

Eurotransplant External Proficiency Testing

- Web based data entry; An update
- Proposal to change the EPT Schemes

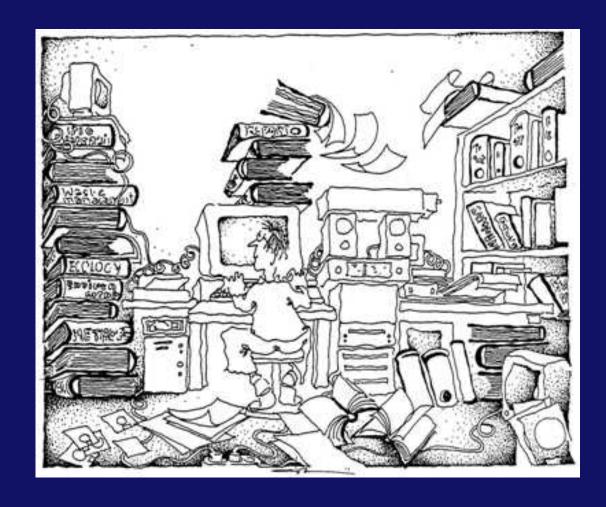






Web based Data entry; an update

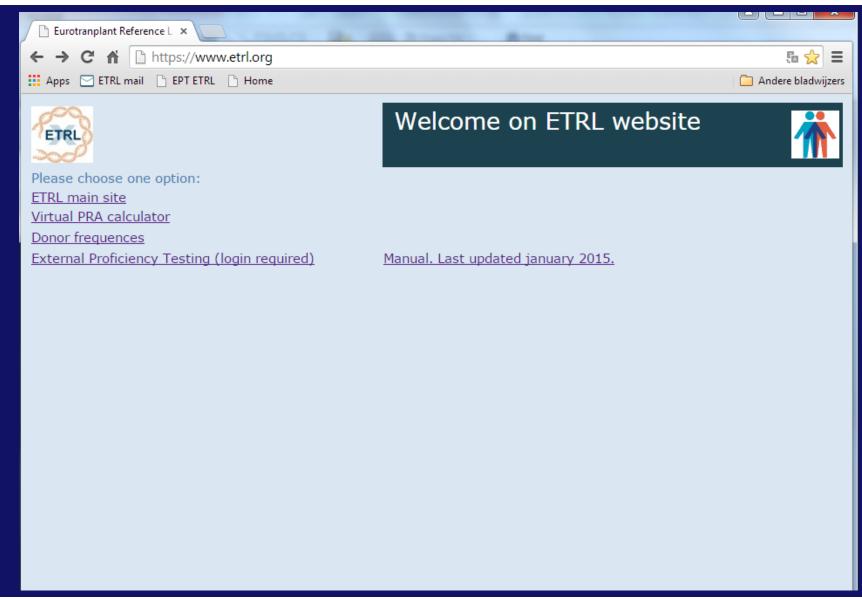






www.etrl.org







ETRL Web based data entry, changes



Roles:

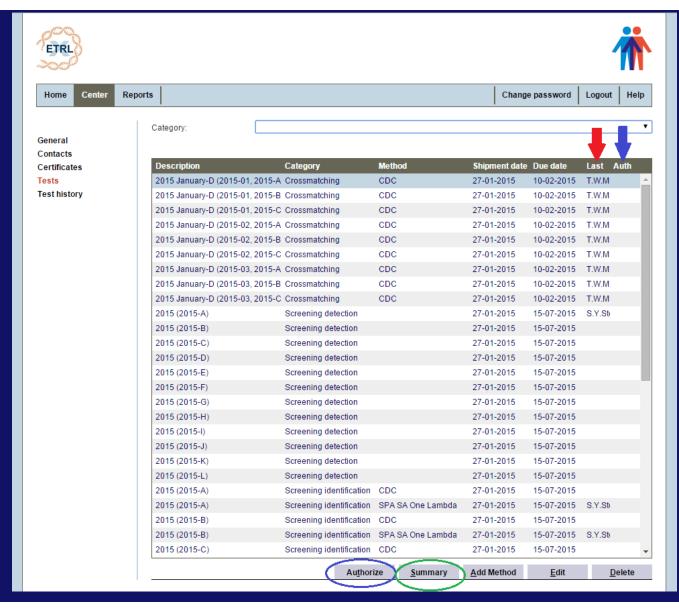
Each center has at least one authorizer and can have one or more administrators and users:

- User (can only enter results of typing, cross matching and screening)
- Administrator (can enter results, can change center data like address, can add and remove users)
- New! : Authorizer (similar to administrator, can also authorize results)



Tests page with extra possibilities







Summary; for tests and test history



Typing

Center: 1902 Period: 2015 Shipment: 2015 feb



	Class I					Class II															
	Method			HLA					Method			HLA									
EPT	CDC	vlab	DNA	Α	Α	В	В	Bw	Bw	Cw	Cw	CDC	vlab	DNA	DR	DR	DR	DR	DR	DQ	DQ
2015-01	X	81-100%	X	A1	A11	B46	B56(22)	No	Yes	Cw15	Cw18	•		X	DR3	DR7	Yes	Yes	No	DQ2	DQ4
2015-02	X	81-100%	X	A3	A66(10)	B27	B48	Yes	Yes	Cw7	Cw14			X	DR4	DR14(6)	Yes	Yes	No	DQ8(3)	DQ7(3)
2015-03	X	81-100%	-	A11	A26(10)	B44(12)	B45(12)	Yes	Yes.	Cw5	Cw7	X	81-100%	X	DR15(2)	DR11(5)	Yes	No	Yes	DQ6(1)	DQ7(3)

Cross Matching

 Center:
 1902

 Period:
 2015

 Shipment:
 2015 feb

 Receipt Date:
 22-01-2015

 Test Date:
 24-01-2015

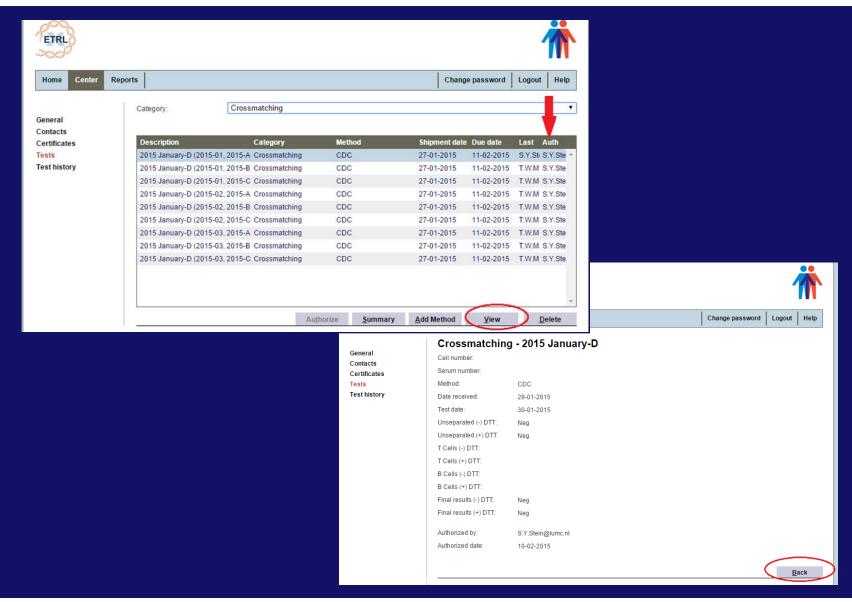


EPT	Serum		Method		Unseparated		T cells		B cells		results
		CDC	FCM	(-)DTT	(+)DTT	(-)DTT	(+)DTT	(-)DTT	(+)DTT	(-)DTT	(+)DTT
2015-01	2015-A	х	-	Pos	Pos					Pos	Pos
2015-01	2015-B	x	-	Neg	Neg	Neg	Neg	Neg	Neg	Neg	Neg
2015-01	2015-C	x	-	Neg	Neg	Neg	ND	Neg	ND	Neg	Neg
2015-02	2015-A	X	-	Pos	Pos	Pos	Pos	Pos	Pos	Pos	Pos
2015-02	2015-B	x	-	Pos	Neg					Pos	Neg
2015-02	2015-C	x	-	Neg	Neg	Neg	Neg	ND	ND	Neg	Neg



Authorized results and view

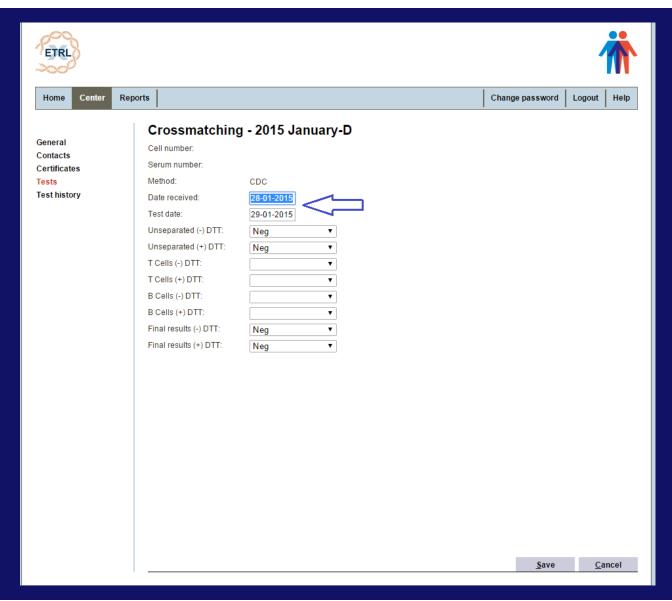














Screening Detection; fixed fields

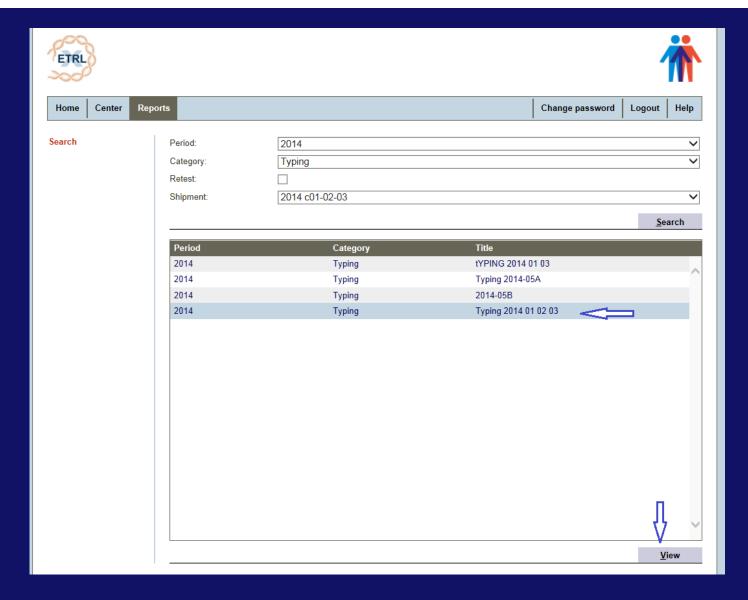


ETRL						
Home Center Repo	orts			Char	nge password Lo	ogout Help
General Contacts Certificates Tests Test history	EPT: Date received: Test date:	2015-A 28-01-2015 29-01-2015	- 2015			
	(-) DTT: (+) DTT:	Panel (N)	PRA v			
	Class I: Class II: - Luminex	Panel (N)	PRA			
	Provider: — Elisa	T	Class I ▼	Class II	▼	
	Elisa:	•	Class I ▼	Class II	•	
	Final conclusion Antibodies:	Class I ▼	Class II			
					<u>S</u> ave	<u>C</u> ancel



Reports; Example

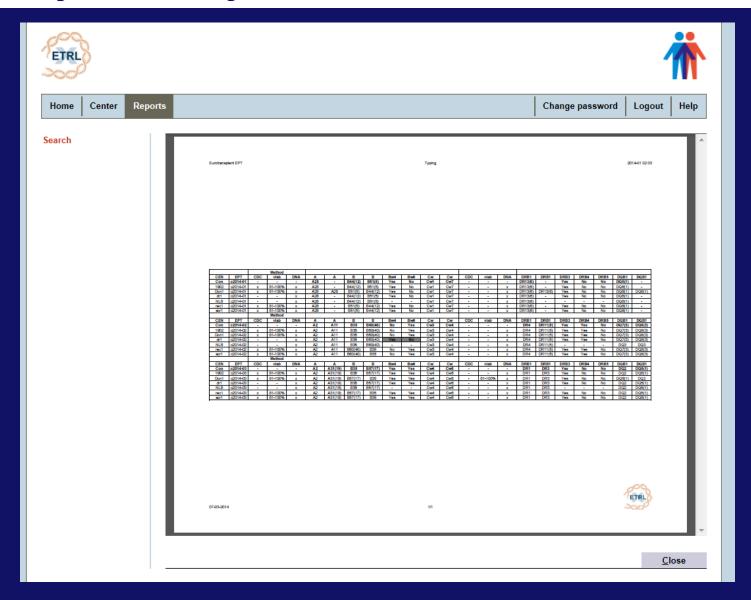






Reports; Example







Web based data entry: From test to validation



September 2014: entering data from shipment of September (Typ/XM) for all centers in the "old" way and try out of the website.

Beginning January 2015; Small adaptations to the website on the base of comments from users.

New manual published on the site.

January 2015: First Data entry for Cross matching and Typing done via the website.

June/July 2015: First Data entry for Antibody Screening via the website.



Eurotransplant EPT in summary



- The Web Site has gone live.
- First typing and cross matching results have been entered by the centers and at the ETRL the first reports are being made and uploaded to the site.
- A few problems had to be solved, e.g. problems with authorization in some centers.
- The site will be further adapted to the wishes of the users and the ETRL during this year.

 If you have questions or remarks contact us here or at etrl@eurotransplant.org



Proposal to change the EPT schemes





Changing EPT schemes: technique based vs. patient oriented

Current situation EPT based on final results versus based on techniques

- Original goal EPT: compare typing, screening and cross match data to get consistent results between ET affiliated labs.
 - Screening detection: only final results (presence/absence HLA antibodies) are analyzed.
 - Cross Matching: all results are analyzed, final results most important.
- EFI accreditation is mandatory for ET affiliated labs, but demands EPT on a technique based level.
- Proposal for EPT scheme changes from 2016



LU MC Changing EPT schemes: technique based



EPT for EFI accreditation

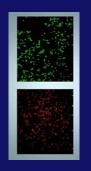
- Screening detection will be analyzed on basis of techniques used
- Screening Identification (CDC and SPA SA)
- 3. Typing: For Class I, scoring of serological results and **DNA** results separated
- Cross-match (CDC)

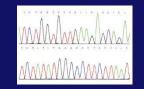
Certificates will show which technique(s) the center uses and fulfills.













Changing EPT schemes: patient oriented (new scheme)



For ET affiliated labs it is important to see how decisions are made before and during donor procedures.

Definition of serological equivalents of EPT typing (final results) should be submitted to the ETRL.

The ETRL proposes to organize, next to the usual EPT schemes, a more patient oriented scheme. This scheme will be compulsory for ET affiliated centers.

Main goal: discuss the results and policies in the different centers to get maximum consistency within ET affiliated centers







Patient oriented EPT: proposed options



- 1. Paper-based exercise
- Centers will receive raw data of results from tests of a number of actual patient and donor combinations (typing of patient and donor, immunizing events, antibody status, cross match results)
- Data will be interpreted by the centers according to local practice, results will be submitted to the ETRL
- Data will be analyzed at the ETRL and discussed at the extramural meetings



Example 1



A female patient in the AM program.

Typing: A3, A26, A10, B44, B12, B38, B16, Cw7, Cw12, Bw4, DR1, DR13, DR6, DR52, DQ5, DQ6, DQ1

Child 1: A1, A26, A10, B8, B38, Cw7, Cw12, Bw4, Bw6, DR1, DR13 DR6, DR52, DQ5, DQ6, DQ1

Child 2: A2, A26, A10, B38, B61, Cw2, Cw12, Bw4, Bw6, DR1, DR13, DR6, DR52, DQ5, DQ6, DQ1

TX 1: A24, A9, A29, A19, B44, B12, B27, Bw4, Cw2, Cw16, DR1, DR7, DR53, DQ1, DQ5, DQ2

TX 2: A1, A3, B44, B12, B49, B21, Bw4, Cw7, Cw16, DR1, DR4, DR53, DQ1, DQ5, DQ3, DQ8

AM: A25, A34, A66, A11, A30, A31, A32, A33, A43, A74, B63, B37, B59, DR15, DR18, DR12, DR14, DR8, DR10

Un-AM: A2, A23, A24, A29, A68, A69, B51, B7, B8, B13, B64, B65, B57, B58, B27, B60, B61, Bw6, DR7, DR4, DR53

Or (additionally) raw data from SPA SA tests

Donor 1: A1, A3, B44, B45, B12, DR1, DR13, DR6

Cross Match results (CDC) Pos –DTT, Neg +DTT

Donor 2: A3, A11, B38, B16, B63, B15, DR1, DR14, DR6

Cross Match results (CDC) Neg –DTT, Neg +DTT

What would be your advice for each of these donors?



Patient oriented EPT: proposed options



- 2. Sample-based exercise
- Cells and sera from the regular EPT shipments will be used
- Selected cells from EPT will be considered as donor cells (typing done in the center)
- Selected sera from EPT shipment will be considered as patient sera (history will be provided)
- Typing / screening / cross matches will be performed and interpreted by the centers according to local practice, results will be submitted to the ETRL
- Data will be analyzed at the ETRL and discussed at the extramural meetings



Example 2 (Case sent along with the Typ/XM scheme)



A male patient (born 1961) on the waiting list for 2,5 years. Has had 3 blood transfusions.

Typing: A26, A10, B52, B5, B55, B22, Bw4, Bw6, Cw1, DR15, DR2, DR11, DR5, DR51, DR52, DQ6, DQ1, DQ7, DQ3 Serum shipped for screening and cross matching

Donor 1

Blood shipped to the centers for typing and cross matching

Donor 2

Blood shipped to the centers for typing and cross matching

Donor 3

Blood shipped to the centers for typing and cross matching

What would be your advice for each of these donors?



Discussion topics "patient oriented EPT"



- The ETRL proposes to perform both the paper and sample-based exercise:
 - paper based: all centers interpret the same raw data
 - sample based: local differences in techniques and interpretation will be visible
- Result feedback and educational value (ETRL collects the results, which will be discussed during the Extra Mural Meeting)
- Ideas for cases (AM patient, ETKAS patient, other)
- What kind of patient data have to be provided; which tests can or should be done in the centers?
- What kind of questions (e.g. which donor is most suitable, would you give a positive or negative advice to transplant...)



Overview: EFI vs. ET





Techniques based

Screening Detection
Screening Identification

Typing (Serological vs DNA) (Cross Matching)

Certificates (per scheme/ technique): fulfilled/not fulfilled



Interpretation/Patient based

Typing (serological equivalent)

Patient cases (paper based and sample based)

Certificate of participation



Eurotransplant EPT: Thank You





All ETRL co-workers the Screening and Tissue Typing Center NLB all participants of the EPT and Eurotransplant