

# Apheresis Platelets Myth Buster

### Which platelets **MUST** be apheresis?

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*

[Platelet changes](#) • [Change in provision of apheresis platelets](#)

### Are apheresis platelets preferred in children and young people?

Those born after 1/1/96 may benefit from apheresis platelets to reduce the risk of variant Creutzfeldt-Jakob Disease (vCJD). The evidence to support this is very low quality. If this would delay treatment or the patient is at an increased risk of an allergic reaction pooled platelets which are suspended in Platelet Additive Solution (PAS) should be used.

[Platelet changes](#) • [Change in provision of apheresis platelets](#) • [BSH Clinical guidelines](#)

### Risk of HLA sensitisation from platelets

The [TRAP study](#) shows no significant difference in the rate of alloimmunisation between apheresis and pooled platelets. Both apheresis and pooled platelets are leucodepleted reducing the risk of HLA sensitisation.

### What about cytomegalovirus (CMV)?

CMV negative blood is rarely required.

**Do not order CMV negative components unless the patient requires them**

- 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](#)

**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

[Clinical guidelines](#) • [Slichter SJ et al](#) • [TRAP study](#)

**Myth:** "Apheresis platelets are a better component than pooled platelets and should be held as stock."

**Fact:** NHSBT does not recommend holding apheresis platelets as stock unless this is to support a children's hospital.

[Platelet changes](#) • [Change in provision of apheresis platelets](#)

**Myth:** "Apheresis platelets cause fewer allergic reactions."

**Fact:** There is evidence that apheresis platelets are likely to cause **more** allergic reactions. Allergic reactions are usually caused by plasma proteins therefore pooled platelets suspended in a 70:30 PAS:plasma ratio rather than apheresis platelets suspended in 100% plasma are preferred in patients at an increased risk.

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