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**COMMENTARY**

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- e39** **KIR Genotyping Data of More Than 3 Million Individuals Are Available for Global Unrelated Stem Cell Donor Searches (Comment to: Weisdorf D, Cooley S, Wang T, et al. KIR donor selection: feasibility in identifying better donors. Biol Blood Marrow Transplant. 2018; doi: 10.1016/j.bbmt.2018.08.022.)**

*Alexander H. Schmidt, Vinzenz Lange, Jan A. Hofmann, Johannes Schetelig, Julia Pingel*

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- e41** **Adults with Philadelphia Chromosome–Like Acute Lymphoblastic Leukemia: Considerations for Allogeneic Hematopoietic Cell Transplantation in First Complete Remission**

*Ibrahim Aldoss, Muhammad O. Kamal, Stephen J. Forman, Vinod Pullarkat*

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- e46** **Ocular Graft-versus-Host Disease after Hematopoietic Cell Transplantation: Expert Review from the Late Effects and Quality of Life Working Committee of the Center for International Blood and Marrow Transplant Research and Transplant Complications Working Party of the European Society of Blood and Marrow Transplantation**

*Yoshihiro Inamoto, Nuria Valdés-Sanz, Yoko Ogawa, Monica Alves, Luigi Berchicci, John Galvin, Hildegard Greinix, Gregory A. Hale, Biljana Horn, Debra Kelly, Hien Liu, Scott Rowley, Helene Schoemans, Ami Shah, Maria Teresa Lupo Stanghellini, Vaibhav Agrawal, Ibrahim Ahmed, Asim Ali, Neel Bhatt, Michael Byrne, Saurabh Chhabra, Zachariah DeFilipp, Kristina Fahnehjelm, Nosha Farhadfar, Erich Horn, Catherine Lee, Sunita Nathan, Olaf Penack, Pinki Prasad, Seth Rotz, Alicia Rovó, Jean Yared, Steven Pavletic, Grzegorz W. Basak, Mino Battiwalla, Rafael Duarte, Bipin N. Savani, Mary E.D. Flowers, Bronwen E. Shaw, Igor Petriček*

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- 193** **Recombinant Pregnancy-Specific Glycoprotein I Has a Protective Role in a Murine Model of Acute Graft-versus-Host Disease**

*Karlie Jones, Sarah Bryant, Jian Luo, Patricia Kiesler, Sherry Koontz, James Warren, Harry Malech, Elizabeth Kang, Gabriela Dveksler*

- 204** **In Vitro Th17-Polarized Human CD4<sup>+</sup> T Cells Exacerbate Xenogeneic Graft-versus-Host Disease**

*Loïc Delens, Grégory Ehx, Joan Somja, Louise Vrancken, Ludovic Belle, Laurence Seidel, Céline Grégoire, Gilles Fransolet, Caroline Ritacco, Muriel Hannon, Sophie Dubois, Yves Beguin, Frédéric Baron, Sophie Servais*

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**216 Over-expression of PD-1 Does Not Predict Leukemic Relapse after Allogeneic Stem Cell Transplantation**

*Prachi Jain, Xin Tian, Stefan Cordes, Jinguo Chen, Caroline R. Cantilena, Christian Bradley, Reema Panjwani, Fariba Chinian, Keyvan Keyvanfar, Minoo Battiwalla, Pawel Muranski, A. John Barrett, Sawa Ito*

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**223 Manufacture of Chimeric Antigen Receptor T Cells from Mobilized Cyropreserved Peripheral Blood Stem Cell Units Depends on Monocyte Depletion**

*Annette Künkele, Christopher Brown, Adam Beebe, Stephanie Mgebroff, Adam J. Johnson, Agne Taraseviciute, Lisa S. Rolczynski, Cindy A. Chang, Olivia C. Finney, Julie R. Park, Michael C. Jensen*

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**233 Mobilization of Hematopoietic Progenitor Cells for Autologous Transplantation Using Pegfilgrastim and Plerixafor: Efficacy and Cost Implications**

*Nicole L. Watts, Marisa B. Marques, Daniel B. Peavey, Racquel Innis-Shelton, Ayman Saad, A. Di Stasi, Donna Salzman, Lawrence S. Lamb Jr, Luciano J. Costa*

**239 High-Dose Chemotherapy with Early Autologous Stem Cell Transplantation Compared to Standard Dose Chemotherapy or Delayed Transplantation in Patients with Newly Diagnosed Multiple Myeloma: A Systematic Review and Meta-Analysis**

*Tania Jain, Mohamad Bassam Sonbol, Belal Firwana, Kantha R. Kolla, Diana Almader-Douglas, Jeanne Palmer, Rafael Fonseca*

**248 Increased Efficacy of Stem Cell Chemomobilization with Intermediate-Dose Cytarabine Plus Granulocyte Colony-Stimulating Factor (G-CSF) Compared with G-CSF Alone in Patients with Multiple Myeloma: Results of a Randomized Trial**

*Tomasz Czerw, Maria Sados-Wojciechowska, Katarzyna Michalak, Jacek Najda, Włodzimierz Mendrek, Malgorzata Sobczyk-Kruszelnicka, Magdalena Glowala-Kosinska, Agata Chwieduk, Iwona Mitrus, Andrzej Smagur, Jerzy Holowiecki, Sebastian Giebel*

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**256 Ruxolitinib Therapy Followed by Reduced-Intensity Conditioning for Hematopoietic Cell Transplantation for Myelofibrosis: Myeloproliferative Disorders Research Consortium 114 Study**

*Vikas Gupta, Heidi E. Kosiorek, Adam Mead, Rebecca B. Klisovic, John P. Galvin, Dmitriy Berenzon, Abdurraheem Yacoub, Auro Viswabandya, Ruben A. Mesa, Judith Goldberg, Leah Price, Mohamed E. Salama, Rona Singer Weinberg, Raajit Rampal, Noushin Farnoud, Amylou C. Dueck, John O. Mascarenhas, Ronald Hoffman*

- 265**     **Ruxolitinib as Salvage Therapy for Chronic Graft-versus-Host Disease**  
*Badri Modi, Michael Hernandez-Henderson, Dongyun Yang, Jeremy Klein, Sanjeet Dadwal, Erin Kopp, Karen Huelsman, Sally Mokhtari, Haris Ali, Monzr M. Al Malki, Ricardo Spielberger, Amandeep Salhotra, Pablo Parker, Stephen Forman, Ryotaro Nakamura*
- 270**     **Peripheral Blood versus Bone Marrow from Unrelated Donors: Bone Marrow Allografts Have Improved Long-Term Overall and Graft-versus-Host Disease-Free, Relapse-Free Survival**  
*Amin Alousi, Tao Wang, Michael T. Hemmer, Stephen R. Spellman, Mukta Arora, Daniel R. Couriel, Joseph Pidala, Paolo Anderlini, Michael Boyiadzis, Christopher N. Bredeson, Jean-Yves Cahn, Mitchell S. Cairo, Shahinaz M. Gadalla, Shahrukh K. Hashmi, Robert Peter Gale, Junya Kanda, Rammurti T. Kamble, Mohamed A. Kharfan-Dabaja, Mark R. Litzow, Olle Ringden, Ayman A. Saad, Kirk R. Schultz, Leo F. Verdonck, Edmund K. Waller, Jean A. Yared, Shernan G. Holtan, Daniel J. Weisdorf*
- 279**     **The Anatomic Distribution of Skin Involvement in Patients with Incident Chronic Graft-versus-Host Disease**  
*Jocelyn S. Gandelman, John Zic, Anna K. Dewan, Stephanie J. Lee, Mary Flowers, Corey Cutler, Joseph Pidala, Heidi Chen, Madan H. Jagasia, Eric R. Tkaczyk*
- 287**     **Outcomes of Patients with Recurrent and Refractory Lymphoma Undergoing Allogeneic Hematopoietic Cell Transplantation with BEAM Conditioning and Sirolimus- and Tacrolimus-Based GVHD Prophylaxis**  
*Amandeep Salhotra, Matthew Mei, Tracey Stiller, Sally Mokhtari, Alex F. Herrera, Robert Chen, Leslie Popplewell, Jasmine Zain, Haris Ali, Karamjeet Sandhu, Elizabeth Budde, Auayporn Nademane, Stephen J. Forman, Ryotaro Nakamura*
- 293**     **Characterization of Late Acute and Chronic Graft-Versus-Host Disease according to the 2014 National Institutes of Health Consensus Criteria in Japanese Patients**  
*Reiko Ito, Yoshihiro Inamoto, Yoshitaka Inoue, Ayumu Ito, Takashi Tanaka, Shigeo Fuji, Keiji Okinaka, Saiko Kurosawa, Sung-Won Kim, Takuya Yamashita, Takahiro Fukuda*

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- 301**     **Outcomes after Second Hematopoietic Cell Transplantation in Children and Young Adults with Relapsed Acute Leukemia**  
*Troy C. Lund, Kwang Woo Ahn, Heather R. Tecca, Megan V. Hilgers, Hisham Abdel-Azim, Allistair Abraham, Miguel Angel Diaz, Sherif M. Badawy, Larisa Broglie, Valerie Brown, Christopher C. Dvorak, Marta Gonzalez-Vicent, Hasan Hashem, Robert J. Hayashi, David A. Jacobsohn, Michael W. Kent, Chi-kong Li, Steven P. Margossian, Paul L. Martin, Parinda Mehta, Kasiani Myers, Richard Olsson, Kristin Page, Michael A. Pulsipher, Peter J. Shaw, Angela R. Smith, Brandon M. Triplett, Michael R. Verneris, Mary Eapen*

- 307**     **Comparable Outcomes of Allogeneic Peripheral Blood versus Bone Marrow Hematopoietic Stem Cell Transplantation in Major Thalassemia: A Multivariate Long-Term Cohort Analysis**  
*Ardeshir Ghavamzadeh, Amir Kasaeian, Tahereh Rostami, Azadeh Kiumarsi*
- 313**     **Sinusoidal Obstruction Syndrome/Veno-Occlusive Disease after Autologous or Allogeneic Hematopoietic Stem Cell Transplantation in Children: a retrospective study of the Italian Hematology-Oncology Association—Hematopoietic Stem Cell Transplantation Group**  
*Maura Faraci, Alice Bertaina, Roberto Luksch, Elisabetta Calore, Edoardo Lanino, Francesco Saglio, Arcangelo Prete, Mariacristina Menconi, Giusy De Simone, Veronica Tintori, Simone Cesaro, Stella Santarone, Maria Grazia Orofino, Franco Locatelli, Marco Zecca*
- 321**     **Practice Patterns of Physician Treatment for Pediatric Chronic Myelogenous Leukemia**  
*Jeffrey R. Andolina, Michael J. Burke, Nobuko Hijiya, Sonali Chaudhury, Kirk R. Schultz, Michael E. Roth*
- 328**     **Late Mortality after Allogeneic Blood or Marrow Transplantation for Inborn Errors of Metabolism: A Report from the Blood or Marrow Transplant Survivor Study-2 (BMTSS-2)**  
*Aman Wadhwa, Yanjun Chen, Anna Holmqvist, Jessica Wu, Emily Ness, Mariel Parman, Michelle Kung, Lindsey Hageman, Liton Francisco, Elizabeth Braunlin, Weston Miller, Troy Lund, Saro Armenian, Mukta Arora, Paul Orchard, Smita Bhatia*

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- 335**     **Outcomes of Haploidentical Transplantation in Patients with Relapsed Multiple Myeloma: An EBMT/CIBMTR Report**  
*Firoozeh Sahebi, Laurent Garderet, Abraham S. Kanate, Diderik-Jan Eikema, Nina Simone Knelange, Omar F. Dávila Alvelo, Yener Koc, Didier Blaise, Qaiser Bashir, José M. Moraleda, Peter Dreger, James F. Sanchez, Stefan Ciurea, Harry Schouten, Nirav N. Shah, Mareike Verbeek, Wolf Rösler, Jose L. Diez-Martin, Stefan Schoenland, Anita D'Souza, Nicolaus Kröger, Parameswaran Hari*

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- 343**     **Cognitive Function and Quality of Life in Vorinostat-Treated Patients after Matched Unrelated Donor Myeloablative Conditioning Hematopoietic Cell Transplantation**  
*Flora Hoodin, Leah LaLonde, Josh Errickson, Kristen Votruba, Rachel Kentor, Erin Gatza, Pavan Reddy, Sung Won Choi*

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- 354** **Mainly Post-Transplant Factors Are Associated with Invasive Aspergillosis after Allogeneic Stem Cell Transplantation: A Study from the Surveillance des Aspergilloses Invasives en France and Société Francophone de Greffe de Moelle et de Thérapie Cellulaire**  
*Christine Robin, Catherine Cordonnier, Karine Sitbon, Nicole Raus, Olivier Lortholary, Sébastien Maury, Regis Peffault de la Tour, Stéphane Bretagne, Sylvie Bastuji-Garin, for the SAIF (Surveillance des Aspergilloses Invasives en France) and the SFGM-TC (Société Francophone de Greffe de Moelle et de Thérapie Cellulaire) Aspergillus Group*
- 362** **Characteristics of Late Fatal Infections after Allogeneic Hematopoietic Cell Transplantation**  
*Maxim Norkin, Bronwen E. Shaw, Ruta Brazauskas, Heather R. Tecca, Helen L. Leather, Juan Gea-Banacloche, Rammurti T. Kamble, Zachariah DeFilipp, David A. Jacobsohn, Olle Ringden, Yoshihiro Inamoto, Kimberly A. Kasow, David Buchbinder, Peter Shaw, Peiman Hematti, Raquel Schears, Sherif M. Badawy, Hillard M. Lazarus, Neel Bhatt, Biljana Horn, Saurabh Chhabra, Kristin M. Page, Betty Hamilton, Gerhard C. Hildebrandt, Jean A. Yared, Vaibhav Agrawal, Amer M. Beitinjaneh, Navneet Majhail, Tamila Kindwall-Keller, Richard F. Olsson, Helene Schoemans, Robert Peter Gale, Siddhartha Ganguly, Ibrahim A. Ahmed, Harry C. Schouten, Jane L. Liesveld, Nandita Khera, Amir Steinberg, Ami J. Shah, Melhem Solh, David I. Marks, Witold Rybka, Mahmoud Aljurf, Andrew C. Dietz, Usama Gergis, Biju George, Sachiko Seo, Mary E.D. Flowers, Minoo Battiwalla, Bipin N. Savani, Marcie L. Riches, John R. Wingard*
- 369** **A Randomized, Double-Blind, Placebo-Controlled Phase 3 Trial of Oral Brincidofovir for Cytomegalovirus Prophylaxis in Allogeneic Hematopoietic Cell Transplantation**  
*Francisco M. Marty, Drew J. Winston, Roy F. Chemaly, Kathleen M. Mullane, Tsiporah B. Shore, Genovefa A. Papanicolaou, Greg Chittick, Thomas M. Brundage, Chad Wilson, Marion E. Morrison, Scott A. Foster, W. Garrett Nichols, Michael J. Boeckh, on behalf of the SUPPRESS Trial Clinical Study Group*

## ANALYSIS

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- 382** **Collection, Cryostorage, Transplantation, and Disposal of Hematopoietic Stem Cell Products**  
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- 391** **Evaluation of a Test Dose Strategy for Pharmacokinetically-Guided Busulfan Dosing for Hematopoietic Stem Cell Transplantation**  
*Jessica M. Davis, Anastasia Ivanova, Yunro Chung, J. Ryan Shaw, Kamakshi V. Rao, Jonathan R. Ptachcinski, Andrew A. Sharf, Jonathan S. Serody, Paul M. Armistead, William A. Wood, James M. Coghill, Katarzyna J. Jamieson, Benjamin G. Vincent, Marcie L. Riches, Thomas C. Shea, Maurice D. Alexander*

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*Jeanne Palmer, Robyn Scherber, Marlene Girardo, Holly Geyer, Heidi Kosiorek, Amylou Dueck, Tania Jain, Ruben Mesa*

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**BRIEF ARTICLES**

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**e55 Umbilical Cord Blood Transplantation Using Reduced-Intensity Conditioning without Antithymocyte Globulin in Adult Patients with Severe Aplastic Anemia**

*Tetsuro Ochi, Yasushi Onishi, Kentaro Nasu, Koichi Onodera, Masahiro Kobayashi, Satoshi Ichikawa, Tohru Fujiwara, Noriko Fukuhara, Minami Yamada-Fujiwara, Hideo Harigae*

**e60 Bortezomib and Immune Globulin Have Limited Effects on Donor-Specific HLA Antibodies in Haploidentical Cord Blood Stem Cell Transplantation: Detrimental Effect of Persistent Haploidentical Donor-Specific HLA Antibodies**

*Hannah Choe, Usama Gergis, Jingmei Hsu, Adrienne Phillips, Tsiporah Shore, Paul Christos, Koen van Besien, Sebastian Mayer*

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**ERRATUM**

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**e65 Addendum to: Haploidentical Related Donor Hematopoietic Stem Cell Transplantation for DOCK8 Deficiency Using Post-Transplantation Cyclophosphamide**

*Nirali N. Shah, Alexandra F. Freeman, Dennis D. Hickstein*

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**ASBMT NOTES**

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**403 ASBMT Notes**