Stanford

Emily C. Liang, MD

Assistant Professor of Medicine (Blood and Marrow Transplantation & Cellular Therapy)

Medicine - Blood & Marrow Transplantation

CLINICAL OFFICE (PRIMARY)

- **Blood and Marrow Transplantation**

  875 Blake Wilbur Dr

  Stanford, CA 94305

  Tel (650) 498-6000 **Fax** (650) 725-3321

Bio

BIO

Dr. Liang is an Assistant Professor in the Division of Blood and Marrow Transplantation & Cellular Therapy. She cares for patients with multiple myeloma and other plasma cell disorders receiving cellular therapies. She graduated from Stanford University with a BA in Human Biology and earned her MD from the David Geffen School of Medicine at UCLA. She completed internal medicine residency at Stanford University and hematology/oncology fellowship at the University of Washington and Fred Hutchinson Cancer Center.

Dr. Liang's research integrates clinical investigation, statistical modeling, and translational science to characterize, predict, and mitigate CAR T-cell therapy-associated toxicities and advance cellular therapies for multiple myeloma. Her work has been published in Blood, Blood Advances, Transplantation and Cellular Therapy, and Bone Marrow Transplantation and has been funded by the National Institutes of Health, Conquer Cancer, and Swim Across America.

CLINICAL FOCUS

- Hematology
- Multiple myeloma
- CAR T-Cell Therapy
- Bone Marrow Transplantation

ACADEMIC APPOINTMENTS

- Assistant Professor-Univ Med Line, Medicine - Blood & Marrow Transplantation
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Chief Fellow, University of Washington/Fred Hutchinson Cancer Center Hematology/Oncology Fellowship Program, (2024-2025)

HONORS AND AWARDS

- Debra Lesavoy Women Who Conquer Cancer Young Investigator Award, Conquer Cancer, the ASCO Foundation (2024)

- Hartwell Innovation Fund Pilot Award, Swim Across America (2024)
- Alpha Omega Alpha, David Geffen School of Medicine at UCLA (2019)
- Deans' Award for Academic Accomplishment, Stanford University (2014)
- Phi Beta Kappa, Stanford University (2014)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Career Development Committee, Chinese American Hematologist and Oncologist Network (CAHON) (2026 - present)
- Medical Education Subcommittee, American Society of Hematology (2026 - present)
- Member, Chinese American Hematologist and Oncologist Network (2023 - present)
- Member, American Society for Transplantation and Cellular Therapy (2022 - present)
- Member, American Society of Clinical Oncology (2022 - present)
- Member, American Society of Hematology (2021 - present)
- Trainee Council, American Society of Hematology (2023 - 2025)

PROFESSIONAL EDUCATION

- Board Certification: Medical Oncology, American Board of Internal Medicine (2025)
- Board Certification: Hematology, American Board of Internal Medicine (2025)
- Fellowship: University of Washington Hem/Onc Fellowship Pgm (2025) WA
- Board Certification: Internal Medicine, American Board of Internal Medicine (2022)
- Residency: Stanford University Internal Medicine Residency (2022) CA
- Medical Education: UCLA David Geffen School Of Medicine (2019) CA

Publications

PUBLICATIONS

- **Early Treatment Failure in Patients With Relapsed/Refractory Multiple Myeloma Receiving Bispecific T-Cell Engagers: Development and Validation of the CHARGE Prognostic Index.** *Journal of clinical oncology : official journal of the American Society of Clinical Oncology*

  Zanwar, S., Hansen, D. K., Pasvolsky, O., Tan, C., Peres, L. C., Goel, U., Popat, R., Afrough, A., Asoori, S., Rana, M., Dave, M., Portuguese, A., Kastritis, et al

  2026: JCO2601039

- **Early T-cell Large Granular Lymphocyte Expansions in Patients with Cytopenias after CD19 CAR T-cell Therapy.** *Transplantation and cellular therapy*

  Albittar, A., Torabi, A., Alahdab, F., Chutnik, A., Kimble, E. L., Kirchmeier, D. R., Torkelson, A., Braathen, K., Liang, E. C., Portuguese, A. J., Yeung, C. C., Shadman, M., Fong, et al

  2026

- **Early neurologic response predicts outcomes after anakinra for immune effector cell-associated neurotoxicity syndrome** *BLOOD ADVANCES*

  Liang, E. C., Kungwankiattichai, S., Wu, X., Voutsinas, J., Macero, D., Khouderchah, C., Qiao, Y., Jeon, Y., Basom, R., Huang, J. J., Portuguese, A. J., Kimble, E. L., Hirayama, et al

  2026; 10 (15): 5264-5275

- **Coordinated expansion of CD163+ monocytes and immature CD177+ neutrophils marks severe neurotoxicity after CD19 CAR T cell therapy.** *bioRxiv : the preprint server for biology*

  Chour, T., Poole, N., MacMillan, H. R., Burleigh, K., Glass, D. R., Liang, E. C., Basom, R., Webb-Robertson, B. M., Stratton, K., Gratz, D., Long, A. N., Elz, A. E., Huang, et al

  2026

- **A novel dose-dense strategy for CD19-directed CAR T-cell therapy is associated with durable responses without increased toxicity in patients with B-cell non-Hodgkin lymphoma.** *Haematologica*

Ortiz-Maldonado, V., Liang, E. C., Huang, J. J., Jeon, Y., Hirayama, A. V., Kimble, E. L., Portuguese, A. J., Khouderchah, C., Braathen, K., Torkelson, A., Kirchmeier, D., Shadman, M., Maloney, et al
2026

- **Fear of Cancer Recurrence in Hematopoietic Cell Transplantation Survivors.** *Transplantation and cellular therapy*
  Liang, E. C., Shen, M. J., Salit, R. B., Onstad, L., Vo, P., Oshima, M. U., Boiko, J. R., Lee, C. J., Carpenter, P. A., Gauthier, J., Simard, S., Lee, S. J.
  2026; 32 (7): 895.e1-895.e8

- **Incidence and Risk Factors for CNS Relapse in Adult ALL after Allogeneic Hematopoietic Cell Transplantation.** *Blood advances*
  Le, C. T., Zhang, A., Vyas, R. D., Otani, J., Russell, K., Cassaday, R. D., Muffly, L. S., Liang, E. C.
  2026

- **Active Extramedullary Disease Predicts ICANS and Early ICAHT after CAR-T Therapy in Multiple Myeloma Transplantation and Cellular Therapy (vol 31 , S409 , 2025)** *TRANSPLANTATION AND CELLULAR THERAPY*
  Portuguese, A. J., Liang, E. C., Huang, J. J., Iovino, L., Wuliji, N., Dima, D., Banerjee, R., Kwok, M. L., Cicero, K. I., Shadman, M., Cowan, A. J., Gauthier, J.
  2026; 32 (5): 630

- **A Practical Guide to Competing Risk Analysis for Transplant and Cell Therapy Research.** *Transplantation and cellular therapy*
  Vaquera-Alfaro, H. A., Jeon, Y., Wu, Q. V., Liang, E. C., Portuguese, A., Gómez-De León, A., Valdespino-Valdes, J., Gauthier, J.
  2026; 32 (4): 489-500

- **Real-world outcomes with elranatamab in multiple myeloma: a multicenter analysis from the U.S. Multiple Myeloma Immunotherapy Consortium.** *Blood cancer journal*
  Portuguese, A. J., Davis, J. A., Raza, S., Castaneda Puglianini, O., Freeman, C., Alsina, M., Wright, C., Blue, B. J., Baz, R. C., Shain, K. H., Goel, U., Khouri, J., Anwer, et al
  2026

- **Comprehensive Benchmarking of Outcomes after Anakinra Treatment for Refractory Immune Effector Cell-Associated Neurotoxicity Syndrome (ICANS)**
  Kungwankiattichai, S., Liang, E. C., Wu, X., Voutsinas, J. M., Macero, D. C., Jeon, Y., Qiao, Y., Huang, J. J., Portuguese, A. J., Kimble, E. L., Hirayama, A., Shadman, M., Chen, et al
  ELSEVIER SCIENCE INC.2026: S13-S14

- **Fear of Cancer Recurrence in Hematopoietic Cell Transplantation Survivors**
  Liang, E. C., Carpenter, P. A., Lee, C. J., Onstad, L., Oshima, M., Salit, R. B., Vo, P., Boiko, J. R., Simard, S., Gauthier, J., Lee, S. J.
  ELSEVIER SCIENCE INC.2026

- **Outcomes of Immune Effector Cell-Associated Hemophagocytic Lymphohistiocytosis-like Syndrome (IEC-HS) in Patients Receiving Frontline Anakinra and Corticosteroids**
  Liang, E. C., Macero, D. C., Khouderchah, C., Voutsinas, J. M., Basom, R., Jeon, Y., Wu, X., Huang, J. J., Portuguese, A. J., Wuliji, N., Iovino, L., Mazziotta, F., Kopmar, et al
  ELSEVIER SCIENCE INC.2026

- **Peripheral HLA-DR plus Neutrophils, CD163+Monocytes and Inflammatory Serum Cytokines Coincide with Severe Immune Effector Cell-Associated Neurotoxicity at Peak Toxicity Onset in CD19 CART cell Therapy**
  Chour, T., Poole, N., MacMillan, H., Burleigh, K., Glass, D., Webb-Robertson, B., Liang, E. C., Huang, J. J., Hirayama, A., Stratton, K., Riddell, S. R., Gauthier, J., Gustafson, et al
  ELSEVIER SCIENCE INC.2026

- **ALC Kinetics Velocity and Acceleration Are Early Predictors of Non-Icans Neurotoxicities after Cilta-Cel Treatment**
  Jeon, Y., Wu, X., Khouderchah, C., Liang, E. C., Portuguese, A. J., Huang, J. J., Kimble, E. L., Hirayama, A., Shadman, M., Dima, D., Banerjee, R., Fong, L., Vicky, et al
  ELSEVIER SCIENCE INC.2026

- **NEMO: A Novel Prognostic Model of Non-Icans Neurotoxicities Associated with Ciltacabtagene Autoleucel**
  Jeon, Y., Wu, X., Khouderchah, C., Liang, E. C., Portuguese, A. J., Huang, J. J., Kimble, E. L., Hirayama, A., Shadman, M., Cowan, A. J., Dima, D., Banerjee, R., Dhodapkar, et al
  ELSEVIER SCIENCE INC.2026: S12-S13

- **Prior transplantation and idecabtagene vicleucel in multiple myeloma: a secondary analysis of CIBMTR data.** *Blood*
  Banerjee, R., Khouderchah, C., Akhtar, O. S., Liang, E. C., Gauthier, J., Dhodapkar, M. V., Portuguese, A. J.

2026; 147 (3): 312-315

- **Time-Series Clustering Captures Patterns of Early Immune Effector Cell-Associated Hematotoxicity That Are Predictable Using Tree-Based Models.** *JCO clinical cancer informatics*
  Liang, E. C., Jeon, Y., Qiao, Y., Wu, X., Huang, J. J., Portuguese, A. J., Basom, R., Torkelson, A., Kirchmeier, D., Braathen, K., Cowan, A. J., Shadman, M., Hirayama, et al
  2026; 10: e2500148

- **Eomesodermin+ CD4+ T cells are critical for curative immunotherapy outcomes.** *Immunity*
  Zhang, P., Haeseleer, F., Waltner, O. G., Gartlan, K. H., Bhise, S. S., Minnie, S. A., Adams, R. C., Yeh, A. C., Ensbey, K. S., Legg, S. R., Sekiguchi, T., Atilla, E., Nemychenkov, et al
  2025; 58 (12): 3024-3039.e7

- **Real-world outcomes with elranatamab in multiple myeloma: A multi-center analysis from the United States multiple myeloma immunotherapy consortium**
  Portuguese, A., Davis, J., Raza, S., Puglianini, O., Freeman, C., Alsina, M., Wright, C., Goel, U., Khouri, J., Anwer, F., Ali, H. M., Pasvolsky, O., Gaballa, et al
  ELSEVIER.2025: 136-137

- **High-dose anakinra to treat refractory immune effector cell-associated neurotoxicity syndrome in CAR T-cell therapy recipients**
  Liang, E., Kungwankiattichai, S., Wu, X., Voutsinas, J., Macero, D., Jeon, Y., Qiao, Y., Huang, J., Portuguese, A., Mazziotta, F., Kopmar, N., Shah, E., Markey, et al
  ELSEVIER.2025: 928-929

- **Independent assessment of ALC thresholds currently in use to predict motor/neurocognitive toxicities (MNTs) after treatment with ciltacabtagene autoleucel**
  Jeon, Y., Wu, X., Khouderchah, C., Liang, E., Portuguese, A., Huang, J., Kimble, E., Hirayama, A., Shadman, M., Cowan, A., Dima, D., Banerjee, R., Dhodapkar, et al
  ELSEVIER.2025: 4147-4148

- **Impact of Gamma-Secretase Inhibition on Outcomes Following BCMA CAR-T Therapy in Multiple Myeloma: A Comparison of Two Phase 1 Trials.** *Transplantation and cellular therapy*
  Portuguese, A. J., Tuazon, S. A., Pont, M. J., Cole, G. O., Sather, B. D., Song, X., Thomas, S., Wood, B. L., Blake, M., Works, M. G., Shadman, M., Liang, E. C., Wu, et al
  2025; 31 (12): 1002.e1-1002.e9

- **Extramedullary disease is associated with severe toxicities following B-cell maturation antigen CAR T-cell therapy in multiple myeloma.** *Haematologica*
  Portuguese, A. J., Liang, E. C., Huang, J. J., Jeon, Y., Dima, D., Banerjee, R., Kwok, M., Cicero, K. I., Hirayama, A. V., Basom, R., Khouderchah, C., Shadman, M., Fong, et al
  2025; 110 (12): 3065-3077

- **Identifying high-risk profiles and adverse prognoses in relapsed/refractory multiple myeloma treated with bispecific antibodies: A real-world analysis of 943 treatment initiations**
  Zanwar, S., Pasvolsky, O., Hansen, D., Goel, U., Afrough, A., Rana, M., Portuguese, A., Davis, J., Sborov, D., Bal, S., Janakiram, M., Shune, L., Ferreri, et al
  ELSEVIER.2025: 4069-4070

- **Incidence and risk factors for CNS relapse in adult ALL after allogeneic hematopoietic cell transplant**
  Le, C., Zhang, A., Vyas, R., Otani, J., Russell, K., Cassaday, R. D., Muffly, L., Liang, E.
  ELSEVIER.2025: 6038-6039

- **Correlates of organ damage in patients with advanced systemic mastocytosis enrolled in clinical trials of avapritinib.** *Blood neoplasia*
  Liang, E. C., Perkins, C., Lu, R., Shi, H., Dimitrijević, S., Abuel, J., Langford, C., Abidi, P., Fechter, L., Shomali, W., Gotlib, J.
  2025; 2 (4): 100127

- **Opportunities to Improve Antibiotic Stewardship, and Identification of Blood Biomarkers Associated with Bacteremia Following CAR-T Cell Therapy.** *Transplantation and cellular therapy*
  Ng, S. K., Flaherty, P. W., Ancheta, M., Tindbaek, K. A., Sekhon, M. K., Huang, J. J., Portuguese, A. J., Albittar, A., Kopmar, N. E., Cowan, A. J., Shadman, M., Hirayama, A. V., Till, et al
  2025; 31 (10): 838.e1-838.e16

- **Real-world comparison of lisocabtagene maraleucel and axicabtagene ciloleucel in large B-cell lymphoma: an inverse probability of treatment weighting analysis with 3-year follow-up.** *Haematologica*
  Portuguese, A. J., Huang, J. J., Jeon, Y., Taheri, M., Albittar, A., Liang, E. C., Hirayama, A. V., Kimble, E. L., Iovino, L., Poh, C., Gopal, A. K., Shadman, M., Till, et al
  2025; 110 (9): 2040-2054

- **Real-world performance of the CALGB 10403 regimen in young adults in the United States.** *Blood neoplasia*
  DaSilva, B., Darwin, A., Zhang, A., Vyas, R. D., Russell, K., Gilbert, J. S., Tan, V., Feldt, S., Johnston, H., Liang, E. C., DuVall, A. S., Liedtke, M., Stock, et al
  2025; 2 (3): 100111

- **A phase 1 trial of fully human BCMA CAR-T therapy for relapsed/refractory multiple myeloma with 5-year follow-up.** *Blood*
  Tuazon, S. A., Portuguese, A. J., Pont, M. J., Cowan, A. J., Cole, G. O., Sather, B. D., Song, X., Thomas, S., Wood, B. L., Blake, M., Works, M. G., Shadman, M., Liang, et al
  2025; 146 (5): 535-545

- **Phase 1 study of CD19 CAR T-cell therapy harboring a fully human scFv in CAR-naïve adult patients with B-ALL.** *Blood advances*
  Gauthier, J., Liang, E. C., Huang, J. J., Kimble, E. L., Hirayama, A. V., Fiorenza, S., Voutsinas, J. M., Wu, Q. V., Jaeger-Ruckstuhl, C. A., Pender, B. S., Kirchmeier, D. R., Torkelson, A., Braathen, et al
  2025; 9 (8): 1861-1872

- **Development and validation of predictive models of early immune effector cell-associated hematotoxicity.** *Blood advances*
  Liang, E. C., Huang, J. J., Portuguese, A. J., Ortiz-Maldonado, V., Albittar, A., Wuliji, N., Basom, R., Jeon, Y., Wu, Q., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, et al
  2025; 9 (3): 606-616

- **Correction: Development and validation of an automated computational approach to grade immune effector cell-associated hematotoxicity.** *Bone marrow transplantation*
  Liang, E. C., Rejeski, K., Fei, T., Albittar, A., Huang, J. J., Portuguese, A. J., Wu, Q., Raj, S., Subklewe, M., Shouval, R., Gauthier, J.
  2025; 60 (2): 254

- **Autoimmune Outcomes in Patients with Concurrent Autoimmune Disease Receiving CD19 CAR T-Cell Therapy for Lymphoma**
  Huang, J. J., Singh, N., Shadman, M., Basom, R. S., Kalus, A., Portuguese, A. J., Liang, E. C., Wuliji, N., Hirayama, A., Chapuis, A. G., Otegbeye, F., Milano, F., Cassaday, et al
  ELSEVIER.2024: 7132-7133

- **INCIDENCES AND FACTORS ASSOCIATED WITH EARLY HEMATOTOXICITY AFTER CAR T-CELL THERAPY ASSESSED BY EHA/EBMT ICAHT CRITERIA**
  Liang, E., Albittar, A., Portuguese, A., Huang, J., Wuliji, N., Wu, Q., Reyes, J., Pin, N., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Hill, et al
  SPRINGERNATURE.2024: 202-204

- **MACHINE-LEARNING-BASED CLUSTERING TO REFINE THE EHA/ EBMT IMMUNE EFFECTOR CELL-ASSOCIATED HEMATOTOXICITY GRADING CRITERIA**
  Liang, E., Albittar, A., Portuguese, A., Huang, J., Wuliji, N., Wu, Q., Reyes, J., Pin, N., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Hill, et al
  SPRINGERNATURE.2024: 45-46

- **T-CELL LARGE GRANULAR LYMPHOCYTE POPULATION INVOLVING CHIMERIC ANTIGEN RECEPTOR-MODIFIED T (CAR T) CELLS IN PATIENTS WITH CYTOPENIA AFTER CD19-TARGETED CAR T-CELL THERAPY: CASE SERIES**
  Albittar, A., Torabi, A., Liang, E., Portuguese, A., Huang, J., Yeung, C., Kimble, E., Kirchmeier, D., Torkelson, A., Chutnik, A., Cassaday, R., Chapuis, A., Kiem, et al
  SPRINGERNATURE.2024: 230-231

- **AUTOMATED GRADING OF IMMUNE EFFECTOR CELL-ASSOCIATED HEMATOTOXICITY**
  Liang, E., Rejeski, K., Raj, S., Albittar, A., Huang, J., Portuguese, A., Wuliji, N., Wu, Q., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Hill, et al
  SPRINGERNATURE.2024: 206-207

- **Human herpesvirus 6 reactivation and disease are infrequent in chimeric antigen receptor T-cell therapy recipients.** *Blood*
  Kampouri, E., Krantz, E. M., Xie, H., Ibrahimi, S. S., Kiem, E. S., Sekhon, M. K., Liang, E. C., Cowan, A. J., Portuguese, A., Green, D. J., Albittar, A., Huang, J. J., Gauthier, et al
  2024; 144 (5): 490-495

- **Development and validation of an automated computational approach to grade immune effector cell-associated hematotoxicity.** *Bone marrow transplantation*
  Liang, E. C., Rejeski, K., Fei, T., Albittar, A., Huang, J. J., Portuguese, A. J., Wu, Q., Raj, S., Subklewe, M., Shouval, R., Gauthier, J.
  2024; 59 (7): 910-917

- **Early prediction of severe ICANS after standard-of-care CD19 CAR T-cell therapy using gradient-boosted classification trees**
  Huang, J., Liang, E. C., Albittar, A., Portuguese, A., Wuliji, N., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Shadman, M., Hirayama, A. V., Till, B. G., Kimble, et al
  LIPPINCOTT WILLIAMS & WILKINS.2024

- **Improving the ICAHT grading criteria using time-series clustering**
  Liang, E. C., Albittar, A., Portuguese, A., Huang, J., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Hill, J. A., Kopmar, N., Banerjee, R., Cowan, A., Poh, et al
  LIPPINCOTT WILLIAMS & WILKINS.2024

- **Predictors of severe hematotoxicity after CAR T-cell therapy**
  Liang, E. C., Albittar, A., Portuguese, A., Huang, J., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Hill, J. A., Kopmar, N., Banerjee, R., Cowan, A., Poh, et al
  LIPPINCOTT WILLIAMS & WILKINS.2024

- **How I Use Next Generation Sequencing-MRD to Plan Approach and Prevent Relapse after HCT for Children and Adults with ALL.** *Blood*
  Muffly, L., Liang, E. C., Dolan, J. G., Pulsipher, M. A.
  2024

- **Managing side effects: guidance for use of immunotherapies in multiple myeloma.** *Hematology. American Society of Hematology. Education Program*
  Liang, E. C., Sidana, S.
  2023; 2023 (1): 348-356

- **Phase I/II Study to Evaluate the Safety, Feasibility, and Efficacy of FP-1201 (Intravenous Interferon-Beta-1a) to Prevent Toxicities after CD19-Directed CAR T-Cell Therapy: Trial in Progress**
  Liang, E. C., Kimble, E. L., Albittar, A., Huang, J. J., Portuguese, A. J., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Simon, S., Chour, T., Newell, E. W., Banerjee, et al
  ELSEVIER.2023

- **Day+3/Day 0 Ferritin Ratio: A Simple Point-of-Care Index Predictive of Severe Immune Effector Cell-Associated Neurotoxicity Syndrome after CD19 CAR T-Cell Therapy**
  Huang, J. J., Liang, E. C., Albittar, A., Portuguese, A. J., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Shadman, M., Hirayama, A. V., Till, B. G., Kimble, E. L., Iovino, et al
  ELSEVIER.2023

- **Phase 2 Study of Anakinra to Prevent CRS and Neurotoxicity after Treatment with Lisocabtagene Maraleucel: Planned Interim Analysis**
  Liang, E. C., Albittar, A., Portuguese, A. J., Huang, J. J., Wu, Q., Reyes, J., Pin, N., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Simon, S., Chour, et al
  ELSEVIER.2023

- **Phase 2 Study of CD19 CAR T Cells with a Fully Human Binder for Large B-Cell Lymphoma in Relapse or Progression after a Murine Binder-Bearing CD19 CAR T-Cell Therapy**
  Gauthier, J., Huang, J. J., Jaeger-Ruckstuhl, C., Liang, E. C., Albittar, A., Portuguese, A. J., Wu, Q., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Shadman, M., Hirayama, et al
  ELSEVIER.2023

- **Day+3/Day 0 Ferritin Ratio: A Simple Point-of-Care Index Predictive of Severe Immune Effector Cell-Associated Neurotoxicity Syndrome after CD19 CAR T-Cell Therapy**
  Huang, J. J., Liang, E. C., Albittar, A., Portuguese, A. J., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Shadman, M., Hirayama, A. V., Till, B. G., Kimble, E. L., Iovino, et al
  ELSEVIER.2023

- **Phase 2 Study of Anakinra to Prevent CRS and Neurotoxicity after Treatment with Lisocabtagene Maraleucel: Planned Interim Analysis**
  Liang, E. C., Albittar, A., Portuguese, A. J., Huang, J. J., Wu, Q., Reyes, J., Pin, N., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Simon, S., Chour, et al

ELSEVIER.2023

- **Phase 2 Study of CD19 CAR T Cells with a Fully Human Binder for Large B-Cell Lymphoma in Relapse or Progression after a Murine Binder-Bearing CD19 CAR T-Cell Therapy**
  Gauthier, J., Huang, J. J., Jaeger-Ruckstuhl, C., Liang, E. C., Albittar, A., Portuguese, A. J., Wu, Q., Torkelson, A., Kirchmeier, D., Chutnik, A., Pender, B., Shadman, M., Hirayama, et al
  ELSEVIER.2023

- **Factors associated with long-term outcomes of CD19 CAR T-cell therapy for relapsed/refractory CLL.** *Blood advances*
  Liang, E. C., Albittar, A., Huang, J. J., Hirayama, A. V., Kimble, E. L., Portuguese, A. J., Chapuis, A., Shadman, M., Till, B. G., Cassaday, R. D., Milano, F., Kiem, H. P., Riddell, et al
  2023; 7 (22): 6990-7005

- **Retrospective Analysis of Adolescent Young Adult Patients with Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma Treated with the CALGB 10403 Regimen Since Completion of Trial Enrollment**
  DaSilva, B., Vyas, R. D., Darwin, A., Russel, K., Gilbert, J., Tan, V., Darji, H., Miller, K., Liang, E. C., Raychaudhuri, S., Duvall, A. S., Liedtke, M., Stock, et al
  AMER SOC HEMATOLOGY.2023

- **LISOCABTAGENE MARALEUCEL FOR RELAPSED OR REFRACTORY LARGE B-CELL LYMPHOMA: FEASIBILITY, SAFETY AND EFFICACY IN A REAL-WORLD SETTING**
  Portuguese, A., Liang, E., Albittar, A., Hirayama, A., Till, B., Cassaday, R., Lynch, R., Poh, C., Milano, F., Chapuis, A., Kiem, H., Maloney, D. G., Gauthier, et al
  SPRINGERNATURE.2023: 207-208

- **FACTORS ASSOCIATED WITH DURATION OF RESPONSE AFTER CD19 CAR T-CELL THERAPY FOR RELAPSED/REFRACTORY CLL: 5-YEAR FOLLOW-UP UPDATE**
  Liang, E., Hirayama, A., Kimble, E., Portuguese, A., Albittar, A., Chapuis, A., Shadman, M., Till, B., Cassaday, R., Milano, F., Kiem, H., Turtle, C., Maloney, et al
  SPRINGERNATURE.2023: 12-14

- **Association of Self-Reported COVID-19 Vaccination Status with COVID-19 Infection among Adult Long-Term Hematopoietic Cell Transplantation Survivors.** *Transplantation and cellular therapy*
  Liang, E. C., Onstad, L. E., Carpenter, P., Pergam, S. A., Flowers, M. E., Lee, S. J., Liu, C.
  2023; 29 (9): 584.e1-584.e9

- **Anakinra for Refractory Cytokine Release Syndrome or Immune Effector Cell-Associated Neurotoxicity Syndrome after Chimeric Antigen Receptor T Cell Therapy.** *Transplantation and cellular therapy*
  Gazeau, N., Liang, E. C., Wu, Q. V., Voutsinas, J. M., Barba, P., Iacoboni, G., Kwon, M., Ortega, J. L., López-Corral, L., Hernani, R., Ortiz-Maldonado, V., Martínez-Cibrian, N., Martinez, et al
  2023; 29 (7): 430-437

- **Next-Generation Sequencing-Based MRD in Adults with ALL Undergoing Hematopoietic Cell Transplantation.** *Blood advances*
  Liang, E. C., Dekker, S. E., Sabile, J. M., Torelli, S., Zhang, A., Miller, K., Shiraz, P., Hayes-Lattin, B., Leonard, J. T., Muffly, L.
  2023

- **Corrigendum to "T cell senescence and impaired CMV-specific response are associated with infection risk in kidney transplant recipients" [Hum. Immunol. 83(4) (2022) 273-280].** *Human immunology*
  Pickering, H., Schaenman, J., Rossetti, M., Ahn, R., Sunga, G., Liang, E. C., Bunnapradist, S., Reed, E. F.
  2022; 83 (12): 857

- **Ultra-Sensitive Next-Generation Sequencing Establishes the Prognostic Value of Very Low MRD in Adults with Acute Lymphoblastic Leukemia Undergoing Hematopoietic Cell Transplantation**
  Liang, E. C., Dekker, S. E., Sabile, J. M. G., Torelli, S., Zhang, A., Miller, K., Shiraz, P., Hayes-Lattin, B., Leonard, J., Muffly, L.
  AMER SOC HEMATOLOGY.2022: 1732-1733

- **Self-Reported Experiences of Adult Hematopoietic Cell Transplantation Survivors with COVID-19 Vaccination and Infection**
  Liang, E. C., Onstad, L. E., Carpenter, P. A., Pergam, S. A., Lee, S. J., Liu, C.
  ELSEVIER.2022

- **Clinicopathologic and Molecular Correlates of Organ Damage Across the Spectrum of Advanced Systemic Mastocytosis**
  Liang, E., Perkins, C., Lu, R., Shi, H., Dimitrijevic, S., Hoehn, G., Abuel, J., Langford, C., Abidi, P., Fechter, L., Shomali, W., Gotlib, J.

CIG MEDIA GROUP, LP.2022: S334

- **Epidemiology of lower respiratory tract infections and community-acquired respiratory viruses in patients with bronchiolitis obliterans syndrome after hematopoietic cell transplant: a retrospective cohort study.** *Transplantation and cellular therapy*
  Epstein, D. J., Liang, E. C., Sharifi, H., Lai, Y. K., Arai, S., Graber-Naidich, A., Sundaram, V., Nelson, J., Hsu, J. L.
  2022

- **Allogeneic Hematopoietic Cell Transplantation for Adult Acute Lymphoblastic Leukemia in the Modern Era.** *Transplantation and cellular therapy*
  Liang, E. C., Craig, J., Torelli, S., Cunanan, K., Iglesias, M., Arai, S., Frank, M. J., Johnston, L., Lowsky, R., Meyer, E. H., Miklos, D. B., Negrin, R., Rezvani, et al
  2022

- **T cell senescence and impaired CMV-specific response are associated with infection risk in kidney transplant recipients.** *Human immunology*
  Pickering, H., Schaenman, J., Rossetti, M., Ahn, R., Sunga, G., Liang, E. C., Bunnapradist, S., Reed, E. F.
  2022; 83 (4): 273-280

- **Correction to: Measurable residual disease status and FLT3 inhibitor therapy in patients with FLT3-ITD mutated AML following allogeneic hematopoietic cell transplantation.** *Bone marrow transplantation*
  Liang, E. C., Chen, C., Lu, R., Mannis, G. N., Muffly, L.
  2022

- **Organ Damage at Initial Presentation across the Spectrum of Advanced Systemic Mastocytosis Variants**
  Liang, E. C., Perkins, C., Lu, R., Abuel, J., Langford, C., DeVore, D., Fechter, L., Abidi, P., Shomali, W., Gotlib, J.
  AMER SOC HEMATOLOGY.2021

- **Measurable Residual Disease Status and FLT3 Inhibitor Therapy in Patients with FLT3-ITD-Mutated AML Following Allogeneic Hematopoietic Cell Transplantation**
  Liang, E. C., Chen, C., Lu, R., Mannis, G. N., Muffly, L.
  CIG MEDIA GROUP, LP.2021: S278-S279

- **Leukocyte transcriptome indicators of development of infection in kidney transplant recipients.** *Clinical transplantation*
  Schaenman, J. M., Rossetti, M., Liang, E. C., Lum, E., Abdalla, B., Bunnapradist, S., Pham, P. T., Danovitch, G., Reed, E. F., Cole, S. W.
  2021; 35 (4): e14252

- **Use of Backup Stem Cells for Stem Cell Boost and Second Transplant in Patients with Multiple Myeloma Undergoing Autologous Stem Cell Transplantation.** *Transplantation and cellular therapy*
  Liang, E. C., Muffly, L. S., Shiraz, P., Shizuru, J. A., Johnston, L., Arai, S., Frank, M. J., Weng, W., Lowsky, R., Rezvani, A., Meyer, E. H., Negrin, R., Miklos, et al
  2021

- **Measurable residual disease status and FLT3 inhibitor therapy in patients with FLT3-ITD mutated AML following allogeneic hematopoietic cell transplantation.** *Bone marrow transplantation*
  Liang, E. C., Chen, C., Lu, R., Mannis, G. N., Muffly, L.
  2021

- **DNA Methylation Age Is More Closely Associated With Infection Risk Than Chronological Age in Kidney Transplant Recipients.** *Transplantation direct*
  Schaenman, J., Zhou, X., Guo, R., Rossetti, M., Liang, E. C., Lum, E., Abdalla, B., Bunnapradist, S., Pham, P. T., Danovitch, G., Karlamangla, A., Reed, E., Horvath, et al
  2020; 6 (8): e576

- **Utility of the AVISE Connective Tissue Disease test in predicting lupus diagnosis and progression.** *Lupus science & medicine*
  Liang, E., Taylor, M., McMahon, M.
  2020; 7 (1): e000345

- **The Frailty Risk Score predicts length of stay and need for rehospitalization after kidney transplantation in a retrospective cohort: a pilot study** *PILOT AND FEASIBILITY STUDIES*
  Schaenman, J., Castellon, L., Liang, E. C., Nanayakkara, D., Abdalla, B., Sarkisian, C., Goldwater, D.
  2019; 5 (1): 144

- **Association of pro-inflammatory cytokines and monocyte subtypes in older and younger patients on clinical outcomes after mechanical circulatory support device implantation** *HUMAN IMMUNOLOGY*
  Schaenman, J. M., Rossetti, M., Sidwell, T., Groysberg, V., Sunga, G., Liang, E., Vangala, S., Chang, E., Bakir, M., Bondar, G., Cadeiras, M., Kwon, M., Reed, et al
  2019; 80 (2): 126-134

- **Increased T cell immunosenescence and accelerated maturation phenotypes Check for in older kidney transplant recipients** *HUMAN IMMUNOLOGY*
  Schaenman, J. M., Rossetti, M., Sidwell, T., Groysberg, V., Sunga, G., Korin, Y., Liang, E., Zhou, X., Abdalla, B., Lum, E., Bunnapradist, S., Pham, T., Danovitch, et al
  2018; 79 (9): 659-667

- **T cell dysfunction and patient age are associated with poor outcomes after mechanical circulatory support device implantation** *HUMAN IMMUNOLOGY*
  Schaenman, J. M., Rossetti, M., Korin, Y., Sidwell, T., Groysberg, V., Liang, E., Vangala, S., Wisniewski, N., Chang, E., Bakir, M., Bondar, G., Cadeiras, M., Kwon, et al
  2018; 79 (4): 203-212

- **Differences in Proinflammatory Cytokines and Monocyte Subtypes in Older as Compared With Younger Kidney Transplant Recipients** *TRANSPLANTATION DIRECT*
  Liang, E. C., Rossetti, M., Sidwell, T., Groysberg, V., Sunga, G., Korin, Y., Vangala, S., Abdalla, B., Lum, E., Bunnapradist, S., Phuong-Thu Pham, Danovitch, G., Reed, E. F., et al
  2018; 4 (3)

- **The newborn human NK cell repertoire is phenotypically formed but functionally reduced** *CYTOMETRY PART B-CLINICAL CYTOMETRY*
  Strauss-Albee, D. M., Liang, E. C., Ranganath, T., Aziz, N., Blish, C. A.
  2017; 92 (1): 33-41

- **The newborn human NK cell repertoire is phenotypically formed but functionally reduced.** *Cytometry. Part B, Clinical cytometry*
  Strauss-Albee, D. M., Liang, E. C., Ranganath, T., Aziz, N., Blish, C. A.
  2016

- **Human NK cell repertoire diversity reflects immune experience and correlates with viral susceptibility.** *Science translational medicine*
  Strauss-Albee, D. M., Fukuyama, J., Liang, E. C., Yao, Y., Jarrell, J. A., Drake, A. L., Kinuthia, J., Montgomery, R. R., John-Stewart, G., Holmes, S., Blish, C. A.
  2015; 7 (297): 297ra115-?

- **Human NK cell repertoire diversity reflects immune experience and correlates with viral susceptibility** *SCIENCE TRANSLATIONAL MEDICINE*
  Strauss-Albee, D. M., Fukuyama, J., Liang, E. C., Yao, Y., Jarrell, J. A., Drake, A. L., Kinuthia, J., Montgomery, R. R., John-Stewart, G., Holmes, S., Blish, C. A.
  2015; 7 (297)

- **Association between Latent Proviral Characteristics and Immune Activation in Antiretrovirus-Treated Human Immunodeficiency Virus Type 1-Infected Adults.** *Journal of virology*
  Liang, E. C., Sceats, L., Bayless, N. L., Strauss-Albee, D. M., Kubo, J., Grant, P. M., Furman, D., Desai, M., Katzenstein, D. A., Davis, M. M., Zolopa, A. R., Blish, C. A.
  2014; 88 (15): 8629-8639

- **Lack of Proficiency in Musculoskeletal Medicine Among Emergency Medicine Physicians** *JOURNAL OF ORTHOPAEDIC TRAUMA*
  Comer, G. C., Liang, E., Bishop, J. A.
  2014; 28 (4): E85-E87