

Supplement 3

Preparation of replaced platelet concentrates using M-sol

(Modified SOP at Japanese Red Cross Hokkaido Blood Center, Sapporo, Japan)

1. Reagents and materials



Platelet concentrates (PC)



Additive solution (M-sol)

When M-sol is vacuum packed by aluminum package, check the vacuum condition before usage. (No breakage on the package and vacuum condition is kept well)

After opening the package, use M-sol as soon as possible.



300mL single bag for sterile connection device (SCD)

2. Method for preparation

- ① Centrifuge PC(2930 rpm, 10 min, 22°C)



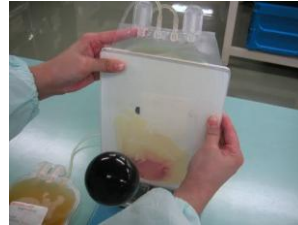
Put the PO bag in a centrifuge cup and centrifuge.

- ② Connect the PO bag with 300mL single bag using SCD.

- ③ Set it in a separation stand.



- ④ Remove supernatant as much as possible.



Residual supernatant is hardly visible in the PO bag

- ⑤ Connect the PO bag with the M-sol bag using SCD and add 220 mL (220 g) of M-sol in to the bag.



Additive solution (M-sol)

Put the PO bag on the electrical scale and press tare button. Then add 220 g of M-sol into the bag.

- ⑥ Seal and cut off the M-sol bag and place the PO bag for 30 min at room temperature.

- ⑦ After placing, agitate the PO bag for 30 min.

If any clots are found in PO bag after 30 min agitation, continue agitating while the clots disappear.

- ⑧ Visual inspection for PO bag.

Practice visual inspection (clots and swelling etc.), and check if the appearance is proper.



- ⑨ Count the platelet number of replaced-PC.

- ⑩ Measure the volume.

- ⑪ Calculate the recovery percentile of platelet.

$$* \% \text{ recovery} = \frac{\text{total platelet count after washing}}{\text{total platelet count before washing}} \times 100$$