

Stanford



John S. Tamaresis, PhD, MS

Biostatistician, Biomedical Data Science

Bio

BIO

Dr. Tamaresis joined the Stanford University School of Medicine in Summer 2012. He earned the Ph.D. in Applied Mathematics from the University of California, Davis and received the M.S. in Statistics from the California State University, East Bay. He has conducted research in computational biology as a postdoctoral scholar at the University of California, Merced and as a biostatistician at the University of California, San Francisco.

As a statistician, Dr. Tamaresis has developed and validated a highly accurate statistical biomarker classifier for gynecologic disease by applying multivariate techniques to a large genomic data set. His statistical consultations have produced data analyses for published research studies and analysis plans for novel research proposals in grant applications. As an applied mathematician, Dr. Tamaresis has created computational biology models and devised numerical methods for their solution. He devised a probabilistic model to study how the number of binding sites on a novel therapeutic molecule affected contact time with cancer cells to advise medical researchers about its design. For his doctoral dissertation, he created and analyzed the first mathematical system model for a mechanosensory network in vascular endothelial cells to investigate the initial stage of atherosclerotic disease.

Publications

PUBLICATIONS

- **CAR19 monitoring by peripheral blood immunophenotyping reveals histology-specific expansion and toxicity.** *Blood advances*
Hamilton, M. P., Craig, E., Gentile Sanchez, C., Mina, A., Tamaresis, J., Kirmani, N., Ehlinger, Z., Syal, S., Good, Z., Sworder, B., Schroers-Martin, J., Lu, Y., Muffly, et al
2024
- **Single Center Randomized Trial of T-reg graft alone versus T-reg graft Plus Tacrolimus for the Prevention of Acute GVHD.** *Blood advances*
Bader, C. S., Pavlova, A., Lowsky, R., Muffly, L., Shiraz, P., Arai, S., Johnston, L. J., Rezvani, A. R., Weng, W. K., Miklos, D. B., Frank, M. J., Tamaresis, J. S., Agrawal, et al
2023
- **CAR19 Therapy Drives Expansion of Clonal Hematopoiesis and Associated Cytopenias**
Hamilton, M. P., Sworder, B. J., Alig, S. K., Good, Z., Boegeholz, J., Schroers-Martin, J., Tamaresis, J., Esfahani, M., Lu, Y., Olsen, M., Liu, C., Ehlinger, Z., Desai, et al
AMER SOC HEMATOLOGY.2023
- **Five Year Outcomes of Patients with Large B-Cell Lymphoma Treated with Standard-of-Care Axicabtagene Ciloleucel: Results from the US Lymphoma CAR-T Cell Consortium**
Spiegel, J. Y., Jain, M. D., Nastoupil, L. J., Tamaresis, J., Ghobadi, A., Lin, Y., Lekakis, L. J., Reagan, P. M., Oluwole, O. O., McGuirk, J. P., Deol, A., Dorritie, K., Sehgal, et al
AMER SOC HEMATOLOGY.2023

- **Phase 1 Trial Results for Patients with Advanced Hematologic Malignancies Undergoing Reduced Intensity Allogeneic HCT with Orca-T Donor Cell Therapy Product and Single Agent Tacrolimus**
Villar-Prados, A., Meyer, E. H., Sutherland, K., Negrin, R. S., Arai, S., Frank, M. J., Johnston, L., Lowsky, R., Miklos, D. B., Muffly, L. S., Dahiya, S., Rezvani, A. R., Sidana, et al
AMER SOC HEMATOLOGY.2023
- **Improved outcomes for relapsed/refractory Hodgkin lymphoma after autologous transplantation in the era of novel agents.** *Blood*
Spinner, M. A., Sica, R. A., Tamaresis, J. S., Lu, Y., Chang, C., Lowsky, R., Frank, M. J., Johnston, L. J., Miklos, D. B., Muffly, L., Negrin, R. S., Rezvani, A. R., Shiraz, et al
2023
- **Analysis of Bendamustine Lymphodepletion, CD19 CART Expansion, Safety and Efficacy in Patients with Rel/Ref NonHodgkin Lymphoma**
Bharadwaj, S., Hamilton, M. P., Sahaf, B., Tamaresis, J., Patil, S., Hanson, P. J., Latchford, T., Arai, S., Johnston, L. J., Lowsky, R., Negrin, R. S., Rezvani, A. R., Shizuru, et al
AMER SOC HEMATOLOGY.2022: 10371-10373
- **Higher Rates of Severe Infection and Persistent Cytopenias in Long-Term CAR19 Responders Than after Autologous HCT: A Single Institution Study of 139 Subjects**
Hamilton, M. P., Liu-Fei, F. C., Alig, S. K., Tamaresis, J., Esfahani, M., Good, Z., Sworder, B., Schroers-Martin, J., Liu, C., Severinsen, F., Hanson, P. J., Lu, Y., Lowsky, et al
AMER SOC HEMATOLOGY.2022: 7545-7547
- **Post-infusion CAR T-Reg cells identify patients resistant to CD19-CAR therapy** *NATURE MEDICINE*
Good, Z., Spiegel, J. Y., Sahaf, B., Malipatlolla, M. B., Ehlinger, Z. J., Kurra, S., Desai, M. H., Reynolds, W. D., Lin, A., Vandris, P., Wu, F., Prabhu, S., Hamilton, et al
2022
- **A Composite Endpoint for Treatment Benefit According to Patient Preference** *STATISTICS IN BIOPHARMACEUTICAL RESEARCH*
Lu, Y., Zhao, Q., Zou, J., Yan, S., Tamaresis, J. S., Nelson, L., Tu, X. M., Chen, J., Tian, L.
2022
- **A Composite Endpoint for Treatment Benefit According to Patient Preference.** *Statistics in biopharmaceutical research*
Lu, Y., Zhao, Q., Zou, J., Yan, S., Tamaresis, J. S., Nelson, L., Tu, X. M., Chen, J., Tian, L.
2022; 14 (4): 408-422
- **Mgta-145+Plerixafor Provides GCSF-Free Rapid and Reliable Hematopoietic Stem Cell Mobilization for Autologous Stem Cell Transplant in Patients with Multiple Myeloma: A Phase 2 Study**
Sidana, S., Bankova, A. K., Hosoya, H., Kumar, S., Tamaresis, J., Le, A., Muffly, L., Johnston, L. J., Arai, S., Lowsky, R., Meyer, E. H., Rezvani, A. R., Weng, et al
AMER SOC HEMATOLOGY.2021
- **Long-Term Outcomes of Patients with Large B-Cell Lymphoma Treated with Standard-of-Care Axicabtagene Ciloleucel: Results from the US Lymphoma CAR-T Cell Consortium**
Spiegel, J. Y., Jain, M. D., Nastoupil, L., Tamaresis, J., Ghobadi, A., Lin, Y., Lekakis, L. J., Reagan, P. M., Oluwole, O. O., McGuirk, J. P., Deol, A., Sehgal, A. R., Goy, et al
AMER SOC HEMATOLOGY.2021: 3826+
- **Incidence and risk factors associated with bleeding and thrombosis following chimeric antigen receptor T-cell therapy** *BLOOD ADVANCES*
Johnsrud, A., Craig, J., Baird, J., Spiegel, J., Muffly, L., Zehnder, J., Tamaresis, J., Negrin, R., Johnston, L., Arai, S., Shizuru, J., Lowsky, R., Meyer, et al
2021; 5 (21): 4465-4475
- **Development of immunosuppressive myeloid cells to induce tolerance in solid organ and hematopoietic cell transplant recipients.** *Blood advances*
Jensen, K. P., Hongo, D., Ji, X., Zheng, P., Pawar, R. D., Wu, H., Busque, S., Scandling, J. D., Shizuru, J. A., Lowsky, R., Shori, A., Dutt, S., Waters, et al
2021
- **CAR T cells with dual targeting of CD19 and CD22 in adult patients with recurrent or refractory B cell malignancies: a phase 1 trial.** *Nature medicine*
Spiegel, J. Y., Patel, S., Muffly, L., Hossain, N. M., Oak, J., Baird, J. H., Frank, M. J., Shiraz, P., Sahaf, B., Craig, J., Iglesias, M., Younes, S., Natkunam, et al
2021
- **GD2 CAR T cells mediate clinical activity and manageable toxicity in children and young adults with DIPG and H3K27M-mutated diffuse midline gliomas.**

Majzner, R. G., Ramakrishna, S., Mochizuki, A., Patel, S., Chinnasamy, H., Yeom, K., Schultz, L., Richards, R., Campen, C., Reschke, A., Mahdi, J., Toland, A., Baggott, et al
AMER ASSOC CANCER RESEARCH.2021

- **Immune reconstitution and infectious complications following axicabtagene ciloleucel therapy for large B-cell lymphoma.** *Blood advances*
Baird, J. H., Epstein, D. J., Tamaresis, J. S., Ehlinger, Z., Spiegel, J. Y., Craig, J., Claire, G. K., Frank, M. J., Muffly, L., Shiraz, P., Meyer, E., Arai, S., Brown, et al
2021; 5 (1): 143-155
- **Immune reconstitution and infectious complications following axicabtagene ciloleucel therapy for large B-cell lymphoma** *BLOOD ADVANCES*
Baird, J. H., Epstein, D. J., Tamaresis, J. S., Ehlinger, Z., Spiegel, J. Y., Craig, J., Claire, G. K., Frank, M. J., Muffly, L., Shiraz, P., Meyer, E., Arai, S., Brown, et al
2021; 5 (1): 143-55
- **Incidence and Risk Factors Associated with Bleeding and Thrombosis Following Chimeric Antigen Receptor T Cell Therapy.** *Blood advances*
Johnsrud, A. J., Craig, J., Baird, J. H., Spiegel, J. Y., Muffly, L., Zehnder, J. L., Tamaresis, J. S., Negrin, R. S., Johnston, L., Arai, S., Shizuru, J. A., Lowsky, R., Meyer, et al
2021
- **Outcomes of Patients with Large B-cell Lymphoma Progressing after Axicabtagene Ciloleucel.** *Blood*
Spiegel, J. Y., Dahiya, S., Jain, M. D., Tamaresis, J. S., Nastoupil, L., Jacobs, M. T., Ghobadi, A., Lin, Y., Lunning, M., Lekakis, L. J., Reagan, P., Oluwole, O. O., McGuirk, et al
2020
- **Analysis of Whole CDR3 TCR Repertoire after Hematopoietic Stem Cell Transplantation in Two Clinical Cohorts.** *Biology of blood and marrow transplantation : journal of the American Society for Blood and Marrow Transplantation*
Shah, O., Tamaresis, J. S., Kenyon, L. J., Xu, L., Zheng, P., Gupta, P., Rangarajan, K., Lee, S., Spellman, S., Nikiforow, S., Zehnder, J., Meyer, E. H.
2020
- **Mixed chimerism and acceptance of kidney transplants after immunosuppressive drug withdrawal.** *Science translational medicine*
Busque, S. n., Scandling, J. D., Lowsky, R. n., Shizuru, J. n., Jensen, K. n., Waters, J. n., Wu, H. H., Sheehan, K. n., Shori, A. n., Choi, O. n., Pham, T. n., Fernandez Vina, M. A., Hoppe, et al
2020; 12 (528)
- **CD22-Directed CAR T-Cell Therapy Induces Complete Remissions in CD19-Directed CAR-Refractory Large B-Cell Lymphoma.** *Blood*
Baird, J. H., Frank, M. J., Craig, J. n., Patel, S. n., Spiegel, J. Y., Sahaf, B. n., Oak, J. S., Younes, S. n., Ozawa, M. n., Yang, E. n., Natkunam, Y. n., Tamaresis, J. S., Ehlinger, et al
2020
- **Recipient-specific T-cell repertoire reconstitution in the gut following murine hematopoietic cell transplant.** *Blood advances*
Zheng, P. n., Tamaresis, J. n., Thangavelu, G. n., Xu, L. n., You, X. n., Blazar, B. R., Negrin, R. S., Zehnder, J. L., Iliopoulou, B. P., Meyer, E. H.
2020; 4 (17): 4232-43
- **Image-based scaling laws for somatic growth and pulmonary artery morphometry from infant- to adulthood.** *American journal of physiology. Heart and circulatory physiology*
Dong, M. L., Yang, W. n., Tamaresis, J. S., Chan, F. P., Zucker, E. J., Kumar, S. n., Rabinovitch, M. n., Marsden, A. L., Feinstein, J. A.
2020
- **Outcomes in large B-cell lymphoma progressing after axicabtagene ciloleucel (Axi-cel): Results from the US Lymphoma CAR-T Consortium.**
Spiegel, J. Y., Dahiya, S., Jain, M. D., Nastoupil, L. J., Ghobadi, A., Lin, Y., Lunning, M., Reagan, P., McGuirk, J., Deol, A., Munoz, J., Locke, F., Neelapu, et al
AMER SOC CLINICAL ONCOLOGY.2019
- **Nonmyeloablative TLI-ATG conditioning for allogeneic transplantation: mature follow-up from a large single-center cohort.** *Blood advances*
Spinner, M. A., Kennedy, V. E., Tamaresis, J. S., Lavori, P. W., Arai, S. n., Johnston, L. J., Meyer, E. H., Miklos, D. B., Muffly, L. S., Negrin, R. S., Rezvani, A. R., Shizuru, J. A., Weng, et al
2019; 3 (16): 2454-64
- **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

- **High human herpesvirus 6 viral load in pediatric allogeneic hematopoietic stem cell transplant patients is associated with detection in end organs and high mortality** *PEDIATRIC TRANSPLANTATION*
Winestone, L. E., Punn, R., Tamaresis, J. S., Buckingham, J., Pinsky, B. A., Waggoner, J. J., Kharbanda, S.
2018; 22 (2)
- **Local estrogen axis in the human bone microenvironment regulates estrogen receptor-positive breast cancer cells.** *Breast cancer research : BCR*
Amanatullah, D. F., Tamaresis, J. S., Chu, P. n., Bachmann, M. H., Hoang, N. M., Collyar, D. n., Mayer, A. T., West, R. B., Maloney, W. J., Contag, C. H., King, B. L.
2017; 19 (1): 121
- **Updated analysis: central venous access device infection rates in an expanded cohort of paediatric patients with severe haemophilia receiving prophylactic recombinant tissue plasminogen activator.** *Haemophilia*
McCarthy, C. E., O'Brien, M., Andrews, J., Zoland, J. M., Macasiray, E., Wong, W., Lo, C., Glader, B., TAMARESIS, J., Jeng, M.
2016; 22 (1): 81-86
- **Breast Cancer Cell Colonization of the Human Bone Marrow Adipose Tissue Niche** *NEOPLASIA*
Templeton, Z. S., Lie, W., Wang, W., Rosenberg-Hasson, Y., Alluri, R. V., Tamaresis, J. S., Bachmann, M. H., Lee, K., Maloney, W. J., Contag, C. H., King, B. L.
2015; 17 (12): 849-861
- **Reading abilities in school-aged preterm children: a review and meta-analysis** *DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY*
Kovachy, V. N., Adams, J. N., Tamaresis, J. S., Feldman, H. M.
2015; 57 (5): 410-419
- **A Randomized Clinical Trial of Therapeutic Hypothermia Mode during Transport for Neonatal Encephalopathy.** *journal of pediatrics*
Akula, V. P., Joe, P., Thusu, K., Davis, A. S., Tamaresis, J. S., Kim, S., Shimotake, T. K., Butler, S., Honold, J., Kuzniewicz, M., Desandre, G., Bennett, M., Gould, et al
2015; 166 (4): 856-861 e2
- **A randomized clinical trial of therapeutic hypothermia mode during transport for neonatal encephalopathy.** *journal of pediatrics*
Akula, V. P., Joe, P., Thusu, K., Davis, A. S., Tamaresis, J. S., Kim, S., Shimotake, T. K., Butler, S., Honold, J., Kuzniewicz, M., Desandre, G., Bennett, M., Gould, et al
2015; 166 (4): 856-61 e1 2
- **Regional variation in antenatal corticosteroid use: a network-level quality improvement study.** *Pediatrics*
Profit, J., Goldstein, B. A., TAMARESIS, J., Kan, P., Lee, H. C.
2015; 135 (2): e397-404
- **Molecular Classification of Endometriosis and Disease Stage Using High-Dimensional Genomic Data** *ENDOCRINOLOGY*
Tamaresis, J. S., Irwin, J. C., Goldfien, G. A., Rabban, J. T., Burney, R. O., Nezhat, C., DePaolo, L. V., Giudice, L. C.
2014; 155 (12): 4986-4999
- **Coculturing human endometrial epithelial cells and stromal fibroblasts alters cell-specific gene expression and cytokine production** *FERTILITY AND STERILITY*
Chen, J. C., Erikson, D. W., Piltonen, T. T., Meyer, M. R., Barragan, F., McIntire, R. H., Tamaresis, J. S., Vo, K. C., Giudice, L. C., Irwin, J. C.
2013; 100 (4): 1132-1143
- **Molecular probe technology detects bacteria without culture** *BMC MICROBIOLOGY*
Hyman, R. W., St Onge, R. P., Kim, H., Tamaresis, J. S., Miranda, M., Aparicio, A. M., Fukushima, M., Pourmand, N., Giudice, L. C., Davis, R. W.
2012; 12
- **Perivascular Human Endometrial Mesenchymal Stem Cells Express Pathways Relevant to Self-Renewal, Lineage Specification, and Functional Phenotype** *BIOLOGY OF REPRODUCTION*
Spitzer, T. L., Rojas, A., Zelenko, Z., Aghajanova, L., Erikson, D. W., Barragan, F., Meyer, M., Tamaresis, J. S., Hamilton, A. E., Irwin, J. C., Giudice, L. C.
2012; 86 (2)
- **A model for shear stress sensing and transmission in vascular endothelial cells** *BIOPHYSICAL JOURNAL*
Mazzag, B. M., Tamaresis, J. S., Barakat, A. I.
2003; 84 (6): 4087-4101