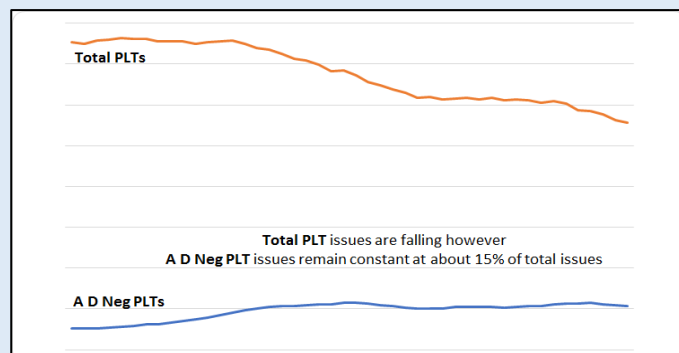


## Conserving the supply of A D Negative platelets

### How you can help

Overall demand for platelets continues to reduce, whereas requests for group A D Negative platelets remains high and has resulted in several shortage alerts in the last 12 months.

There are strategies you can implement to help ensure the supply of this group is available for patients when they need it.



### BSH Major Haemorrhage addendum, March 2017

If platelets are required before the blood group of the patient is known, group A should be used. D negative platelets should be used for females less than 50 years of age of unknown group.

**CHANGED TO**

**It is acceptable to use ABO-incompatible platelets negative for high titre agglutinins in the management of patients with major haemorrhage.**

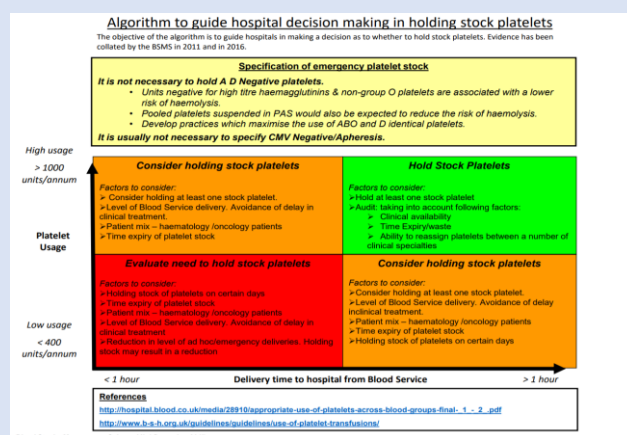
### Did you know...

- ABO-matched platelets give the highest platelet count increment. Major ABO mismatch gives the lowest increment. <sup>(1)</sup>
- It is not necessary to hold A D Negative platelets as emergency platelet stock.
- Units negative for high titre haemagglutinins & non-group O platelets are associated with a lower risk of haemolysis. <sup>(2)</sup>
- Pooled platelets suspended in PAS would also be expected to reduce the risk of haemolysis. <sup>(3)</sup>



### What you can do...

- Develop practices which maximise the use of ABO and D identical platelets.
- Review ordering patterns – only order A D Negative platelets for named patients.
- Review activity and wastage of A D Negative platelets.
- Stock an alternative to A D Negative platelets – contact the BSMS for advice.
- Pilot change in practice.
- Review stock holding using the BSMS algorithm. (<http://www.bloodstocks.co.uk/pdf/platelet-stock-algorithm.pdf>)



### References

- (1) Triulzi DJ et al. The impact of platelet transfusion characteristics on post transfusion platelet increments and clinical bleeding in patients with hypoproliferative thrombocytopenia. - *Blood* (2012); 119(23):5553-5562
- (2) Estcourt, L et al. Guidelines for the use of platelet transfusions. - *Br J Haematol* (2017);176: 365-394
- (3) PHB Bolton-Maggs (Ed) D Poles et al. on behalf of the Serious Hazards of Transfusion (SHOT) Steering Group. - *The 2017 Annual SHOT Report* (2018)

## Algorithm to guide hospital decision making in holding stock platelets

The objective of the algorithm is to guide hospitals in making a decision as to whether to hold stock platelets. Evidence has been collated by the BSMS in 2011 and in 2016.

**Specification of emergency platelet stock**

**It is not necessary to hold A D Negative platelets.**

- Units negative for high titre haemagglutinins & non-group O platelets are associated with a lower risk of haemolysis.
- Pooled platelets suspended in PAS would also be expected to reduce the risk of haemolysis.
- Develop practices which maximise the use of ABO and D identical platelets.

**It is usually not necessary to specify CMV Negative/Apheresis.**

High usage  
> 1000  
units/annum

Platelet  
Usage

Low usage  
< 400  
units/annum

<p style="text-align: center;"><b>Consider holding stock platelets</b></p> <p><i>Factors to consider:</i></p> <ul style="list-style-type: none"> <li>➢ Consider holding at least one stock platelet.</li> <li>➢ Level of Blood Service delivery. Avoidance of delay in clinical treatment.</li> <li>➢ Patient mix – haematology /oncology patients</li> <li>➢ Time expiry of platelet stock</li> </ul>	<p style="text-align: center;"><b>Hold Stock Platelets</b></p> <p><i>Factors to consider:</i></p> <ul style="list-style-type: none"> <li>➢ Hold at least one stock platelet</li> <li>➢ Audit: taking into account following factors:                             <ul style="list-style-type: none"> <li>➢ Clinical availability</li> <li>➢ Time Expiry/waste</li> <li>➢ Ability to reassign platelets between a number of clinical specialities</li> </ul> </li> </ul>
<p style="text-align: center;"><b>Evaluate need to hold stock platelets</b></p> <p><i>Factors to consider:</i></p> <ul style="list-style-type: none"> <li>➢ Holding stock of platelets on certain days</li> <li>➢ Time expiry of platelet stock</li> <li>➢ Patient mix – haematology /oncology patients</li> <li>➢ Level of Blood Service delivery. Avoidance of delay in clinical treatment</li> <li>➢ Reduction in level of ad hoc/emergency deliveries. Holding stock may result in a reduction</li> </ul>	<p style="text-align: center;"><b>Consider holding stock platelets</b></p> <p><i>Factors to consider:</i></p> <ul style="list-style-type: none"> <li>➢ Consider holding at least one stock platelet.</li> <li>➢ Level of Blood Service delivery. Avoidance of delay in clinical treatment.</li> <li>➢ Patient mix – haematology /oncology patients</li> <li>➢ Time expiry of platelet stock</li> <li>➢ Holding stock of platelets on certain days</li> </ul>

< 1 hour

Delivery time to hospital from Blood Service

> 1 hour

**References**

<http://hospital.blood.co.uk/media/28910/appropriate-use-of-platelets-across-blood-groups-final-1-2.pdf>

<http://www.b-s-h.org.uk/guidelines/guidelines/use-of-platelet-transfusions/>