



David Miklos

Associate Professor of Medicine (Blood and Marrow Transplantation) at the Stanford University Medical Center

Medicine - Blood & Marrow Transplantation

 NIH Biosketch available Online

CLINICAL OFFICES

- **Stanford Cancer Center**

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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**

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Bio

BIO

I am a physician-scientist who has established a human translational research group that fosters the development of both laboratory immunologists, and clinical translational researchers. Allogeneic hematopoietic cell transplantation (alloHCT) cures blood cancer via beneficial graft-v-tumor immunity. Our overall research goal is to augment GVT while preventing detrimental graft versus host disease (GVHD). The Miklos lab pioneered protein microarray technologies to discover clinically relevant allogeneic antibodies, especially those targeting H-Y antigens following sex mismatched transplantation. Our discovery that allogeneic HY antibodies develop in association with chronic GVHD revealed a critical B cell role in chronic GVHD pathogenesis and our clinical trials established cGVHD therapeutic benefits using anti-B cell drugs rituximab and ibrutinib. We developed high-throughput sequencing of the B and T cell immune receptor thereby enabling: 1) lymphoid disease quantification, 2) detailed B and T cell donor reconstitution kinetics, and 3) clonal analysis of antigen specific responses following allo-HCT.

Immunotherapy is revolutionizing cancer treatment and as the Stanford Clinical Cancer Cell Therapy program develops and evaluates the most promising cutting-edge cell therapies for cancer patients on a variety of clinical trials. Chimeric Antigen T Cell (CAR-T) therapy targets the patient's T lymphocytes to attack their cancer by infecting their own T cells to express chimeric antigen receptor (CAR) proteins that target and kill cancer cell expressing surface proteins. Thus far, the most successful CAR-T have targeted B cell antigen CD19, and ongoing trials are treating patients with relapsed/refractory Diffuse Large B Cell Lymphoma (DLBCL) using this CAR19 therapy.

CLINICAL FOCUS

- Cancer > Blood and Marrow Transplant
- Cancer > Hematology
- Chimeric Antigen Receptor Therapy (CAR-T)
- Blood and Marrow Transplantation
- Graft vs Host Disease
- Lymphoma
- Leukemia

- Multiple Myeloma
- Hematology/Oncology

ACADEMIC APPOINTMENTS

- Associate Professor - Med Center Line, Medicine - Blood & Marrow Transplantation
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Clinical Director Cancer Cell Therapy, Stanford University, (2016- present)
- Medical Director of Stanford Cellular Therapeutics and Transplantation Laboratory, Stanford University, (2011-2016)

HONORS AND AWARDS

- Phi Beta Kappa, University of Notre Dame (1987)
- Alpha Omega Alpha, Yale Medical School (1995)
- Predoctoral Fellow, Howard Hughes Medical Institute (1989-1993)
- Medical Scientist Training Fellow, NIH (1993-1995)
- Clinical Investigator Training Program Scholar, Harvard Medical School (2001-2003)

PROFESSIONAL EDUCATION

- Medical Education: Yale University Office of the Registrar (1995) CT
- Fellowship: Dana Farber Cancer Institute Hematology Oncology Fellowship (2001) MA
- Residency: Brigham and Women's Hospital Harvard Medical School (1998) MA
- Internship: Brigham and Women's Hospital Harvard Medical School (1996) MA
- B.S., University of Notre Dame (1987)
- M.D., Yale University Medical School (1995)
- Ph.D., Yale University , Genetics (1995)

LINKS

- Bone Marrow Transplantation Site: <http://bmt.stanford.edu>
- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Miklos is a seasoned hematopoietic cell transplant (HCT) clinician and immunologist with special interest in B cell biology, tumor immunology and graft versus host disease (GVHD). His Stanford laboratory has applied cutting edge technologies to human translational research including: protein microarrays for antibody identification, antigen specific B cell identification, and next-generation deep sequencing of B and T lymphocyte cell receptors for monitoring cancer and immune responses. He has translated his laboratory insights to improve allogeneic hematopoietic cell transplantation, and his research significantly contributed to two 2017 FDA approvals: 1) Yescarta for patients with aggressive lymphoma that has failed two therapies, 2) Ibrutinib for patients with cGVHD that has failed prior therapy

Ongoing CAR-T human correlative research:

1) Phase I CAR19-22 Safety and efficacy outcomes – the first bispecific CAR-T study for patients with rel/refractory DLBCL and ALL, 2) CAR19 CD4-CD8 immune phenotyping of DLBCL patients receiving CA-T; Hypothesize: Real-time CAR-T characterization predicts toxicity. 3) Mechanisms for DLBCL treatment Failure

following CAR19 – CD19 Antigen loss accounts for 25% treatment failure. 4) Single cell RNA analysis of CAR-19 T cells in DLBCL lymph nodes following CAR-T – cell fate mapping via TCR analysis

CLINICAL TRIALS

- CD19/CD22 Chimeric Antigen Receptor T Cells and Chemotherapy in Treating Patients With Recurrent or Refractory CD19 Positive Diffuse Large B-Cell Lymphoma or B Acute Lymphoblastic Leukemia, Recruiting
- CTL019 Out of Specification MAP for ALL or DLBCL Patients, Recruiting
- Efficacy of Axicabtagene Ciloleucele Compared to Standard of Care Therapy in Subjects With Relapsed/Refractory Diffuse Large B Cell Lymphoma, Recruiting
- Obinutuzumab in cGVHD After Allogeneic Peripheral Blood Stem Cell Transplantation, Recruiting
- Safety and Efficacy of Axicabtagene Ciloleucele in Combination With Utomilumab in Adults With Refractory Large B-cell Lymphoma, Recruiting
- A Phase 2 Multicenter Study Evaluating Subjects With Relapsed/Refractory Mantle Cell Lymphoma, Not Recruiting
- Ibrutinib in Combination With Corticosteroids vs Placebo in Combination With Corticosteroids in Subjects With New Onset cGVHD, Not Recruiting
- Study of bb2121 in Multiple Myeloma, Not Recruiting

Teaching

COURSES

2016-17

- Translational Immunology: IMMUNOL 209 (Win, Spr)

2015-16

- Translational Immunology: IMMUNOL 209 (Win, Spr)

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

John Baird

Postdoctoral Research Mentor

John Baird, Jay Spiegel

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Immunology (Phd Program)
- Medicine (Masters Program)

Publications

PUBLICATIONS

- **A confirmation of chronic graft-versus-host disease prediction using allogeneic HY antibodies following sex-mismatched hematopoietic cell transplantation.** *Haematologica*
Paul, J., Nakasone, H., Sahaf, B., Wu, F., Wang, K., Ho, V., Wu, J., Kim, H., Blazar, B. R., Ritz, J., Howard, A., Cutler, C., Miklos, et al
2019
- **Long-term safety and activity of axicabtagene ciloleucele in refractory large B-cell lymphoma (ZUMA-1): a single-arm, multicentre, phase 1-2 trial.** *The Lancet. Oncology*
Locke, F. L., Ghobadi, A., Jacobson, C. A., Miklos, D. B., Lekakis, L. J., Oluwole, O. O., Lin, Y., Braunschweig, I., Hill, B. T., Timmerman, J. M., Deol, A., Reagan, P. M., Stiff, et al
2018
- **Nonmyeloablative Allogeneic Transplantation Using TLI-ATG Conditioning for Lymphoid and Myeloid Malignancies: Mature Follow-up from a Large, Single Institution Cohort**

Spinner, M. A., Kennedy, V. E., Tamaresis, J. S., Lavori, P. W., Elder, L. V., Arai, S., Johnston, L. J., Meyer, E. H., Miklos, D. B., Muffly, L. S., Negrin, R. S., Rezvani, A. R., Shizuru, et al
AMER SOC HEMATOLOGY.2018

- **Axicabtagene Ciloleucel (Axi-cel) CD19 Chimeric Antigen Receptor (CAR) T-Cell Therapy for Relapsed/Refractory Large B-Cell Lymphoma: Real World Experience**
Nastoupil, L. J., Jain, M. D., Spiegel, J. Y., Ghobadi, A., Lin, Y., Dahiya, S., Lunning, M. A., Lekakis, L. J., Reagan, P. M., Oluwole, O. O., McGuirk, J. P., Deol, A., Sehgal, et al
AMER SOC HEMATOLOGY.2018
- **1 Study of CD19/CD22 Bispecific Chimeric Antigen Receptor (CAR) Therapy in Children and Young Adults with B Cell Acute Lymphoblastic Leukemia (ALL)**
Schultz, L. M., Davis, K. L., Baggott, C., Chaudry, C., Marcy, A., Mavroukakis, S., Sahaf, B., Kong, K. A., Muffly, L. S., Kim, S., Meyer, E. H., Fry, T. J., Qin, et al
AMER SOC HEMATOLOGY.2018
- **Phase I Experience with a Bi-Specific CAR Targeting CD19 and CD22 in Adults with B-Cell Malignancies**
Hossain, N., Sahaf, B., Abramian, M., Spiegel, J. Y., Kong, K., Kim, S., Mavroukakis, S., Oak, J., Natkunam, Y., Meyer, E. H., Frank, M. J., Feldman, S. A., Long, et al
AMER SOC HEMATOLOGY.2018
- **Elevated Axicabtagene Ciloleucel (CAR-19) Expansion By Immunophenotyping Is Associated with Toxicity in Diffuse Large B-Cell Lymphoma**
Spiegel, J. Y., Sahaf, B., Hossain, N., Frank, M. J., Claire, G., Abramian, M., Latchford, T., Villa, B., Cancilla, J., Oak, J., Natkunam, Y., Long, S. R., Arai, et al
AMER SOC HEMATOLOGY.2018
- **2-Year Follow-up and High-Risk Subset Analysis of Zuma-1, the Pivotal Study of Axicabtagene Ciloleucel (Axi-Cel) in Patients with Refractory Large B Cell Lymphoma**
Neelapu, S. S., Ghobadi, A., Jacobson, C. A., Miklos, D. B., Lekakis, L. J., Oluwole, O. O., Lin, Y., Braunschweig, I., Hill, B. T., Timmerman, J. M., Deol, A., Reagan, P. M., Stiff, et al
AMER SOC HEMATOLOGY.2018
- **End of Phase 1 Results from Zuma-6: Axicabtagene Ciloleucel (Axi-Cel) in Combination with Atezolizumab for the Treatment of Patients with Refractory Diffuse Large B Cell Lymphoma**
Jacobson, C. A., Locke, F. L., Miklos, D. B., Herrera, A. F., Westin, J. R., Lee, J., Rossi, J. M., Zheng, L., Avanzi, M. P., Roberts, Z. J., Sun, J.
AMER SOC HEMATOLOGY.2018
- **Target Antigen Downregulation and Other Mechanisms of Failure after Axicabtagene Ciloleucel (CAR19) Therapy**
Oak, J., Spiegel, J. Y., Sahaf, B., Natkunam, Y., Long, S. R., Hossain, N., Mackall, C. L., Kong, K. A., Miklos, D. B.
AMER SOC HEMATOLOGY.2018
- **Small-molecule BCL6 inhibitor effectively treats mice with non-sclerodermatous chronic graft-versus-host disease. *Blood***
Paz, K., Flynn, R., Du, J., Qi, J., Luznik, L., Maillard, I., MacDonald, K. P., Hill, G. R., Serody, J. S., Murphy, W. J., Sage, P. T., Sharpe, A. H., Miklos, et al
2018
- **Clinical Response in ZUMA-1, the Pivotal Study of Axicabtagene Ciloleucel (Axi-Cel) in Patients with Refractory Large B Cell Lymphoma, May Be Influenced by Characteristics of the Pretreatment Tumor Microenvironment (TME)**
Rossi, J. M., Galon, J., Turcan, S., Danan, C., Locke, F. L., Neelapu, S. S., Miklos, D. B., Jacobson, C. A., Lekakis, L. J., Lin, Y., Ghobadi, A., Go, W. Y., Bot, et al
CIG MEDIA GROUP, LP.2018: S281
- **Detection of Measurable Residual Disease by Next-Generation Sequencing in Paired Blood and Bone Marrow Samples from Patients with Lymphoid Malignancies**
Miklos, D., Muffly, L., Lee, L., Crossley, B.
CIG MEDIA GROUP, LP.2018: S295–S296
- **Durability of Response in Patients with Refractory Large B Cell Lymphoma Treated with Axicabtagene Ciloleucel in the Pivotal Phase 2 Study, ZUMA-1**
Locke, F. L., Ghobadi, A., Jacobson, C. A., Jacobsen, E., Miklos, D. B., Lekakis, L. J., Braunschweig, I., Oluwole, O. O., Lin, Y., Siddiqi, T., Deol, A., Reagan, P. M., Farooq, et al
CIG MEDIA GROUP, LP.2018: S277–S278
- **Axicabtagene Ciloleucel in Patients with Refractory Large B Cell Lymphoma: Outcomes by Prior Lines of Therapy in the Pivotal Phase 2 Study, ZUMA-1**
Locke, F. L., Ghobadi, A., Lekakis, L. J., Miklos, D. B., Jacobson, C. A., Jacobsen, E., Braunschweig, I., Oluwole, O. O., Siddiqi, T., Lin, Y., Reagan, P. M., Farooq, U., Deol, et al

CIG MEDIA GROUP, LP.2018: S276

- **Circulating tumor DNA assessment in patients with diffuse large B-cell lymphoma following CAR T-cell therapy.** *Leukemia & lymphoma*
Hossain, N. M., Dahiya, S., Le, R., Abramian, A. M., Kong, K. A., Muffly, L. S., Miklos, D. B.
2018: 1–4
- **Characteristics of the pretreatment tumor microenvironment may influence clinical response in patients with refractory large B cell lymphoma treated with axicabtagene ciloleucel (axi-cel) in the pivotal ZUMA-1**
Rossi, J. M., Galon, J., Turcan, S., Danan, C., Locke, F. L., Neelapu, S. S., Miklos, D. B., Jacobson, C. A., Lekakis, L. J., Lin, Y., Ghobadi, A., Go, W. Y., Bot, et al
AMER ASSOC CANCER RESEARCH.2018
- **Ibrutinib-Mediated Inhibition of cGVHD Pathogenic Pre-Germinal Center B-Cells and Follicular Helper Cells While Preserving Immune Memory and Thi T-Cells**
Sahaf, B., Tebaykin, D., Hopper, M., Cheung, P., Bittencourt, F., Cutler, C., Arora, M., Waller, E. K., Jagasia, M., Pusic, I., Flowers, M. E., Logan, A. C., Jaglowski, et al
ELSEVIER SCIENCE INC.2018: S20–S21
- **Anti-Platelet-Derived Growth Factor Receptor Alpha Chain Antibodies Predict for Response to Nilotinib in Steroid-Refractory or -Dependent Chronic Graft-Versus-Host Disease** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Chen, G. L., Carpenter, P. A., Broady, R., Gregory, T. K., Johnston, L. J., Storer, B. E., Beumer, J. H., Qiu, J., Cerda, K., Le, R., Otani, J. M., Liu, H., Ross, et al
2018; 24 (2): 373–80
- **Axicabtagene Ciloleucel CAR T-Cell Therapy in Refractory Large B-Cell Lymphoma** *NEW ENGLAND JOURNAL OF MEDICINE*
Neelapu, S. S., Locke, F. L., Bartlett, N. L., Lekakis, L. J., Miklos, D. B., Jacobson, C. A., Braunschweig, I., Oluwole, O. O., Siddiqi, T., Lin, Y., Timmerman, J. M., Stiff, P. J., Friedberg, et al
2017; 377 (26): 2531–44
- **Ibrutinib for chronic graft-versus-host disease after failure of prior therapy** *BLOOD*
Miklos, D., Cutler, C. S., Arora, M., Waller, E. K., Jagasia, M., Pusic, I., Flowers, M. E., Logan, A. C., Nakamura, R., Blazar, B. R., Li, Y., Chang, S., Lal, et al
2017; 130 (21): 2243–50
- **Validation of the Hematopoietic Cell Transplantation-Specific Comorbidity Index in Nonmyeloablative Allogeneic Stem Cell Transplantation** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Veeraputhiran, M., Yang, L., Sundaram, V., Arai, S., Lowsky, R., Miklos, D., Meyer, E., Muffly, L., Negrin, R., Rezvani, A., Shizuru, J., Weng, W., Johnston, et al
2017; 23 (10): 1744–48
- **Ibrutinib efficacy and tolerability in patients with relapsed chronic lymphocytic leukemia following allogeneic HCT.** *Blood*
Ryan, C. E., Sahaf, B., Logan, A. C., O'Brien, S., Byrd, J. C., Hillmen, P., Brown, J. R., Dyer, M. J., Mato, A. R., Keating, M. J., Jaglowski, S., Clow, F., Rezvani, et al
2016
- **The Biology of Chronic Graft-Versus-Host Disease: a Task Force Report From the National Institutes of Health Consensus Development Project on Criteria for Clinical Trials in Chronic Graft-Versus-Host Disease.** *Biology of blood and marrow transplantation*
Cooke, K. R., Luznik, L., Sarantopoulos, S., Hakim, F. T., Jagasia, M., Fowler, D. H., van den Brink, M. R., Hansen, J. A., Parkman, R., Miklos, D. B., Martin, P. J., paczesny, s., Vogelsang, et al
2016
- **High-throughput allogeneic antibody detection using protein microarrays** *JOURNAL OF IMMUNOLOGICAL METHODS*
Paul, J., Sahaf, B., Perloff, S., Schoenrock, K., Wu, F., Nakasone, H., Collier, J., Miklos, D.
2016; 432: 57-64
- **Presensitization to HY antigens in female donors prior to transplant is not associated with male recipient post-transplant HY antibody development nor with clinical outcomes** *HAEMATOLOGICA*
Nakasone, H., Sahaf, B., Tian, L., Wang, T., Haagenson, M. D., Schoenrock, K., Perloff, S., Ryan, C. E., Wu, F., Spellman, S. R., Lee, S. J., Ritz, J., Miklos, et al
2016; 101 (1): E30–E33
- **Risks and benefits of sex-mismatched hematopoietic cell transplantation differ according to conditioning strategy.** *Haematologica*
Nakasone, H., Remberger, M., Tian, L., Brodin, P., Sahaf, B., Wu, F., Mattsson, J., Lowsky, R., Negrin, R., Miklos, D. B., Meyer, E.
2015; 100 (11): 1477-1485
- **Allogeneic hematopoietic cell transplantation after failed autologous transplant for lymphoma using TLI and anti-thymocyte globulin conditioning** *BONE MARROW TRANSPLANTATION*

- Rezvani, A. R., Kanate, A. S., Efron, B., Chhabra, S., Kohrt, H. E., Shizuru, J. A., Laport, G. G., Miklos, D. B., Benjamin, J. E., JOHNSTON, L. J., Arai, S., Weng, W., Negrin, et al
2015; 50 (10): 1286-1292
- **Red blood cell transfusions are associated with HLA class I but not H-Y alloantibodies in children with sickle cell disease.** *British journal of haematology*
Nickel, R. S., Hendrickson, J. E., Yee, M. M., Bray, R. A., Gebel, H. M., Kean, L. S., Miklos, D. B., Horan, J. T.
2015; 170 (2): 247-256
 - **Noninvasive monitoring of diffuse large B-cell lymphoma by immunoglobulin high-throughput sequencing.** *Blood*
Kurtz, D. M., Green, M. R., Bratman, S. V., Scherer, F., Liu, C. L., Kunder, C. A., Takahashi, K., Glover, C., Keane, C., Kihira, S., Visser, B., Callahan, J., Kong, et al
2015; 125 (24): 3679-3687
 - **Allogeneic HY antibodies detected 3 months after female-to-male HCT predict chronic GVHD and nonrelapse mortality in humans** *BLOOD*
Nakasone, H., Tian, L., Sahaf, B., Kawase, T., Schoenrock, K., Perloff, S., Ryan, C. E., Paul, J., Popli, R., Wu, F., Otani, J. M., Coller, J., Warren, et al
2015; 125 (20): 3193-3201
 - **Therapeutic benefits targeting B-cells in chronic graft-versus-host disease** *INTERNATIONAL JOURNAL OF HEMATOLOGY*
Nakasone, H., Sahaf, B., Miklos, D. B.
2015; 101 (5): 438-451
 - **National Institutes of Health Consensus Development Project on Criteria for Clinical Trials in Chronic Graft-versus-Host Disease: III. The 2014 Biomarker Working Group Report** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Paczesny, S., Hakim, F. T., Pidala, J., Cooke, K. R., Lathrop, J., Griffith, L. M., Hansen, J., Jagasia, M., Miklos, D., Pavletic, S., Parkman, R., Russek-Cohen, E., Flowers, et al
2015; 21 (5): 780-792
 - **ABO Mismatch Is Associated with Increased Nonrelapse Mortality after Allogeneic Hematopoietic Cell Transplantation** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Logan, A. C., Wang, Z., Alimoghaddam, K., Wong, R. M., Lai, T., Negrin, R. S., Grumet, C., Logan, B. R., Zhang, M., Spellman, S. R., Lee, S. J., Miklos, D. B.
2015; 21 (4): 746-754
 - **A Reduced-Toxicity Regimen Is Associated with Durable Engraftment and Clinical Cure of Nonmalignant Genetic Diseases among Children Undergoing Blood and Marrow Transplantation with an HLA-Matched Related Donor.** *Biology of blood and marrow transplantation*
Mahadeo, K. M., Weinberg, K. I., Abdel-Azim, H., Miklos, D. B., Killen, R., Kohn, D., Crooks, G. M., Shah, A. J., Kharbanda, S., Agarwal, R., Kapoor, N.
2015; 21 (3): 440-444
 - **Allogeneic hematopoietic cell transplant for normal karyotype AML: indirect evidence of selection for adverse molecular profile.** *Bone marrow transplantation*
Percival, M. M., Medeiros, B. C., Tian, L., Robeson, S., Laport, G. G., Johnston, L. J., Shizuru, J. A., Miklos, D. B., Arai, S., Weng, W. K., Negrin, R. S., Lowsky, R.
2015
 - **Immunoglobulin and T cell receptor gene high-throughput sequencing quantifies minimal residual disease in acute lymphoblastic leukemia and predicts post-transplantation relapse and survival.** *Biology of blood and marrow transplantation*
Logan, A. C., Vashi, N., Faham, M., Carlton, V., Kong, K., Buño, I., Zheng, J., Moorhead, M., Klinger, M., Zhang, B., Waqar, A., Zehnder, J. L., Miklos, et al
2014; 20 (9): 1307-1313
 - **Risk associations between HLA-DPB1 T-cell epitope matching and outcome of unrelated hematopoietic cell transplantation are independent of HLA-DPA1.** *Bone marrow transplantation*
Fleischhauer, K., Fernandez-Viña, M. A., Wang, T., Haagenson, M., Battiwalla, M., Baxter-Lowe, L. A., Ciceri, F., Dehn, J., Gajewski, J., Hale, G. A., Heemskerk, M. B., Marino, S. R., McCarthy, et al
2014; 49 (9): 1176-1183
 - **Total lymphoid irradiation-antithymocyte globulin conditioning and allogeneic transplantation for patients with myelodysplastic syndromes and myeloproliferative neoplasms.** *Biology of blood and marrow transplantation*
Benjamin, J., Chhabra, S., Kohrt, H. E., Lavori, P., Laport, G. G., Arai, S., Johnston, L., Miklos, D. B., Shizuru, J. A., Weng, W., Negrin, R. S., Lowsky, R.
2014; 20 (6): 837-843
 - **Clinical impact of H-Y alloimmunity.** *Immunologic research*
Popli, R., Sahaf, B., Nakasone, H., Lee, J. Y., Miklos, D. B.

2014; 58 (2-3): 249-258

- **Minimal residual disease quantification using consensus primers and high-throughput IGH sequencing predicts post-transplant relapse in chronic lymphocytic leukemia** *LEUKEMIA*
Logan, A. C., Zhang, B., Narasimhan, B., Carlton, V., Zheng, J., Moorhead, M., Krampf, M. R., Jones, C. D., Waqar, A. N., Faham, M., Zehnder, J. L., Miklos, D. B.
2013; 27 (8): 1659-1665
- **A distinct evolution of the T-cell repertoire categorizes treatment refractory gastrointestinal acute graft-versus-host disease.** *Blood*
Meyer, E. H., Hsu, A. R., Liliental, J., Löhr, A., Florek, M., Zehnder, J. L., Strober, S., Lavori, P., Miklos, D. B., Johnson, D. S., Negrin, R. S.
2013; 121 (24): 4955-4962
- **A distinct evolution of the T-cell repertoire categorizes treatment refractory gastrointestinal acute graft-versus-host disease** *BLOOD*
Meyer, E. H., Hsu, A. R., Liliental, J., Loehr, A., Florek, M., Zehnder, J. L., Strober, S., Lavori, P., Miklos, D. B., Johnson, D. S., Negrin, R. S.
2013; 121 (24): 4955-4962
- **Birth Order and Transplantation Outcome in HLA-Identical Sibling Stem Cell Transplantation: An Analysis on Behalf of the Center for International Blood and Marrow Transplantation** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Dobbelstein, C., Ahn, K. W., Haagenson, M., Hale, G. A., Van Rood, J. J., Miklos, D., Waller, E. K., Spellman, S. R., Fernandez-Vina, M., Ganser, A., Aljurf, M., Bornhaeuser, M., Gupta, et al
2013; 19 (5): 741-745
- **H-Y antigen-binding B cells develop in male recipients of female hematopoietic cells and associate with chronic graft vs. host disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Sahaf, B., Yang, Y., Arai, S., Herzenberg, L. A., Herzenberg, L. A., Miklos, D. B.
2013; 110 (8): 3005-3010
- **Humoral Immunity to Cytomegalovirus and Chronic Graft-Versus-Host Disease** *VIRAL IMMUNOLOGY*
Nambodiri, A. M., Nietert, P. J., Wadia, P. P., Miklos, D. B., Pandey, J. P.
2012; 25 (4): 338-340
- **Prophylactic rituximab after allogeneic transplantation decreases B-cell alloimmunity with low chronic GVHD incidence** *BLOOD*
Arai, S., Sahaf, B., Narasimhan, B., Chen, G. L., Jones, C. D., Lowsky, R., Shizuru, J. A., Johnston, L. J., Laport, G. G., Weng, W., Benjamin, J. E., Schaeffer, J., Brown, et al
2012; 119 (25): 6145-6154
- **Sirolimus and mycophenolate mofetil as GVHD prophylaxis in myeloablative, matched-related donor hematopoietic cell transplantation** *BONE MARROW TRANSPLANTATION*
Johnston, L., Florek, M., Armstrong, R., McCune, J. S., Arai, S., Brown, J., Laport, G., Lowsky, R., Miklos, D., Shizuru, J., Sheehan, K., Lavori, P., Negrin, et al
2012; 47 (4): 581-588
- **High-throughput VDJ sequencing for quantification of minimal residual disease in chronic lymphocytic leukemia and immune reconstitution assessment** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Logan, A. C., Gao, H., Wang, C., Sahaf, B., Jones, C. D., Marshall, E. L., Buno, I., Armstrong, R., Fire, A. Z., Weinberg, K. I., Mindrinos, M., Zehnder, J. L., Boyd, et al
2011; 108 (52): 21194-21199
- **Clonally identical Hodgkin's disease develops after allogeneic hematopoietic cell transplant for CLL** *BONE MARROW TRANSPLANTATION*
Tseng, D., Jones, C. D., Anderson, M., Warnke, R., Zehnder, J. L., Miklos, D. B.
2011; 46 (12): 1576-1578
- **Adoptive Immunotherapy with Cytokine-Induced Killer Cells for Patients with Relapsed Hematologic Malignancies after Allogeneic Hematopoietic Cell Transplantation** *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*
Laport, G. G., Sheehan, K., Baker, J., Armstrong, R., Wong, R. M., Lowsky, R., Johnston, L. J., Shizuru, J. A., Miklos, D., Arai, S., Benjamin, J. E., Weng, W., Negrin, et al
2011; 17 (11): 1679-1687
- **A phase 1 study of imatinib for corticosteroid-dependent/refractory chronic graft-versus-host disease: response does not correlate with anti-PDGFRα antibodies** *BLOOD*
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