Transfusion Related Acute Lung Injury (TRALI)

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FDA reports:

 TRALI implicated in 10 - 14% of fatalities of the last three years

Reactions :3, FY97, 12,FY 98, 17,99

75% cases, donor products tested
 HLA /granulocyte antibody positive

Options for reducing morbidity & mortality

- 1. Deferral of donors implicated in a single unit or in more than one multiple unit TRALI case.
- 2. Identify donors with risk factors followed by:
 - screen for HLA/granulocyte antibodies
 - deferral
 - diversion of plasma to non-injectables
 - 3. Establishment of improved physician education about TRALI and improved surveillance mechanisms for donors implicated in non-fatal as well as fatal TRALI cases

- Presentations:
- Dr. Mark Popovsky, President, Cell Processing Division & Corporate Medical Director, Haemonetics Corp. Associate Professor of Pathology, Harvard Medical School
- Dr. Patricia Kopko , Associate Director, Sacramento Medical Foundation Blood Centers, Assistant Clinical Professor, Medical Pathology, University of California, Davis
- Dr. Lynn K. Boshkov, Associate Professor and Director of Transfusion Medicine, Oregon Health Sciences University
- Dr. John Finlayson, Associate Director for Science, OBRR

Questions for the Committee:

 1. Should FDA consider interventions at this time to identify donors and/or donations with an increased risk for producing TRALI in a recipient?

1a. If not, what data are needed to define appropriate measures

- 2. If yes (in 1.), would it be appropriate to identify blood donors with a history of:
- i. multiparity (3 or more pregnancies)
- ii. allogeneic transfusion
- iii. implication in a single unit case, or more one multiple unit TRALI case.

- 2b If yes (in 1.), for donors with risk factors (as in 2), would it be appropriate to:
- i. limit collections for transfusion to plasma reduced products(e.g. washed RBCs; apheresis platelets)
- ii. divert the plasma collections to the manufacture of non-injectable products

- iii. screen for anti-HLA/granulocyte antibodies and permit negative donors to continue donating routinely
 - iv. defer such donors