

Head Office / Siège social 1800 Alta Vista Ottawa, ON K1G 4J5 T 613.739.2300 F 613.731.1411 www.blood.ca www.sang.ca

#### INFORMATION ONLY

Results of Hospital Practice Survey – Group AB Cryoprecipitate

Customer Letter # 2017-18

2017-05-18

Dear Customer:

#### **Executive Summary**

- Changes to hospital customer practices and policies regarding use of group AB cryoprecipitate could improve the supply of group AB plasma for transfusion.
- The majority of hospital customers surveyed treat patients with any blood group of cryoprecipitate whether the patient's blood group is unknown (57%) or known (86%). The largest pediatric hospital in Canada and a large Toronto hospital that operates a level III neonatal program are included in this group.
- Fibrinogen concentrate is used as a source of fibrinogen by 67% of hospitals that stock this product for patients with one or more of the following indications; congenital hypofibrinogenemia, large bleeds associated with cardiopulmonary bypass surgery, trauma, obstetrical cases, or other large bleeds.

#### Background

As stated in customer letter 2017-14, demand for group AB plasma continues to grow and, at times, the demand is greater than the supply. Approximately 3% of the general population of Canada is group AB and approximately 4% of Canadian Blood Services whole blood donors are group AB. In contrast, hospital issues of group AB plasma represented 13.4% of all plasma issued in 2016/2017.

As universal donors for plasma, group AB donors are consistently asked to donate. Further, as group AB red cells are not in high demand, the need for whole blood collections from AB donors to produce plasma and cryoprecipitate must be balanced with the need to minimize the discard and outdating of group AB red cells.

As part of Canadian Blood Services' efforts to better understand hospital practices and policies regarding the use of cryoprecipitate, and in particular group AB cryoprecipitate, we conducted a short survey in April 2017 of the top 100 individual hospitals that order cryoprecipitate. Some of these 100 hospitals are either part of a hospital corporation or a health region that have one common policy, thus we expected to receive a total of 77 responses.

We received a total of 74 responses, for a response rate of 96%. Thank you to everyone who took the time to complete the survey.

A few days before our survey was distributed, the Canadian Society for Transfusion Medicine (CSTM) <u>Standards</u> for Hospital Transfusion Services, version 4 April 2017 was published. Article 5.4.3.2 states that, "Adult recipients can be transfused with any ABO group of cryoprecipitate.<sup>10.7.6</sup>"

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Please note that we will update our Circular of Information for the Use of Human Blood Components – Plasma Components. CSA blood and blood components standard Z902-15 (December 2015), article 10.7.6 states that "A policy shall be in place concerning ABO compatibility of cryoprecipitate components."

Below is a summary of the survey responses. We trust that sharing these hospital practices will serve as a source of guidance for all hospitals served by Canadian Blood Services, especially where only group AB cryoprecipitate is currently used.

## When a Patient's Blood Group Is Unknown

- 57% (42) of respondents prepare and issue <u>any</u> blood group of cryoprecipitate. One of those is the largest pediatric hospital in Canada; another is a large downtown Toronto hospital that operates a level III neonatal program.
- 14% (10) prepare and issue only group AB.
- 12% (9) prepare and issue group AB cryoprecipitate for neonates only.
- 18% (13) answered "Other", 9 of which do not stock group AB cryoprecipitate.

# If You Provide Group AB When Patient's Group is Unknown, What is the Rationale?

- 4 responded it was historic policy.
- 3 responded that they would use another group if group AB cryoprecipitate was not available.
- 1 responded that they would use fibringen concentrate.
- 1 responded their policy is based on the Canadian Blood Services Circular of Information (COI) For the Use of Human Blood Components Plasma Components. Note; as indicated above, the COI will be updated.
- 1 responded that they wish to provide the best component for the patient.

## Ordering Fibrinogen Concentrate

- 54% (40) order fibringen concentrate from Canadian Blood Services.
- 46% (34) do not order fibrinogen concentrate from Canadian Blood Services.

#### Types of Patients Treated with Fibrinogen Concentrate

- 23% (9) only use it to treat patients with congenital hypofibrinogenemia.
- 67% (27) use it to treat patients for a combination of the following; congenital hypofibrinogenemia, cardiopulmonary bypass surgery, trauma, obstetrical bleeds, other large bleeds.
- 2.5% (1) used it to treat a patient with toxic shock syndrome.
- 2.5% (1) use it at the request of the ordering physician.
- 2.5% (1) have fibrinogen concentrate in stock at the hospital transfusion service, but have not yet used it.

## When a Patient's Blood Group Is Known

- 86% (64) are willing to use any blood group of cryoprecipitate for transfusion.
- 14% (10) are not willing to use any blood group of cryoprecipitate for transfusion.

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## If Not Willing to Provide Any Group When Patient's Group is **Known**, What is the Rationale?

- 2 responded it was historic policy.
- 2 responded that treating physician's approval would be required.
- 1 responded that they only provide group specific cryoprecipitate.
- 1 responded that they stock all ABO groups of cryoprecipitate, they would give group specific.
- 1 responded that it is best to give ABO identical/compatible whenever possible.
- 1 responded that group A cryoprecipitate is the preferred substitution for group B or AB patients.
- 2 did not provide a rationale.

#### First Alternative if Canadian Blood Services is Unable to Supply Group AB Cryoprecipitate?

- 73% (54) would use another ABO of cryoprecipitate.
- 4% (3) would use fibringen concentrate.
- 23% (17) responded "other" and of those the majority (13) responded that they do not stock group AB cryoprecipitate, 3 responded that it was up to the ordering physician, and 1 responded they would wait until group AB cryoprecipitate was available.

For additional information on this topic, please also see BloodBrief background status – <u>An Update on Cryo and Fibrinogen.</u>

This customer letter can also be viewed at <a href="www.blood.ca">www.blood.ca</a> in the "Hospitals" section. If you have questions about this letter, or if you require it in an accessible format, please contact your local hospital liaison specialist.

Sincerely,

Dana Devine, Ph.D.

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Chief Medical & Scientific Officer