



Eurotransplant Virtual Extra Mural Tissue Typers Meeting 2020

Results EPT 2019

Yvonne Zoet
Eurotransplant Reference Laboratory
LEIDEN







EPT Results



- HLA typing
- Crossmatching
- HLA antibody screening



Virtual Extra Mural Meeting 2020 27-11-2020

EPT Results 2019; HLA typing (12 samples)



- √ 63 centers participated
- ✓ Discrepancy rate 1,6 % (2018: 1,3%)
- ✓ Overview of discrepancies:

| Class I | HLA-A | 1 |
|---------|--------------|---|
| | HLA-B | 1 |
| | HLA-C | 1 |
|) | Bw4/Bw6 | 7 |
| = 9 | HLA-DR | 1 |
| Class | HLA-DQ | 1 |
| 13 | HLA DRB3-4-5 | 1 |

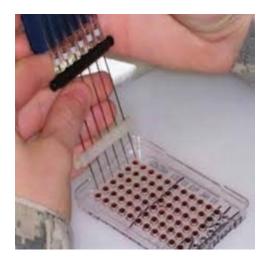
✓ Reminder: Note that Bw4 must only be assigned on basis of HLA-B antigens

EPT Results 2019; Crossmatching



65 centers participated:

- √ 31 donor centers
- √ 34 recipient centers



In total, 36 crossmatches with 12 different blood samples could be performed.

3 Virtual Extra Mural Meeting 2020 27-11-2020

EPT Results 2019; Crossmatching



27-11-2020

Discrepancy Rates

| Discrepancy rates Donor centers 2019 | | | | | | | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|---------------|---------|-------|-------|--|--|
| Unsep | arated | T cells | | B cells | | Final results | | | Total | | |
| (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | Total | 2018 | | |
| 2,1% | 2,9% | 1,7% | 1,0% | 5,1% | 4,0% | 2,3% | 2,9% | 2,8% | 3,9% | | |

| Discrepancy rates Recipient centers 2019 | | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------------|---------|-------|-------|--|--|
| Unsep | arated | T cells | | B cells | | Final results | | | Total | | |
| (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | Total | 2018 | | |
| 2,7% | 4,0% | 2,8% | 3,5% | 3,4% | 3,6% | 3,3% | 4,7% | 3,6% | 3,0% | | |

EPT Results 2019; Crossmatching



Consensus rates

| | Consensus rates donor centers 2019 | | | | | | | | | | | |
|---------|------------------------------------|---------|---------|---------|---------------|---------|---------|-------|------|--|--|--|
| Unse | Unseparated T cells | | B cells | | Final results | | Total | Total | | | | |
| (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | | 2018 | | | |
| 83% | 92% | 89% | 86% | 78% | 78% | 86% | 89% | 85% | 89% | | | |

| | Consensus rates recipient centers 2019 | | | | | | | | | | | |
|-------------|--|---------|-----------|---------|---------|---------------|---------|-------|-------|--|--|--|
| Unseparated | | Тc | cells B o | | ells | Final results | | Total | Total | | | |
| (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | | 2018 | | | |
| 94% | 97% | 94% | 94% | 69% | 78% | 92% | 97% | 90% | 86% | | | |

| Consensus rates extra shipments centers 2019 | | | | | | | | | | |
|--|---------|---------|---------|---------|---------|---------|---------|-----|--|--|
| Unseparated | | T cells | | Вс | ells | Final r | Total | | | |
| (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | (-) DTT | (+) DTT | | | |
| 100% | 100% | 100% | 100% | 89% | 89% | 100% | 100% | 97% | | |



EPT Results 2019; Screening Detection



- √ 12 sera were screened
- √ 68 centers participated

| Discrepancy Rates Screening Detection 2019 | | | | | | | | | | |
|--|----------|---------|----------|-----------|-----------|---------|--------------------|---------|----------|--|
| Luminex ELISA | | ISA | CDC (| %PRA | Final F | Results | Final Results 2018 | | | |
| Class I | Class II | Class I | Class II | % (-) DTT | % (+) DTT | Class I | Class II | Class I | Class II | |
| 1,8% | 3,0% | - | ı | 5,2% | 5,7% | 1,8% | 3,2% | 0,7% | 1,4% | |

EPT Results 2019; Screening Identification



CDC

- √ 12 sera were screened
- √ 59 centers participated
- √ 17 consensus specificities were found
- √ 8 centers had over 25% missing consensus specificities



EPT Results 2019; Screening Identification



- SPA* (4 centers)
- SPA Single Antigen (67 centers)
- SPA SA PLUS* (6 centers)

SPA SA: 348 consensus specificities

303 specificities for Class I

45 specificities for Class II

All centers fulfilled the criteria

^{*}SPA and SPA SA PLUS were not assessed, because of low number of participating centers. These centers received a certificate of participation.

EPT on HLA typing; future changes



To allow for the introduction of the virtual crossmatch, HLA typing requirements will change within Eurotransplant.

The EPT for HLA typing will change accordingly, depending on the future typing requirements (discussed later today).

Discussions with the EFI EPT committee have been initiated.





Thank You!

Tissue typing laboratories, recipient laboratories and Eurotransplant



The ETRL team

Geert Haasnoot Sebastiaan Heidt Petra van der Kroef Marissa van der Linden-van Oevelen Yvonne Zoet



11

