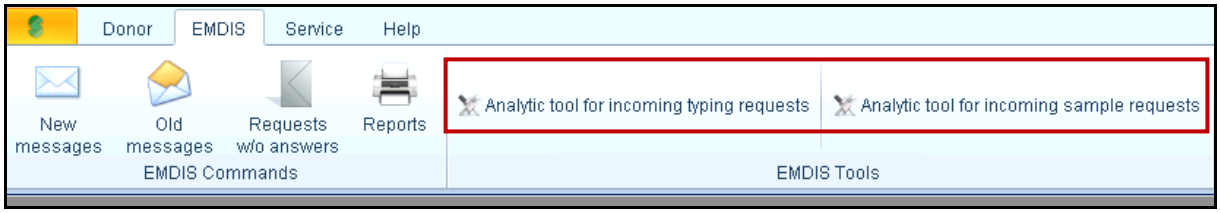
It is possible to print the message, have a WMDA printout, reserve the donor, send txt messages and warnings, and deny the request.

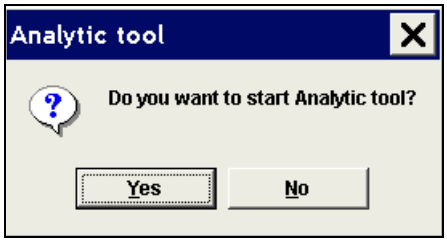
IV.VI. ANALYTICAL TOOL: INCOMING TYPING REQUESTS – INCOMING SAMPLE REQUESTS

The analytical tool gives an overview of all received typing requests or sample requests.

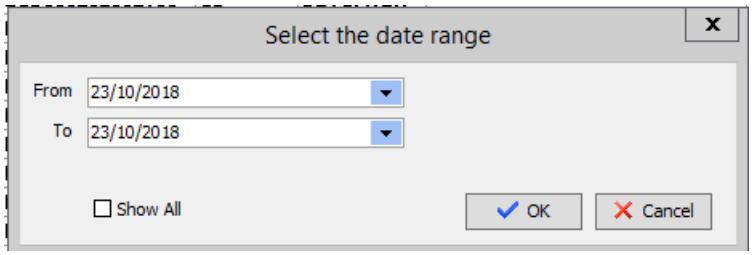
Both the GRID code as the old donor code (now called the secondary code are listed in the export.

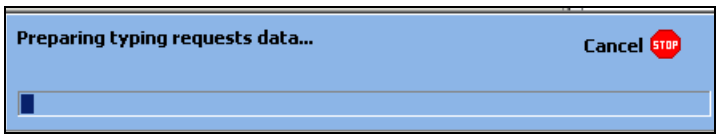
Go to:



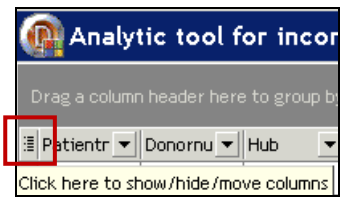


Select the period for which you want to print the incoming typing request by selecting date from:



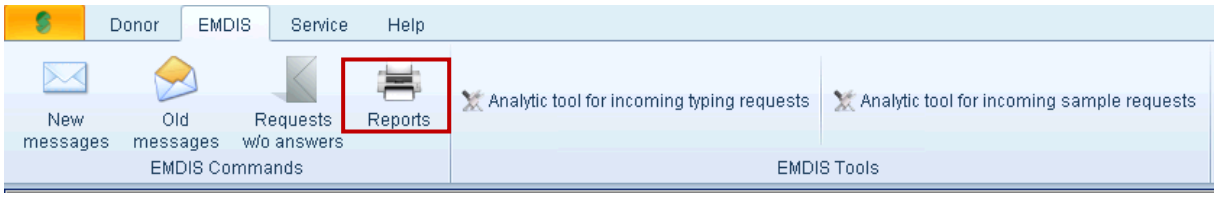


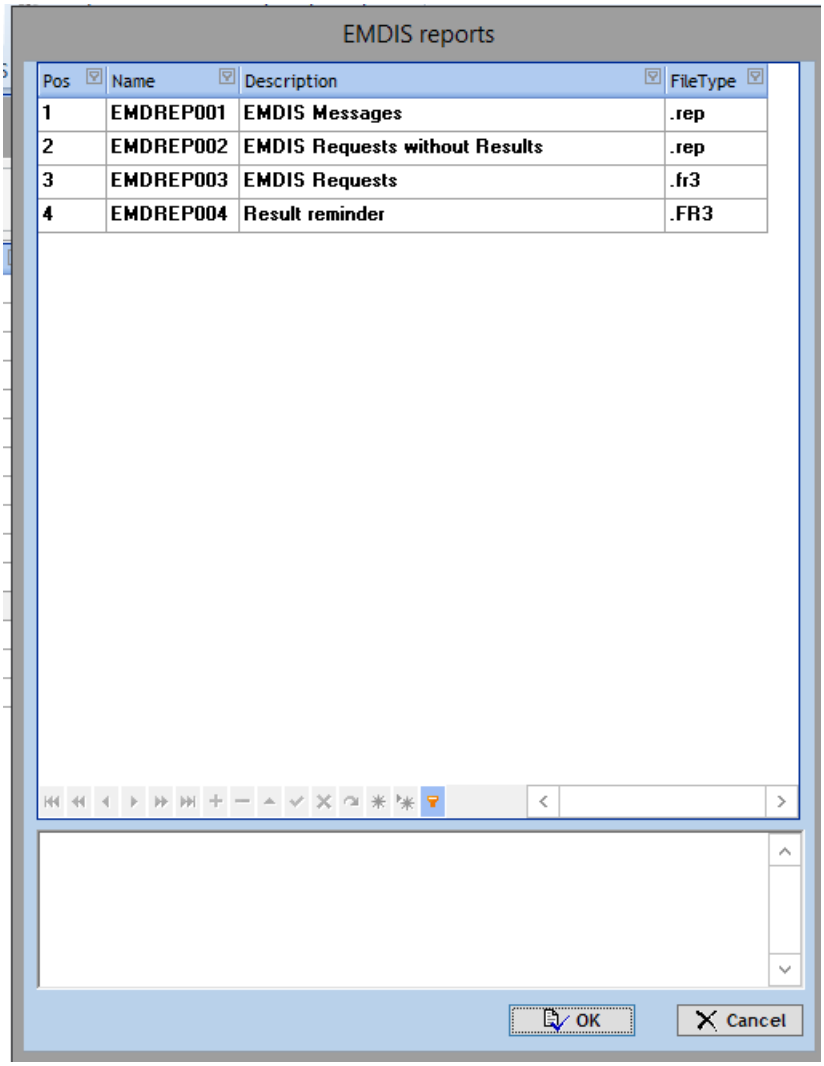
The analytical tool gives an overview of all received typing requests or sample requests. Clicking on enables you to make of a selection of columns to you wish. Further tool options are explained in chapter II.X. Analytical tool.



The first time you login, you have to set your columns settings, your selection will be saved for future login sessions.

IV.VII. EMDIS REPORTS





The **EMDIS REP001** report will list up all EMDIS messages (received – sent) inclusive EMDIS status:

EMDIS messages

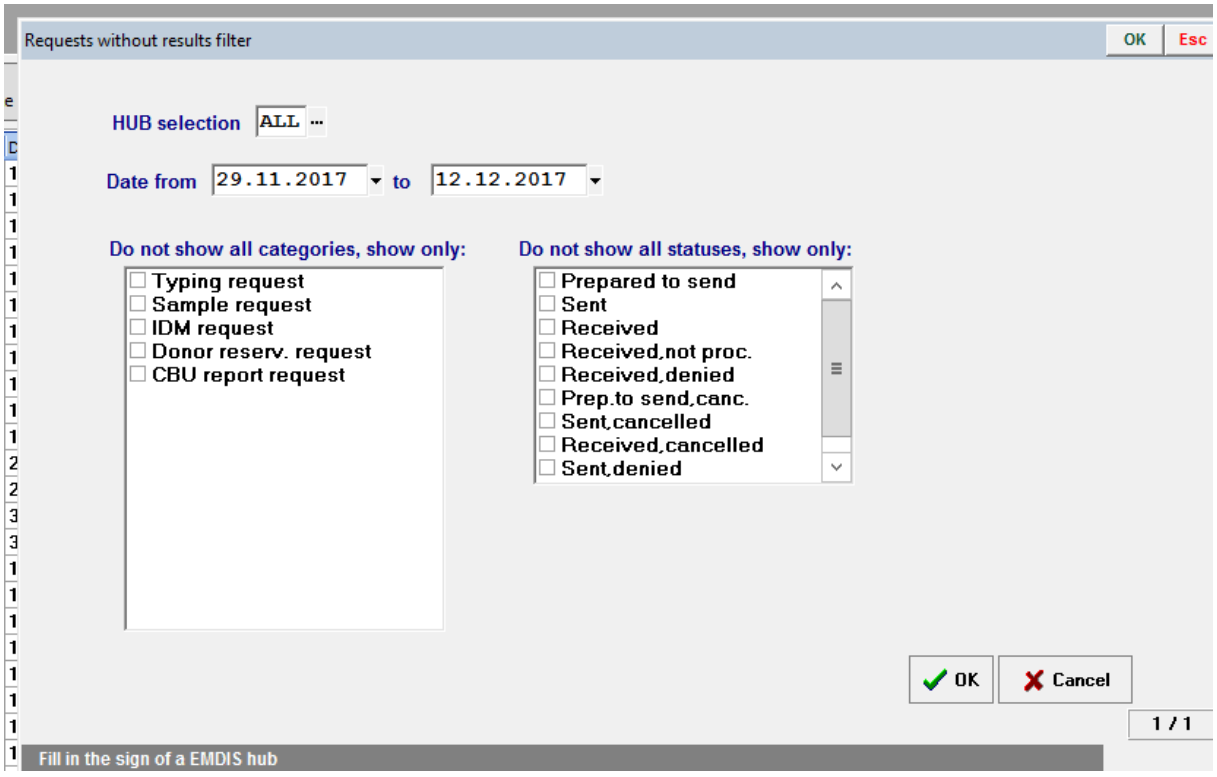
from 6/11/2017 to 12/12/2017
Generated at 12.12.2017 15/51
Generated by TestMultiple

Marrow Donor Program Belgium - Registry
Motstraat 40
2800 Mechelen
Belgium

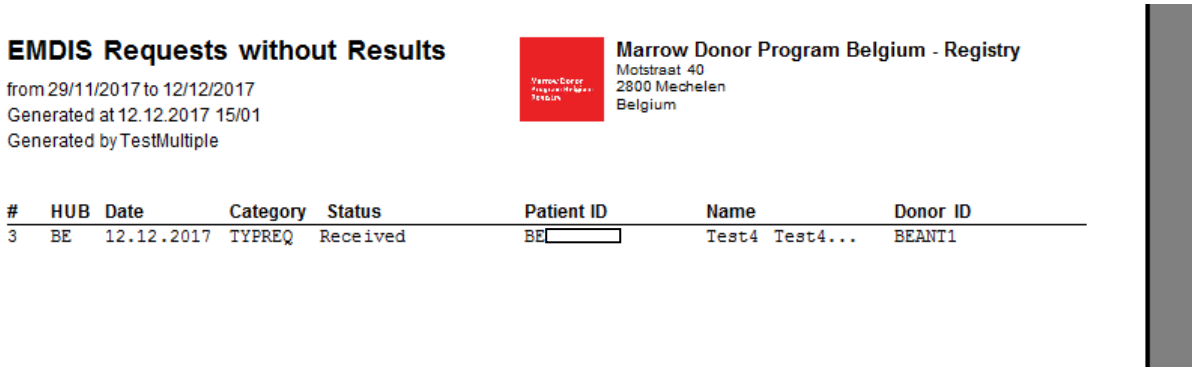
#	HUB	Date	Category	Status	Patient ID	Name
18	BE	12.12.2017	TYPREQ	Received	BE	Test4 Test4...

HUB: code of requesting Registry
Date: request date
Category: type of request
Status: EMDIS status of the message: received, sent, …
Patient ID: patient's ID
Name: patient's name

The **EMDIS REP002** report will open the following window screen:



When you select “Typing request” and the “Received” a report with pending typing requests will be printed:



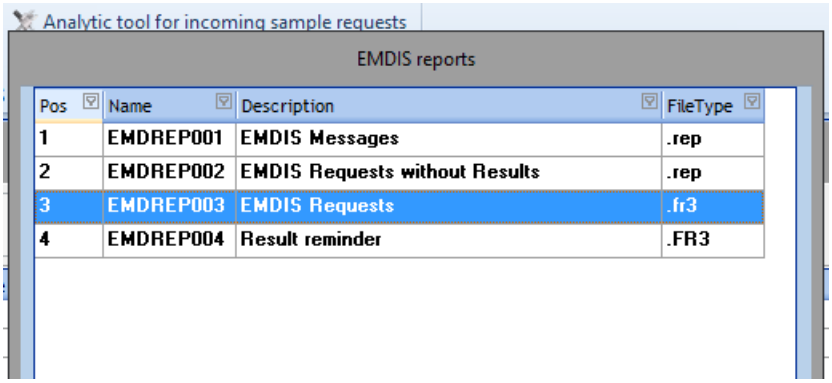
EMDIS Requests without Results

from 29/11/2017 to 12/12/2017
Generated at 12.12.2017 15/01
Generated by TestMultiple

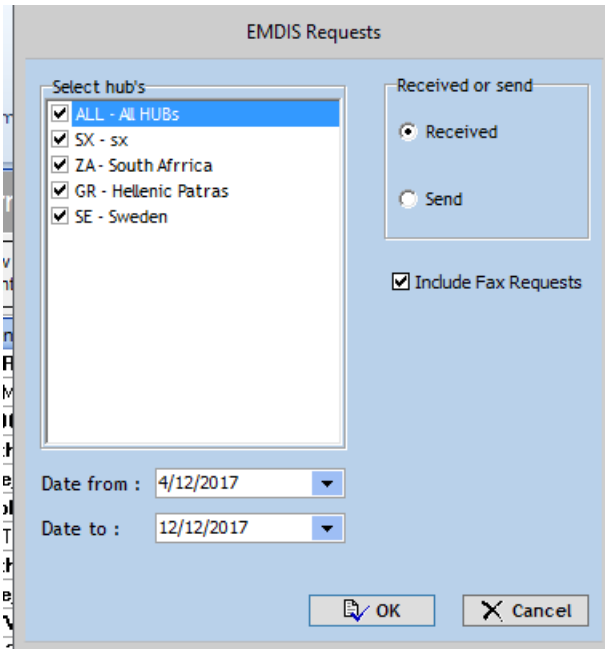
Marrow Donor Program Belgium - Registry
Motstraat 40
2800 Mechelen
Belgium

#	HUB	Date	Category	Status	Patient ID	Name	Donor ID
3	BE	12.12.2017	TYPREQ	Received	BE	Test4 Test4...	BEANT1

The **EMDIS REP003** report will open the following window screen:



Select the registry :



This report will count the number of typing requests, sample requests, IDM requests and Reservation requests:

Marrow Donor Program Belgium Registry

Statistic report how many requests were received.

Marrow Donor Program Belgium - Registry

Motstraat 40

2800 Mechelen

Belgium

Received requests from 4/12/2017 to 12/12/2017.

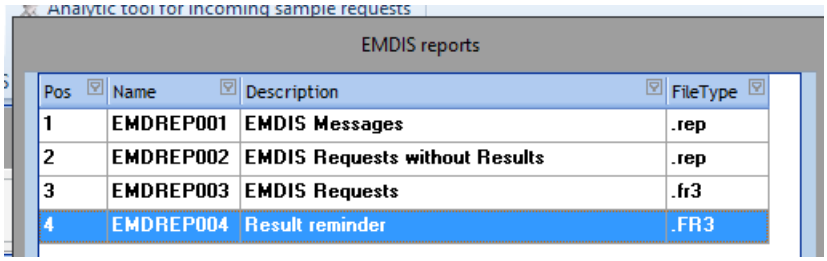
Generated at 12/12/2017 15:36:08

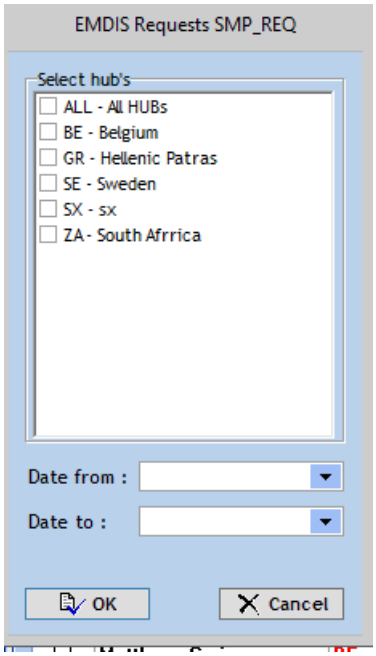
Generated by TestMultiple

Hub	TYPREQ	SMPREQ	IDMREQ	RSVREQ
SX	0/0/0/0	0/0/0/0	0/0/0/0	0/0/0/0
ZA	0/0/0/0	0/0/0/0	0/0/0/0	0/0/0/0
GR	0/0/0/0	0/0/0/0	0/0/0/0	0/0/0/0
SE	0/0/0/0	0/0/0/0	0/0/0/0	0/0/0/0
Total	0/0/0/0	0/0/0/0	0/0/0/0	0/0/0/0

Format in columns : Received/Canceled/Denied/All

The **EMDIS REP003** report will open the following window screen:





This report lists the pending sample requests: