

News from Scandiatransplant office September - 2011



Introduction

You have here the fifth newsletter with information from Scandiatransplant office. In this issue we proudly present a great amount of new features and improvements concerning the tissue typing and STAMP facilities in the system. The developments are mainly based on wishes from the Tissue Typers Meeting 2011 in Göteborg and a meeting with part of the STAMP steering committee in Århus.

All newsletters are easily accessible at the web page www.scandiatransplant.org under <http://www.scandiatransplant.org/news/newsletter-2012>.

Remember to notify us if you wish to have relevant courses displayed on the web page.

Purpose

By this information letter we wish to communicate to you about the office status and progress within the system, collaboration with groups related to Scandiatransplant and ongoing working projects.

We hope that you will read it and share the information with whom it might concern.

As always please do not hesitate to contact us for further information, ideas, problems and help.

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1. Local Acceptable Mismatches Program (LAMP)

LAMP is a new option for patients not fulfilling the criteria for inclusion on STAMP. LAMP gives the local transplantation center an improved facility to help finding a local donor due to defined acceptable mismatches. The centers decide themselves which patients and how many should be included on LAMP. The program does not result in any exchange obligation between centers.

The procedure for inclusion of patients to LAMP is described step by step in

http://www.scandiatriansplant.org/members/stamp/STAMP_meeting_Sep_2011_minutes.pdf/at_download/file

In short:

1. You go to the main 'STAMP - Acceptable Mismatches Programme' menu.

```
STAMP - Acceptable Mismatches Programme

1. STAMP/LAMP pre transplantation
2. Patients being prepared for STAMP/LAMP
3. Patients ready to go on STAMP
4. Patients on STAMP
5. Patients temporarily off STAMP
6. Patients on LAMP (local programme)
7. Patients permanently withdrawn from STAMP
8. STAMP reports
9. Previous Menu

Enter your choice: 1_____

Application: SCTP_UK      Menu: STAMP      v      <Rep>
```

2. In menu 'STAMP/LAMP pre transplantation' enter "Date of accept" and press <F10>. You will now be able to find the record in the menu 'Patients being prepared for STAMP/LAMP'
3. Methods of determination, acceptable mismatches and comments are registered the same way as for STAMP patients.
4. When sufficient data has been entered you activate the patient on LAMP by changing "Status" from I = Inactive to L = Local programme. The patient is now on LAMP. All LAMP patients are found in the menu 'Patients on LAMP (local programme)'
5. At recipient search the HLA matches of a LAMP patient will be calculated using the methods for STAMP patients (but will not result in exchange obligation).
6. In the search selection screen a new line has been added.

KIDNEY WAITING LIST SURVEY				Page	4/6	2501	
ABO Compat.:		All	1253	Own	226	Ex. Obligation	0
Local prior.:	Yes	No.	Sel	Waiting Time	No.	Sel	
		9	█	in Months:	0 - 11	427	-
	No	1242	-		12 - 23	411	-
	R<18 D<55 MMx3-1	0	-		24 - 59	319	-
	Local acc. mism.:	1	-		60 - *	96	-
Age in	0 - 15	2	-	CMV:	Positive	764	-
Years:	16 - 19	2	-		Negative	222	-
	20 - 39	192	-				
	40 - 59	617	-	HCV_Ab:	Positive	20	-
	60 - *	440	-		HCV_Ag:	Positive	3
					HBS_Ag:	Positive	5

Count: *0

<Replace>

- If a match is found for a LAMP patient it will appear on the search result list (marked with an L to the left) depending on search selections.

KIDNEY WAITING LIST														Page	1/1	2505		
Tx cnt:AR										Exchg.				2	Own	0	All	82
PRI	Scandia	Surname	AB	Ag	WT	TX	IM	AB	DR	RP	D	CM	HC	HCV	HBS	TX	SF	
	Number		0	e		NO	ST	MM	MM	MM	SA	V	V	Ag	Ag	CN	RC	
█	1	1552	0	31	31	1	HI	0	0	-	-	+	-	ND	-	HE	-	
	5	1463	0	43	31	1	NI	0	0	-	-	+	-	ND	-	AR	-	
	L	135	0	39	33	2	I	0	1	£	-	+	ND	ND	ND	AR	-	
	-	1625	0	63	15	1	NI	1	0	-	-	+	-	ND	-	AR	-	
	-	1569	0	65	27	1	I	1	0	-	*	+	-	ND	ND	AR	-	
	-	1642	0	58	12	1	NI	1	0	-	-	+	-	ND	-	AR	-	
	-	1629	0	63	14	1	NI	1	0	-	-	-	-	ND	-	AR	-	
	-	84	0	46	237	4	PI	2	0	*	-	-	-	ND	-	AR	-	
	-	1622	0	66	16	1	NI	2	0	-	-	+	-	ND	-	AR	-	
	-	1667	0	28	7	1	NI	2	0	-	-	-	-	ND	ND	AR	-	
v	-	1666	0	49	7	1	NI	2	0	-	-	-	-	ND	-	AR	-	

* POP UP *

Count: 11

v

<Replace>

Please note that no matter what STAMP status a patient has it can always become a LAMP patient. LAMP is an alternative to STAMP.

2. New features concerning STAMP

2.1 Quality control - missing Ab screen

In STAMP guidelines it is stated that 'Recipients in the program must be regularly screened at least every 3 months'.

In the main STAMP menu you will find the new quality control menu 'STAMP patients with PRA older than 3 months'. By entering this menu you will get a display of all patients on STAMP from whom a screen test has not been registered in 3 months.

2.2. Causes of temporary withdrawal

After acceptance it is for varying reasons sometimes necessary to temporarily withdraw a patient from STAMP. The status on the patient's STAMP record will in these cases be changed from Active to Inactive by the center.

When this happens a forced pop up will appear, where the cause of withdrawal should be registered. By pressing >F5<, in the pop up, a list of values will be displayed and the suitable cause(s) of withdrawal can be chosen.

Causes of temporary withdrawal from STAMP

- Positive crossmatch: HLA typing and antibody specification needed
- Further HLA typing required
- Further antibody specification required
- Other, not specified cause

The temporary withdrawal causes are only shown in STAMP extractions.

2.3 Causes of permanent withdrawal

Patients no longer eligible for STAMP, must be permanently withdrawn from STAMP.

You will find the facility for taking patients permanent off STAMP in the bottom of the screen.

STAMP - ACCEPTABLE MISMATCHES PROGRAMME		9201
Scandia Number	Pers Num	Sex <u>F</u> Female ABO <u>A</u>
Surname	First name	
Tx Center <u>AR Aarhus</u>	Country	
Curr wait list <u>KI Kidney</u>	Wl status <u>W</u> Wait for tx number <u>4</u>	
Date of wl entry <u>21-JAN-1999</u>	Dial/Tr cn <u>AB Aalborg</u>	
Narr eq ser HLA <u>A 3,24;B 7;DR 12,14;DQ 7,5;</u>		
Repea mismatches <u>A2,11;B14,18,22;DR1,2,3</u>		
Most recent PRA 1 <u>13-DEC-2010</u> I% <u>94</u> CDC, LUMI	II% <u>54</u> CDC, LUMI	
Most recent PRA 2 <u>29-SEP-2010</u> I% <u>94</u> CDC, LUMI	II% <u>56</u> CDC, LUMI	
Identif antib <u>A+X,(1),11,2,23,25,26,29,31,32,33,34,36,43,66,68,69,74,80;</u>		
Date of accept <u>23-AUG-2010</u>	Sign up <u>Y</u> Yes Status <u>A</u> Active	
Methods of determ <u>CDC, LUMI</u>		
Acc. mismatches <u>A30;B73,81;DQ2,4,5,7;DR3,4,8,11,13,1403,1404,17,18</u>		
Comments		
STAMP check <u>Event log</u> Score chance <u>*</u>	Permanent withdrawal	
Date/User of First Reg/Last Change <u>23-AUG-2010 ARPKN</u>	<u>25-AUG-2010 ARPKN</u>	

Count: *1

<Replace>

Place the cursor in the field 'Permanent withdrawal' and press >F7< followed by >F5< to choose between permanent withdrawal causes.

Causes of permanent withdrawal

- In preparation, does not meet STAMP criteria
- Re-evaluated, does not meet STAMP criteria
- Not accepted on STAMP
- PRA testing not provided according to rules
- Persistent positive cross match
- New HLA antibodies / acceptable mismatches cannot be defined
- Other cause

Important: Permanent withdrawal is PERMANENT withdrawal, there is no way back.

A new menu has been added 'Patients permanently withdrawn from STAMP',

were all permanent withdrawals of STAMP records are displayed.

2.4. Quality control – STAMP criteria check

Now available at any time in the STAMP process, both before and after acceptance, is a possibility to check if all STAMP acceptance criteria, as described in the STAMP guidelines, are fulfilled.

The evaluation facility is found in the bottom left screen.

The screenshot shows the STAMP software interface. At the top, there is a menu bar with 'File', 'Edit', 'View', 'Window', and 'Help'. Below the menu bar is a toolbar with various icons. The main window displays patient information for 'STAMP - ACCEPTABLE MISMATCHES PROGRAMME' with ID 9201. The patient's details include Scandia Number, Pers Num, Sex (M Male), and ABO (A). Other fields include Surname, Tx Center (GÖ Göteborg), Country (S Sweden), Curr wait list (KI Kidney), Date of wl entry (02-JAN-2008), and HLA (A 24, 32; B 7, 44; DR 15, 4; DQ 2, 7). The STAMP check section is highlighted with a red box and includes options for 'Event log', 'Score chance', and 'Permanent withdrawal'. The bottom status bar shows '* POP UP *' and 'Count: *1'.

STAMP - ACCEPTABLE MISMATCHES PROGRAMME		9201
Scandia Number	Pers Num	Sex <u>M</u> <u>Male</u> ABO <u>A</u>
Surname	First name	
Tx Center	Country	<u>S</u> <u>Sweden</u>
Curr wait list	Wl status	<u>N</u> Wait for tx number <u>2</u>
Date of wl entry	Dial/Tr cn	
Narr eq ser HLA	<u>A</u> 24, 32; <u>B</u> 7, 44; <u>DR</u> 15, 4; <u>DQ</u> 2, 7;	
Repea mismatches	<u>A</u> 10; <u>DR</u> 7, 8	
Most recent PRA 1	I% <u>99</u>	II% <u>99</u>
Most recent PRA 2	I% <u>99</u>	II% <u>99</u>
Identif antib	<u>A</u> (1), 11, 2, 25, 26, 28, 29, 3, 30, 31, 33, 34, 36, 43, 66, 68, 69, 74, 80;	
Date of accept	Sign up	<u>Y</u> <u>Yes</u> Status <u>A</u> <u>Active</u>
Methods of determ	<u>-</u> <u>CDC_FLOW</u>	
Acc. mismatches	<u>-</u> <u>A</u> 1, 23; <u>B</u> 13, 27, 37, 42, 47, 48, 58, 59, 81, 82; <u>DQ</u> 2, 7; <u>DR</u> 1, 16	
Comments		
STAMP check	<input checked="" type="checkbox"/> Event log	<input type="checkbox"/> Score chance * <input type="checkbox"/> Permanent withdrawal
Date/User of First Reg/Last Change	<u>09-FEB-2010</u> <u>JLR</u> <u>17-MAY-2011</u> <u>SCTP</u>	

* POP UP *
Count: *1 <Replace>

By pressing >F7< you get check and calculations done on all the following variables:

1 Wait time > 1 yr or child

The total waiting time on kidney waiting list and present age on the patient is calculated. Total waiting time on kidney waiting list must be more than one year. (Excepted are children they do not have to wait one year on kidney waiting list before acceptance).

2 HI PRA >= 80% at present

Defines if the patient is highly immunized (PRA ≥ 80%) in last registered antibody screen test

3 Most recent PRA < 3 months

Checks if the last registered antibody screen test is done within the last 3 months

4 HI >= x2 > 3 months

Identifies if highly immunized test result is identified in two consecutive samples over a period of more than 3 months.

5 A,B,DR,DQ splits

A check is done weather the recipient HLA-antigens are assigned at split level.

A '*' in front of an allele indicates that the assigned HLA type contains a broad type which is serological typed. A '!' in front of an allele indicates that the problematic broad type is genomic typed.

6 Acc. mm. Splits

Checks if all acceptable mismatches are registered as splits

7 Id. antib. Splits

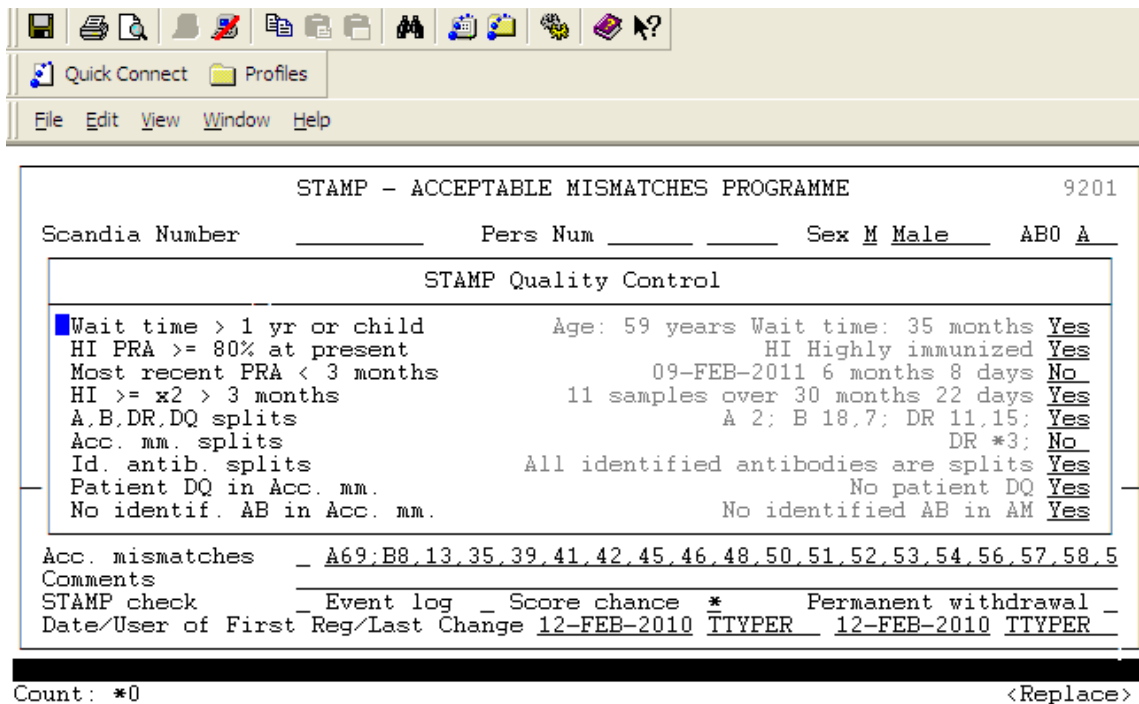
Checks if all identified antibodies are registered as splits

8 Patient DQ in Acc. mm.

Checks if patients own DQ is entered as acceptable mismatch.

9 No identif. AB in Acc. mm.

Compares one to one if any identified antibodies by mistake are given as acceptable mismatches.



Example of a STAMP record check; to the right it is stated if every single criteria is accepted or not. The conclusion of this check is that:

- a new sample needs to be antibody screen tested (and the result entered into Scandiatransplant)
- a broad type DR3 is given as an acceptable mismatch this indicates that it is necessary also to check if DR17 and DR18 are given as acceptable mismatches.

The STAMP check is a quality control and is meant as a help, it does not inflict with the activation of patients to STAMP.

In the cases where an email is sent to the steering committee, the results of the STAMP check will automatically be included in the message.

3. New features concerning identified antibodies

3.1. Donor specific antibodies (DSA) in search

Results of deceased donor search for best matching kidney patients will now also contain DSA.

KIDNEY WAITING LIST													Page	1/1	2505			
Tx cnt:OS													Exchg.	0	Own	0	All	212
PRI	Scandia	Surname	AB	Ag	WT	TX	IM	AB	DR	RP	DSA	CM	HC	HBS	TX	SF		
	Number		0	e		NO	ST	MM	MM	MM		V	V	Ag	CN	RC		
-	-	10	-	0	46	41	4	I	3	0	*	+	ND	ND	OS	-		
-	-	10	-	0	48	23	2	I	3	0		-	ND	ND	OS	-		
-	-	13	-	0	62	34	2	I	3	0	*	+	ND	ND	OS	-		
-	-	15	-	0	66	23	1	LI	3	0	*	+	ND	ND	OS	-		
-	-	16	-	0	66	16	1	NI	3	0		+	ND	ND	OS	-		
-	-	16	-	0	64	21	1	I	3	0		+	ND	ND	OS	-		
-	-	16	-	0	67	21	1	LI	3	0	(*)	+	ND	ND	OS	-		
-	-	15	-	0	78	21	1	NI	3	0		+	ND	ND	OS	-		
-	-	15	-	0	75	28	1	NI	3	0		+	ND	ND	OS	-		
-	-	16	-	0	55	17	2	NI	3	0	*	+	ND	ND	OS	-		
-	-	16	-	0	51	17	1	NI	3	0		-	ND	ND	OS	-		

* POP UP *
Count: 38 ^ v <Replace>

When a patient in the DSA column is marked */(*) press >F5< to view DSA along with repeated mismatches.

'*' in DSA column indicates that the this patient at the moment has important antibodies against donor that needs to be taken into account. In the ex. below B5 needs to be taken into account A1 does not.

KIDNEY WAITING LIST													Page	1/1	2505			
Tx cnt:OS													Exchg.	0	Own	0	All	212
PRI	Scandia	Surname	AB	Ag	WT	TX	IM	AB	DR	RP	DSA	CM	HC	HBS	TX	SF		
	Number		0	e		NO	ST	MM	MM	MM		V	V	Ag	CN	RC		
Repeated mismatches. Donor specific antibodies																		
																2516		
		Donor number																
		Scandia number																
		Rep. mism.																
		DSA	A(1); B5;															

'(*)' in DSA column indicates that all of the the donor specific antibodies no longer are of clinical relevance.

KIDNEY WAITING LIST										Page	1/1	2505				
Tx cnt:05					Exchg. <u>4</u> Own <u>0</u> All <u>214</u>											
PRI	Scandia	Surname	AB	Ag	WT	TX	IM	AB	DR	RP	DSA	CM	HC	HBS	TX	SF
	Number		0	e		NO	ST	MM	MM	MM		V	V	Ag	CN	RC
Repeated mismatches, Donor specific antibodies																
												Donornumber		2516		
Scandianumber _____																
Rep. mism. _____																
DSA <u>A(1)</u> ;																

Please note this is a one to one comparison be aware of identified antibodies (or search HLA) given as broad types.

3.2 Inactivating identified antibodies

When an identified antibody no longer should be taken into account it is now possible to inactivate it instead of deleting. After inactivation it will be displayed in brackets in the summary and in case of DSA in kidney patient search.

Enter the menu 'Updating Of Waiting List Data', make a query on the specific patient and enter the 'Antibody screen test' menu.

SCANDIA TRANSPLANT		2001
RECIPIENT SYSTEM PAGE 3/3		
Scandia Number	_____	
5. HLA TYPING:		*
6. ANTIBODY SCREEN TEST:		* *
7. SENSITIZATION HISTORY:		*
8. VARIOUS IMMUNOLOGY:	Immunol. Requirements	_____
	Previous / allowable mismatches & Waiting for organ number	*
	Edit transplantation number	-

* POP UP *
Count: *1 <Replace>

Place the cursor on 'edit allowable antibodies', press >F7< and place a >X< in front of the identified antibodies you wish to allow.

S C A N D I A T R A N S P L A N T 2001
 RECIPIENT SY

Scandia Number 106185

		ALLOWABLE ANTIBODIES 2008			
		HLA-A	HLA-B	HLA-DR	HLA-DQ
	ANTIBODY S	1	12	11	2
	Date of Current Serum Sample	25	13	12	3
5.	HLA Antibodies in Current Serum	3	15	13	4
	Serological Routines Used to Disc	32	17	14	7
6.	Edit allowable antibodies	66	21	3	8
		9	27	4	9
7.	Anti HLA-A Anti HLA-B Anti HI		35	7	
			38	8	
8.			40	9	
			41		
			42		
	Summary A(1,25,3,32,66,9; B12,13,1		46		
			47		
	ArrDown: next record, ArrUp: prev		48		

Count: *6

<Replace>

Press >F10< to save.

S C A N D I A T R A N S P L A N T 2001
 RECIPIENT SY

Scandia Number 106185

		ALLOWABLE ANTIBODIES 2008			
		HLA-A	HLA-B	HLA-DR	HLA-DQ
	ANTIBODY S	X 1	12	11	2
	Date of Current Serum Sample	25	13	12	3
5.	HLA Antibodies in Current Serum:	3	15	13	4
	Calculated combined PRA:	32	17	14	7
6.	Serol. Routines used to disclose	66	21	3	8
	Edit allowable antibodies *	9	27	4	9
7.			35	7	
	Anti HLA-A Anti HLA-B Anti HI		38	8	
8.			40	9	
			41		
			42		
	Summary A(1),25,3,32,66,9; B12,13		46		
			47		
	ArrDown: next record, ArrUp: prev		48		

Count: *6

<Replace>

3.3 New low immunised (LI) HLA antibody status

The new status is used and displayed for low PRA values (1-9%).

HI – PRA ≥ 80%

I – PRA 10-79%

LI – PRA ≤ 9%

NI – PRA 0%

PI – previously immunised

ND – Not done

Scandia Number _____

SENSITIZATION HISTORY:			2007
Sample date	PRA I	cl. II	Identified antibodies
08-SEP-2011	5	0	_____
08-MAR-2011	0	0	_____
08-SEP-2010	0	0	_____
09-JUN-2010	0	0	_____
28-JUL-2009	_____	0	_____
_____	_____	_____	_____
_____	_____	_____	_____

Current immunization status 20-SEP-2011 LI Low immunized

* POP UP *

Count: *5

<Replace>

4. Calculated frequency for PRA and transplantability

A donor pool, based on 1000 recently HLA typed deceased donors registered in Scandiatriansplant, has been made. In the near future each tissue typing lab. will receive a list with donors that needs retyping. This is to improve the following calculations:

4.1 Frequency calculated combined PRA

On the basis of registered identified antibodies on a specific patient it is possible to make a percentage calculation of a combined PRA class I and II.

Enter the menu 'Updating Of Waiting List Data', make a query on the specific patient and choose the 'Antibody screen test' menu.

SCANDIATRANSPLANT		2001
RECIPIENT SYSTEM PAGE 3/3		
Scandia Number	_____	
5. HLA TYPING:		*
6. ANTIBODY SCREEN TEST:		* (highlighted)
7. SENSITIZATION HISTORY:		*
8. VARIOUS IMMUNOLOGY:	Immunol. Requirements	_____
	Previous / allowable mismatches & Waiting for organ number	*
	Edit transplantation number	-

* POP UP *

Count: *1

<Replace>

S C A N D I A T R A N S P L A N T 2001
 RECIPIENT SYSTEM PAGE 3/3

Scandia Number _____

ANTIBODY SCREEN TEST 2008

Date of Current Serum Sample 12-NOV-2010

5. HLA Antibodies in Current Serum: Class I 60% Class II 60%

Calculated combined PRA: 99% 21-SEP-2011

6. Serol. Routines used to disclose Class I - Class II -

7. Edit allowable antibodies *

Anti HLA-A	Anti HLA-B	Anti HLA-Cw	Anti HLA-DR	Anti HLA-DQ
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Summary A(1),25,3,32,66,9; B12,13,15,17,21,27,35,38,40,41,42,46,47

ArrDown: next record, ArrUp: previous record, F1: calculate PRA

Count: *15 <Replace>

Press >F1< and a combined PRA value, containing class I and II antibodies, will be calculated and saved. Recalculating of changes can be made by pressing >F1< again. The last date of calculation together with the PRA values will always be displayed.

4.2 Frequency calculated transplantability

In STAMP it is possible to get

- a 'frequency calculated transplantability' based on patient's own tissue type
- a 'frequency calculated transplantability with acceptable mismatches' based on patient's own tissue type and acceptable mismatches.

The calculation is solely based on the HLA types in the donor pool and do NOT take ABO into account.

Place the cursor in the field 'Calc. frequency' and press >F7< to get a pop up.

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STAMP - ACCEPTABLE MISMATCHES PROGRAMME 9201

Scandia Number          Pers Num _____ Sex F Female ABO A

Surname                  _____ First name _____
Tx Center                AR Aarhus Country DK Denmark
Curr wait list          KI Kidney Wl status W Wait for tx number 4
Date of wl entry        21-JAN-1999 Dial/Tr cn AB
Narr eq ser HLA         A 3,24;B 7,70;DR 12,14;DQ 7,5;
Repea mismatches       A2,11;B14,18,22;DR1,2,3
Most recent PRA 1      13-DEC-2010 I% 94 CDC, LUMI II% 54 CDC, LUMI
Most recent PRA 2      29-SEP-2010 I% 94 CDC, LUMI II% 56 CDC, LUMI
Identif antib           A+X,(1),11,2,23,25,26,29,31,32,33,34,36,43,66,68,69,74,80;

Date of accept          23-AUG-2010 Sign up Y Yes Status A Active
Methods of determ       CDC, LUMI
Acc. mismatches        A30;B73,81;DQ2,4,5,7;DR3,4,8,11,13,1403,1404,17,18
Comments
STAMP check            Event log Calc. frequency  Perm. withdrawal
Date/User of First Reg/Last Change 23-AUG-2010 ARPKN 25-AUG-2010 ARPKN

```

* POP UP *

Count: *1

<Replace>

By pressing >F10< you get the calculated match frequency among the 1000 donor types with and without acceptable mismatches.

```

STAMP - ACCEPTABLE MISMATCHES PROGRAMME 9201

Scandia Number          Pers Num _____ Sex M Male ABO A

Surname                  _____ First name _____
Tx Center                GO Göteborg Country S Sweden
Curr wait list          KI Kidney Wl status N Wait for tx number 3
Date of wl entry        19-FEB-2008 Dial/Tr cn _____
Narr eq ser HLA         A 2,28;B 27,37;DR 10,11;DQ 7,5;
Repea mismatches       A3;B8,15;DR2,4,6
Most recent PRA 1      20-JAN-2011 I% 97
Most recent PRA 2      21-OCT-2010 I% 99
Identif antib           A1,11,24,29,3,30,31,34,36,

Date of accept          11-FEB-2010 Sign up Y
Methods of determ       CDC, FLOW
Acc. mismatches        A25,26,32,33,43,66,68,69
Comments
STAMP check            Event log Calc. frequency  Perm. withdrawal
Date/User of First Reg/Last Change 11-FEB-2010 JLR 11-MAR-2010 JLR

```

Calculated Frequency	
Without STAMP	0.0%
With STAMP	0.1%
Last calculated <u>23-AUG-2011</u>	
<input checked="" type="checkbox"/> Press F10 to (re)calculate	

ERM-40400: Transaction complete -- 1 records posted and committed.

Count: *1

<Replace>

