

# iTRANSFUSEFACTSHEET

all about blood

VOLUME 1, NUMBER 3

## I NEED TO KNOW ABOUT FRESH FROZEN PLASMA

SUE HEATLEY

### What is plasma?

Blood is composed of liquid and cells. Plasma is the pale yellow liquid part of blood. It makes up about 55 percent of the blood and is mostly made up of water (about 92 percent).

### What does plasma do?

Plasma acts as a carrier for red blood cells as well as proteins and other substances our body needs to keep our blood flowing correctly, to send important signals throughout our body, fight infection and clear out toxic waste.

### What is Fresh Frozen Plasma (FFP)?

FFP is the blood component made by the Blood Service once all blood cells are removed from a whole blood collection. If plasma is separated from the whole blood collection within 18 hours it is called “fresh”. To allow a 12 month shelf-life the “Fresh Plasma” is frozen, hence “Fresh Frozen Plasma”.

### How is FFP used?

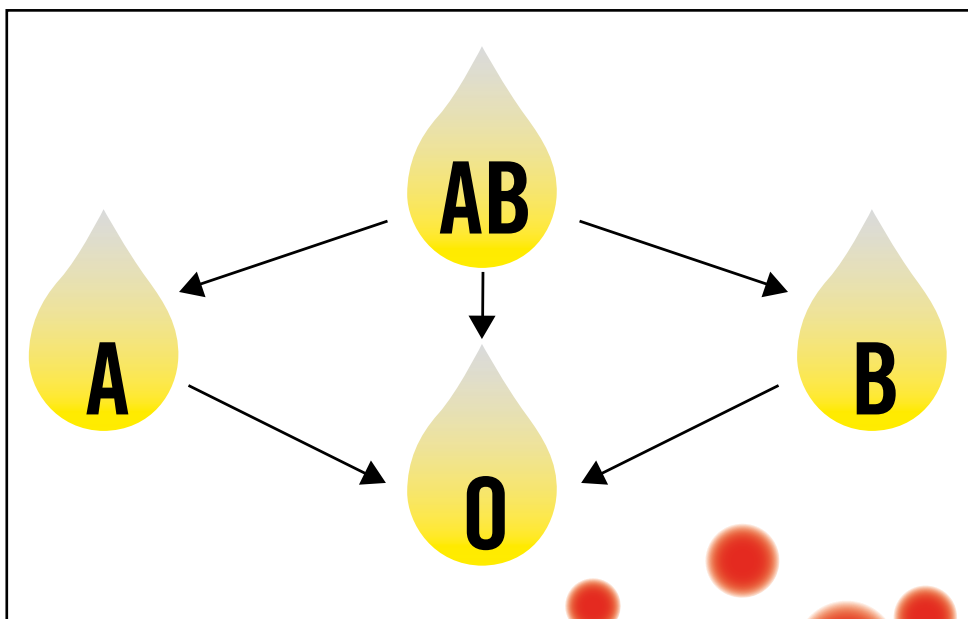
FFP is often used by trauma patients who require massive transfusion to replace clotting factors. FFP is also used by patients on blood thinning medications (eg warfarin) needing to reverse the medication effects rapidly. FFP is often used to replace missing plasma proteins or other substances.

### Does blood group matter?

Plasma contains anti-A and Anti-B antibodies depending upon blood group.<sup>1</sup> Patients should only receive FFP which does not contain antibody which could attack their own red cells.

### Group O FFP

Group O people have both Anti-A and Anti-B so group O FFP can ONLY be given to group O patients. If group O FFP were given to a group A patient, the Anti-A will attack the patient's group A red cells.



### Group A or B FFP

Group A plasma contains anti-B. A FFP can only be given to patients who are group A or O ie only patients who do not have group B red cells. Group B plasma contains anti-A. B FFP and can only be given to patients who are group B or O.

### Group AB FFP

Group AB plasma does not contain any Anti-A or Anti-B. AB FFP can be given to patients who are group AB, A, B or O. Group AB donors are called “universal plasma donors”.

### Why is AB FFP so important?

AB FFP can safely be given to any patient. This is very important in an emergency when there isn't time to get a full blood type from the patient.

### How many donors are group AB?

About 3 percent of the Australian population are blood group AB, however to meet clinical

### PACKFACT

Von Willebrand Factor is our largest plasma protein. It can stretch up to 100µm long – more than 10 times a red cell diameter.



needs, 8 percent of the FFP the Blood Service makes is AB. It is essential to manage our blood stocks with this in mind.

### Reference

1 Refer to the table in *I Need to Know About ABO* fact sheet (Vol 1, No. 1).

The information contained in this fact sheet is not intended to be medical or professional advice. The disclaimer found at transfusion.com.au applies to this fact sheet.

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