

Cryoprecipitate Dosing

- Cryoprecipitate (Cryo) is transfused as a concentrated source of fibrinogen.
- A standard adult dose is 3 4 g of fibrinogen (70 kg adult).1
- Different size packs of Cryo are available in Australia. See table below.

Standard Adult Dose of Cryoprecipitate (Cryo)

Apheresis Large (discontinued size Dec 24, use in 2025 until expiry)	4 packs
Whole Blood or Split Apheresis (new pack size from 2025) These are equivalent packs and can be combined to make a dose	9 - 10 packs*

- The Laboratory will issue the required number of packs when an 'adult dose' is requested (*10 packs, or 9 packs if an update to the current Australian Guidance is made).
- From early in 2025 (depending on local stocks), only Whole Blood Cryo & Split Apheresis Cryo packs will be available (with equivalent fibrinogen content and volume of 30 – 40 mL).
- In the case of children or neonates, refer to local critical bleeding protocols and/or contact a haematologist or senior transfusion laboratory scientist for advice. The usual starting dose for children is 5 mL/kg², in high-risk patients 10 mL/kg can be considered.

Rationale for above Adult dosing table:

Provides a dose of 3 - 4 g of fibrinogen, consistent with the National critical bleeding guideline¹

Cryoprecipitate (Cryo)	Volume (mL) mean ±1SD	Fibrinogen (mg per Pack) mean ±1SD
Apheresis Large size ³ Discontinued size (last donations 31/12/24) In use within expiry date/until stock exhausted	60 ± 2	1079 ± 299
^Split apheresis (validation data ⁴) Smaller size due to splitting of apheresis donations from 1/1/25	33 ± 3	395 ± 116
^Whole blood Cryo³ Existing product, routine use in SA from 2025	37 ± 2	372 ± 114

^Fibrinogen content per pack & per mL is equivalent, can be used interchangeably to make a dose

- In SA the predominant Cryo product used has been Apheresis (Large) packs. From 2025 with the change to the Split Apheresis pack, SA will receive this as well as Whole Blood Cryo.
- When reviewing international studies of fibrinogen replacement, ensure that the current fibrinogen content in Australian Cryoprecipitate (see current BCI3 for updates) is considered when estimating equivalence. Due to differences in manufacturing process between Blood Services internationally, fibrinogen content per 'unit' (pack) and per mL can vary considerably.
- Provides a standard adult dose independent of body weight, which is not always readily available to the hospital blood bank/transfusion laboratory.
- Some adult patients may be prescribed doses outside the above table based on their individual circumstances. Contact a haematologist or senior transfusion laboratory scientist for advice.
- Typically, 1 pack of Whole Blood (or Split Apheresis Cryo) per 5 10 kg body weight, or 1 pack of Apheresis Cryo (Large) per 10 - 20 kg body weight would be expected to increase the patient's fibringen concentration by 0.5 - 1.0 g/L.3

Developed in conjunction with SA Critical Bleeding Advisory Group.

For more information contact your hospital Blood Bank / Transfusion Lab & refer to your local Critical Bleeding Guidelines.

- 1. National Blood Authority. Patient blood management guideline for adults with critical bleeding, 2023 (accessed Nov 2024)
- 2. National Blood Authority. Patient blood management guideline for Neonatal and Paediatrics, 2016 (accessed Nov 2024)
- 3. Australian Red Cross Lifeblood, Blood Component Information (BCI): An extension of blood component labels, 2024 Edition (accessed Nov 2024)

4. Australian Red Cross Lifeblood Validation Summary, AHP communication, 13/11/24.



