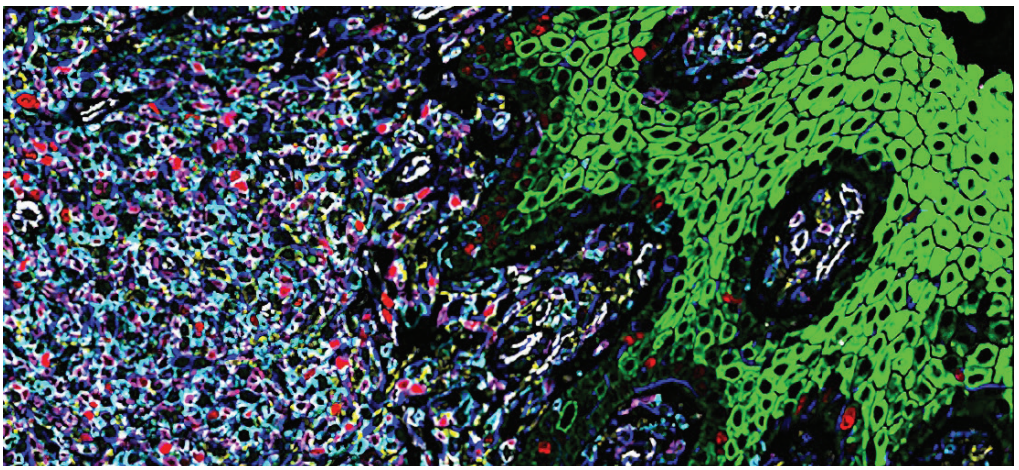
Stanford MEDICINE
School of Medicine

Multidisciplinary Cutaneous and T-Cell Lymphoma Program



875 Blake Wilbur Drive
Stanford, CA 94305

To refer a patient
Debbie Bergman (Coordinator)
Dbergman@stanfordhealthcare.org
Christine Nguyen (Coordinator)
ChriNguyen@stanfordhealthcare.org

Faculty:
Cutaneous Oncology
Youn Kim, MD (Program Director)
Jennifer Wang, MD
Erica Wang, MD

Medical Oncology
Michael Khodadoust, MD, PhD
(Program Co-Director, Translational Research)
Ranjana Advani, MD

Radiation Oncology
Richard Hoppe, MD (Program Co-Director)
Michael Binkley, MD, MS
Susan Hiniker, MD

Blood & Marrow Transplantation
Wen-Kai Weng, MD, PhD (Program Co-Director)

Pathology
Kerri Rieger, MD, PhD
Robert Novoa, MD
Ryanne Brown, MD, MBA
Sebastian Fernandez-Pol, MD, PhD

Websites
- cutaneouslymphoma.stanford.edu
- cancer.stanford.edu

Gifting Information:
Checks can be made payable to:
Stanford University- Cutaneous Lymphoma Research Fund (HAFSE):
Stanford University
Development Services
P.O. Box 20466
Stanford, CA 94309-0466

The Stanford Multidisciplinary Cutaneous and T-cell Lymphoma team offers expert treatment for patients with cutaneous or systemic T-cell lymphomas, including mycosis fungoides (MF), Sézary syndrome (SS), CD30+ lymphoproliferative disorders (lymphomatoid papulosis and anaplastic large cell lymphoma), subcutaneous panniculitis-like T-cell lymphoma, gamma-delta T-cell lymphoma, CD8+ aggressive epidermotropic T-cell lymphoma, NK/T-cell lymphoma, systemic peripheral T-cell lymphomas, and cutaneous B-cell lymphomas. Our physicians subspecialize in treating these types of cancers, and have extensive expertise in handling the most complicated cases. In fact, we serve as the consultants to the experts. Consultations are comprehensive and clinic visits are coordinated to allow joint evaluations by our multidisciplinary team.

Innovative Discoveries and Treatments Available at Stanford

The Stanford team continues its leadership in bringing cutting-edge technology platforms to the clinics, testing new diagnostic and prognosticating tools and establishing biomarkers to guide selection of therapies that best align with patient's lymphoma profile. Our multidisciplinary approach allows the most comprehensive and personalized management for each patient. Moreover, we offer the newest in novel targeted and immune therapies, including treatments that attack newly discovered tumor surface proteins, genetic and epigenetic alterations that affect cell signaling, proliferation, or survival pathways and/or microenvironment elements, to eliminate cancer cells. Here are examples of the new therapies available at Stanford and highlights of the clinical and translational development:

- Mogamulizumab (KW-0761) is a bioengineered, humanized monoclonal antibody against CCR4, highly expressed on tumor cells. Stanford's leadership has led to the successful completion of the phase 3 trial and the FDA approval. We are now exploring combination therapies with mogamulizumab to improve the overall clinical benefit including strategies with radiation therapy or other immune therapies that can result in synergistic activity with mogamulizumab.
- Brentuximab vedotin is an antibody-drug-conjugate that targets CD30, commonly expressed on tumor cells in cutaneous T-cell lymphoma (CTCL). Stanford-led clinical trial in CTCL has shown impressive activity, allowing brentuximab vedotin as a standard of care option in the NCCN guidelines. Stanford's trial, along with the phase 3 clinical trial data, was instrumental in the official FDA approval in CTCL, and we have demonstrated that brentuximab can clear CTCL even with minimal amount of CD30 target molecule.
- Immune checkpoint blockade, such as anti-PD-1 monoclonal antibody, unleashes the antitumor effector T cells that fight off malignant T cells in mycosis fungoides and Sézary syndrome. Promising clinical activity in CTCL with durable responses were observed with pembrolizumab. Comprehensive translational studies are ongoing to further characterize biomarkers predictive of clinical response or resistance to pembrolizumab and to identify optimal combination therapy strategies.

- Novel macrophage checkpoint blockade, anti-CD47 monoclonal antibody, specifically discovered by Stanford investigators, is undergoing clinical development in solid tumors and lymphomas including CTCL. Blocking the checkpoint ("don't eat me" signal) with the antibody allows effective phagocytosis of the malignant cells by patient's own macrophages. Combination therapy with mogamulizumab (anti-CCR4 antibody) may enhance the "eat-me" signal and provide clinical immune synergy with improved results. Stanford is leading a multicenter ETCTN trial exploring this novel combination approach.
- Anti-KIR3DL2 monoclonal antibody (lacutamab) therapy in cutaneous T-cell lymphoma. KIR3DL2 is highly and selectively expressed on neoplastic T cells, including mycosis fungoides and Sézary syndrome. This antibody works by stimulating the patient's own immune system to attack the KIR3DL2-expressing cancer cells. In the phase 1 study, patients tolerated the humanized antibody very well and experienced significant clinical benefit, especially in those with Sézary syndrome. The early promising results has led to the development of the currently ongoing phase 2 pivotal study.
- Stanford investigators have shown that low-dose (12 Gy) total skin electron beam therapy (LD-TSEBT) can be highly effective in clearing the skin disease in patients with CTCL. We are exploring various combination approaches with LD-TSEBT, to not only clear lymphoma in all compartments including the blood and lymph nodes but also to provide sustaining response by partnering with immune therapies. We have successfully combined LD-TSEBT with pembrolizumab or immune cytokines such as interleukin-12. Currently, we are exploring the combination of LD-TSEBT with mogamulizumab in a clinical trial.
- Clinical trial based on Stanford's genomics research targeting the molecules and pathways that allow survival advantage of malignant T-cells is ongoing in collaboration with Memorial Sloan Kettering Cancer Center. An oral PI3K dual inhibitor, duvelisib, is combined with histone deacetylase inhibitor, romidepsin. Other trials targeting cancer cell signaling and survival pathways, including a dual SYK-JAK inhibitor (cerdulatinib) and selected ITK inhibitor (CPI-818), are also ongoing in partnerships with industry.
- Non-myeloablative allogeneic hematopoietic stem cell transplantation (HSCT) using total skin electron beam therapy (TSEBT), total lymphoid irradiation (TLI), and anti-thymocyte globulin (ATG) as novel preparatory regimen for patients with mycosis fungoides and Sézary syndrome. Stanford's "protective" conditioning regimen allows patients to have long-lasting or curative results with much improved safety profile compared to conventional HSCT regimens. Given the safety advantage, we are also able to reduce risks for our older patients. This novel Stanford regimen is now being adopted at multiple expert centers, globally. Patients referred for consideration of allogeneic HSCT will be managed jointly with our multidisciplinary group.
- Chimeric antigen receptor T-cells (CAR-T) technology equips the activated T-cells with the ability to target specific molecules on the cancer cells, resulting in potent killing of cancer cells by super-charged T-cells. With the discovery of gene editing tools, we now are able to utilize the CAR-T therapy to fight T-cell lymphoma cells specifically without the good T-cells killing each other. In partnership with CRISPR Therapeutics, CD70 targeting CAR-T therapy in cutaneous and systemic T-cell lymphomas have been initiated and early results show promising efficacy and safety results.
- Newer molecular diagnostic methods including T-cell receptor (TCR) high throughput sequencing offer superior sensitivity and specificity over conventional tools for the identification and monitoring of clonal malignant T cells. This type of technology is actively used to follow cancer activity that is not measurable by conventional methods, thus better defining and predicting if patients can be in long-term remission. The same method is also used to establish patient's distinct malignant TCR sequence, thus differentiating lymphoma from benign or inflammatory mimics, leading to early and/or more definitive diagnosis. Furthermore, in the era of immune therapies that cause significant skin rashes, this highly specific method can best distinguish CTCL from rashes associated with the newer CTCL therapies, thus allowing us to optimize our management.
- Stanford investigators have also shown that the clonal TCR sequence unique to each CTCL patient is a potential great target for immune therapy. In each patient, their lymphoma TCR target is present on every CTCL cell and uniformly absent on normal cells, thus allowing highly specific immune therapy. We are exploring methods to train the patient's immune system to better recognize and target the lymphoma TCR and effectively kill the CTCL cells by enhanced anti-tumor immune activity. Pre-clinical studies of patient-specific anti-TCR immune response have been promising and we hope to launch a clinical trial in the next year.
- Sophisticated in-depth next generation sequencing (NGS) methods have allowed Stanford investigators to identify key signaling and survival pathways and molecules used by CTCL cells for their growth and spread of cancer. These early discoveries have led us to have develop a targeted NGS panel for hematologic malignancies that can be utilized to identify actionable ("druggable") targets in cutaneous and systemic T-cell lymphomas. These actionable NGS panels also help us identify the molecular mechanisms driving the patient's lymphoma, allowing improved precision in prioritizing therapy.

International Leadership

The Stanford MCTLP team led the effort in establishing the Cutaneous Lymphoma International Consortium (CLIC), an international collaborative network of CL expert centers committed to partnering in large-scale research that is essential in generating meaningful

data in rare disease groups such CTCL. The CLIC Steering Committee was established to optimize the global representation of leadership. Collectively, we recognized the potential challenges of building and sustaining an ambitious international platform, thus we identified initial objectives with stepwise build towards the ultimate goal to prepare the CLIC alliance for translational discoveries with large-scale testing and validation for optimal clinical applicability. More than 60 international expert centers have joined to partake in the CLIC collaborative effort. Stanford and the UK co-lead center (UHB) serve as CLIC's coordinating data center for the collection and management of clinical, pathology, and molecular data linked with a federated ("virtual") Biobank establishment at each participating center. This CLIC Biobank and digitized pathology databank serve as an invaluable repository of clinical samples linked with prospectively collected clinical and pathology annotation for translational research in CL. Through this mechanism, key scientific discoveries reported from an expert center can be efficiently validated in a larger study at an international level.

CUTANEOUS AND T-CELL LYMPHOMA CLINICAL TRIALS

To learn more about active Lymphoma clinical trials, please visit: cancer.stanford.edu/trials or cutaneouslymphoma.stanford.edu

- Prospective Multicenter International Observational Study for Determination of a Cutaneous Lymphoma International Prognostic Index Model and Impact of Major Therapies in Patients with Advanced Mycosis Fungoides and Sézary Syndrome
- A Phase 2 Single-Center, Single-Arm, Open-Label Mogamulizumab Combined Upfront with Low-dose Total Skin Electron Beam Therapy (LD-TSEBT) in Patients with Mycosis Fungoides and Sézary Syndrome
- A Phase 1b/2 Study of Hu5F9-G4 (Magrolimab) in Combination with Mogamulizumab in Relapsed/Refractory Treated T-cell Lymphoma
- Open-Label, Phase 2 Study to Assess the Safety of Mogamulizumab Given Every 4 Weeks Following Induction in Participants with Relapsed/Refractory Cutaneous T-cell Lymphoma (CTCL)
- An Open-Label, Multi-Cohort, Multi-Center Phase II Study Evaluating the Efficacy and Safety of IPH4102 Alone or in Combination with Chemotherapy in Patients with T-cell lymphoma: TELLOMAK study
- Optimizing Dosing of Brentuximab Vedotin for Mycosis Fungoides, Sezary Syndrome, and Lymphomatoid Papulosis
- A Phase 1/1b Dose-Escalation Trial Evaluating CPI-818, an Oral Interleukin-2-Inducible T-Cell Kinase Inhibitor, in Subjects With Relapsed/Refractory T-Cell Lymphoma
- A Phase 1, Open-Label, Multicenter, Dose Escalation and Cohort Expansion Study of the Safety and Efficacy or Anti-CD70 Allogeneic CRISPR-Cas9-Engineered T Cells (CTX130) in Adult Subjects with Relapsed or Refractory T or B Cell Malignancies
- A Multicenter, Open-Label, First-In-Human, Multiple Expansion Cohort, Phase 1/2 Study to Evaluate the Safety and Efficacy of DR-01 in Adult Subjects with Large Granular Lymphocytic Leukemia or Cytotoxic Lymphomas

SELECTED PUBLICATIONS BY STANFORD MCLP AND COLLABORATORS

- Ungewickell A, Bhaduri A, Rios E, Reuter J, Lee CS, Mah A, Zehnder A, Ohgami R, Kulkarni S, Armstrong R, Gratzinger D, Tavallaee M, Rook A, Snyder M, **Kim Y, Khavari P**. Genomic analysis of mycosis fungoides and Sézary syndrome identifies recurrent alterations in TNFR2. Nat Genet 47:1056-60, 2015.
- Qu K, Zaba LC, Satpathy AT, Giresi PG, Jin Y, Armstrong R, Jin C, Schmitt N, Rahbar Z, Ueno H, Greenleaf WJ, **Kim YH, Chang HY**. Chromatin accessibility landscape of cutaneous T cell lymphoma and dynamic response to HDAC inhibitors. Cancer Cell 32:27-41, 2017.
- Satpathy AT, Saligrama N, Buenrostro JD, Wei Y, Wu B, Rubin AJ, Granja JM, Lareau CA, Li R, Qi Y, Parker KR, Mumbach MR, Serratelli WS, Gennert DG, Schep AN, Corces MR, **Khodadoust MS, Kim YH, Khavari PA,** Greenleaf WJ, Davis MM, **Chang HY.** Transcript-indexed ATAC-seq for precision immune profiling. Nat Med 24:580-90, 2018.
- **Weng W-K**, Armstrong R, Arai S, Desmarais C, **Hoppe R, Kim YH**: Minimal residual disease monitoring with high-throughput sequencing of T cell receptors in cutaneous T cell lymphoma. Sci Transl Med 5(214):214ra171, 2013.
- **Weng WK,** Arai S, Rezvani A, Johnston L, Lowsky R, Miklos D, Shizuru J, Muffly L, Meyer E, Negrin RS, **Wang E**, Almazan T, Million L, **Khodadoust M, Li S, Hoppe RT, Kim YH.** Nonmyeloablative allogeneic transplantation achieves clinical and molecular remission in cutaneous T-cell lymphoma. Blood Adv 4:4474-82, 2020.
- Dai J, Almazan TH, Hong EK, **Khodadoust MS, Arai S, Weng WK, Kim YH**. Potential association of anti-CCR4 antibody mogamulizumab and graft-vs-host disease in patients with mycosis fungoides and Sézary syndrome. JAMA Dermatol 154: 728-730, 2018.

- **Hoppe RT**, Harrison C, Tavallaee M, Bashey S, Sundram U, Li S, Million L, Dabaja B, Granger P, Duvic M, **Kim YH**. Low-dose total skin electron beam therapy as an effective modality to reduce disease burden in patients with mycosis fungoides: results of pooled analysis from 3 phase II clinical trials. J Am Acad Dermatol 72:286-92, 2015.
- Rahimy E, Skinner L, **Kim YH, Hoppe RT.** Technical report: 3D-printed patient-specific scalp shield for hair preservation in total skin electron beam therapy. Tech Innov Patient Support Radiat Oncol. Jun;18:12-15, 2021.
- Fong S, Hong EK, **Khodadoust MS,** Shufeng L, **Hoppe RH, Kim YH, Hiniker SM.** Low-dose total skin electron beam therapy combined with mogamulizumab for refractory mycosis fungoides and Sezary syndrome. Adv Radiat Oncol. 2020, Nov; available online D-20-00319R1
- Obeid JP, Gutkin PM, Lewis J, SkinnerL, **Wang EB, Khodadoust MS, Kim YH, Weng WK, Hoppe RT, Hiniker SM**. Volumetric Modulated Arc Therapy and 3-Dimensional printed bolus in the treatment of refractory primary cutaneous gamma delta lymphoma of the bilateral legs. Pract Radiat Oncol 9:220-225, 2019.
- **Kim YH**, Tavallaee MT, Sundram U, Salva KA, Wood GS, Li S, Rozati S, Nagpal S, Krathen M, Reddy S, **Hoppe RT**, Nguyen-Lin A, **Weng WK**, Armstrong R, Pulitzer M, Advani RA, Horwitz SM. Phase II investigator-initiated study of brentuximab vedotin in mycosis fungoides and Sézary syndrome with variable Cd30 expression level: a multi-institution collaborative project. J Clin Oncol, 33:3750-3758, 2015.
- Prince HM*, **Kim YH*,** Horwitz SM, Dummer R, Scarisbrick J, Quaglino P, Zinzani PL, et al. Brentuximab vedotin or physician's choice in CD30-positive cutaneous T-cell lymphoma: an open-label, multicenter, randomized phase 3 trial. Lancet 390:555-566, 2017. *Equal contribution.
- Rahbar Z, **Li S,** Tavallaee M, **Novoa RA**, Kim J, **Kim YH.** Variability in the expression of immunohistochemical markers: implications for biomarker interpretation in cutaneous T-cell lymphoma. J Invest Dermatol 138:1204-1206, 2018.
- **Kim YH,** Bagot M, Pinter-Brown P, Rook AH, Porcu P, Horwitz S, Whittaker S, Tokura Y, Vermeer M, Zinzani PL, Sokol L, Morris S, et al, and the MAVORIC Study Group. Mogamulizumab versus vorinostat in previously treated cutaneous T-cell lymphoma (MAVORIC): an international, open-label, randomized, controlled phase 3 trial. Lancet Oncol 19:1192-1204, 2018.
- Bagot M, Porcu P, Marie-Cardine A, Battistella M, William BM, Vermeer M, Whittaker S, Rotolo F, Ram-Wolff C, **Khodadoust MS,** Bensussan A, Paturel C, Bonnafous C, Sicard H, Azim HA, **Kim YH.** IPH4102, a first-in-class anti-KIR3DL2 monoclonal antibody, in patients with relapsed or refractory cutaneous T-cell lymphomas: an international, first-in-human, open-label, phase 1 trial. Lancel Oncol 20:1160-1170, 2019.
- **Khodadoust MS**, Rook AH, Porcu P, Foss F, Moskowitz AJ, Shustov A, Shanbhag S, Sokol L, Fling SP, Ramchurren N, Pierce R, Davis A, Shine R, **Li S,** Fong S, Kim J, Yang Y, Blumenschein WM, Yearley JH, Das B, Patidar R, Datta V, Cantu E, McCutcheon JN, Karlovich C, Williams PM, Subrahmanyam PB, Maecker HT, Horwitz SM, Sharon E, Kohrt HE, Cheever MA, **Kim YH**. Pembrolizumab in Relapsed and Refractory Mycosis Fungoides and Sézary Syndrome: A Multicenter Phase II Study. J Clin Oncol 38:20-28, 2020.
- Rojansky R, **Fernandez-Pol S, Wang E, Rieger KE, Novoa RA,** Zehnder JL, Kunder CA, **Kim YH, Khodadoust MS, Brown RA.** Cutaneous T-cell lymphomas with pathogenic somatic mutations and absence of detectable clonal T-cell receptor gene rearrangement: two case reports. Diagn Pathol 15:122, 2020.
- **Fernandez-Pol S,** Neishaboori N, Chapman CM, **Khodadoust MS**, **Kim YH**, Rieger KE, Suarez CJ. Two cases of mycosis fungoides with PCM1-JAK2 fusion. JCO Precis Oncol. 2021 Nov;5:646-652.
- **Wang JY,** Hirotsu KE, Neal TM, Raghavan SS, Kwong BY, **Khodadoust MS, Brown RA, Novoa RA, Kim YH, Rieger KE.** Histopathologic Characterization of Mogamulizumab-associated Rash. Am J Surg Pathol 44:1666-1676, 2020.
- Hirotsu KE, Neal TM, **Khodadoust MS, Wang JY**, Rieger KE, Strelo J, Hong E, **Kim YH,** Kwong BY. Clinical characterization of mogamulizumab-associated rash during treatment of mycosis fungoides and Sézary syndrome. JAMA Dermatology 157:700-707, 2021.
- Hoffmann JC, Atwater SK, Hong E, Kumar J, **Khodadoust M, Kim Y,** Ohgami RS. A Long-Term Study of Persistent Sézary Syndrome: Evidence for Antigen Shift by Multiparameter Flow Cytometry and Its Significance in Overall Survival. Am J Dermatopathol 2020 42:389-396, 2020.
- Guitart J, Martinez-Escala ME, Subtil A, Duvic M, Pulitzer M, Olsen E, Kim E, Rook A, Samini A, Wood G, Girardi M, Junkins-Hopkins JM, Ivan D, Selim MA, Sable K, Virmani P, Pincus L, Tetzlaff M, Kim, J, **Kim YH.** Primary cutaneous aggressive epidermotropic cytotoxic T cell lymphomas: reappraisal of a provisional entity in the 2016 WHO classification of cutaneous lymphomas. Mod Pathol 30:761-772, 2017.
- Guitart J, Mangold AR, Martinez-Escala ME, Walker CJ, Comfere NI, Pulitzer M, **Rieger KE,** Torres-Cabala CA, Pincus LB, Kumar ES, **Wang EBK,** Park KE, Espinosa ML, Duvic M, **Kim YH,** Horwitz S. Clinical and Pathological Characteristics and Outcomes

Among Patients With Subcutaneous Panniculitis-like T-Cell Lymphoma and Related Adipotropic Lymphoproliferative Disorders. JAMA Dermatol. Oct 1;158(10):1167-1174, 2022.

- Kheterpal MK, Dai J, Geller S, Pulitzer M, Ni A, Myskowski PL, Moskowitz A, Kim J, Hong EK, Fong S, **Hoppe RT, Kim YH,** Horwitz SM. Role of imaging in low-grade cutaneous B-cell lymphoma presenting in the skin. J Am Acad Dermatol. 2019 Oct;81(4):970-976. doi: 10.1016/j.jaad.2019.01.037. Epub 2019 Jan 29. PubMed PMID: 30703460; PubMed Central PMCID: PMC6661219.
- Scarisbrick JJ, Prince HM, Vermeer MH, Quaglino P, Horwitz S, Porcu P, Stadler R, Wood G, Beylot-Barry M, Foss F, Girardi M, Bagot M, Michel L, Battistella M, Guitart J, Kuzel TM, Martinez-Escala M, Estrach T, Papadavid E, Antoniou C, Sugaya M, Miyagaki T, Gniadecki R, Saches J, Miyashiro D, Servitje O, Berti E, Onida F, Hodak E, Amitay-Laish I, Ortiz-Romero P, Rodriguez-Peralto J, Knobler R, Pimpinelli N, Cowan R, Rook A, Kim E, Pileri A, Pujol R, Wong H, Tyler K, Querfeld C, Willemze R, Evison F, Morris S, Kim J, Li S, Tavallaee M, **Hoppe RT**, Duvic M, Whittaker SJ, **Kim YH**. **Cutaneous Lymphoma International Consortium (CLIC)** Study of Outcome in Advanced Stages of Mycosis Fungoides & Sézary Syndrome: Effect of Specific Prognostic Markers on Survival and Development of a Prognostic Model. J Clin Oncol 33:3766-73, 2015.
- Quaglino P, Maule M, Prince HM, Porcu P, Horwitz S, Duvic M, Vermeer M, Bagot M, Guitart J, Papadavid L, Sanches JA, Hodak E, Sugaya M, Berti E, Ortiz-Romero P, Pimpinelli N, Octavio S, Pileri A, Zinzani PL, Estrach T, Knobler R, Stadler R, Rook AH, Geskin LJ, Willemze R, Whittaker S, **Hoppe R,** Scarisbrick J, **Kim YH.** Global patterns of care in advanced stage MF/SS: a multicenter retrospective follow-up study from the **Cutaneous Lymphoma International Consortium (CLIC**). Ann Oncol 28:2517-25, 2017.
- Gru AA, Kim J, Pulitzer M, Guitart J, Battistella M, Wood GS, Cerroni L, Kempf W, Willemze R, Pawade J, Querfeld C, Schaffer A, Pincus L, Tetzlaff M, Duvic M, Scarisbrick J, Porcu P, Mangold AR, DiCaudo DJ, Shinohara M, Hong EK, Horton B, **Kim YH**. The use of central pathology review with digital slide scanning in advanced stage mycosis fungoides and Sezary syndrome: a multi-institutional and international pathology study. Am J Surg Pathol 42:726-34, 2018.
- Scarisbrick JJ, Quaglino P, Prince HM, Papadavid E, Hodak E, Bagot M, Servitje O, Berti E, Ortiz-Romero P, Stadler R, Patsatsi A, Knobler R, Guenova E, Child F, Whittaker S, Nikolaou V, Tomasini C, Amitay I, Prag Naveh H, Ram-Wolff C, Battistella M, Alberti-Violetti S, Stranzenbach R, Gargallo V, Muniesa C, Koletsa T, Jonak C, Porkert S, Mitteldorf C, Estrach T, Combalia A, Marschalko M, Csomor J, Szepesi A, Cozzio A, Dummer R, Pimpinelli N, Grandi V, Beylot-Barry M, Pham-Ledard A, Wobser M, Geissinger E, Wehkamp U, Weichenthal M, Cowan R, Parry E, Harris J, Wachsmuth R, Turner D, Bates A, Healy E, Trautinger F, Latzka J, Yoo J, Vydianath B, Amel-Kashipaz R, Marinos L, Oikonomidi A, Stratigos A, Vignon-Pennamen MD, Battistella M, Climent F, Gonzalez-Barca E, Georgiou E, Senetta R, Zinzani P, Vakeva L, Ranki A, Busschots AM, Hauben E, Bervoets A, Woei-A-Jin FJSH, Matin R, Collins G, Weatherhead S, Frew J, Bayne M, Dunnill G, McKay P, Arumainathan A, Azurdia R, Benstead K, Twigger R, **Rieger K, Brown R,** Sanches JA, Miyashiro D, Akilov O, McCann S, Sahi H, Damasco FM, Querfeld C, Folkes A, Bur C, Klemke CD, Enz P, Pujol R, Quint K, Geskin L, Hong E, Evison F, Vermeer M, Cerroni L, Kempf W, **Kim Y,** Willemze R. The **PROCLIPI international registry** of early-stage mycosis fungoides identifies substantial diagnostic delay in most patients. Br J Dermatol 181:350-357, 2019.
- Campbell BA, Scarisbrick JJ, **Kim YH,** Wilcox RA, McCormack C, Prince HM. Time to next treatment as a meaningful endpoint for trials of primary cutaneous lymphoma. Cancers (Basel) 12:2311, 2020.
- Hodak E, Sherman S, Papadavid E, Bagot M, Querfeld C, Quaglino P, Prince HM, Ortiz-Romero PL, Stadler R, Knobler R, Guenova E, Estrach T, Patsatsi A, Leshem YA, Prague-Naveh H, Berti E, Alberti-Violetti S, Cowan R, Jonak C, Nikolaou V, Mitteldorf C, Akilov O, Geskin L, Matin R, Beylot-Barry M, Vakeva L, Sanches JA, Servitje O, Weatherhead S, Wobser M, Yoo J, Bayne M, Bates A, Dunnill G, Marschalko M, Buschots AM, Wehkamp U, Evison F, Hong E, Amitay-Laish I, Stranzenbach R, Vermeer M, Willemze R, Kempf W, Cerroni L, Whittaker S, **Kim YH**, Scarisbrick JJ; Cutaneous Lymphoma International Consortium (CLIC) institutions. Should we be imaging lymph nodes at initial diagnosis of early-stage mycosis fungoides? Results from the **PROspective Cuntaeous Lymphoma International Prognostic Index (PROCLIPI) study.** Br J Dermatol. Mar;184(3):524-531, 2021.
- Quaglino P, Prince HM, Cowan R, Vermeer M, Papadavid E, Bagot M, Servitjie O, Berti E, Guenova E, Stadler R, Querfeld C, Busschots AM, Hodak E, Patsatsi A, Sanches J, Maule M, Yoo J, Kevin M, Fava P, Ribero S, Zocchi L, Rubatto M, Fierro MT, Wehkamp U, Marshalko M, Mitteldorf C, Akilov O, Ortiz-Romero P, Estrach T, Vakeva L, Enz PA, Wobser M, Bayne M, Jonak C, Rubeta M, Forbes A, Bates A, Battistella M, Amel-Kashipaz R, Vydianath B, Combalia A, Georgiou E, Hauben E, Hong EK, **Jost** M, Knobler R, Amitay-Laish I, Miyashiro D, Cury-Martins J, Martinez X, Muniesa C, Prag-Naveh H, Stratigos A, Nikolaou V, Quint K, Ram-Wolff C, **Rieger K,** Stranzenbach R, Szepesi Á, Alberti-Violetti S, Felicity E, Cerroni L, Kempf W, Whittaker S, Willemze R, **Kim Y**, Scarisbrick JJ**.** Treatment of early-stage mycosis fungoides: results from the **PROspective Cuntaeous Lymphoma International Prognostic Index (PROCLIPI) study.** Br J Dermatol. Apr;184(4):722-730, 2021.
- Quaglino P, Scarisbrick J, Roccuzzo G, Abeldano A, Battistella M, McCormack C, Cowan R, Cozzio A, Cury-Martins J, Enz P, Geskin L, Guenova E, **Kim YH**, Knobler R, Litvinov IV, Miyagaki T, Molgo M, Nicolay J, Papadavid E, Pinter-Brown L, Pujol

Vallverdu R, Querfeld C, Ortiz-Romero P, Stadler R, Vermeer MH, Bagot M, Hodak E. Identifying unmet needs and challenges in the definition of a plaque in mycosis fungoides: an EORTC-CLTG/ISCL survey. J Eur Acad Dermatol Venereol. Apr;37(4):680-688. Epub 2023 Jan 17, 2023

- Cai ZR, Chen ML, Weinstock MA, **Kim YH, Novoa RA,** Linos E. Incidence Trends of Primary Cutaneous T-Cell Lymphoma in the US From 2000 to 2018: A SEER Population Data Analysis. JAMA Oncol. Nov 1;8(11):1690-1692, 2022.
- Phillips D, Matusiak M, Gutierrez BR, Bhate SS, Barlow GL, Jiang S, Demeter J, Smythe KS, Pierce RH, Fling SP, Ramchurren N, Cheever MA, Goltsev Y, West RB, **Khodadoust MS**, **Kim YH**, Schürch CM, Nolan GP. Immune cell topography predicts response to PD-1 blockade in cutaneous T-cell lymphoma. Nat Commun. Nov 18;12(1):6726, 2021.
- Phillips D, Schürch CM, **Khodadoust MS**, **Kim YH**, Nolan GP, Jiang S. Highly multiplexed phenotyping of immunoregulatory proteins in the tumor microenvironment by CODEX tissue imaging. Front Immunol. May 19;12:687673, 2021.
- **Kim YH,** Prince HM, Whittaker S, Horwitz SM, Duvic M, Bechter O, Sanches JA, Stadler R, Scarisbrick J, Quaglino P, Zinzani PL, Wolter P, Eradat H, Pinter-Brown LC, Ortiz-Romero PL, Akilov OE, Trotman J, Taylor K, Weichenthal M, Walewski J, Fisher D, McNeeley M, Gru AA, Brown L, Palanca-Wessels MC, Lisano J, Onsum M, Bunn V, Little M, Trepicchio WL, Dummer R. Response to brentuximab vedotin versus physician's choice by CD30 expression and large cell transformation: an ALCANZA sub-analysis. Eur J Cancer 148:411-421, 2021.
- Dummer R, Vermeer MH, Scarisbrick JJ, **Kim YH**, Stonesifer C, Tensen CP, Geskin LJ, Quaglino P, Ramelyte E. Cutaneous T-cell lymphoma. Nat Rev Dis Primers. Aug 26;7(1):61. 2021.
- Horwitz SM, Scarisbrick JJ, Dummer R, Whittaker S, Duvic M, **Kim YH**, Quaglino P, Zinzani PL, Bechter O, Eradat H, Pinter-Brown L, Akilov OE, Geskin L, Sanches JA, Ortiz-Romero PL, Weichenthal M, Fisher DC, Walewski J, Trotman J, Taylor K, Dalle S, Stadler R, Lisano J, Bunn V, Little M, Prince HM. Randomized phase 3 ALCANZA study of brentuximab vedotin vs physician's choice in cutaneous T-cell lymphoma: final data. Blood Adv. Dec 14;5(23):5098-5106, 2021.
- Olsen EA, Whittaker S, Willemze R, Pinter-Brown L, Foss F, Geskin L, Schwartz L, Horwitz S, Guitart J, Zic J, **Kim YH**, Wood GS, Duvic M, Ai W, Girardi M, Gru A, Guenova E, Hodak E, **Hoppe R**, Kempf W, Kim E, Lechowicz MJ, Ortiz-Romero P, Papadavid E, Quaglino P, Pittelkow M, Prince HM, Sanches JA, Sugaya M, Vermeer M, Zain J, Knobler R, Stadler R, Bagot M, Scarisbrick J. Primary cutaneous lymphoma: recommendations for clinical trial design and staging update from the ISCL, USCLC, and EORTC. Blood 2022 Aug 4;140(5):419-437, 2022.
- Horwitz S, Zinzani PL, Bagot M, **Kim YH**, Moskowitz AJ, Porcu P, Dwyer K, Sun W, Herr FM, Scarisbrick J. Lack of impact of type and extent of prior therapy on outcomes of mogamulizumab therapy in patients with cutaneous T-cell lymphoma in the MAVORIC trial. Leuk Lymphoma. Dec;62(13):3109-3118, 2021..
- Bagot M, Dalle S, Sokol L, Tsianakas A, Musiek A, Ortiz-Romero PL, Poligone B, Duvic M, Elmets C, Leoni M, Dwyer K, Ito T, Herr F, **Kim YH.** Long-term disease control and safety with the anti-CCR4 antibody mogamulizumab: Post-hoc analyses from the MAVORIC trial of patients with previously treated cutaneous T-cell lymphoma. Dermatol Ther. Aug;35(8):e15634, 2022.
- Tung JK, Jangam D, Ho CC, Fung E, **Khodadoust MS, Kim YH**, Zehnder JL, Stehr H, Zhang BM. Minimal/measurable residual disease monitoring in patients with lymphoid neoplasms by high-throughput sequencing of the T-cell receptor. J Mol Diagn. 25(6):331-341, 2023
- Kim EJ, Mangold AR, DeSimone JA, Wong HK, Seminario-Vidal L, Guitart J, Appel J, Geskin L, Lain E, Korman NJ, Zeitouni N, Nikbakht N, Dawes K, Akilov O, Carter J, Shinohara M, Kuzel TM, Piette W, Bhatia N, Musiek A, Pariser D, **Kim YH,** Elston D, Boh E, Duvic M, Huen A, Pacheco T, Zwerner JP, Lee ST, Girardi M, Querfeld C, Bohjanen K, Olsen E, Wood GS, Rumage A, Donini O, Haulenbeek A, Schaber CJ, Straube R, Pullion C, Rook AH, Poligone B. Efficacy and Safety of Topical Hypericin Photodynamic Therapy for Early-Stage Cutaneous T-Cell Lymphoma (Mycosis Fungoides): The FLASH Phase 3 Randomized Clinical Trial. JAMA Dermatol. Sep 1;158(9):1031-1039, 2022.
- Lee K, Evans MG, Yang L, Ng S, Snowden C, **Khodadoust M, Brown RA,** Trum NA, Querfeld C, Doan LT, Song J, Zhang H, Gru AA, Wood GS, Wada DA, Shanmugam V, Haun PL, Aster JC, Duncan LM, Guitart J, Weinstock DM, Nardi V, Choi J. Primary cytotoxic T-cell lymphomas harbor recurrent targetable alterations in the JAK-STAT pathway. Blood. Dec 9;138(23):2435-2440, 2021.
- Beygi S, **Sebastian Fernandez-Pol S, Duran G, Wang EB,** Henning S, Zehnder JL, Rmchurren N, Fling SP, Cheever MA, **Weng WK, Kim YH, Khodadoust MS.** Pembrolizumab in mycosis fungoides with PD-L1 structural variants. Blood Adv 5:771-774, 2021.
- Beygi S, Duran GE, **Fernandez-Pol S,** Rook AH, **Kim YH**, **Khodadoust MS.** Resistance to mogamulizumab is associated with loss of CCR4 in cutaneous T-cell lymphoma. Blood. Jun 30;139(26):3732-3736, 2022.
- Su T, Duran GE, Kwang AC, Ramchurren N, Fling SP, **Kim YH**, **Khodadoust MS.** Single-cell RNA-sequencing reveals predictive features of response to pembrolizumab in Sezary syndrome. Oncoimmunology. Aug 27;11(1):2115197, 2022.
- **Khodadoust MS, Mou E, Kim YH.** Integrating novel agents into the treatment of advanced mycosis fungoides and Sezary syndrome. Blood. 141(7):695-703, 2023