

Apheresis platelet MYTHBUSTER

Q: Are AD Negative platelets equivalent to matched platelets?

A: Group matched platelets - ABO and D group optimises incremental rise and is the best choice for patients unless HLA required.

[Conserving AD neg platelets](#)

[Guidance for transfusion across groups](#)

Q: Which platelets MUST be apheresis?

- A:**
1. Human Leucocyte Antigen / Human Platelet Antigen (HLA/HPA) selected platelets for a named patient
 2. Platelets for intra-uterine and neonatal transfusions
 3. Platelets from an IgA deficient donor

For IgA deficient patients order by arrangement with an NHSBT consultant

[HLA ordering](#)

MYTH:

"Apheresis platelets should be used for patients who are not demonstrating a good post-transfusion platelet increment."

FACT:

There is no benefit from giving randomly selected apheresis platelets in these cases. Instead, take an immediate platelet increment (10-30mins post transfusion) after administering ABO matched platelets.

If the increment result is poor, perform investigations for HLA antibodies

[BSH Clinical Guidelines](#) [Slichter SJ et al](#) [TRAP study](#)

MYTH:

"Stock platelets should always be apheresis."

FACT:

NHSBT does not recommend holding apheresis platelets as stock.

MYTH:

"Apheresis platelets cause fewer allergic reactions."

FACT:

Evidence shows that allergic reactions are more likely with apheresis than pooled platelets.

Allergic reactions are usually caused by plasma proteins. Therefore, for patients at increased risk of reactions, pooled platelets suspended in a 70:30 PAS:plasma ratio, are preferable to apheresis platelets suspended in 100% plasma.

[SHOT](#)

Q: Is there a risk of HLA sensitisation from platelets?

A: Both apheresis and pooled platelets are leucodepleted reducing the risk of HLA sensitisation.

The [TRAP study](#) shows no significant difference in the rate of alloimmunisation between apheresis and pooled platelets.

Q: What about cytomegalovirus (CMV)?

A: CMV negative blood is rarely required.

Only order CMV negative components for patients who require them for the following reasons:

- Intra-uterine transfusions
- Neonates up to 28 days post expected date of delivery
- Elective transfusions during pregnancy (not during labour or delivery)

Do not delay emergency transfusion if CMV negative components are not available

[Cytomegalovirus Tested Blood Components](#)

[CMV Factsheet](#)