FRESENIUS KABI
caring for life

AmiCORE Apheresis System

Collection Efficacies of a New Apheresis System for Double Dose Platelet Collection

P Kitpoka*[1], W Thienphopirak[1], S Chanthet[1], S Chiawchan[1], P Phattanachak[1]

[1]Pathology, Ramathibodi Hospital, BKK, Thailand

Background: New generation apheresis systems enable a multiple unit collection of platelets from the one eligible donors in a single procedure. The advantages of this procedure are to maximize donor resources, minimize risk of transfusion transmitted diseases and reduce production costs.

Collection Efficacies of a New Apheresis System for Double Dose Platelet Collection (continued)

Aims: The aims of this study is to evaluate the performance and collection efficacy of the AmiCORE Apheresis System, Frensenius Kabi AG, Germany for collection of double dose platelet (DDP). The platelet quality characteristics and donor safety were also evaluated.

Methods: Eighteen repeated donors were recruited for DDP. DDP were collected in 100% plasma for the target of 5.6 x 10^{11}. Donor pre- and post-donation parameters, procedure and platelet quality characteristics were measured. Donor reaction were observed.

Results: Prior to platelet collection, donors for DDP collection had an average platelet count of 313 ± 43 x 10^3/µL. None of the donors have post-donation platelet count less than 100 x 10^3/µL. Red cell loss from DDP collection averaged 21 ± 1 mL. Collection times averaged 87 ± 21 minutes. The DDP collections had an average platelet collection efficiency of 82.59 ± 5.56%, producing a total average platelet yield of 6.50 ± 0.44 x 10^{11}. The average actual to targeted platelet yield ratios was 1.16 ± 0.08. All of DDP had residual white blood cells < 1 x 10^6/unit. No adverse events were reported from any donors.

Summary/Conclusions: The efficiency and safety of DDP collection by the AmiCORE Apheresis System has been revealed in this evaluation. Leukoreduced platelets had acceptable characteristics and passed international standard requirement.

FRESENIUS KABI
caring for life

Fresenius Kabi AG
61346 Bad Homburg
Germany

Phone: +49 61 72 608-0
Fax: +49 6172 608-5786

amicore@fresenius-kabi.com
www.fresenius-kabi.com