

Whole Blood Product in Finland and Finnish Prehospital Whole Blood Study

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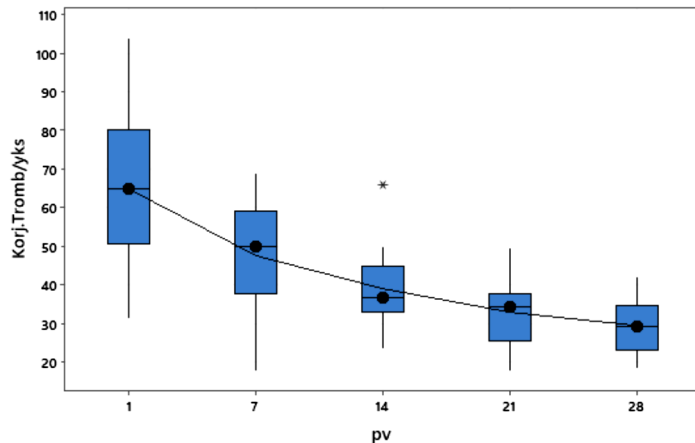
Implementation of Whole Blood for Transfusion
EBA Webinar 9.12.2022

FinnPHWB

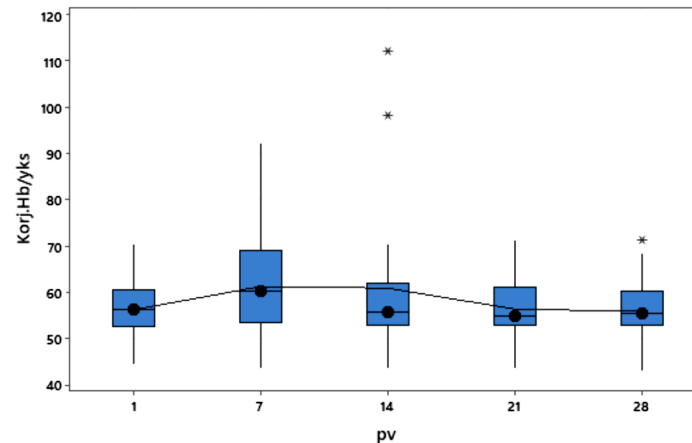
FRCBS whole blood (LTOWB)

- Leukoreduced
- Male donors only, no HLA antibody measurement
- O RhD pos
- Titer ≤ 128 , measured after every LTOWB donation
- 21 days shelf life, +2 – +6 °C
- Indication: emergency transfusion at prehospital emergency care
- Currently delivered only to the hospitals that participate for case group patient recruitment for Finnish Prehospital Whole Blood study (FinnPHWB)

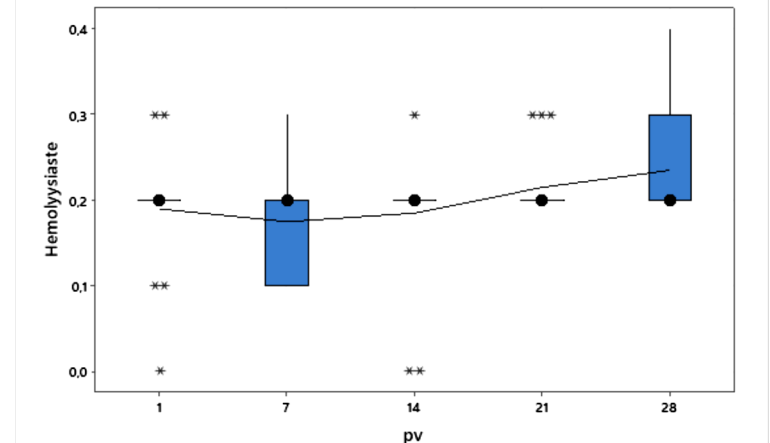
Platelets



Hb



Hemolysis



Finnish Prehospital Whole Blood Study



- Open, non-randomized, multicenter clinical study
 - LTOWB will be used in three centers while other centers will continue to use PRBC
- Hypotheses
 - Use of LTOWB is feasible, and it is **easier to use** than current transfusion therapy
 - LTOWB as prehospital transfusion therapy is clinically **non-inferior** compared to PRBC
 - **Coagulation properties of LTOWB are better** and LTOWB is associated with **less severe endothelial damage and inflammation** compared to PRBC
- Approved by the ethics committee for Helsinki and Uusimaa hospital district
- Funding from EBA, state subsidy for university hospitals, MATINE (Scientific Advisory Board for National Defence)
- 3 (-4) years recruitment, first control patients recruited, no LTOWB used yet

Concerns

- Only limited number of users and thus patients, lot of wastage
 - Is 21 days shelf life OK?
 - Should we allow in-hospital use?
 - What are the other options for old units?
- FRCBS LTOWB could be useful in limited crisis while blood service operates normally, but may not be useful in large and long-lasting crisis
 - Expensive, laborious, supply of consumables?
 - Donor pool might be too small; male donors only, O RhDpos
- One bag system without leukoreduction may be better in larger, long-lasting crisis
 - Emergency donor pool and walking blood bank option

Base code	Approximated number of patients per year
FH10	35
FH30	20
PH00	15