TRALI Risk Mitigation Overview

Transfusion Related Acute Lung Injury (TRALI) is a serious and sometimes fatal complication of transfusion. The risk of TRALI has been most often associated with high plasma volume blood components and with donor HLA antibodies specific to the recipient’s white blood cells.

On April 1, 2014, the San Diego Blood Bank (SDBB) implemented the TRALI mitigation requirements for plasma components and whole blood for allogeneic transfusion contained in the 29th Edition of AABB Standards for Blood Banks and Transfusion Services.

5.4.1.2 Plasma and Whole Blood for allogeneic transfusion shall be from males, females who have not been pregnant, or females who have been tested since their most recent pregnancy and results interpreted as negative for HLA antibodies.

Based on the risk mitigation strategies described in the AABB Association Bulletin #14-07, Interim Standard to the 29th Edition of Standards for Blood Banks and Transfusion Services, dated October 3, 2014, SDBB obtained pregnancy history from female plasma donors. If the plasma was to be released for clinical transfusion, it was collected from females who had never been pregnant.

The 30th Edition of AABB Standards for Blood Banks and Transfusion Services (BBTS Standards) was updated on April 01, 2016. On September 22, 2016 the SDBB moved to targeted HLA antibody testing for female donors donating both platelets and plasma to comply with the modified BBTS Standard 5.4.1.3 which expanded TRALI risk reduction measures to Apheresis Platelets and established a deadline for implementation.

5.4.1.3 Plasma, Apheresis Platelets, and Whole Blood for allogeneic transfusion shall be from males, females who have not been pregnant, or females who have been tested since their most recent pregnancy and results interpreted as negative for HLA antibodies.

5.4.1.3.1 For apheresis platelet components, Standard 5.4.1.3 shall be implemented by October 1, 2016.

The San Diego Blood Bank is in compliance with the TRALI risk mitigation standards.

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