St. Paul's Hospital
Transfusion Medicine Service

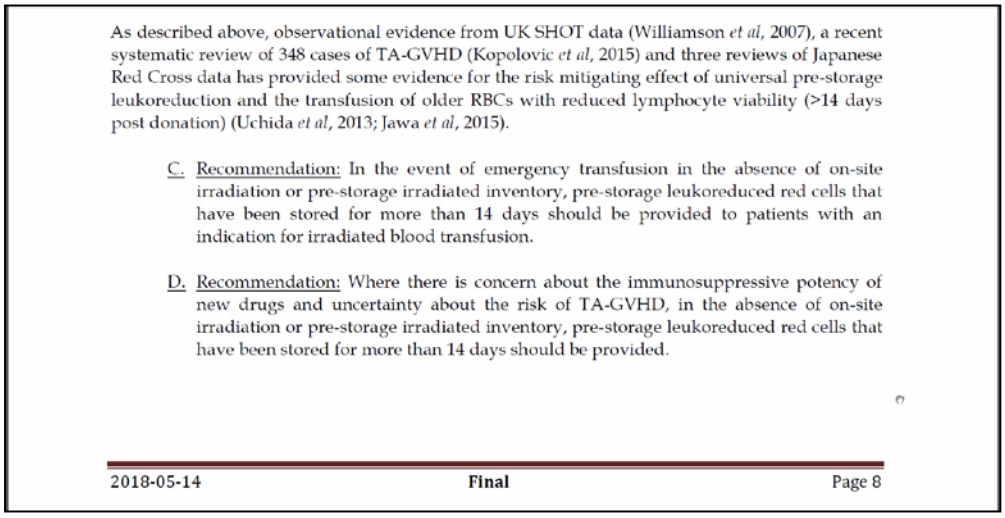
NATIONAL ADVISORY COMMITTEE ON BLOOD AND BLOOD PRODUCTS: UPDATED RECOMMENDATIONS FOR USE OF IRRADIATED BLOOD COMPONENTS IN CANADA

A few changes have been made surrounding the use of irradiated blood components in consideration of the updated recommendations released by NAC in May 2018.

Ordering physicians may notice a change in approved clinical conditions and availability of irradiated red cells.

This letter has been included for your information because:

- irradiated red cells were not readily available for your patient
- donor units that are more than 14 days old were substituted to minimize the potential risk of Transfusion Associated Graft Versus Host Disease



As described above, observational evidence from UK SHOT data (Williamson *et al*, 2007), a recent systematic review of 348 cases of TA-GVHD (Kopolovic *et al*, 2015) and three reviews of Japanese Red Cross data has provided some evidence for the risk mitigating effect of universal pre-storage leukoreduction and the transfusion of older RBCs with reduced lymphocyte viability (>14 days post donation) (Uchida *et al*, 2013; Jawa *et al*, 2015).

C. Recommendation: In the event of emergency transfusion in the absence of on-site irradiation or pre-storage irradiated inventory, pre-storage leukoreduced red cells that have been stored for more than 14 days should be provided to patients with an indication for irradiated blood transfusion.

D. Recommendation: Where there is concern about the immunosuppressive potency of new drugs and uncertainty about the risk of TA-GVHD, in the absence of on-site irradiation or pre-storage irradiated inventory, pre-storage leukoreduced red cells that have been stored for more than 14 days should be provided.

2018-05-14 **Final** Page 8

Please refer to the NAC website for more information.
https://www.nacblood.ca/resources/guidelines/downloads/Recommendations_Irradiated_Blood_Components.pdf

Contact Transfusion Medicine (local 68003) if you would like to speak to a Hematopathologist.