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2021

Study Title

We keep getting aggregates in platelets: Let’s GET AGGRIP on aggregates!

Study Description

BEST members have indicated that their centre has experienced problems with persistent platelet aggregates. In an international Vox Sanguinis Forum, some respondents indicated that up to 20% of their apheresis platelets may contain aggregates. Platelet components with aggregates are typically discarded.

Published data suggests that platelets from some donors have a greater tendency to form aggregates. Platelets with aggregates also tend to be more activated with increased P-selectin and more TGF-B1, RANTES and PF4 release. There is no published data to suggest whether platelet components with smaller aggregates or lower numbers of aggregates may be less activated than components with large aggregates/large numbers of aggregates, although limited preliminary data suggests there might be a difference. If this were the case it might be possible that some platelet components with aggregates could be kept in inventory to reduce wastage. Similarly, the effect of removing aggregates by a transfusion giving set or other forms of filtration has not been assessed
It is proposed to address these questions in an international study through the BEST Collaborative.

The study aims are:
To determine whether apheresis platelet components containing aggregates are more activated
To determine whether the size and number of aggregates influences the in vitro quality of platelet components
To compare in vitro quality of platelet components with aggregates before and after filtration

Study Status

Active

Publication Number

Teams

CC

Study Leaders

Marks