BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Gino Kim IN

eRA COMMONS USER NAME (credential, e.g., agency login): ginokin11

POSITION TITLE: Assistant Professor of Medicine and Dermatology

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE <i>(if</i> applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Emory University	BS	05/2002	Biology/Economics(m)
Emory University, Rollins School of Public Health	MPH	05/2006	Environmental / Occupational Health
Ross University	MD	05/2010	Medicine
State University of New York, Downstate College of Medicine	Internship	06/2011	Internal Medicine
State University of New York, Downstate College of Medicine	Residency	06/2013	Internal Medicine
University of Southern California, Keck School of Medicine	Fellowship	06/2016	Hematology / Oncology

Personal Statement

I am a physician-scientist with a background in solid tumor medical oncology, with a focus on the development and conduct of clinical trials to further the use of novel oncology therapeutics and combinations. Within solid tumor oncology, my area of expertise is the management of cutaneous tumors, including melanoma and nonmelanoma skin cancers. As lead melanoma PI at our institution, I oversee the multi-disciplinary melanoma and skin cancer program and portfolio of therapeutic clinical trials for all cutaneous malignancies, including investigator-initiated studies and industry sponsored studies, as well as those conducted in coordination with cooperative groups, including those under the Southwest Oncology Group (SWOG), California Cancer Consortium (NCI-CTEP), Alliance and the ACCRU Network. In addition to my role as a clinical trialist, I have a translational research interested in rare cutaneous malignancies (Merkel cell carcinoma, extramammary Paget's disease, sweat gland tumors), as well as rare / aggressive subtypes of common cutaneous malignancies (acral lentiginous melanoma, metastatic cutaneous squamous cell carcinoma, metastatic basal cell carcinoma).

Positions and Employment

2010-2011	Intern, Internal Medicine, SUNY Downstate Medical Center, Brooklyn, NY
2011-2013	Residency, Internal Medicine, SUNY Downstate Medical Center, Brooklyn, NY
2012-2013	Postdoctoral Researcher, Human Oncology & Pathogenesis Program, Memorial Sloan Kettering Cancer Center, New York, NY
2013-2016	Fellow, Hematology and Oncology, University of Southern California, Norris Comprehensive Cancer Center, Los Angeles, CA
2016-Present	Assistant Professor of Clinical Medicine, Division of Oncology, University of Southern California, Norris Comprehensive Cancer Center, Los Angeles, CA
2016-Present	Staff Attending, Division of Oncology, Los Angeles County Medical Center, Los Angeles, CA
2016-Present	Staff Attending, Hematology/Oncology, Huntington Hospital, Pasadena, CA
2017-Present	Assistant Professor of Dermatology, University of Southern California, Keck School of Medicine, Los Angeles CA
2020-Present	Staff Attending, Hematology/Oncology, Verdugo Hills Hospital, Glendale CA

<u>Honors</u>

- 2015-2016 Chief Oncology Fellow, University of Southern California, Norris Comprehensive Cancer Center, Los Angeles, CA
- 2020-2021 L.A.'s Top Doctor Oncology, Los Angeles Magazine

Contributions to Science

1. Clinical trials for the treatment of melanoma and other cutaneous malignancies. Ours is a large National Cancer Institute-designated cancer center that is part of a university hospital system, the University of Southern California Health Sciences Center, and including a public county health net hospital, the Los Angeles County Medical Center, all of which are located in Los Angeles, where incidence rates of melanoma are among the highest in the world. In this setting, we are actively involved in the conduct of clinical trials, not only for the management of advanced/metastatic melanoma, but other malignancies as well. We have been active contributors to a number of investigator initiated, cooperative group and industry sponsored studies that employ novel immunotherapy agents, including checkpoint inhibitors, autologous cell therapy, and also targeted therapies and intratumoral agents.

Sundararajan S, McBride A, Tarhini A, **In GK**, Kendra KL, Lutzky J, Carson WE, Roe D, Jeter J. A Phase I/II Study of Pembrolizumab and Imatinib in Patients with Locally Advanced / Metastatic Melanoma with c-KIT Mutation or Amplification. *Pigment Cell Melanoma Res.* 2018;31:125-230.

Moschos SJ, Eroglu Z, Khushalani NI, Kendra KL, Ansstas G, **In GK**, Wang P, Liu G, Collichio FA, Googe PB, Carson CC, McKinnon K, Wang HH, Nikolaishvilli-Feinberg N, Ivanova A, Arrowood CC, Garrett-Mead N, Conway KC, Edmiston SN, Ollila DW, Serody JS, Thomas NE, Ivy SP, Agrawal L, Dees EC, Abbruzzese JL. Targeting the IL-2 inducible kinase in melanoma; a phase 2 study of ibrutinib in systemic treatment-refractory distant metastatic cutaneous melanoma: preclinical rationale, biology, and clinical activity (NCI9922). *Melanoma Res.* 2021 Apr 1;31(2):162-172. doi: 10.1097/CMR.0000000000000726. PMID: 33661190

Butler MO, Robert C, Negrier S, **In GK**, Walker J, Krajsova I, Atkinson V, Hansson J, Kapiteijn EH, Loquai C, Shaw H, Cheng T, Mansard S, Grob JJ, Guidoboni M, Mehta M, Ascierto PA, Diab A. ILLUMINATE 301: A randomized phase 3 study of tilsotolimod in combination with ipilimumab compared with ipilimumab alone in patients with advanced melanoma following progression on or after anti-PD-1 therapy. *J Clin Oncol.* 2019 ASCO Annual Meeting. DOI: 10.1200/JCO.2019.37.15_suppl.TPS9599

Silk AW, LeBouef N, Chandra S, **In GK**, Burgess M, Davar D, Hyngstrom J, Voorhies B, Thakuria M, Moore D, Chen H, Zloza A, Mehnert J. Interim Analysis of a Phase II Study of Talimogene Laherparepvec Followed by Talimogene Laherparepvec + Nivolumab in Merkel Cell Carcinoma (NCI #10057). Abstract Submission to 1st International Symposium on Merkel Cell Carcinoma, 2019.

Trodello C, Higgins S*, Ahadiat O, Ragab O, **In G**, Hawkins M, Wysong A. Cetuximab as a Component of Multimodality Treatment of High-Risk Cutaneous Squamous Cell Carcinoma: A Retrospective Analysis From a Single Tertiary Academic Medical Center. *Dermatologic Surgery*. 2019 Feb;45(2):254-267. PMID: 30672860

In GK, Vaidya P*, Filkins A*, Hermel DJ*, King KG, Ragab O, Tseng WW, Swanson M, Kokot N, Lang JE, Menendez L, DeClerck B, Kim G, Hu JC, Terando A, Jadvar H, Ricker C, Miller KA, Peng DH, Wysong A. PD-1 Inhibition Therapy for Advanced Cutaneous Squamous Cell Carcinoma: a Retrospective Analysis from the University of Southern California. *J Cancer Res Clin Oncol.* 2020 Nov 18. Doi: 10.1007/s00432-020-03458-6. PMID: 33210210

Thomas SS, **In GK**, Doger B, Haefliger S, Martin-Liberal J, Goldberg Z, Cacovean A, Fiaz R, Chen G, Jagasia MH, Finckenstein FG, Fardis M, Jimeno A. Safety and efficacy of lifileucel (LN-144), an autologous, tumor infiltrating lymphocyte cell therapy in combination with pembrolizumab for immune checkpoint inhibitor naïve patients with advanced melanoma. Poster Presentation at 2021 ASCO Annual Meeting. *J Clin Oncol.*

2. Investigation of disparities affecting patients with cutaneous and solid tumor malignancies. Our multi-disciplinary research team seeks to define the epidemiological, biological, clinical and social disparities affecting patients with cutaneous tumors and other malignancies. Our work has particularly focused on disparities affecting three groups of patients: patients with rare cutaneous malignancies, patients with rare presentations/subtypes of cutaneous malignancies, or understudied populations who suffer from cutaneous malignancies.

In GK, Yang D, Thomas JS*, Pham A*, Basu A*, Mehta AA*, Miller KA, Cockburn MG, Hu J. Frequency and Outcomes of Melanoma Subtypes in a Diverse Population: The Los Angeles County – University of Southern California (LAC-USC) Medical Center Experience. *J Clin Oncol.* DOI: 10.1200/JCO.2017.35.15_suppl.e21063

Miller KA, Pham A*, Thomas JS*, Cockburn MG, Freyer DR, Hu J, Milam J, Wojcik K, **In GK****. Clinical Characteristics of Melanoma in an Ethnically Diverse Population of Adolescents and Young Adults. *J Clin Oncol.* DOI: 0.1200/JCO.2017.35.15_suppl.e21043

Wojcik KY, **In GK**, Navid F. Melanoma. *Cancer in Los Angeles County: Survival Among Adolescents and Young Adults 1988-2014.* Los Angeles Cancer Surveillance Program, University of Southern California. 102-106, 2017.

D'Souza A, Brooks C, **In G**, Raymond V, Lanman R, Nieva J. Impact of Liquid Biopsy on the Treatment of Low-Income Lung Cancer Patients. *J Thorac Oncol.* Volume 12(11), Supplement 2, Page S2027. November 2017.

Chaddha U*, Maehara D*, Lin S*, **In G**, Chang CF, Balekian A. Effect of Language and Ethnicity on Interval From Diagnosis to Treatment in Non-Small Cell Lung Cancer Patients at a Public and a Private Hospital. *Chest.* Volume 152(4), Suppl, Page A620. CHEST 2017 Meeting.

Miller KA, **In GK**, Jiang SY, Ahadiat O, Higgins S*, Wysong A, Cockburn MG. Skin Cancer Prevention Among Hispanics: a Review of the Literature. *Curr Derm Rep.* 2017 Sept;6(3):186-195. DOI: 10.1007/s13671-017-0191-8

In GK, Chow L, Lara K, Ragab O, Andrade J, Mehta A, Tseng W, Hu JS. Clinical Experience with Acral Melanoma at the University of Southern California. *Pigment Cell Melanoma Res.* Poster Presentation, SMR Congress 2018

Vaidya P*, Samaan J*, Ghanshani S*, Maw TT, **In GK****. Incidences and Outcomes of Secondary Cutaneous Malignancies Among Renal Transplant Recipients. *J Invest Dermatol*. Montagna Symposium on the Biology of Skin 2018.

Jeong AR*, Hu J, Higgins S*, Wysong A, **In GK**.** Clinical Experience with Dermatofibrosarcoma Protuberans (DFSP) in a Diverse Ethnic Population. *J Clin Oncol.* DOI: 10.1200/JCO.2018.36.15_suppl.e23531

Adler BL, Smogorzewski J, Sierro T, Shauly O, Osipchuk D, Miller M, Mert M, Fong MW, Ganesh S, Han H, In **GK**, Maw TT, Smogorzewski M, Hu J, Ngo B, Lee D, Ahronowitz I. Skin cancer and dermatoses in a majority Hispanic population of solid organ transplant recipients. *J Am Acad Dermatol.* 2019 Aug 7;S0190-9622(19)32492-2. PMID: 31400454

Miller KA, Wojcik KY, Cockburn MG, **In GK**, Hamilton AS, Milam JE. Prevalence and correlates of adherence to skin examination among adolescent and young adult survivors of melanoma from the Project Forward Study. *Pediatr Blood Cancer.* 2019 Nov 27:e28090. DOI: 10.1002/pbc.28090. Published online November 27, 2019. PMID: 31774240

Wong A, Truong T, Vaidya P, In G, Maw TT. Secondary Malignancy in Kidney Transplant Recipients: University of Southern California Experience. *J Am Soc Nephrol.* 2020. Abstract, American Society of Nephrology, 2020 Kidney Week, Annual Meeting.

Rabi S, Syder N, Ragab O, **In G**, Hu JC. Rapidly Progressive Porocarcinoma of the Ear and Multidisciplinary Approach to Management. *Dermatol Surg.* Published online March 4, 2020. PMID: 32141925

Lu JE, Chang JR, Berry JL, **In GK**, Zhang-Nunes, S. Clinical Update on Checkpoint Inhibitor Therapy for Conjunctival and Eyelid Melanoma. *Int Ophthalmol Clin.* 2020 Spring;60(2):77-89. PMID: 32205655

Wilhite AM, Wu S, Xiu J, Korn M, Phung T, Herzog TJ, **In GK**, Gibney GT, Brown J, Rocconi RP, Jones NL. Too much skin in the game? A paradigm shift in our understanding of vulvar and vaginal melanomas as distinct tumor types compared with cutaneous melanomas. Focused Scientific Plenary. Society of Gynecologic Oncology Annual Meeting, Virtual, March 2021.

Hijazi M*, Capone S*, Mehta A, **In G**. Clinicopathologic Comparison of Basal Cell Carcinoma Between Hispanics and Non-Hispanic Caucasian Patients in Los Angeles County. Poster Presentation at 2021 10th World Congress of Melanoma – 17th EADO Congress.

Fernandez B, Miller M, Sierro T, Shah E, Wong-Michalak S, Haughton R, Rodman J, Mert M, Fong ME, Ganesh S, Han H, **In GK**, Maw TT, Miller K, Smogorzewski M, Hu J, Ngo B, Ahronowitz I. Examining Low Rates of Dermatology Visits in Solid Organ Transplant Recipients. *J Am Acad Dermatol.* Accepted for publication May 20, 2021.

Ebia MI*, **In GK****. Multiple primary malignancies among patients with advanced melanoma. Online Presentation at 2021 ASCO Annual Meeting. *J Clin Oncol*.

Giri U*, Yu X*, Resnick K*, Larsen T*, **In GK****. Venous thromboembolism in patients on checkpoint inhibitors. Online Presentation at 2021 ASCO Annual Meeting. *J Clin Oncol*.

3. Molecular biomarkers for targeted cancer therapy. Whereas previously we determined that EGFR driven lung adenocarcinoma may progress spatio-temporally as a unique pathway from lung metastasis to brain metastases, we next sought to assess the molecular underpinnings of brain metastases in melanoma. We interrogated over 130 melanoma brain tumors in comparison with 745 melanoma primary tumors, which revealed the presence of several epigenetic regulators that were significantly mutated in brain metastases, including those implicating the SWI/SNF pathway, as well as upregulation of the MAPK pathway.

In GK, Mason J, Lin S*, Newton PK, Kuhn P, Nieva J. Development of metastatic brain disease involves progression through lung metastases in *EGFR* mutated non-small cell lung cancer. *Convergent Science Physical Oncology*. 2017 Sep;3(3). PMID: 30283700

Gibney GT, Tang S, Poorman K, Olszanski AJ, Eisenberg B, Mehmi I, Farma JM, **In GK,** Amin A, Rapisuwon S, Vanderwalde A, Atkins MB. Associations of Age, PD-L1 Status, BRAF Mutation and Tumor Mutational Burden (TMB) in Advanced Melanoma. *J Clin Oncol.* DOI: 10.1200/JCO.2018.36.15_suppl.e21609

Li S, Song Y, Quach C, Guo H, Jang GB, Maazi H, Zhao S, Sands N, Liu Q, **In G**, Peng D, Yuan W, Machida K, Yu M, Akbari O, Hagiya A, Yang Y, Punj V, Tang L, Liang C. Transcriptional regulation of autophagylysosomal function in BRAF-driven melanoma progression and chemoresistance. *Nat Commun.* 2019 Apr 12;10(1):1693. PMID: 30979895

Darabi S, Thomas JS, Demeure MJ, Poorman K, **In GK**, Frankel AE, Vanderwalde A, Olszanski AJ, Farma J, Atkins MB, Grodon M, Eisenberg BL. Oncogenic Gene Fusions in Malignant Melanomas. *Pigment Cell Melanoma Res.* Poster Presentation, 2019 SMR Congress.

Gatalica Z, Vranic S, Kruslin B, Poorman K, Stafford P, Kacerovska D, Senarathne W, Florento E, Contreras E, Leary A, Choi A*, **In GK**. Comparison of the biomarkers for targeted therapies in primary extra-mammary and mammary Paget's disease. *Cancer Med*. 2020 Jan 3. DOI: 10.1002/cam4.2820. Published online January 3, 2020. PMID: 31899853

In GK, Poorman K, Saul M, O'Day S, Farma JF, Olszanski AJ, Gordon MS, Thomas JS, Eisenberg B, Flaherty L, Weise A, Daveluy S, Gibney G, Atkins MB, VanderWalde A. Molecular Profiling of Melanoma Brain Metastases Compared to Primary Cutaneous Melanoma and to Extracranial Metastases. *Oncotarget.* 2020 Aug 18; 11(33):3118-3128. PMID: 32913556

Owsley J, Stein M, Porter J, **In GK**, Salem M, O'Day S, Elliot A, Poorman K, Gibney G, VanderWalde A. Prevalence of class I-III BRAF mutations among 114,662 cancer patients in a large genomic database. *Exp Biol Med (Maywood)*. 2020 Oct 5;1535370220959657. PMID: 33019809

Gibney GT, Xiu J, **In GK**, O'Day SJ, Lutzky J, Drabick JJ, VanderWalde A, Poorman K, Korn WM, Atkins MB. Basal Cell Carcinoma demonstrates a T-cell exclusion immune phenotype in contrast to other anti-PD-1 therapy responsive cutaneous malignancies. *J Immunother Cancer*. Poster Presentation, 2020 SITC 35th Annual Meeting.

Ricker C, Amundson E*, Algaze S*, Ciccone M, Dong S*, D'souza A, Felicetti K, Hernandez D, Jayachandran P*, Kang I, Narayanan K, Thomas JS, Tulpule V, Umayam R, Xia B, **In GK****. Assessing somatic and germline variants in cancer patients. Poster Presentation at 2021 ASCO Annual Meeting. *J Clin Oncol*.

Tiu-Lim J, Yin J, Xiu J, Korn WM, Lenz HJ, **In G**, Roussos-Torres ET, Lu J, Spicer D, Ma C, Hoon D, Krill-Jackson E, Heeke A, Sammons S, Isaacs C, Ademuyiwa F, Tan A, Kang IM. Molecular Characterization of the Ras-MAPK Pathway in Metastatic Breast Cancer. Poster Presentation at 2021 ASCO Annual Meeting. *J Clin Oncol*.

Research Support

<u>ONGOING</u>

1UL1TR001855-01 SC Clinical and Translational Science Evaluating the Genomic Landscape This proposal explores the mutationa melanoma subtypes in patients of Hi 2) copy number alterations, to identif Role: Principal Investigator	In (PI) te Institute of Melanoma in Hispanics al landscape of acral lentig ispanic origin. The propos fy pharmacologically explo	12/05/16-05/30/ inous melanoma al seeks to ident itable biological	17 a and other cutaneous ify: 1) recurrent mutations and pathways in this disease.		
Total Direct Costs		\$3000.0	U		
1UL1TR001855-02 SC Clinical and Translational Science Enumerating Circulating Tumor Cells The major goals of this project are to determine whether changes in circul platforms will be tested, to identify the for molecular profiling to enable targ	In (PI) the Institute is as a Prognostic Biomarke to survey acral melanoma p ating tumor cell counts ma the most prognostic system, eted therapeutic approach	06/06/17-09/06/ er for Acral Lenti atients with limit y predict time of as well as explo in the event of r	17 ginous Melanoma ed stage I-III disease, to relapse. Several different CTC oring the possibility to use CTC's elapse.		
Total Direct Costs		\$3000.0	0		
1UL1TR001855In (PI)07/01/19-06/30/20SC Clinical and Translational Science InstituteExamining the DNA Methylation Landscape of Merkel Cell CarcinomaThis project will analyze the DNA methylation profile of patients with localized and metastatic Merkel cellcarcinoma, as compared to matched normal tissue, to better understand which pathways may not only impactthe development of this disease, but also contribute to metastatic progression. Identified genes/probes ofinterest will be further studied mechanistically using in vitro assays.Role: Principal Investigator					
Total Direct Costs		\$3000.0	D		
Dean's Pilot Funding Program Keck School of Medicine of USC Short-Term Fasting Prior to Standard Feasibility Study This prospective clinical trial will ass combination with PD-1/PD-L1 based Correlatives of interest include analy checkpoint blockade, to assess whe Role: Principal Investigator	In (PI) d Checkpoint Blockade Us ess the safety and feasibili i immunotherapy in the trea zes of metabolic reprogram ther fasting may impact the	02/03/20-02/03/ ing PD-1/PD-L1 ty of a program of atment of patient nming, as well a e use of cancer i	22 Inhibition: A Pilot Safety and of short-term fasting in s with advanced malignancies. s biomarkers of response to mmunotherapy.		
Total Direct Costs		\$78,544	.00		
1R37CA256867-01 NIH/NCI Social Health, Activity Behaviors and Social challenges are a major issue relationships, referred to as social he poorer quality of life after treatment a health, physical activity, and quality	Miller (PI) d Quality of Life Among Yo for young adult cancer pat ealth, may decrease physic and recovery. This study w of life to expand our unders	02/01/21-12/30/ ung Adult Cance ents (18-39 yea cal activity after a ill investigate the standing of their	26 er Survivors rs old). Impairments in social a cancer diagnosis, leading to e relationships between social interrelations to inform		
Role: Co-Investigator Total Direct Costs	any survivorship for young a	\$496,00	0.00		

COMPLETED

None.

ONGOING CLINICAL TRIALS				
R2810-ONC-1915 Regeneron Pharmaceuticals	In (National PI)	06/01/20-06/01/22		
Evaluating the PD-1 checkpoint inhi recurrent, and regionally advanced of	bitor, Cemiplimab, as neoadjuvant therapy in high risk localized, locally cutaneous squamous cell carcinoma: a Phase II pilot study (NeoPOWER)			
Total Direct Costs	ſ	\$1,038,124.00		
NCI 9466 NCI/California Cancer Consortium Phase I/II Study of Dabrafenib, Tran Other Solid Tumor	In (Lead USC PI) netinib, and Navitoclax in I	BRAF Mutant Melanoma (Phase I and II) and		
NCI 10057 NCI/California Cancer Consortium Phase II Study of Talimogene laher Refractory T Cell and NK Cell Lymp and Other Rare Skin Tumors	In (Lead USC PI) parepvec Followed by Tali homas, Cutaneous Squar	mogene laherparepvec + Nivolumab in nous Cell Carcinoma, Merkel Cell Carcinoma,		
WOG S1801 In (Lead USC PI) outhwest Oncology Group phase II randomized study of adjuvant versus neoadjuvant MK-3475 (pembrolizumab) for clinically etectable stage III-IV high risk melanoma				
POLARIS Array Biopharma A Phase 2, Open-Label, Multicenter dose Regimen in Patients with BRA	In (Lead USC PI) Trial of Encorafenib + Bir F V600-Mutant Melanoma	imetinib Evaluating a Standard-dose and a High- Brain Metastasis (POLARIS)		
ECOG-ACRIN EA6174 Eastern Cooperative Oncology Grou Phase III Randomized Trial Compar in Completely Resected Merkel Cell	In (Lead USC PI) up / American College of F ing Adjuvant MK-3475 (Pe Carcinoma	Radiology Imaging Network embrolizumab) to Standard of Care Observation		
ALLIANCE A091802 Alliance for Clinical Trials in Oncolog Phase II Randomized Trial of Avelu Squamous Cell Carcinoma of the Sk	In (Lead USC PI) gy mab Plus Cetuximab Vers kin	us Avelumab Alone in Advanced Cutaneous		
IGNYTE Replimune An Open-Label, Multicenter, Phase in Patients with Solid Tumors	In (Lead USC PI) 1/2 Study of RP1 as a Sin	gle Agent and in Combination with PD1 Blockade		
DUET-1-02 Xencor A Phase 1b/2 Multiple-Dose Study t Subjects with Advanced Merkel Cell	In (Lead USC PI) o Evaluate the Safety and Carcinoma or Extensive-	Efficacy of XmAb18087 +/- Pembrolizumab in stage Small Cell Lung Cancer		

COMPLETED CLINICAL TRIALS

NCI 9922 In (Lead USC PI) NCI/California Cancer Consortium Phase 2 Study of Ibrutinib (PCI-32765) in Refractory Distant Metastatic Cutaneous Melanoma: Correlation of Biomarkers with Response and Resistance

SWOG S1512 In (Lead USC PI) Southwest Oncology Group Phase II and Pilot Trial of PD-1 Blockade with MK-3475 (Pembrolizumab) in Patients with Resectable or Unresectable Desmoplastic Melanoma

SWOG S1607 In (Lead USC PI) Southwest Oncology Group Phase II Study of Combining Talimogene Laherparepvec (T-VEC) (NSC-785349) and MK-3475 (pembrolizumab) (NSC-776864) in Patients with Advanced Melanoma Who Have Progressed on Anti-PD1/L1 Based Therapy

IMspire170In (Lead USC PI)Genentech IncA Phase III, Open-Label, Multicenter, Two-Arm, Randomized Study to Investigate the Efficacy and Safety of
Cobimetinib Plus Atezolizumab Versus Pembrolizumab in Patients With Previously Untreated Advanced BRAF
V600 Wild-Type Melanoma

ILLUMINATE-301 In (Lead USC PI) Idera Pharmaceuticals A Randomized Phase 3 Comparison of IMO-2125 with Ipilimumab versus Ipilimumab Alone in Subjects with Anti-PD-1 Refractory Melanoma