Blood Banks Profit From Rising Interest Rates

By James M. Coghill, MD, and Alice Ma, MD

As the care of hematology patients has become increasingly sophisticated, the field of transfusion medicine has likewise advanced considerably. Once responsible only for the management of basic blood products, the blood bank is now overseeing an ever increasing assortment of components including human leukocytes, peripheral blood and bone marrow-derived stem cells, clotting factors, and various immunoglobulin preparations. This year's Transfusion Medicine Education Session, scheduled for 7:30 a.m. and 2:00 p.m. today, will serve to highlight important new advances in the field while at the same time educating us about several of the major transfusion-related complications we may be confronted with in our daily clinical practices. Dr. John Roback will lead off the program with a discussion of donor lymphocyte infusions (DLI) as a novel approach to boosting immunity to opportunistic viral infections following hematopoietic stem cell transplantation (HSCT). He will outline the advantages and disadvantages of virus-specific cytotoxic T-lymphocyte (CTL) expansion *in-vitro* and review newer approaches combining DLI with active recipient vaccination. Next, Dr. Richard Kaufman will discuss one of the most important issues blood bank physicians are faced with today, platelet availability. Because platelets are kept at room temperature and are prone to bacterial contamination, their storage is limited to only five days. Dr. Kaufman will reviewnew approaches aimed at extending their shelf life, and highlight alternative platelet dosing strategies that could alleviate some of the platelet shortages blood banks are often faced with. Dr. Darrell Triulzi will conclude the program with a review of transfusion-related acute lung injury (TRALI). He will discuss the incidence and pathophysiology of this serious complication, as well as approaches to its diagnosis and clinical management.

For more information on these topics, attendees are encouraged to attend the "Basic Science and Clinical Practice in Blood Transfusion" oral sessions (tomorrow at 4:30 p.m. and Monday at 3:30 p.m.). Look for Dr. Sherrill J. Slichter's presentation "*In Vivo* Studies of Autologous Platelets Stored at Room Temperature (22°C), 4°C, and 4° C with Galactosylation" (abstract #580) and Dr. Christopher C. Silliman's talk on TRALI entitled "A Two-Event *In Vivo* Model of Transfusion-Related Acute Lung Injury," (abstract #19).

Those with an interest in stem cell mobilization are encouraged to attend the Scientific Committee on Transfusion Medicine (today at 4:00 p.m. and repeated tomorrow at 7:30 a.m.). Drs. David T. Scadden, Tsvee Lapidot, and Hal E. Broxmeyer will overview the bone marrow stem cell niche as well as recent advances in the field of chemokine biology, and will discuss new approaches aimed at improving peripheral stem-cell mobilization prior to HSCT. For those wishing to learn more about the state of the art in blood substitutes, check out Dr. John S. Olsen's presentation "Designing Recombinant Hemoglobin to be a Safe and Effective Blood Substitute" at the Hemoglobin/Red Cell Scientific Program Session (today and tomorrow at 9:30 a.m.), or speak to Dr. Harvey G. Klein at his Meet-the-Expert Session "Progress in Blood Substitutes and Transfusion Medicine" tomorrow at 11:15 a.m. Finally, given the difficulties with iron overload faced by many chronically transfused patients, plan to attend Dr. Alan R. Cohen's presentation "Iron Chelators: Recent Advances" at the Iron in Hematology Education Session (today at 7:30 a.m. and 2:00 p.m.).