



Scottish National Blood Transfusion Service  
Policy Record

Ref: NATP CLIN 041 01  
Cat: CLINICAL



**Title:**

**THE USE OF GROUP A FRESH FROZEN PLASMA IN EMERGENCY PATIENTS WHERE THE BLOOD GROUP IS UNKNOWN**

**Statement of Policy:**

It is acceptable to change from Group AB FFP to **HT negative Group A FFP** in unknown patients with major haemorrhage thus preserving the AB FFP supply for known group AB patients.

**Key Change From Previous Revision:**

This is a new policy

<b>Policy Agreement</b>	CGSC: 6 <sup>th</sup> June 2017	Board: N/A
<b>Supersedes Policy Ref:</b>	N/A	
<b>Date Of Implementation:</b>	1 <sup>st</sup> August 2017	



## **BACKGROUND:**

Historically, SNBTS has issued Fresh Frozen Plasma (FFP) of the same ABO group.

In an emergency situation, where the Blood Bank does not have a current patient sample so the blood group is unknown (i.e. during a 'Code Red' or when a 'Shock Pack' is requested) group AB FFP, containing no Anti-A or Anti-B or Anti-A, B antibodies, has been thawed, issued and safely transfused to patients of all ABO groups.

### **Increased usage of FFP**

In recent years, there has been a large increase in the amount of FFP used during major haemorrhage particularly in trauma. This is due to trauma teams aiming to transfuse their patients with plasma in a ratio of 1:1 with RBCs. This has put an enormous strain the supply of Group AB FFP because Group AB donors make up only 4 % of the population.

### **Changing to Group A for emergency patients**

To provide a greater volume of FFP, available for patients of unknown blood group, SNBTS will now provide Group A FFP routinely in both the emergency setting. This can be thawed to order or pre-thawed units, if this is standard clinical practice in the Blood Bank.

### **Safety of moving to Group A FFP**

1. 85 % of the population is either Group A or Group O and will be fully compatible.
2. In studies the remaining 15% (Group AB and B).
  - a. do not appear to be affected by receiving Group A FFP. This is likely to be due to the fact that in men (all plasma is from male donors), the titre of anti-B in Group A donors is generally low due to lack of stimulation by incompatible fetal red cells during pregnancy) making it less likely that the antibody will harm RBCs of group B and AB.
  - b. Transfused anti-B will be diluted in the patients total blood volume.
  - c. Emergency patients will be receiving a lot of O RhD negative RBCs reducing the number of B and AB RBCs that might be targeted by potential anti-B.
  - d. 80 % of all group B or AB patients are known to be "secretor" which means they have soluble group B antigen in their plasma which will "neutralise" any anti-B antibodies in the donor plasma.
3. From 2017 all SNBTS blood donors are tested for high titre antibodies and FFP found to lack High Titre anti-A and/or anti-B antibodies will be labelled as 'HT negative'.



For these reasons it is acceptable to change from Group AB to **HT negative Group A FFP** in unknown patients with major haemorrhage thus preserving the AB FFP supply for known group AB patients.

**REFERENCES:**

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