

Blood Centers and the Trending T-Cell Therapeutics Market

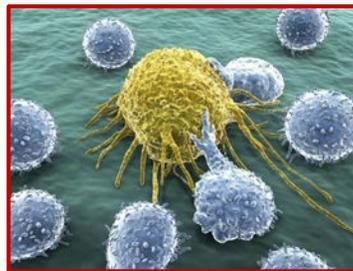
T-cell therapy research is causing a tsunami of clinical trials in the field of oncology in the last few years. While research into and practice of delivering chimeric antigen receptor (CAR) T-cell therapy, mainly CD4, to treat HIV patients has been underway for over a decade, CAR-T therapies are now being investigated for all types of cancers, including blood-borne cancers like leukemia and non-Hodgkin's lymphoma. Some blood centers have started dipping their toes into the T-cell therapeutics water.

"We think in the industry, that cellular therapies are just around the corner, but they've been around the corner for at least the last 15 years," said Philip Norris, MD, co-director of the Blood Systems Research Institute and vice-president of Research and Scientific Affairs at Blood Systems, Inc. "We're still waiting for widespread adoption of these therapies in the clinic."

That time is now. With more clinical trials and research into CAR-T therapy and tumor infiltrating lymphocyte therapy (TILs), big pharmaceutical companies like Juno, Novartis, and Kite Pharmaceuticals manufacturing are dominating the field in CAR-T production. So how can blood centers help support this new line of research and capitalize on this new emerging market? Raw materials and an eye toward the future, said Dr. Norris.

"The blood center's role in this will be significant," said Anand Padmanabhan, MD, medical director at the BloodCenter of Wisconsin (BCW), a part of Versiti, which has begun to collect mononuclear cells (MNCs)

for production of CAR-T cells, and expects participation in more studies. "This is going to be the future of precision cancer therapy. It is a very important step for blood centers to be able to leverage our core skills in apheresis to support this growing market. We are already expert at collecting stem cells from mobilized donors and patients, and we will use those skills to collect high-quality, consistent



products from non-mobilized cancer patients. In this new type of world of T-cell collection, we already have the expertise."

Geeta Paranjape, MD, medical director of clinical services at Carter BloodCare, said her organization had already been involved with different cellular therapies for a while as well so the next step into collecting MNCs for CAR-T production was an easy transition. "We've been collecting stem cells for more than one hospital in town for a number of years, this was just a natural part of the next step."

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OUR SPACE

Global Healing President John Donnelly, PhD

Tackling the Latest Challenges in Safe Blood Accessibility

Thirty years of work, sparked by the spread of HIV, has led to great improvements in blood safety and availability in developing countries, especially in sub-Saharan Africa. The World Health Organization reports that most, about 65 percent, of that new safe blood went to children under five years of age. Much of that blood also was used to save mothers during childbirth as bleeding is the leading cause of maternal deaths in developing countries.

Most of the support came from President George W. Bush's Emergency Program for AIDS Relief (PEPFAR). More than 90 percent of countries worldwide now have the ability to screen more than 90 percent of their blood donations for HIV, hepatitis B, and hepatitis C. PEPFAR money is now being directed solely to AIDS prevention and treatment. Does this mean the job is done and we can all relax? In reality, children and mothers die every day for lack of blood. For two-thirds of the world's countries, blood collections fall well below the WHO minimum recommendation of one percent of the population.

What to do? One model may be the revolutionary work that has been done to make vaccines available to children in developing countries. One dose of a combination vaccine for infants in the U.S. costs around \$50. A comparable vaccine, custom-tailored for developing country markets, today costs around \$1.50, with sufficient supplies to ensure that every child gets a full course of immunizations. This revolution came about because of a large investment of funds from private foundations and corporations, as well as governments. What has been done for vaccines shows that such revolutions are not only necessary, but possible.

Blood may be very different from vaccines, but PEPFAR showed that even a few million dollars goes a long way in saving the lives of tens of thousands of those needing blood. Achieving the goal of making safe blood accessible and affordable around the world will require a detailed understanding of the problem, and close collaborations between governments, industry, international organizations and financiers. The International Blood Safety Forum, planned for next March in conjunction with ABC's Annual Meeting, will help this dialog by bringing together experts to assess what remains to be done, and identify critical next steps leading toward solutions. Plan to join us on March 24, 2017, and be a part of the discussion. ♦

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ABC is an association of not-for-profit, independent community blood centers that helps its members provide excellence in transfusion medicine and related health services. ABC provides leadership in donor advocacy, education, national policy, quality, and safety; and in finding efficiencies for the benefit of donors, patients, and healthcare facilities by encouraging collaboration among blood organizations and by acting as a forum for sharing information and best practices.

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BLOOD CENTERS AND T-CELL THERAPEUTICS (continued from page 1)

Two years ago, Carter BloodCare jumped on board with one of the big pharma companies, Novartis, to help supply the raw mononuclear cells (MNCs) the U.K.-based pharmaceutical company needed to develop CAR-T cells for pediatric lymphoblastic leukemia patients. Carter BloodCare has also provided MNCs and stem cells for Bellicum Pharmaceuticals, based in Houston, Texas, for treating leukemia patients and are a research partner with Seattle-based biotechnology company Dendreon.

The process was not a major new investment for Carter, who already had a stem cell laboratory with trained staff and most of the equipment needed. While the blood center is fully equipped to obtain T-cells from donors and patients via apheresis, they are not involved in cord blood collection, though they can assist with clinical programs with bone marrow aspiration upon request. What Carter does, and many other centers like BCW and New York Blood Center are doing, is extracting the raw materials in terms of MNCs, supplying these cells to the laboratory that manipulate them (academic or industry lab), and then getting back the finished genetically-modified product to infuse into patients. Some of the cells are autologous, some allogenic depending on the therapy (CAR-T versus TILS for example) and which clinical trial the center has signed on to.

“You need a clinical partner,” noted Dr. Paranjape. “What we do is only a portion of the total therapy, but with the right clinical champion, we can provide this service to the right patients.”

While places like Novartis provide a relatively strict protocol on number of cells per kilogram and how to store the product, there could be room for the blood centers to play a role in developing collection and infusion protocols for T-cell therapeutics in the future, noted Dr. Padmanabhan. The Food and Drug Administration told this reporter they have not issued guidances yet regarding CAR-T development nor are there any meetings currently planned to discuss the topic, although some workshops have occurred in the somewhat recent past, 2013 and 2014.

For many blood banks and blood centers, the cost of opening an appropriate lab with which to extract the MNCs might be cost-prohibitory as there is a great deal of equipment, time, and training involved in the initial set-up. Once a blood center has decided to enter into the marketplace, the next step is deciding in which kind of T-cell therapeutics your blood center should invest.

While many cord blood bank programs exist involving blood centers, there do not appear to be many cord blood units being used to extract MNCs for CAR-T therapies. However, for the development of other T-cell therapies, such as regulatory T-cells for graft-versus-host-disease after transplantation, the University of Minnesota is using cord blood.

“The starting raw material can have pros and cons depending upon what you are trying to make out of it,” said David McKenna Jr., scientific and medical director of Molecular and Cellular Therapeutics at the University of Minnesota. “Cord blood has a naïve immune system as compared to adult blood, and that naivety ends up being an advantage for isolation of CD25+ regulatory T-cells.” For other T-cell therapies, particularly those relying on cytotoxicity such as CAR-T cells, adult blood with a mature immune system is the logical starting material.

The “explosion” of CAR-T cells research trials and interest in their use for treatment of a variety of cancers has opened a new revenue possibility for some blood centers, but the next step—or *leap* forward—will be to develop a manufacturing site for these end T-cell therapies.

“To expand beyond the current role of blood banks in supporting T-cell therapeutics to actually producing T-cell therapeutics, the next step is a pretty high bar,” said Dr. Norris. “Currently one needs a ‘clean room’ environment, which is very expensive. There are only a limited number of specialized centers in the U.S.

(continued on page 4)



BLOOD CENTERS AND T-CELL THERAPEUTICS (continued from page 3)

that produce T-cell therapies, and you need to have someone expert in the field to lead the program. That's part of the barrier into entry in this market, you need to have the expertise to really develop these therapies."

A "clean room" is a room used in manufacturing scientific and pharmaceutical products where the level of contamination, e.g. dust particles and other pollutants, are specified by the number of particles per cubic meter at a specified particle size. Staff enter and leave through airlocks; pens and paper made from natural materials are excluded; and air is constantly circulated, filtered, and pressurized. The maintenance, training, equipment, and specialties to create, manage and run a cleanroom are very cost prohibitory right now for most blood centers. As Dr. Norris stated, finding an expert in the field is also extremely tough right now as there are only a select number of people nationwide with the expertise level to run such facilities. However, the profit margins could be well worth the investment in the long term.

"If we (transfusion services) can get to the point where we produce T-cell therapeutics, this could provide a new growth area for blood banks," said Dr. Norris. "However, these therapies are very expensive and Novartis, Kite, and Juno, these big players are already heavily invested in the pharmaceutical grade CAR-T cell space. It would be unlikely we could compete in that arena as they are spending hundreds of millions of dollars in developing products. There are some other T-cell therapies that don't lend themselves to mass-production, like TILs—and that could be a space for blood centers to establish a niche."

Dr. Padmanabhan agreed, saying T-cell manipulation could be the next big move for blood centers in this space. "There will be more ways to arm these cells appropriately to target cancer cells and tumors. Stay tuned for more to come." 🔴

RESEARCH IN BRIEF

Substantial relief from pain crises found for sickle cell disease (SCD) patients in SUSTAIN study.

Significantly lower rates of sickle-cell related pain crises were found when patients took SEG101 (crizanlizumab, formerly SelG1), an anti-P-selectin antibody, concluded researchers from the phase two portion of the SUSTAIN study. This randomized, double-blind, multi-center (n=60) trial in the U.S., Brazil, and Jamaica, studied 198 SCD patients, some of whom were taking hydroxyurea and some who were not. Sixty-six patients received a low-dose (2.5 mg per kilogram of body weight [bw]), 67 patients received a high-dose (5.0 mg per kg of bw), and 65 received a placebo intravenously 14 times over a one-year period. The study, funded by Selexys Pharmaceuticals and performed by Novartis, found the median rate of crises per year was 1.63 with high-dose crizanlizumab versus 2.98 with placebo (a 45.3 percent decrease). The median time to the first pain crisis was significantly longer with high-dose crizanlizumab than with placebo (4.07 vs. 1.38 months), as was the median time to the second crisis (10.32 vs. 5.09 months). There was also a 62.9 percent lower rate of uncomplicated crises with high-dose crizanlizumab versus placebo. Serious adverse events were reported in 55 patients as well as five deaths.

Citation: Ataga K.I., Kutlar A., Kanter J., *et al.* Crizanlizumab for the Prevention of Pain Crises in Sickle Cell Disease. *New England Journal of Medicine*. December 3, 2016. DOI: 10.1056/NEJMoa1611770.

***Babesia microti* testing for blood donors.** The American Red Cross performed a 22-month study using fluorescence immunoassays (AFIAs) for *B. microti* antibodies and real-time polymerase-chain-reaction (PCR) assays for *B. microti* DNA on blood-donation samples obtained in Connecticut, Massachusetts, Minnesota, and Wisconsin—areas with epidemic seasonal *B. microti* infections. The researchers found that of the 89,153 blood-donation samples tested, 335 (0.38 percent) were antibody positive, suggesting past or present infection. Of those testing positive, 67 (20 percent) were also PCR-positive and nine PCR-positive samples were antibody-negative (in the seronegative window). Samples were positive throughout the year, and PCR positive samples were found year round. There is currently no licensed blood screening test for *B. microti* and blood centers have relied on donor history questionnaires that have very poor sensitivity and specificity.

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America's Blood Centers®
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INSIDE ABC

The programs and services described in the Inside ABC section are available to ABC member blood centers and their staff only, unless otherwise specified.

The 3rd International Blood Safety Forum



GLOBAL HEALING

ABC is proud to once again partner with Global Healing, an international non-profit organization dedicated to improving patient care in lower income countries, to provide the 3rd International Blood Safety Forum (IBSF). The IBSF has been featured at numerous ABC Annual Meetings and provides a chance to bring together some of the most brilliant minds in the blood industry from the U.S. and across the globe. This year the IBSF will focus on making safe blood products more widely available, and affordable, to help decrease the rates of maternal mortality, childhood anemia, and trauma death worldwide. The IBSF will also review the progress that has been made under the President's Emergency Plan for AIDS Relief (PEPFAR) and the gaps still remaining in access to safe blood. The Global Healing website notes that PEPFAR resources are now being redirected to HIV testing and treatment, leaving gaps in the accessibility of a safe blood supply in many developing countries. IBSF speakers will analyze the cost drivers for safe blood and present the business case for increasing the supply of safe blood in developing countries, while audience members will collaborate to put forth potential solutions to the current shortages of affordable blood products in the developing world. For more information, visit [the Global Healing IBSF website](#).

Download the Benefits and Compensation Survey

America's Blood Centers' 2016 Compensation and Benefits Survey results are now available for purchase. This second-tier management survey was designed by Gallagher Surveys, in collaboration with ABC's Human Resources Committee. With over 33 blood centers completing the survey and including data on over 9,600 employees from 67 titles, you will receive the most current and accurate trends in compensation and benefits programs at ABC member blood centers. Prices are accordingly: participants, \$450; Non-Participants, \$900. To purchase the survey, e-mail [Annmarie Flaherty](#).

A Visit From Jolly St. Nick

ABC would like to thank Visit Anchorage for sending over some holiday magic Thursday, December 8, to our Washington, D.C. office. ABC would also like to thank ABC member center Blood Bank of Alaska as a future host of the 2020 ABC Summer Meeting and MD Workshop in Anchorage. Happy Holidays! ❄️



RESEARCH IN BRIEF (continued from page 4)

Citations: Moritz E.D., Winton C.S., Tonnetti L., et al. Screening for *Babesia microti* in the U.S. Blood Supply. *New England Journal of Medicine*. December 8, 2016. DOI: 10.1056/NEJMoa1600897.

Investigators in Cleveland demonstrated a cardioprotective role of nitric oxide (NO) bound to hemoglobin (SNO-hgb) in animal models of myocardial infarction (MI) and heart failure. NO is sometimes called the third respiratory gas after oxygen and carbon dioxide. SNO-hgb, rather than NO itself, is a potent vasodilator with an important role in regulation of oxygen delivery to hypoxic tissue. This suggests that RBCs may play an important role in the protection of ischemic tissue. Zhang *et al.* have demonstrated that mice with mutant hemoglobin that does not bind NO, compared to wild type controls, have increased cardiac injury and mortality in models of MI and heart failure. Conversely, adaptive collateral vascularization was promoted in some mutant mice and was associated with reduced cardiac injury. The results suggest the potential importance of RBCs in the response to tissue hypoxia, and may suggest therapeutic opportunities to improve myocardial oxygenation. The results also suggest SNO-hgb should be investigated as a biomarker for heart disease and cardiovascular risk.

Citation: Zhang R., Hess D.T., Reynolds J.D., Stamler J.S. Hemoglobin S-nitrosylation plays an essential role in cardioprotection. *Journal of Clinical Investigation*. December 2016. DOI:10.1172/JCI90425. ♦

BRIEFLY NOTED

Clinicians should take more heed when administering stem cells. Experts from the Food and Drug Administration (FDA) Center for Biologics Evaluation and Research wrote a commentary piece in the *New England Journal of Medicine* highlighting how clinicians are performing stem cell injections without adequate clinical trials to support their use. The FDA noted that the safety and efficacy of stem cells derived from peripheral blood or bone marrow for hematopoietic reconstitution has been well-established; their use, autologous or allogenic, for other indications, such as orthopedic or neurological diseases, is not established yet. The authors cited a few cases in which autologous stem cells were given to patients with a neurological disease, kidney disease, and breast cancer and caused adverse events including neurological injury and tumors. The regulatory agency does not require large trials to prove benefits outweigh risks, the authors noted, and while they are hopeful regarding the capabilities of stem cells, adequate clinical trials must be performed to prove use of these cells, even if autologous stem cells, is safe and effective.

Citation: Marks P.W., Witten C.M., and Califf R.M. Clarifying Stem-Cell Therapy's Benefits and Risks. *NEJM*. November 30, 2016 online. DOI: 10.1056/NEJMp1613723.

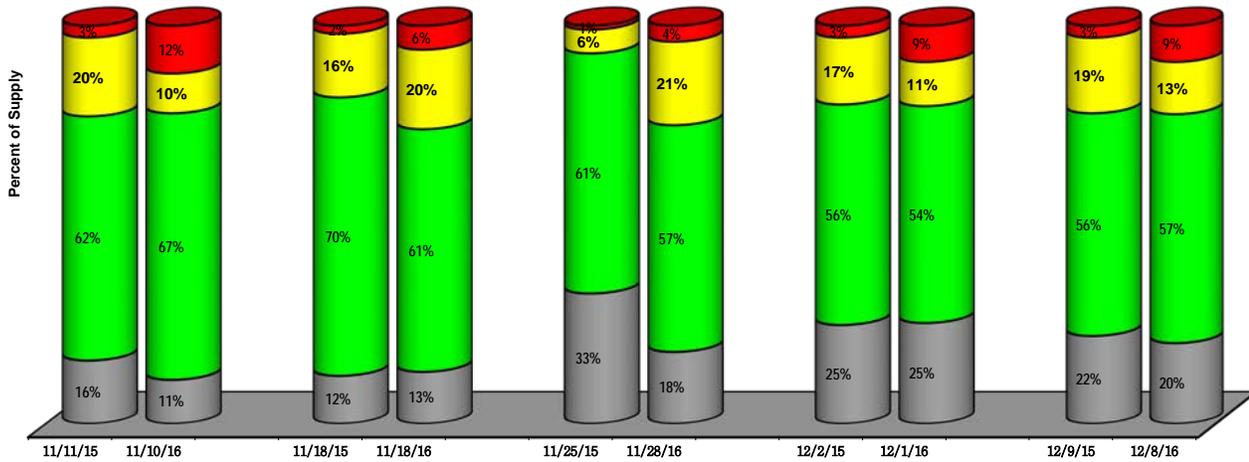
AABB has published its [2012 to 2014 Donor Hemovigilance Report](#). There was a slight increase in number of adverse donor reactions, with vasovagal reactions and needle-related local injuries resulting in hematomas or bruises being the most common. The number of organizations reporting and included in the report doubled from five in 2012 to 10 in 2014, yet the number of donations stayed close in number, 1.2 million to 1.3 million, respectively. The rate of adverse donor reactions went slightly up during this time period from 22.2 reactions per 1,000 donations to 22.8. Vasovagal reactions remains the most common type of reaction and increased slightly from 2012 to 2014 to a rate of 16.3 per 1,000 donations. Most such reactions were categorized as "prefaint," without any loss of consciousness. (Source: AABB Biovigilance Report, December 1, 2016.) ♦

Join us for the
ABC SMT Journal Club Webinar

December 13, 2016
1:00 p.m. to 2:00 p.m. EST
For more information, click [here](#)



STOPLIGHT: Status of the ABC Blood Supply, 2015 vs. 2016



The order of the bars is (from top to bottom), red, yellow, green, and no response

ADRP launches a new website

Enhancing your donor recruitment career just got easier with the introduction of ADRP’s new website. The new site is designed to help ADRP subscribers take advantage of the many benefits offered to them, including access to educational resources and additional networking opportunities. The new site is optimized for mobile devices and tablets as well, making it easier to navigate on-the-go. Subscribers can search for recruitment or collections resources, network with their industry friends via new forums, and update their subscription or profile on the new site.



“ADRP subscribers are engaged technology users,” said Christine Hayes, ADRP President, “These resources were developed to help the ADRP community easily find and use the benefits available to them and get the most out of their subscription.”

The new website also offers an optimized subscription renewal process that allows users to update their subscription for 2017 quickly and easily. ADRP offers annual subscriptions for only \$85 per year (\$65 per year for ABC members), which provides access to all subscriber-only content, free webinars, and discounts to the annual ADRP conference.

To take advantage of benefits and services offered to ADRP subscribers, or to find out more about ADRP, visit us [online](#). ♦



Registration is now open for the 2017 America’s Blood Centers Annual Meeting



AMERICA'S BLOOD CENTERS

55th ANNUAL MEETING



"The 2017 ABC Annual Meeting in Washington, DC is the premier place for industry leaders to experience peer-to-peer collaboration and networking, exclusive educational events and the opportunity to be an advocate for your blood center on Capitol Hill."
 – Christine Zambricki, Chief Executive Officer, America’s Blood Centers

Meeting Schedule

| | |
|---|--|
| <p>Friday, March 24 International Blood Safety Forum</p> <p>Saturday, March 25 Business Forum ABC Board Meeting</p> <p>Sunday, March 26 ABC Members Meeting SMT Forum & Celso Bianco Lectureship FABC Reception</p> <p>Hotel Information Ritz-Carlton (Pentagon City) Hotel room rate: \$249 + tax Reserve hotel by March 3</p> | <p>Monday, March 27 Blood Center Leadership Forum 20th Annual <i>Awards of Excellence</i> ABC’s Got Talent Season II</p> <p>Tuesday, March 28 Advocacy Forum Capitol Hill Visits</p> |
|---|--|

March 24-28, 2017 – Washington, DC

Future Leader Scholarship Program (Funded by FABC)
Details available upon registration.

Registration Fees (Member/Non-member)
Annual Meeting: \$975 / \$1,605
International Blood Safety Forum (Friday only): \$275 / \$275
International Blood Safety Forum & Business Forum (Fri & Sat only): \$410 / \$410
Business Forum through Advocacy Forum (Sat through Tue): \$760 / \$1,330
Registration opens early December. For questions, contact [Lori Beaton](#).

Sponsorship Opportunities
For questions or to learn more about sponsorship opportunities, contact [Jodi Zand](#).



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New

ABC’s Premier Education Resource is now online

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The **ABC Professional Institute** Learning Portal provides access to webinars and self-paced online courses and resources that are intended to support the success of blood center employees and industry partners. The **ABC Professional Institute** offers industry-level training, allowing you to focus on organization-level training.

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- Leadership development courses
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Find out more and register: americasblood.org or members.americasblood.org



INFECTIOUS DISEASE UPDATES

The Florida Department of Health (FDOH) cleared a Miami neighborhood of local Zika transmission. On Friday, Florida Gov. Rick Scott announced FDOH cleared the Little River Zika zone as free of local transmission. The area has not had any locally transmitted cases reported in over 45 days. The declaration comes just in time for Art Basel, a premier art show in Miami that draws thousands of visitors each year. A northern section of Miami Beach was also cleared on November 22, however, the South Beach zone of Miami Beach, remains an active Zika area. (Source: [Gov. Scott press release](#), December 2, 2016)

More than one way into the brain for Zika. Zika was previously thought to enter neural progenitor cells (NPCs) by linking to a protein called AXL. A group of researchers from Harvard Stem Cell Institute and Novartis now discovered AXL is not the only pathway for Zika into NPCs. After genetic ablation of AXL, no effect was found on ZIKV entry or ZIKV-mediated cell death in human induced pluripotent stem cell-derived NPCs or cerebral organoids, noted the new study in *Cell Stem Cell*. Their findings call into question the utility of AXL inhibitors being used to prevent birth defects for fetuses being carried in a Zika-infected mother. "It's very important for the research community to learn that targeting the AXL protein alone will not defend against Zika," said Ajamete Kaykas, co-corresponding author and a senior investigator in neuroscience at the Novartis Institutes for BioMedical Research to *Science Daily*. The scientists genetically modified human NPCs to be AXL-free (knockout) and then exposed two-dimensional cell cultures and then 3D mini-brain "organoids" containing such NPCs to the Zika virus. There was clear evidence of active Zika infection in both samples. This finding was supported by an earlier study that knocked out AXL in the brains of mice.

Citation: Well M.F., Salick M.R., Wiskow O., *et al.* Genetic Ablation of *AXL* Does Not Protect Human Neural Progenitor Cells and Cerebral Organoids from Zika Virus Infection. *Cell Stem Cell*. December 2016. DOI: <http://dx.doi.org/10.1016/j.stem.2016.11.011>. ♦

REGULATORY NEWS

ISBT Seeks Comments on new TACO criteria. The International Society of Blood Transfusion (ISBT) Working Party on Hemovigilance, in collaboration with The International Hemovigilance Network (IHN), is considering revision of the

WORD IN WASHINGTON



21st Century Cures Act passes the Senate without so much as a hiccup.

The Senate echoed the House of Representative's enthusiasm for the bill with a 94 to 5 vote on Wednesday, December 7. President Obama is expected to sign the bill into law before he leaves office as one of his final acts. "It could help us find a cure for Alzheimer's," he said in a weekly address last Saturday. "It could end cancer as we know it and help those seeking treatment for opioid addiction...It's an opportunity to save lives, and an opportunity we just can't miss." We reported on the bill's passage through the House last week in Newsletter #42. While the act does have some critics in the medical profession who have argued the bill could weaken the Food and Drug Administration as a regulatory body, there has been a large amount of support from both sides of the aisle. "The significant new support for developing customized, personal clinical treatments with the Precision Medicine Initiative, and for accelerating discoveries to cure cancer with the Cancer Moonshot program, will ultimately have major impact on our nation's health," said David Wellis, PhD, CEO of the San Diego Blood Bank. "I'm not only excited for the continued major commitment to this research, but even more delighted that our blood donor communities have the opportunity to be actively participating in these programs." ♦



REGULATORY NEWS (continued from page 9)

surveillance criteria for transfusion-associated circulatory overload (TACO). The current criteria, developed in 2013, omitted some cases that clinicians and hemovigilance systems considered as TACO cases. The proposed criteria stipulated that to be diagnosed with TACO, a patient should exhibit acute onset or worsening respiratory distress during or up to 12 hours after transfusion and have evidence of two or more of four given symptoms: acute or worsening pulmonary edema, unanticipated cardiovascular system changes, fluid overload, or elevation in natriuretic peptide levels. The revision group is accepting comments on the proposed criteria until January 31. Submit comments to [Kevin Land](#), ISBT hemovigilance working party chair, or [Jo Wiersum](#), TACO definition revision group. (Source: [AABB Biovigilance Update](#), December 1, 2016) 📌

MEMBER NEWS



LifeStream honors anniversary of San Bernardino, Calif., shooting. LifeStream, whose headquarters is less than a mile from the site of the December 2, 2015 terrorist attack that killed 14 people, honored the strength, unity, and resilience of the community during a commemorative event on the anniversary of the attack. LifeStream President, CEO and Medical Director, Rick Axelrod, MD, opened the 40-minute ceremony by asking attendees to join him in observing a moment of silence for the victims. Dr. Axelrod also praised first responders, medical professionals, and volunteer blood donors for their roles in community healing. The emergency orders for blood on that day totaled 300 units from hospitals treating the wounded that day—about triple the average daily order from the same hospitals. Dr. Axelrod thanked the donors who had given blood in the days before the attack making that surge possible, he noted. Media covered the event, included CBS, NBC, and ABC affiliates, and Reuters.

National Institute of Mental Health (NIMH) awards grant to New York Blood Center (NYBC). NYBC and the University of Pennsylvania School of Nursing received a grant from NIMH to develop an awareness program on the daily oral use of early exposure prophylaxis medication (PrEP) to help stop the acquisition of the human immunodeficiency virus (HIV). The award for \$769,578 will be spread out over three years to the two organizations as well as local community consulting groups to help at-risk women in the New York and Philadelphia metropolitan areas. (Source: [Penn Nursing Science press release](#), December 3, 2016)



Hawaiian Electric donated \$10,000 to the Blood Bank of Hawaii. The donation is one of the power company's "125 Acts of Aloha" which commemorates Hawaiian Electric's 125th anniversary. The electric company and the blood bank have a relationship that spans for generations. During World War II, Hawaiian Electric's Girls Athletic Association became Red Cross nurses and started blood drives for the blood bank, known back then as the Honolulu Blood-Plasma Bank. The HECOettes, as the nurses were called, eventually faded away, but their commitment to the community remained a tradition of Hawaiian Electric. Today,

Hawaiian Electric is the largest private blood donor in the state with more than 400 employees contributing in excess of 1600 pints annually. (Source: [Hawaii Electric press release](#), December 2, 2016)

(continued on page 11)



MEMBER NEWS (continued from page 10)

The Blood Connection participated in a rare heart-warming moment.

On November 22, blood recipient Tyler Gallagher, whose pelvic region was crushed in a work accident in June, returned to Greenville Health System to thank the many people who helped save his life, including doctors, nurses, paramedics, and the flight team that transported him to the hospital. On site were also three of the blood donors whose O-negative blood Tyler received. By the time the flight crew arrived at the scene of Mr. Gallagher's accident in June, his blood pressure was less than one-third what it should have been and was falling. The flight crew started the blood transfusion as soon as he was loaded into the helicopter and gave him both of the units they carried on board. "This type of situation is exactly why we have spent a significant time investment to ensure that all standards were met to allow blood and blood products to be available to patients on the helicopter," said Sarah Fabiano, MD, an emergency physician at Greenville Memorial Hospital and the associate medical director for GHS MedTrans air ambulance service. "Our close relationship with GHS MedTrans and The Blood Connection allows us to provide life-saving blood transfusions at accident scenes, precious minutes before transfusions could be administered in the trauma center." Today, Tyler looks at life differently, recognizing that 'every day is a blessing.' He embraced the blood donors declaring, "We're blood brothers, now!"



Oklahoma Blood Institute (OBI) launched a new database to aid researchers. [Bio-Linked](#) is an electronic roster of donors who are willing to help participate in clinical trials or basic research. Mostly, the service is to help connect researchers with donors who have rare or very specific types of diseases. Donors can sign up at a kiosk at OBI or online. Currently, there are 2,000 registered users. OBI notes that personal information will not be shared with outside sources and the donor will be contacted before any information is shared with a researcher. (Source: KFOR.com, [Oklahoma Blood Institute starts database to help in potential cures for rare diseases](#). December 1, 2016) ♦

Special Note



On behalf of America's Blood Centers and the API Curriculum Development Committee, please join me in thanking Michelle Johnson for all of her support of ABC and our industry. Michelle has served our industry, and ABC specifically, in so many ways, including facilitating training sessions, participating in many ABC committees, and helping to drive the development of America's Blood Centers Professional Institute (API). She has been a strong voice and advocate of our member blood centers over the years.

Michelle, we truly appreciate all of your support, expertise and insight and wish you all the best for a bright future!

Sincerely,

Rachelle Londa



America's Blood Centers®
Professional Institute



CALENDAR

2017

Feb. 13-14: **AABB U.S. Hemovigilance Symposium, Atlanta, Ga.** To register and more information, click [here](#).

Mar. 2-3. **IPFA 2nd Asia Workshop on Plasma Quality and Supply, Yogyakarta, Indonesia.** To register for the workshop, click [here](#).

Mar. 24-28. **Annual Meeting, America's Blood Centers, Washington, D.C.** Contact: ABC Meetings Department. Phone: (202) 654-2901; e-mail: meetings@americasblood.org.

Mar. 25: **Board Meeting, America's Blood Centers, Washington, D.C.** Contact: ABC Meetings Department. Phone: (202) 654-2901; e-mail: meetings@americasblood.org.

May 1 -3. **2017 ADRP Annual Conference, Chicago, Ill.** More information is available on the [website](#).

May 16-17. **IPFA/PEI 24th International Workshop on "Surveillance and Screening of Blood-borne Pathogens", Zagreb, Croatia.** To register, click [here](#).

June 17-21: **27th Regional Congress of the ISBT, Copenhagen, Denmark.** [Click to register for the event.](#)

Aug. 1-4. **Summer Meeting, MD Workshop & Golf Tournament, America's Blood Centers, Providence, R.I.** Contact: ABC Meetings Dept. Phone: (202) 654-2901; e-mail: meetings@americasblood.org.

Aug. 3. **Board Meeting, America's Blood Centers, Providence, R.I.** Contact: ABC Meetings Dept. Phone: (202) 654-2901; e-mail: meetings@americasblood.org.

Sept. 11-12. **IPFA/BCA 3rd Global Symposium on The Future for Blood and Plasma Donations, Atlanta, Ga.** To register, click [here](#). ♦

ABC's
Got Talent

.....
Season II Is Coming

MARCH 27, 2017

**Start Practicing & Stay
Tuned for Details!**



America's Blood Centers
It's About Life.



CLASSIFIED ADVERTISING

Classified advertisements, including notices of positions available and wanted, are published free of charge for a maximum of three weeks per position per calendar year for ABC institutional members. There are charges for non-members: \$139 per placement for ABC Newsletter subscribers and \$279 for non-subscribers. A six (6) percent processing fee will be applied to all credit card payments. Notices ordinarily are limited to 150 words. To place an ad, contact Leslie Maundy at the ABC office. Phone: (202) 654-2917; fax: (202) 393-5527; e-mail: lmaundy@americasblood.org.

POSITIONS

Director, Product Management (DPM) (Shreveport, LA). LifeShare Blood Centers, a community partner since 1942, is currently seeking a key leadership position to assist with building a culture focused on quality and efficiency while ensuring all operational policies, procedures and SOPs meet requirements of regulatory bodies. Provides oversight for product manufacturing and distribution to hospitals across a multi-state area. Provides oversight of distribution activities for seven LifeShare locations while maximizing opportunities of resource sharing products. Monitors demand to coordinate collection needs, ensuring availability of blood products. Develops and maintains training programs on compliance and error reduction, works with others to plan and meet budgetary goals and operational performance trends to ensure the business viability. Bachelor's in health or related field. Four plus years' blood banking or five years in management with logistics and sales experience. Experience in leading teams in regulated environment. Must have knowledge of strategic planning, budgeting, organizing and implementing initiatives. To apply: www.lifeshare.org under the careers tab. LifeShare Blood Centers is an EEO/AAP – M/F/D/V/Genetic Data employer maintaining Tobacco and Drug Free Workplace. All qualified applicants will receive consideration without regards to race, color, ethnicity, religion, gender, national origin, disability, veteran status, genetic data or other legally protected status.

Chief Medical Officer. Hoxworth Blood Center seeks a Chief Medical Officer to be responsible for the medical activities of Hoxworth, oversight of the operation of the Transfusion Service, and maintains service relations with 30 other hospitals in the Cincinnati area. The position accomplishes this through a respectful, constructive and collaborative style, guided by local, state and national regulations and the objectives of Hoxworth Blood Center and the University of Cincinnati College of Medicine. The position provides medical oversight, regulatory expertise and leadership to ensure the delivery, potency, purity and safety of blood/cell services and products. This position requires an active Unrestricted Ohio Medical License (or eligibility to obtain the license). Apply online at: <https://jobs.uc.edu> (Req ID# 15461). Visit our website at www.hoxworth.org. Hoxworth Blood Center is dedicated to the promotion of research and education in transfusion medicine and cell therapies. The University of Cincinnati is an affirmative action/equal opportunity employer/M/F/Vet/Disabled.

Director of Technical Services. Blood Bank of Hawaii, a medium-size blood center (50,000 RBC distribution annually), is seeking a strong leader to oversee all technical operations in the component manufacturing, quality control, and immunohematology reference laboratories and the 16-member team. Headquartered in Honolulu, we are the sole provider of blood to the state's hospitals. If you are a CLS and/or SBB with at least five years' technical and management experience in a blood bank setting, come join a dynamic, cohesive team that is effecting positive change. We offer a competitive salary and excellent benefits. Apply online now at www.BBH.org.

Director of Center Operations (DCO) (Shreveport, LA). LifeShare Blood Centers, a part of the community since 1942, is currently seeking to fill a key leadership position within our organization. The DCO is building a culture focused on Quality while ensuring all operational policies, procedures and SOPs meet the requirements of all regulatory bodies. Provides oversight for LifeShare Donor Centers (LDC) while working with peers to create departmental standards for Donor Services and Donor Recruitment. Direct oversight of Shreveport location. Works with ED-DO and other team members to develop collection plans to meet budgetary goals and operational performance trends to ensure the business viability. Bachelor's in health or related field. Four plus years' blood banking or five years in progressively responsible management positions or leading a Sales team. Demonstrated experience in leading teams in a regulated environment. Must have knowledge of strategic planning, budgeting, organizing and implementing initiatives. To apply, please visit: www.lifeshare.org under the careers tab. LifeShare Blood Centers is an EEO/AAP – M/F/D/V/Genetic Data employer maintaining a Tobacco and Drug Free Workplace. All qualified applicants will receive consideration without regards to race, color, ethnicity, religion, gender, national origin, disability, veteran status, genetic data or other legally protected status.

Director of Laboratory Services. SunCoast Blood Bank (SCBB) located on Florida's Gulf Coast, is seeking an experienced blood bank professional to direct and manage our transfusion service. SCBB provides services for an 800 bed hospital that also includes a trauma center, open heart unit and a neonatal intensive care. In addition, we provide reference laboratory services for other area

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POSITIONS (continued from page 13)

hospitals. Ideal candidates will have increasing levels of responsibility in blood banking or clinical laboratory management including supervisory experience. Bachelor's degree in appropriate field, SBB preferred and Florida Supervisor license in all laboratory areas. Competitive compensation and benefits package. Preemployment drug screening and background checks required. Interested candidates please apply [online](#).

Director Donor Recruitment & Client Services (8821-San Antonio, TX). Responsible for developing, leading, and directing Donor Recruitment and Client Services. Will conduct customer service, sales, and marketing services on behalf of the South Texas Blood & Tissue Center's (STBTC) operational business units. Will develop, ensure, and maintain positive and lasting donor and customer relations, and serve as the liaison between internal and external customers. Will ensure the accomplishment of donor recruitment and marketing goals under the supervision of the Vice President, Blood Operations. Bachelor's degree in Business Administration or Marketing/Sales preferred or equivalent work related experience required. Seven years marketing or sales management experience required. Five years leadership experience required. Five years management experience required. Relevant computer software experience required. Three years driving experience with good driving record required. BioBridge Global and its subsidiaries are proud to be an EEO/AA-M/F/D/V/Genetic Data employer that maintains a Tobacco & Drug-Free Workplace. All qualified applicants will receive consideration for employment without regard to race, color, ethnicity, religion, sex, national origin, disability, veteran status, genetic data or other legally protected status. Apply online at <https://career4.successfactors.com/sfcareer/jobreqcareer?jobId=8821&company=biobridge&usename>.

Director, Donor Recruitment (Location: San Bernardino, CA). Responsible for managing/developing systems and internal resources necessary to retain current active blood donors, increase the number of first time donors, increase the number of career donors, and increase donation frequency. Responsible for directing the tactical aspects of both mobile and telephone recruitment, including the utilization strategy and selection process of new Area Representatives and Tele-recruiters. Works closely with Collections leadership to ensure donor satisfaction and effective production planning. Works closely with the Vice President of Marketing and Public Relations on developing recruitment materials and promotional campaigns. The ideal candidate will have a bachelor's degree (BA) in Business, Marketing, Public Relations, or related field. One to two years of experience managing a Recruiting, Sales and/or Community Development function is required because of the complexity and subtlety of issues required to lead the Department. Five or more years of direct experience in the Art of Communication with a

strong background in Customer Service. Sales and Marketing experience preferred. Bilingual a plus. Current California Driver's License. For further information and to apply online please visit: www.LStream.org. Must pass pre-employment background check and drug screen. LifeStream is an Equal Opportunity Employer, M/F/D/V.

Vice President, Corporate and Community Resources. Carter Bloodcare (CBC), is seeking a missionfocused, seasoned, strategic and process-minded leader with experience in leading a group of talented individuals. The candidate must be a leader who is able to help others deliver measurable, cost-effective results that drive performance. He/she oversees core operations for the blood program. This position reports to the CEO. Qualifications: Minimum five years senior level management experience; Advance degree; Experience in blood banking; Competency in strategic planning and business development; Working knowledge of data analysis; Energetic, flexible, collaborative, and proactive; Outstanding organizational and leadership abilities; Excellent interpersonal and public speaking skills; and aptitude in decision-making and problem solving. Carter Bloodcare is an EEO/Affirmative Action employer. CBC provides equal employment opportunities to all employees and applicants and will not discriminate in its employment practices due to an employee's or applicant's race, color, religion, sex, age, national origin, genetic, and veteran or disability status. In addition to federal law requirements, Carter BloodCare complies with applicable state and local laws governing nondiscrimination in employment in every location in which the company has facilities. CBC is a Pro Disabled & Veteran Employer. Please apply online at: www.carterbloodcare.org. We maintain a drug-free workplace and perform pre-employment substance abuse testing.

Donor Services Supervisor (OneBlood Inc., Port Charlotte, FL). Supervises the phlebotomy of blood donors in a defined collection area. This position oversees the Port Charlotte Donor Center, North Port Donor Center, Venice Donor Center and two blood mobiles. The candidate for this position should be a proficient and knowledgeable operator of the apheresis technologies Alyx and Amicus. The candidate chosen for this position will be a trustworthy and proven leader, who embodies a fair and consistent leadership attitude. The candidate who is chosen for this role should be a capable multitasker and extremely detail oriented. The functions of this role will require the chosen candidate to work long hours, including early mornings, evenings, weekends and some specified holidays. This candidate should be a team player and fully embody the mission statement and vision of Oneblood Inc. Please apply online at: <https://application-oneblood.icims.com/jobs/2218/donor-services-supervisor/job?mode=view>. OneBlood is an Equal Opportunity Employer/Vet/Disability.

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POSITIONS (continued from page 14)

Quality Assurance Manager. The Community Blood Center, Appleton, WI is seeking a Quality Assurance Manager to lead our team of quality assurance professionals. This position develops, oversees, maintains and continually improves the organization's quality plan, ensures that cGMP requirements and quality standards are recognized, understood and maintained across the organization, and is responsible for maintaining the organizations deviation management systems. Candidates should be able to demonstrate strong leadership, communication, and interpersonal skills. Requirements: Bachelor's degree or equivalent experience in medical technology or a clinical, allied health field. Certified Quality Auditor (CQA) and/or Specialist Blood Bank (SBB) desired. Previous experience required in a regulatory environment with a minimum of three years in a management position in quality/compliance/regulatory/audit department, preferably in lab, blood services or healthcare industry. Working knowledge of cGMP, AABB, CLIA and CFR blood banking requirements. To apply and view complete job description of this position, go to www.communityblood.org. The Community Blood Center is an Equal Opportunity Employer M/F/Disability/Veteran.

Manager, Donor Operations (Location: La Quinta, CA (Greater Palm Springs area)). Oversees donor operations including Manual, Special Services, and Automated Donation processes, and also advanced procedures where applicable. As needed, will be trained to perform Collections Technical Procedures. Responsible for overseeing, evaluating, making decisions regarding issues of customer service and compliance to cGMP Standards, equipment monitoring and Quality Control, staff training, assignments, scheduling daily breaks, and performance. Also, responsible for monitoring and trending Productivity and Facility/Equipment Management. Education and Experience: Bachelor's degree in Business Administration, Human Resources, Nursing or Medical Technology or RN with relevant supervisory/management experience. Or three to five years Supervisory experience in a Blood Bank setting. Experience with supervising people and processes; managing and prioritizing multiple assignments requiring a high level of problem-solving and organizational skills; possess excellent written and oral communication skills. Current CPR Certification. Current California Driver's License. For further information and to apply online please visit: www.LStream.org. Must pass pre-employment background check and drug screen. LifeStream is an Equal

Opportunity Employer, M/F/D/V. LifeStream participates in the Federal governments E-verify program to determine employment eligibility.

Associate Area Representative (Location: San Bernardino, CA; Schedule: Monday through Friday;

8:00 am to 4:30 pm). The essential element of the Associate Area Representative position is to assist Area Representatives through the development of specific territories with the community; maintain, and expand professional relationships with community businesses and organizations through quality customer service; contribute to departmental objectives with the goal of adding donations from new groups and increasing donations from existing groups. The Associate Area Representative will have access to all field territories for supplemental support. Under the direction of Management, the Associate Area Representative is responsible for all aspects of the blood drive recruitment process within various territories in order to ensure successful drives and achieve the goals of the blood drive. The ideal candidate will have a bachelor's degree (BA) in Business, Marketing, Public Relations, or related field preferred. Three to four years of direct experience in the Art of Persuasive Communication, with a strong background in Customer Service. Sales and Marketing experience is strongly preferred. Current California driver's license. For further information and to apply online please visit: www.LStream.org. Must pass pre-employment background check, drug screen and physical exam. LifeStream is an Equal Opportunity Employer, M/F/D/V. LifeStream participates in the Federal government E-verify program to determine employment eligibility

Area Representative (Location: San Bernardino, CA). The essential element of the Area Representative position is to develop, maintain, and expand professional relationships with community businesses. Provide quality customer service with the goal of adding donations from new groups and increasing donations from existing groups. The Area Representative is responsible for all aspects of the Blood Drive recruitment process within an assigned territory. This includes, but is not limited to booking the drive, education, management, and coordination of the drive in cooperation with the assigned Representative or Chairperson of the Business or Organization. The ideal candidate will have a bachelor's degree (BA) in Business, Marketing, Public Relations, or related field preferred. Three to four years of direct experience in the Art of Persuasive Communication, with a strong background in Customer Service. Sales and Marketing experience is strongly preferred. Current California driver's license. For further information and to apply online please visit: www.LStream.org. Must pass preemployment background check and drug screen. LifeStream is an Equal Opportunity Employer, M/F/D/V. LifeStream participates in the Federal government E-verify program to determine employment eligibility.

Senior Collection Operations Director (Oklahoma Blood Institute; Oklahoma City, Oklahoma, USA). This position will provide leadership and direction over all aspects of the Donor Services collection team for both mobile and fixed site operations. It is responsible for assessing, developing and implementing strategic plans to

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POSITIONS (continued from page 15)

friendly competitive environment to motivate staff to achieve high system wide standings on all key performance metrics (loss rates, errors, 2RBC conversion, Global Blood Fund, etc.). Conduct routine meetings to communicate organizational vision, updates, and changes and recognize outstanding staff performance keeping morale high. Maintain adequate staffing levels. Make frequent visits to both fixed and mobile collection sites. Actively participate in internal and external assessments/inspections including corrective action plans and effectiveness checks as needed. Track and monitor inventory and collection goals, which include whole blood, automation rates, and WB conversion data. Analyze data and make adjustments to increase productivity. This includes working closely with recruitment to ensure projections are met. Prepare and manage department annual budgets. Qualifications: Bachelor's degree in management or medical field, Masters helpful. Minimum of five years' leadership/management experience, and valid driver's license. Salary: Competitive salary and excellent benefits package. How to apply: <http://obi.org/careers/>.

Reference Laboratory Technologist. Mississippi Valley Regional Blood Center (MVRBC) is offering a full time opportunity to join our team in our St. Louis facility. MVRBC is the exclusive provider of blood products and services to 85 hospitals in IA, IL, WI and MO. Our aim is to provide world-class blood products and services to communities in need. To achieve this, we need passionate, talented professionals to join our team. This individual will be performing antibody testing, antigen typing, and providing consultation to hospital staff as needed. This position is full time with a working schedule of, Monday through Friday 4:00 p.m. to 12:00 a.m., including on-call rotation for weekends and holidays. Candidates will possess MT/MLS certification with ASCP or equivalent. SBB is a plus, but not required. Ideally candidates will have three years of blood banking experience in the past five years. MVRBC offers an opportunity to be a part of a dedicated team that makes us a recognized leader in the blood center industry, an environment that makes work/life balance a priority with a generous paid time off account, a fantastic benefit package and a competitive salary. Pre-employment drug screen and background check required. Interested candidates may visit <https://www.localjobnetwork.com/apply/add/21199153> to apply. EOE: Minorities, Women, Veterans, Disabilities 📌