



Oral Presentation

The production of Reveos in Blood Transfusion Centre, Faculty of Medicine, Khon Kaen University, Thailand.

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Background and objective : The Reveos automated blood processing system has been developed for whole blood units automated ,the machine was developed for separate. The aim of this study was evaluate the product specifications and quality of components produced by the Reveos system. This system has been installed in Blood Transfusion Centre, Faculty of Medicine, Khon Kaen University since September 2016 to date. Therefore, the system should be evaluated.

Materials and Methods : Whole blood was processed using the Reveos system and compared according to validate the use of the first installation. Reveos red cells were leukoreduced and stored in SAGM at 4°C. Reveos plasma was frozen at -30°C and factor activity was assessed after thawing. Leukoreduced platelet concentrates Reveos were prepared by pooling 4 iso-group interim platelet units or 1-2 random platelet concentrate from top-bottom method and 3-2 interim platelet units pooled by Reveos pooling set, Comparison the values of volume, hematocrit , platelet contents and white blood cell contamination of LDPRC and LDPC at first installation to date with SPSS statistics.

Results : 408 whole blood sample were processing with Reveos system. Average of fresh frozen plasma, interim platelet and leuko-packed is 217.52, 62.40 and 10.2 ml, respectively. The platelet index more than 60 cells/u is 75.8%. The quality of LDPRC; hematocrit equal 55.8%, volume equal 313 ml and white cell contamination equal 0.0×10^6 cells/u. Comparison the value with SPSS statistics were found that the hematocrit, voume and white blood cell contamination were not different ($p>0.01$, $p>0.05$ and $p>0.05$, respectively). The quality of LDPC (N=68); platelet contents equal 3.03×10^{11} cells/u, volume equal 255.8 ml and white cell contamination equal 0.0×10^6 cells/u. All values were not differ statistically ($p>0.05$).

Conclusions : Our production of Reveos system; LDPRC and LDPC at first installation to date provides reached the recommended quality of Council of Europe (EU), American Association of Blood Banks(AABB) and National Blood Centre, Thai Red Cross Society (TRC).

Keywords : Reveos ; Quality control (QC)