June 2018

Dear Hospital Colleague:

Nationally, the overall demand for red blood cells (RBCs) for transfusion has been declining since 2009. After years of progressive increase, O-negative demand has started to decline as well. From April 2017 – March 2018 a total of 84,573 O-negative RBCs were issued to hospitals served by Canadian Blood Services. This is a decrease of 12,820 units compared to four years ago (fiscal April 2012 – March 2013). The Canadian Blood Services BloodBrief was first introduced to blood system stakeholders in September 2013 and the O-neg issues growth rate has declined steadily since (Figure 1).

This shift in demand is encouraging, and is reflected in the percentage of O-negative issues that had been gradually declining slightly (Figure 2). It is important to note that some hospitals are decreasing the overall amount of RBC units received per year. Therefore, despite O-negative efficiencies, the percentage of O-negative RBC of all blood group units received may not reflect this general improvement in transfusion practice. The positive efforts of hospitals and blood system stakeholders pertaining to the optimization of O-neg red blood cell use are evident and by working together we can continue to optimize the utilization of this limited resource.

Canadian Blood Services continues to improve phenotype testing practices to ensure sufficient group specific phenotyped units are available when requested by hospitals. This will continue to help to reduce reliance on O-negative phenotyped units and improve the overall availability of O-negative units. Sustained collective effort of all blood system stakeholders is integral to address the imbalance that still exists between our O-negative donor population (10% - sourced from 6-7% of the general population) and national hospital demand (11.5%). Canadian Blood Services supports and facilitates dialogue, data sharing and promotion of best practices to minimize different patterns of practice within hospital peer groups. In September 2014, we issued a customer letter outlining challenges and highlighting best practices pertaining to O-negative RBCs. In February 2017, the National Advisory Committee on Blood and Blood Products released a position paper addressing utilization and inventory management of O-negative RBCs.

In a continued effort to promote optimal utilization of O-negative RBCs, this is the fifth year that hospital transfusion committees are being engaged via BloodBrief. This year, the BloodBrief provides three years of O-negative RBC issue data specific to hospitals, ranking within the O-neg issues list, anonymized and identified (80.2% of hospitals) issue data for hospitals across the country as a reference. Please refer to the footnotes with the BloodBrief data tables when reviewing the data.
The goal is to continue to heighten hospital awareness of issue trends over time and compared to other hospitals. Results from the BloodBrief effectiveness survey conducted in January 2016 confirmed survey results from 2014 and revealed that for 90% of survey respondents the BloodBrief highlighted data/information that was new and it also prompts hospitals to review transfusion practice and blood component demand.

Please do not hesitate to contact me directly with any questions or comments you may have regarding the content of this BloodBrief. Alternately, your local Canadian Blood Services Medical Officer or Hospital Liaison Specialist is available as well.

Sincerely,

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Figure 1: O-neg units issued by Canadian Blood Services to hospitals in all provinces (except Quebec) and corresponding growth rates since 2009.

Figure 2: O-neg as a percentage of all red blood cells issued by Canadian Blood Services to hospitals in all provinces (except Quebec) since 2009.