

TS SCORE

Various ways to describe immunisation



- Percent reactivity against cell panel
 - Unseparated cell
 - T cell cells
 - B cells
- FlowPRA reactivity
 - Class I
 - Class II
- cPRA
 - Calculated against real donors



How can we compare results?

- Different cell panels will give different results
 - Anti HLA A2 40-60%
- Balance between incorporating as many antigens as possible and representing the “real world”



What is the chance for a positive XM

- Class I- 50% and class II-38%
 - 50%
 - >50-100%?



- A1,2; B7,8; DR15,3
- A2,23; B7,62; DR13,14
- A1,11; B35,44; DR1
- A24,A31; B60; DR1
- A2,B8,B13; DR3,7
- A2,68; B8,51; DR4,13
- A3,25; B51,64; DR4,10
- A25,30; B49,62; DR3,15
- A1,3; B52,B64; DR1,11
- A2; B13,18; DR15,7
- A23,26; B8,39; DR1,8
- A3,11; B38,62; DR1,15
- A2,29; B8,44; DR15,13
- A11,25; B7,27; DR1,8
- A2,32; B56,60; DR16,11
- A1,3; B27,44; DR1,13
- A1,2; B8; DR3
- A1,2; B7,8; DR3,15

- HLA A2 in 50%
- HLA DR1 in 38%
- PRA class I=50%
- PRA class II=38%
- cPRA as “transplantability index”
- cPRA=89%- thus much worse than indicated by the figures we register



cPRA

- Will more objectively describe the probability of a positive XM
- Will be more consistent between centers if same donor pool is used for calculations
- Will still not describe the probability of finding a suitable donor because ABO is not included



TS



- Use both cPRA and ABO
- Patients with blood group A (44%) will have almost 4 times the chance compared to patients with blood group B (12%)



Items that remains



- Incomplete HLA data
 - HLA DRB3/4/5
 - DQA1
 - DPA1
 - DPB1
 - Alleles compared to antigens



Christian Naper:
Should we include CDC PRA% in addition to
TS as eligibility criteria?



3.2 Good candidates for STAMP?

Evaluate if these potential STAMP eligible patients may have **difficulties in getting kidneys from local donors.**

- Good candidates usually have a reason for immunization (previous transplants, pregnancies, or blood transfusions).
- Good candidates usually have **both CDC and solid phase reactivity** (although both do not have to fulfill HI criteria).
- Good candidates usually have **high-level reactivity in antibody testing.**
- Good candidates occasionally have a **history of positive cross matches.**



Christian Naper:
Should we include CDC PRA% in addition to
TS as eligibility criteria?



The STAMP steering committee does not if the antibodies are significant or not, except that the antibodies reported should have an MFI above 1000.

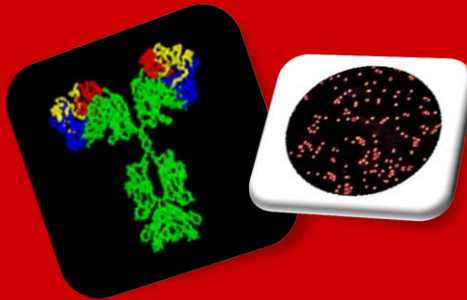
All antibodies reported could be clinically insignificant and the patient has no need for STAMP listing.

Suggestion: **both CDC PRA** (either old microtiter or new CDC Flow technique) and **Luminex results should be reported to Scandia** and be available to the steering committee when deciding if the patient is eligible for STAMP.

There should be a **significant risk of a positive CDC crossmatch** to be eligible for STAMP; maybe a CDC PRA $\geq 40\%$.



HOW CAN WE INCREASE POSSIBILITY OF TRANSPLANTATION FOR THOSE WHO HAVE BEEN YEARS ON STAMP LIST



Questions asked (more than) a year ago



- Should we collectively look into immunization details of patients on STAMP for more than 3 years?
- Could an increase in acceptable antigens by increasing cut-off levels for MFI values contribute to:
 - **1. enhance the chance of finding a donor?**
 - **2. without compromising the overall results of STAMP collaboration?**

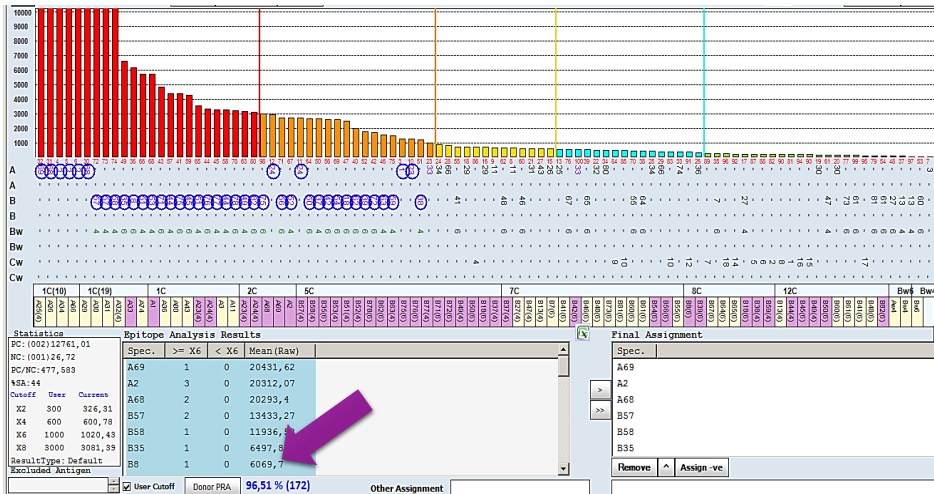


Case example

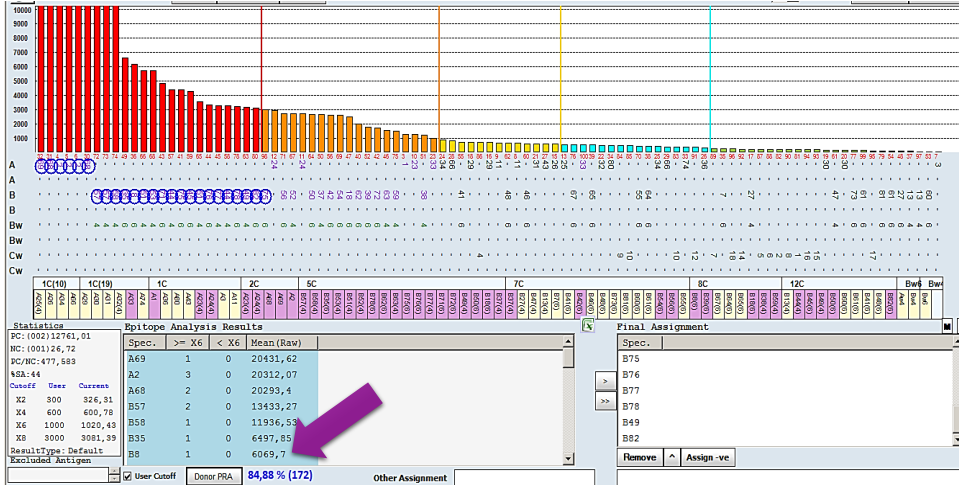
- Female who has been more than 3 years at STAMP list
- Dg: IgA nephropathy
- Waiting for second kidney-graft
- Previous mismatch antigens are B35 and DR1
 - These should not be added to AMM list if they are not there at regular MFI cut-off level
- Current PRA 97/100%, TS 0%
 - (Luminex, OneLambda singles, EDTA pre-treated serum)

HLA-A	03
HLA-A	-
HLA-B	07
HLA-B	13
HLA-DRB1	13
HLA-DRB1	-
ABORh	B RhD pos

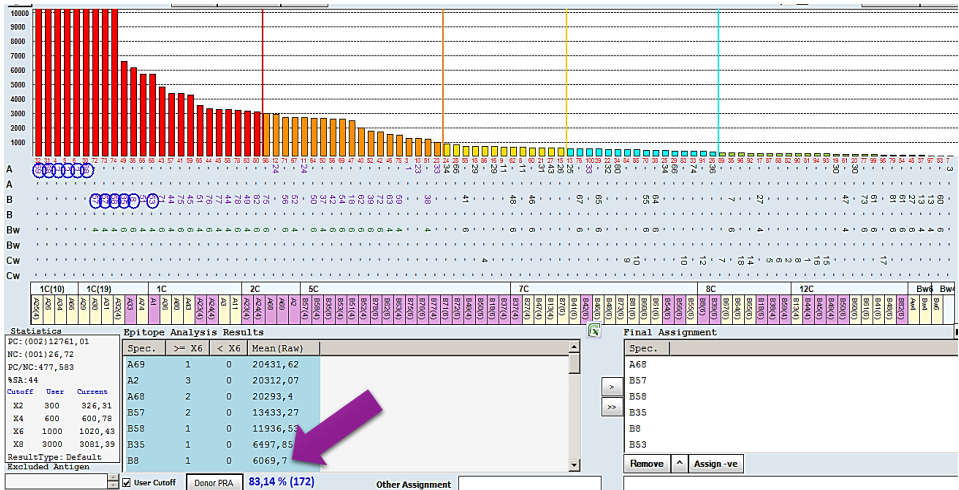
Current Luminex single I, MFI cut-off 1000



Modified Luminex single I, MFI cut off 3000

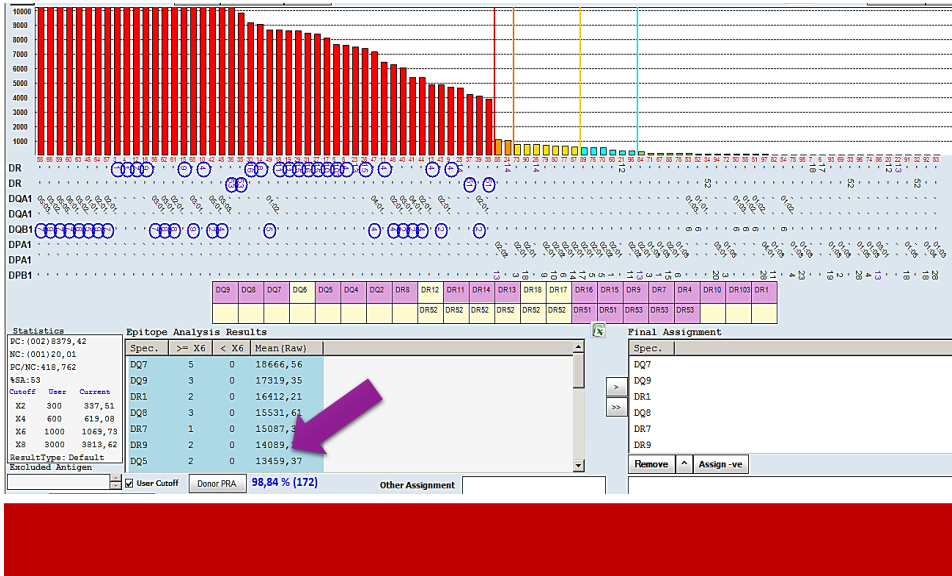


Modified Luminex single I, MFI cut off 5000

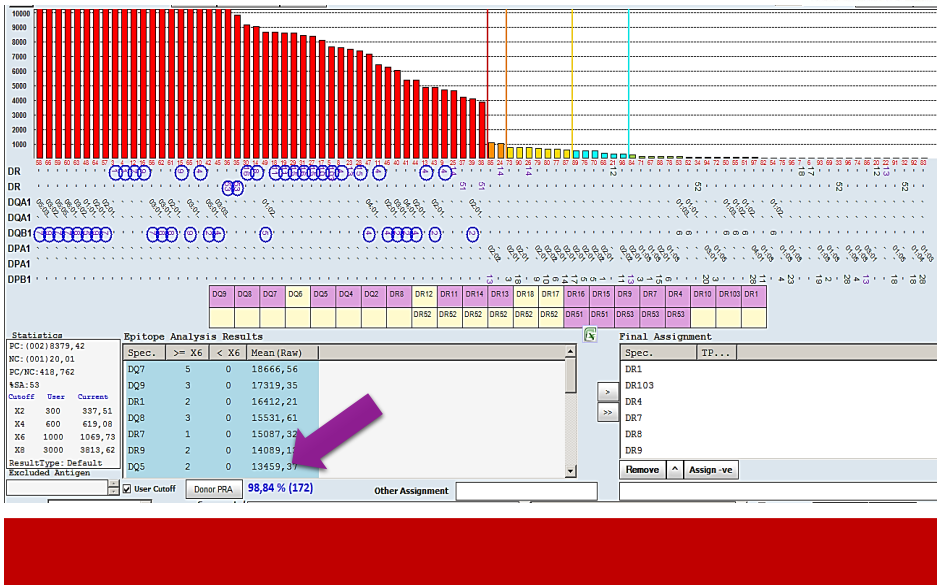




Current Luminex single II



Modified Luminex single II, MFI cut off 5000



Proposed STAMP modifications



- Add new antigens to AMM-list but do not remove notified antibodies
- Recalculate TS
 - if this increases patient's changes will increase
 - if this remains stable the whole procedure has been in vain (like in my case example, unfortunately)
 - **accept/do not accept TS more than 2%???**
- Write notice to explain what has been modified and why
- After modifications, re-send case to STAMP steering committee for re-evaluation (inactivate-activate)

Suggestion for future meetings



1. All centres prepare own difficult cases (waiting more than **2-3 years?**) (like presented here)
1. Cases are presented to tissue typers during each annual meeting
2. Cases are discussed and if feasible, modifications to the acceptable antigen panels will be suggested by all
3. Centre will then modify their cases as suggested
4. Final acceptance is made by STAMP steering committee using standard procedures (add notice that the case has been discussed at the meeting)