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Dr. Song is an epidemiologist with expertise in biostatistics and clinical medicine, which he uses to address a wide array of analytical questions in health care. He has broad experience designing and implementing advanced and innovative real-world data analytic and economic modeling solutions for pharmaceutical clients. Dr. Song conducts research to evaluate and compare the clinical, economic, and humanistic impacts of diseases and treatments across a variety of therapeutic areas. He is experienced in disease areas such as oncology, hematology, infectious diseases and vaccines, dermatology, rheumatology, cardiology, and endocrinology. Dr. Song has provided cross-indication consulting for multiple blockbuster pharmaceutical products, as well as novel pipeline agents. In his work, he uses data from clinical trials, administrative claims, medical chart reviews, surveys, qualitative interviews, and medical literature. His research has covered many different study types, including disease epidemiology, burden of illness, disease treatment and management patterns, comparative effectiveness research, individualized medicine, systematic literature reviews, indirect treatment comparisons, economic modeling such as cost-effectiveness analyses and budget impact analyses, analyses of patient-reported outcomes, and preference research such as discrete choice experiments. Dr. Song's work has been published in peer-reviewed journals and presented at international conferences on medical and health care research.

EDUCATION

2014 Ph.D., epidemiology, University of California, Los Angeles

2009 M.S., epidemiology and biostatistics, Peking University

2007 M.B.B.S., Peking University

PROFESSIONAL EXPERIENCE

2014–Present Analysis Group, Inc.

Vice President (2021–Present)

Manager (2017–2020) Associate (2014–2016)

2009–2014 University of California, Los Angeles

Research Assistant Teaching Assistant

SELECTED PUBLICATIONS

Oncology and hematology

- West H, Hu X, Zhang Su, Song Y, Chirovsky D, Gao C, Lerner A, Jiang A, Signorovitch J, Samkari A. Evaluation of disease-free survival as a predictor of overall survival and assessment of real-world burden of disease recurrence in resected early-stage non–small cell lung cancer. *Journal of Managed Care & Specialty Pharmacy*. 2023:29(7).
- Jonasch E, **Song Y**, Freimark J, Berman R, Nguyen H, Signorovitch J, Sundaram M. Epidemiology and economic burden of von Hippel-Lindau disease-associated renal cell carcinoma in the United States. *Clinical Genitourinary Cancer*. 2023:21(2).
- West H, Hu X, Zhang Su, Song Y, Chirovsky D, Gao C, Lerner A, Jiang A, Signorovitch J, Samkari A. Treatment patterns and outcomes in resected early-stage non-small cell lung cancer: An analysis of the SEER-Medicare data. *Clinical Lung Cancer*. 2023:24(3).
- Hass N, Song Y, Willemann-Rogerio J, Zhang S, Carley C, Zhu J, Bhattacharya R, Signorovitch J, Sundaram M. Disease-free survival as a predictor of overall survival in localized renal cell carcinoma following initial nephrectomy: A retrospective analysis of Surveillance, Epidemiology and End Results-Medicare data. *International Journal of Urology*. 2023:30(3).
- Lin C, Sajeev G, Stiff PJ, Brunstein CG, Cutler C, Sanz G, Lindemans CA, Rezvani AR, Hanna R, Koh LP, Maziarz RT, Hwang YK, Song Y, Liu Q, Manghani R, Sivaraman S, Signorovitch J, Horwitz ME, Sung AD. Health-related quality of life following allogeneic hematopoietic cell transplantation with omidubicel versus umbilical cord blood. *Transplantation and Cellular Therapy*. 2023:29(1).
- Sundaram M, Song Y, Willemann-Rogerio J, Zhang S, Bhattacharya R, Adejoro O, Carley C, Zhu J, Signorovitch J, Haas NB. Clinical and economic burdens of recurrence following nephrectomy for intermediate-high or high-risk renal cell carcinoma: a retrospective analysis of SEER-Medicare data. *Journal of Managed Care & Specialty Pharmacy*. 2022:28(10).
- Hamadani M, Chen L, Song Y, Xu MK, Liao L, Caimi PF, Carlo-Stella C. Matching-adjusted indirect comparison of the efficacy of loncastuximab tesirine versus treatment in the chemoimmunotherapy era for relapsed/refractory diffuse large B-cell lymphoma. Clinical Lymphoma, Myeloma & Leukemia. 2022:22(8).
- Sieluk J, **Song Y**, Freimark J, Huang M, Haiderali A, Berman R, Wang T, Signorovitch J, Hirshfield KM. The economic burden of recurrence in triple-negative breast cancer among working age patients in the United States. *Advances in Therapy*. 2021:39(2).
- Griffin JD, **Song Y**, Yang H, Freimark J, Shah MV. Posttransplant maintenance therapy in patients with *FLT3*-mutated acute myeloid leukemia: real-world treatment patterns and outcomes. *European Journal of Haematology*. 2021:107(5).
- Bensimon AG, Zhong Y, Swami U, Briggs A, Young J, Feng Y, Song Y, Signorovitch J, Adejoro O, Chakravarty A, Chen M, Perini RF, Geynisman DM. Cost-effectiveness of pembrolizumab with axitinib as first-line treatment for advanced renal cell carcinoma. *Current Medical Research and Opinion*. 2020:36(9).

- Bensimon AG, Zhou Z-Y, Jenkins M, Song Y, Gao W, Signorovitch J, Krepler C, Scherrer E, Wang J, Aguiar-Ibáñez R. An economic evaluation of pembrolizumab versus other adjuvant treatment strategies for resected high-risk stage III melanoma in the United States. *Clinical Drug Investigation*. 2020:40(7).
- Schultz NM, Penson DF, **Song Y**, Yang H, Ramaswamy K, Lowentritt B. Adverse events associated with cumulative corticosteroid use in patients with castration-resistant prostate cancer: an administrative claims analysis. *Drug Safety*. 2019:43(1).
- Bensimon AG, Zhou Z-Y, Jenkins M, Song Y, Gao W, Signorovitch J, Krepler C, Liu FX, Wang J, Aguiar-Ibáñez R. Cost-effectiveness of pembrolizumab for the adjuvant treatment of resected high-risk stage III melanoma in the United States. *Journal of Medical Economics*. 2019:22(10).
- Schultz N, Penson D, Wilson S, Song Y, Yang H, Ramaswamy K, Lowentritt B. Health care resource utilization and costs associated with corticosteroid use in patients with castration-resistant prostate cancer: an administrative claims analysis. *Journal of Managed Care & Specialty Pharmacy*. 2019:25(8).
- Griffin JD, Yang H, **Song Y**, Kinrich D, Shah M, Bui CN. Treatment patterns and healthcare resource utilization in patients with FLT3-mutated and wild type acute myeloid leukemia: a medical chart study. *European Journal of Haematology*. 2018:102(4).
- Schultz NM, Flanders SC, Wilson S, Brown BA, Song Y, Yang H, Lechpammer S, Kassabian V. Treatment duration, healthcare resource utilization, and costs among chemotherapy-naïve patients with metastatic castration-resistant prostate cancer treated with enzalutamide or abiraterone acetate: A retrospective claims analysis. Advances in Therapy. 2018:35(10).
- Massoudi M, Balk M, Yang H, Bui CN, Pandya BJ, Guo J, Song Y, Wu EQ, Brown B, Barlev A, Flanders S. Number needed to treat and associated incremental costs of treatment with enzalutamide vs abiraterone acetate plus prednisone in chemotherapy-naïve patients with metastatic castration-resistant prostate cancer. *Journal of Medical Economics*. 2017:20(2).
- Song Y, Hao Y, Macalalad AR, Lin PL, Signorovitch JE, Wu EQ. Clinical outcomes with first-line endocrine therapy or chemotherapy in postmenopausal HR+/HER2- metastatic breast cancer. *Breast Cancer: Basic and Clinical Research.* 2015:9.
- Song Y, Chavarro JE, Cao Y, Qiu W, Mucci L, Sesso HD, Stampfer MJ, Giovannucci E, Pollak M, Liu S, Ma J. Whole milk intake is associated with prostate cancer-specific mortality among U.S. male physicians. *The Journal of Nutrition*. 2013:143(2)

Immunology

- Bergman M, Tundia N, Martin N, Suboticki JL, Patel J, Goldschmidt D, **Song Y**, Wright GC. Patient-reported outcomes of upadacitinib versus abatacept in patients with rheumatoid arthritis and an inadequate response to biologic disease-modifying antirheumatic drugs: 12- and 24-week results of a phase 3 trial. *Arthritis Research & Therapy*. 2022:24(1).
- Strand V, Tundia N, Bergman M, Ostor A, Durez P, Song I-H, Enejosa J, Schlacher C, Song Y, Fleischmann R. Upadacitinib improves patient-reported outcomes vs placebo or adalimumab in patients with rheumatoid arthritis: results from SELECT-COMPARE. Rheumatology. 2021:60(12).

- Pope J, Sawant R, Tundia N, Du EX, Qi CZ, Song Y, Tang P, Betts KA. Comparative efficacy of JAK inhibitors for moderate-to-severe rheumatoid arthritis: a network meta-analysis. *Advances in Therapy*. 2020:37(5).
- Strand V, Schiff M, Tundia N, Friedman A, Meerwein S, Pangan A, Ganguli A, Fuldeore M, Song Y, Pope J. Effects of upadacitinib on patient-reported outcomes: results from SELECT-BEYOND, a phase 3 randomized trial in patients with rheumatoid arthritis and inadequate responses to biologic disease-modifying antirheumatic drugs. *Arthritis Research & Therapy*. 2019:21(1).
- Song Y, Betts KA, Lu Y, Singh R, Clewell J, Griffith J. Economic burden of switching to different biologic therapies among tumor necrosis factor inhibitor-experienced patients with psoriatic arthritis. *Rheumatology and Therapy*. 2019:6(2).
- Strand V, Husni ME, Betts KA, Song Y, Singh R, Griffith J, Beppu M, Zhao J, Ganguli A. Network meta-analysis and cost per responder of targeted immunomodulators in the treatment of active psoriatic arthritis. BMC Rheumatology. 2018:2(1).
- Strand V, Tundia N, **Song Y**, Macaulay D, Fuldeore M. Economic burden of patients with inadequate response to targeted immunomodulators in rheumatoid arthritis. *Journal of Managed Care & Specialty Pharmacy*. 2018:24(4).
- Husni ME, Betts KA, Griffith J, Song Y, Ganguli A. Benefit-risk trade-offs for treatment decision in moderate-to-severe rheumatoid arthritis: Focus on the patient perspective. *Rheumatology International*. 2017:37(9).
- Betts KA, Griffith J, **Song Y**, Mittal M, Joshi A, Wu EQ, Ganguli A. Network meta-analysis and cost per responder of tumor necrosis factor-α and interleukin inhibitors in the treatment of active ankylosing spondylitis. *Rheumatology and Therapy*. 2016:3(2).

Infectious diseases and vaccines

- Hu T, **Song Y**, Done N, Mohanty S, Liu Q, Sarpong EM, Lemuz-Wirtz E, Signorovitch J, Weiss T. Economic burden of acute otitis media, pneumonia, and invasive pneumococcal disease in children in the United States after the introduction of 13-valent pneumococcal conjugate vaccines during 2014-2018. *BMC Health Services Research*. 2023:23(1).
- Igho-Osagie E, Puenpatom A, Williams MG, Song Y, Yi D, Wang J, Berman R, Gu M, He C. Prevalence of potential drug-drug interactions with ritonavir-containing COVID-19 therapy. *Journal of Managed Care & Specialty Pharmacy*. 2023:29(5).
- Hu T, Sarpong EM, **Song Y**, Done N, Liu Q, Lemus-Wirtz E, Signorovitch J, Mohanty S, Weiss T. Incidence of non-invasive all-cause pneumonia in children in the United States before and after the introduction of pneumococcal conjugate vaccines: A retrospective claims database analysis. *Pneumonia*. 2023:15(1).
- Hu T, **Song Y**, Done N, Liu Q, Sarpong E, Lemus-Wirtz E, Signorovitch J, Mohanty S, Weiss T. Incidence of invasive pneumococcal disease in children with commercial insurance or Medicaid coverage in the United States before and after the introduction of 7- and 13-valent pneumococcal conjugate vaccines during 1998-2018. *BMC Public Health*. 2022:22(1).

- Hu T, Done N, Petigara T, Mohanty S, Song Y, Liu Q, Lemus-Wirtz E, Signorovitch J, Sarpong E, Weiss T. Incidence of acute otitis media in children in the United States before and after the introduction of 7- and 13-valent pneumococcal conjugate vaccines during 1998-2018. BMC Infectious Disease. 2022:22(1).
- Yamazaki K, Macaulay D, Song Y, Gonzalez YS. Clinical and economic burden of patients with chronic hepatitis C with versus without antiviral treatment in Japan: an observational cohort study using hospital claims data. *Infectious Diseases and Therapy*. 2019:8(2).
- Signorovitch JE, Betts KA, **Song Y**, Sorg RA, Li J, Behl AS, Kalsekar A. Comparative efficacy and safety of daclatasvir/asunaprevir versus interferon-based regimens in genotype 1b HCV infection. *Journal of Comparative Effectiveness Research*. 2015:4(6).

Cardiology and endocrinology

- Li J, Yang Q, Zhong F, Manson JE, Papandonatos GD, Wu W-C, Chan K-H, **Song Y**, Kuang J, Liu S. Prenatal exposure to famine and the development of diabetes later in life: An age-period-cohort analysis of the China Health and Nutrition Survey (CHNS) from 1997 to 2015. *European Journal of Nutrition*. 2023:62(2).
- Greene SJ, Lautsch D, Gaggin HK, Djatche LM, Zhou M, Song Y, Signorovitch J, Stevenson AS, Blaustein RO, Butler J. Contemporary outpatient management of patients with worsening heart failure with reduced ejection fraction: Rationale and design of the CHART-HF study. American Heart Journal. 2022:251.
- Kim N, Wang J, Burudpakdee C, **Song Y**, Ramasamy A, Xie Y, Sun R, Kumar N, Wu EQ, Sullivan SD. Cost-effectiveness analysis of semaglutide 2.4 mg for the treatment of adult patients with overweight and obesity in the United States. *Journal of Managed Care & Specialty Pharmacy*. 2022:28(7).
- Li J, Sesso H, Zhong VW, Chan K-H, Madsen TE, Papandonatos GD, Zheng T, Wu W-C, **Song Y**, Yu X, Liu S. Famine and trajectories of body mass index, waist circumference, and blood pressure in two generations: Results from the China Health and Nutrition Survey (CHNS) from 1993–2005. *Hypertension*. 2022:79(3).
- Song Y, Cho M, Brennan K, Chen BH, Song Y, Manson JE, Hevener AL, You NC, Butch AW, Liu S. Relations of sex hormone levels to leukocyte telomere length in black, Hispanic, and Asian/Pacific Islander postmenopausal women. *Journal of Diabetes*. 2018:10(6).
- Song Y, Chou EL, Baecker A, You NC, Song Y, Sun Q, Liu S. Endocrine-disrupting chemicals, risk of type 2 diabetes, and diabetes-related metabolic traits: A systematic review and meta-analysis. *Journal of Diabetes*. 2015:8(4).
- Hu Y, Song Y, Franke AA, Hu FB, van Dam RM, Sun Q. A prospective investigation of the association between urinary excretions of dietary lignan metabolites and weight change in US women. *American Journal of Epidemiology*. 2015:182(6).
- Song Y, Huang YT, Song Y, Hevener AL, Ryckman KK, Qi L, LeBlanc ES, Kazlauskaite R, Brennan KM, Liu S. Birthweight, mediating biomarkers and the development of type 2 diabetes later in life: A prospective study of multi-ethnic women. *Diabetologia*. 2015:58(6).

- Song Y, Hauser R, Hu FB, Franke AA, Liu S, Sun Q. Urinary concentrations of bisphenol A and phthalate metabolites and weight change: A prospective investigation in US women. *International Journal of Obesity*. 2014:38(12).
- Ryckman KK, Rillamas-Sun E, Spracklen C, Wallace RB, Garcia L, Tylavsky FA, Howard BV, Liu S, Song Y, LeBlanc ES, White MV, Parikh NI, Robinson JG. Ethnic differences in the relationship between birth weight and type 2 diabetes mellitus in postmenopausal women. *Diabetes & Metabolism*. 2014:40(5).
- He L, Tang X, Song Y, Li N, Li J, Zhang Z, Liu J, Yu L, Xu H, Zhang J, Hu Y. Prevalence of cardiovascular disease and risk factors in a rural district of Beijing, China: A population-cased survey of 58,308 Residents. BMC Public Health. 2012:12.
- Wang F, Wu S, **Song Y**, Tang X, Marshall R, Liang M, Wu Y, Qin X, Chen D, Hu Y. Waist circumference, body mass index and waist to hip ratio for prediction of metabolic syndrome in Chinese. *Nutrition, Metabolism & Cardiovascular Diseases*. 2009:19(8).

Other therapeutic areas

- Song Y, E J-Y, Guo T, Sasane R, Arcona S, Keshava N, Wu E. Treatment patterns and healthcare resource use in Medicare beneficiaries with Parkinson's disease. *ClinicoEconomics and Outcomes Research*. 2023:15.
- Fishman J, Kalilani L, **Song Y**, Swallow E, Wild I. Antiepileptic drug titration and related health care resource use and costs. *Journal of Managed Care & Specialty Pharmacy*. 2018:24(9).
- Wing VK, **Song Y**, Xiang C, Liu X, Macaulay D, Ponsillo M, Blumentals WA. Incidence of catheter-related complications in Japanese patients with central venous catheters and among patients with short bowel syndrome. *Clinical and Experimental Gastroenterology*. 2018:11.
- Song Y, You NC, Song Y, Kang MK, Hou L, Wallace R, Eaton CB, Tinker LF, Liu S. Intake of small-to-medium-chain saturated fatty acid is associated with peripheral leukocyte telomere length in postmenopausal women. *The Journal of Nutrition*. 2013:143(6).
- Cao Y, Kenfield S, **Song Y**, Rosner B, Qiu W, Sesso HD, Gaziano JM, Ma J. Cigarette smoking cessation, total and cause-specific mortality: A 22-year follow-up study in US male physicians. *Archives of Internal Medicine*. 2011:171(21).

SELECTED CONFERENCE PRESENTATIONS

Oncology and hematology

- Pierce K, Wang Y, Malik AA, Cook EE, Song Y, Quintana A, Mohan T, Valdes CR, Otero PR. "Humanistic, clinical, and economic burden in patients with relapsed or refractory multiple myeloma on second line or higher therapy: a systematic literature review." International Myeloma Society (IMS) Annual Meeting 2023, Athens, Greece (September 27–30, 2023)
- Donington J, Hu X, Zhang S, Song Y, Gao C, Arunachalam A, Chirovsky D, Lerner A, Jiang A, Signorovitch J, Samkari A. "Real-world primary treatment patterns in stages I-III non-small cell lung cancer." 2023 World Conference on Lung Cancer (WCLC), Singapore (September 9–12, 2023)

- Donington J, Hu X, Zhang S, Song Y, Gao C, Arunachalam A, Chirovsky D, Lerner A, Jiang A, Signorovitch J, Samkari A. "Neoadjuvant treatment pattern and association between real-world event-free survival and overall survival in patients with resected early-stage non-small cell lung cancer." European Lung Cancer Congress (ELCC) 2023 Scientific Committee, Copenhagen, Denmark (March 29–April 1, 2023)
- Wang L, Bensimon AG, Sundaram M, Xu R, Lai J, Liu Y, Mt-Isa S, Yang D, Freimark J, Song Y, Jonasch E. "Burden of surgeries and surgical complications in patients with von Hippel Lindau (VHL) disease before and after treatment with belzutifan." American Society of Clinical Oncology Genitourinary Cancers Symposium (ASCO-GU), San Francisco, CA (February 16–18, 2023)
- Garg M, Satija A, Song Y, Sarpong E, Meade B, Lemus-Wirtz E, Gaburo K, Signorovitch J, Raut M, Ryland K, Chakraborty S. "Real-world treatment patterns, healthcare resource use, and costs among patients with diffuse large B-cell lymphoma: a retrospective analysis of US claims data." Annual Meeting of the American Society of Hematology (ASH), New Orleans, LA (December 10–13, 2022)
- Garg M, Satija A, Song Y, Sarpong E, Meade B, Lemus-Wirtz E, Gaburo K, Signorovitch J, Raut M, Ryland K, Chakraborty S. "Economic burden and treatment patterns among patients with mantle cell lymphoma in the US: a retrospective claims analysis." ASH Annual Meeting, New Orleans, LA (December 10–13, 2022)
- Sivaraman S, Sajeev G, Song Y, Xu C, He C, Signorovitch J, Shin H, Manghani R, Tang X, Zhang M-J, Burns LJ, Simantov R. "Clinical outcomes following allogeneic hematopoietic cell transplantation with omidubicel or other donor sources in patients with hematologic malignancies: comparison of clinical trial results to Center for International Blood and Marrow Transplant Research database controls." ASH Annual Meeting, New Orleans, LA (December 10–13, 2022)
- Lai Y, Song Y, Zhang S, Bhattacharya R, Carley C, Bensimon A. "Disease management costs for patients with intermediate-high or high-risk renal cell carcinoma (RCC) following nephrectomy." International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Europe, Vienna, Austria (November 6–9, 2022)
- West H, Hu X, Chirovsky D, Song Y, Zhang S, Gao C, Carley C, Lerner A, Signorovitch J, Samkari A. "Real-world disease-free survival as a predictor of overall survival in resected early-stage non-small cell lung cancer." 2022 WCLC, Vienna, Austria (August 6–9, 2022)
- Haas NB, Bhattacharya R, Song Y, Willemann-Rogerio J, Zhang S, Carley C, Anderson A, Signorovitch J, Sundaram M. "Variation in recurrence rate and overall survival (OS) outcomes by disease stage and incremental impact of time to recurrence on OS in localized renal cell carcinoma (RCC)." American Society of Clinical Oncology (ASCO) Annual Meeting, Chicago, IL (June 4–6, 2022)
- Sundaram M, Song Y, Freimark J, Berman R, Nguyen H, Signorovitch J, Jonasch E. "Real-world treatment patterns in von Hippel-Lindau (VHL) disease-associated renal cell carcinoma (RCC): costs of tumor reduction procedures and their complications." ASCO Annual Meeting, Chicago, IL (June 4–6, 2022)

- Maziarz RT, Edwards ML, Gergis U, Song Y, Liu Q, Noman A, Anderson A, Simantov R, Manghani R, Sivaraman S, Signorovitch J. "Total costs of care and complication rates among patients with hematologic malignancies who receive allogeneic hematopoietic cell transplants in the US." Tandem Meetings Transplantation & Cellular Therapy Meetings of the Society for Transplantation and Cellular Therapy (ASTCT) and the Center for International Blood and Marrow Transplant Research (CIBMTR), Salt Lake City, UT (April 23–26, 2022)
- Gergis U, Khera N, Edwards ML, Song Y, Sun R, Simantov R, Sivaraman S, Manghani R, Signorovitch J. "Projected impact of omidubicel on racial and ethnic disparities in allogeneic hematopoietic cell transplant access and outcomes for patients with hematologic malignancies in the US." Tandem Meetings Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR, Salt Lake City, UT (April 23–26, 2022)
- Horwitz ME, Sajeev G, Stiff P, Brunstein CG, Cutler C, Sanz G, Lindemans CA, Rezvani AR, Hanna R, Koh LP, Mariarz RT, Hwang WYK, Song Y, Liu Q, Manghani R, Sivaraman S, Signorovitch J, Galamidi-Cohen E. "Health-related quality of life (HRQL) following transplantation with omidubicel versus umbilical cord blood (UCB) in patients with hematologic malignancies: Results from a phase III randomized, multicenter study." Tandem Meetings Transplantation & Cellular Therapy Meetings of ASTCT and CIBMTR, Salt Lake City, UT (April 23–26, 2022)
- Jonasch E, Song Y, Freimark J, Berman R, Nguyen H, Signorovitch J, Sundaram M. "Healthcare resource utilization (HRU) and costs among patients with Von Hippel-Lindau disease (VHL)-associated renal cell carcinoma (RCC): A retrospective administrative claims analysis." ASCO-GU, San Francisco, CA (February 17–19, 2022)
- Zhou M, Yang H, **Song Y**, Marshall DA, Griffin JD, Saini L, Shah MV. "Patient and physician preferences for treatment of newly diagnosed acute myeloid leukemia (AML) in patients not candidates for intensive chemotherapy." ASH Annual Meeting, Atlanta, GA (December 11–14, 2021)
- Zhou M, Yang H, Song Y, Marshall DA, Griffin JD, Saini L, Shah MV. "Impact of blood transfusions on treatment attributes, quality of life, and out-of-pocket costs in newly diagnosed acute myeloid leukemia ineligible for high-intensity chemotherapy: patient and physician perspectives." Academy of Managed Care Pharmacy (AMCP) Nexus, Denver, CO (October 18–21, 2021)
- Zhou M, Yang H, Song Y, Marshall DA, Griffin JD, Saini L, Shah MV. "Patient and physician perspectives on treatment attributes and the humanistic and economic burden of blood transfusions in patients with acute myeloid leukemia (AML) previously treated with hematopoietic stem cell transplantation (HSCT)." AMCP Nexus, Denver, CO (October 18–21, 2021)
- Zhou M, Yang H, Song Y, Marshall DA, Griffin JD, Saini L, Shah MV. "Patient and physician preferences for post-hematopoietic stem cell transplantation maintenance treatment of acute myeloid leukemia." European Hematology Association (EHA), Virtual Congress (June 9–17, 2021)

- Haas NB, Song Y, Willemann-Rogerio J, Zhang S, Adejoro O, Carley C, Zhu J, Bhattacharya R, Signorovitch J, Sundaram M. "Disease-free survival as a predictor of overall survival in localized renal cell carcinoma (RCC) following first nephrectomy." ASCO Annual Meeting, Virtual Congress (June 4–8, 2021)
- Sieluk K, Haiderali A, Huang M, Signorovitch J, Song Y, Freimark J, Berman R. "Healthcare resource utilization associated with disease recurrence among surgically-treated patients with triple-negative breast cancer." ISPOR, Virtual Congress (May 17–20, 2021)
- Sieluk K, Haiderali A, Huang M, Signorovitch J, Song Y, Freimark J, Wang T. "Productivity costs associated with disease recurrence among surgically-treated patients with triple-negative breast cancer." ISPOR, Virtual Congress (May 17–20, 2021)
- Sundaram M, Song Y, Willemann-Rogerio J, Zhang S, Adejoro O, Carley C, Zhu J, Signorovitch J, Haas NB. "Economic and clinical burdens of recurrence following nephrectomy for intermediate-high or high-risk renal cell carcinoma (RCC): a retrospective administrative claims analysis." ISPOR, Virtual Congress (May 17–20, 2021)
- Griffin JD, **Song Y**, Yang H, Freimark J, Shah MV. "Posttransplant maintenance therapy in patients with *FLT3*-mutated (*FLT3*^{mut+}) acute myeloid leukemia (AML): Results from a retrospective chart review study." EHA, Virtual Congress (June 11–14, 2020)
- Bensimon A, Zhong Y, Swami U, Briggs A, Young J, Feng Y, Song Y, Signorovitch J, Adejoro O, Chakravarty A, Chen M, Perini RF, Geynisman DM. "Cost-effectiveness of pembrolizumab in combination with axitinib as first-line treatment for advanced renal cell carcinoma." ASCO-GU, San Francisco, CA (February 13–15, 2020)
- Griffin J, Shah MV, **Song Y**, Yang H, Tang W. "Economic burden of relapse after hematopoietic stem cell transplantation (HSCT) in patients with acute myeloid leukemia (AML): A retrospective claims-based analysis." ISPOR Europe, Copenhagen, Denmark (November 2–6, 2019)
- Schultz NM, Lowentritt B, Wilson SC, Song Y, Yang H, Ramaswamy K, Penson DF. "Health care resource utilization and costs associated with corticosteroid use in patients with castration-resistant prostate cancer: An administrative claims analysis." AMCP Annual Meeting, San Diego, CA (March 25–28, 2019)
- Schultz NM, Penson DF, Wilson SC, Song Y, Yang H, Ramaswamy K, Lowentritt B. "Clinical events associated with cumulative corticosteroid use in patients with castration-resistant prostate cancer: an administrative claims analysis." ASCO-GU, San Francisco, CA (February 14–16, 2019)
- Griffin JD, Shah MV, **Song Y**, Yang H. "Treatment patterns and healthcare resource utilization (HRU) in patients with relapsed/ refractory (R/R) *FLT3*-mutated (*FLT3*^{mut}) and *FLT3*-wild type (*FLT3*^{wt}) acute myeloid leukemia (AML): a multi-country medical chart study." Annual Meeting of the ASH, San Diego, CA (December 1–4, 2018)
- Kassabian V, Flanders SC, Wilson S, Brown BA, Song Y, Yang H, Lechpammer S, Schultz NM. "Healthcare resource utilization and costs in metastatic castration-resistant prostate cancer patients treated with enzalutamide or abiraterone acetate." ASCO-GU, San Francisco, CA (February 8–10, 2018)

- Kassabian V, Flanders SC, Wilson S, Brown BA, Song Y, Yang H, Lechpammer S, Schultz NM.
 "Treatment duration and utilization patterns in metastatic castration-resistant prostate cancer patients receiving enzalutamide or abiraterone acetate." ASCO-GU, San Francisco, CA (February 8–10, 2018)
- Griffin JD, Yang H, **Song Y**, Kinrich DB, Bui CN. "Treatment patterns and healthcare resource utilization in patients with FLT3-mut and FLT3-wt acute myeloid leukemia: a multi-country medical chart study." Annual Meeting of the ASH, Atlanta, GA (December 9–12, 2017)
- Bui C, Massoudi M, Balk M, Guo J, Song Y, Brown B, Barlev A, Pandya BJ, Yang H. "Number needed to treat and associated incremental costs to achieve one additional patient free of event: indirect comparison of enzalutamide and abiraterone + prednisone in chemotherapy-naïve metastatic castration-resistant prostate cancer." AMCP Annual Meeting, San Francisco, CA (April 19–22, 2016)
- Zhang J, Song Y, Zhou Z, Zhang C, Signorovitch J. "The impacts on work productivity from ceritinib compared with chemotherapy for crizotinib-experienced ALK+ non-small cell lung cancer." 6th European Lung Cancer Conference (ELCC), Geneva, Switzerland (April 13–16, 2016)
- Song Y, Hao Y, Macalalad A, Lin P, Signorovitch J, Wu E. "Overall survival following initiation of first-line treatment with a non-steroidal aromatase inhibitor or fulvestrant among postmenopausal women with recurrent HR+/HER2- metastatic breast cancer." AMCP Annual Meeting, San Diego, CA (April 7, 2015)
- Song Y, Chavarro JE, Cao Y, Qiu W, Mucci L, Sesso HD, Stampfer MJ, Giuvannucci E, Pollak M, Liu S, Ma J. "Intake of dairy products in relation to risk and survival of prostate cancer: a 28-year follow-up study." 2012 World Cancer Congress (WCC), Montréal, Canada (August 28, 2012)

Immunology

- Song Y, Mittal M, Zueger P, Wang Y, Gao S, Clewell J, Jones H, Deodhar A. "Response and all-cause medical service costs in patients with ankylosing spondylitis (AS) who cycled through TNFi therapies." AMCP Annual Meeting, San Antonio, TX (March 21–24, 2023)
- Song Y, Mittal M, Zueger P, Wang Y, Gao S, Clewell J, Nakasato P, Gibofsky A. "Real-world clinical and economic value of switching to a non-TNFi advanced therapy compared with TNFi cycling in psoriatic arthritis." AMCP Annual Meeting, San Antonio, TX (March 21–24, 2023)
- Bergman M, Enejosa J, Martin N, Suboticki J, Goldschmidt D, Song Y, Tundia N. "Patient-reported outcomes of upadacitinib versus abatacept in patients with rheumatoid arthritis and an inadequate response to biologic disease-modifying antirheumatic drugs: 12-week results of a Phase 3 study." American College of Rheumatology (ACR) Convergence, Virtual Congress (November 5–9, 2020)
- Fleischmann R, Bergman M, Tundia N, Song I-H, Suboticki J, Song Y, Strand V. "Patient-reported outcomes of upadacitinib versus adalimumab use in patients with moderately to severely active rheumatoid arthritis and an inadequate response to methotrexate: 26-Week analysis of a Phase 3 study." American College of Rheumatology/Association of Rheumatology Health Professionals (ACR/ARHP) Annual Meeting, Atlanta, GA (November 8–13, 2019)

- Bergman M, Tundia N, Camp HS, Meerwein S, Schlacher C, Goldschmidt D, Song Y, Strand V. "Effects of upadacitinib on patient-reported outcomes after 24 weeks in patients with active rheumatoid arthritis and an inadequate response to conventional synthetic or biologic disease-modifying anti-rheumatic drugs: Results from SELECT-NEXT and SELECT-BEYOND Phase 3 studies." ACR/ARHP Annual Meeting, Atlanta, GA (November 8–13, 2019)
- Tzellos T, **Song Y**, Wang J, Yang H, Sing R, Calimlim B. "A longitudinal assessment of the impact of adalimumab on work productivity, skin pain, and quality of life measures among patients with hidradenitis suppurativa." European Academy of Dermatology and Venereology (EADV), Madrid, Spain (October 9–13, 2019)
- Strand V, Bergman M, Tundia N, Ostor A, Durez P, Song I-H, Enejosa JJ, Schlacher C, Song Y, Fleischman R. "Upadacitinib Improves Patient-Reported Outcomes in Patients With Rheumatoid Arthritis and Inadequate Response to Methotrexate: Results From SELECT-COMPARE." European Alliance of Associations for Rheumatology (EULAR) Annual European Congress of Rheumatology, Madrid, Spain (June 12–15, 2019)
- Strand V, Husni E, Singh R, Betts KA, **Song Y**, Zhao J, Griffith J, Ganguli A. "Network metaanalysis of targeted immunomodulators in the treatment of psoriatic arthritis patients without prior biologic treatment." ACR/ARHP Annual Meeting, Chicago, IL (November 3–8, 2017)
- Strand V, Schiff M, Tundia N, Friedman A, Meerwein S, Pangan A, Ganguli A, Fuldeore M, Song Y, Pope J. "Patient reported outcomes of upadacitinib: Results from biologic inadequate responders (SELECT BEYOND Phase III trial)." EULAR Annual European Congress of Rheumatology, Amsterdam, Netherlands (June 13–16, 2018)
- Song Y, Betts KA, Singh R, Clewell J, Griffith J. "Economic evaluation of patients with psoriatic arthritis treated with adalimumab or secukinumab." AMCP Annual Meeting, Boston, MA (April 23–26, 2018)
- Song Y, Betts KA, Singh R, Clewell J, Griffith J. "Economic burden of switching to different biologic therapies among tumor necrosis factor inhibitor-experienced patients with psoriatic arthritis." AMCP Annual Meeting, Boston, MA (April 23–26, 2018)
- Strand V, Husni E, Singh R, Betts BA, Song Y, Griffith J, Ganguli A. "Network meta-analysis of targeted immunomodulators in the treatment of biologic-naïve psoriatic arthritis." ACR/ARHP Annual Meeting, San Diego, CA (November 3–8, 2017)
- Betts KA, Woolley JM, **Song Y**, Gao W, Wu EQ. "Indirect comparison of sodium zirconium cyclosilicate versus patiromer in the treatment of hyperkalemia through 48 hours." Kidney Week 2017 of the American Society of Nephrology (ASN), New Orleans, LA (October 31–November 5, 2017)
- Jemec G, Song Y, Yang H, Skup M, Calimlim B. "Comparison of healthcare resource utilization and costs of patients with hidradenitis suppurativa treated with adalimumab and non-biologics." Annual Congress of the EADV, Geneva, Switzerland (September 13–17, 2017)
- Kimball A, Yang M, Song Y, Valdecantos W, Ganguli A. "Health-related quality of life and work productivity associated with HiSCR and NRS30 response among patients with moderate to severe hidradenitis suppurativa." Annual Meeting of the American Academy of Dermatology (AAD), Orlando, FL (March 3–7, 2017)

- Qureshi A, Yang M, Song Y, Zhang A, Sundaram M, Ganguli A. "High-value subpopulation for skin pain improvement in adalimumab-treated patients with moderate to severe hidradenitis suppurativa." Annual Meeting of the AAD, Orlando, FL (March 3-7, 2017)
- Husni ME, Griffith J, Betts KA, Song Y, Ganguli A. "Thresholds of benefit-risk trade-offs from the patient perspective for treatment decisions in moderate-to-severe rheumatoid arthritis." ACR/ARHP Annual Meeting, Washington, DC (November 11–16, 2016)
- Keystone EC, Betts KA, Schlacher C, **Song Y**, Ganguli A, Griffith J. "Incremental benefit of radiographic inhibition on long-term outcomes in patients with rheumatoid arthritis." ACR/ARHP Annual Meeting, Washington, DC (November 11–16, 2016)
- Strand V, Tundia N, Song Y, Macaulay D, Fuldeore M. "Economic burden of non-responders to biologic DMARD treatments in rheumatoid arthritis." ACR/ARHP Annual Meeting, Washington, DC (November 11–16, 2016)
- Strand V, Husni ME, Reichmann W, Betts K, Griffith J, Song Y, Beppu M, Ganguli A. "Network meta-analysis and cost per responder of tumor necrosis factor, interleukin, and phosphodiesterase inhibitors in the treatment of psoriatic arthritis." Annual Meeting of the AAD, Washington, DC (March 4–8, 2016)
- Strand V, Husni ME, Reichmann W, Betts K, Griffith J, Song Y, Beppu M, Ganguli A. "Network meta-analysis of tumor necrosis factor, interleukins, and phosphodiesterase-4 inhibitor in the treatment of psoriatic arthritis." ACR/ARHP Annual Meeting, San Francisco, CA (November 7–11, 2015)

Infectious diseases and vaccines

- Mohanty S, Done N, Liu Q, Song Y, Gaburo K, Wang T, Sarpong EM, White M, Weaver J, Signorovitch J, Weiss T. "Incidence of pneumococcal disease in children ≤48 months old in the United States: 2010-2019." IDWeek, Boston, MA (October 11–15, 2023)
- Russell ES, **Song Y**, Gao Y, Signorovitch J. "Predicted uptake of novel HIV treatment options in the United States." IDWeek, Boston, MA (October 11–15, 2023)
- Liu G, Done N, Song Y, Goswami H, Wang T, Li H, Mattera M, Signorovitch J, Hair GM. "Healthcare resource utilization and costs among patients with COVID-19 in the United States." IDWeek, Boston, MA (October 11–15, 2023)
- Russell ES, Zhou M, Song Y, Signorovitch J, Barak N, Mast TC. "Both dose frequency and modality drive HIV treatment preferences among people living with HIV in the United States." ISPOR, Boston, MA (May 7–10, 2023)
- Oluwaseun S, Yang C, Si Tu SJ, Song Y, Han F, Gu C, Signorovitch J, Wang XC, Bian R, Carias C. "Comparative public health impact of rotavirus vaccination in China." International Congress on Infectious Disease, Kuala Lumpur, Malaysia (November 17–20, 2022)
- Puenpatom A, Williams MG, Song Y, Yi D, Wang J, Gu M, He C, Berman R, Igho-Osagie E. "Prevalence of potential drug-drug interactions with ritonavir-containing COVID-19 therapies." 24th Annual Meeting of Making a Difference in Infectious Disease (MAD-ID), Orlando, FL (May 18–21, 2022)

- Zhou M, Song Y, Gao E, Whiteside Y, Billmyer E, Signorovitch, J. "Pre-exposure prophylaxis (PrEP) prescriptions among individuals at high risk for HIV in the United States, 2012-2018." IDWeek, Virtual Congress (September 29–October 2, 2021)
- Hu T, Sarpong EM, Song Y, Done N, Orvis E, Signorovitch J, Petigara T. "Incidence of acute otitis media in children in the United States before and after the introduction of pneumococcal conjugate vaccines (PCV7 and PCV13) during 1998-2018." IDWeek, Virtual Congress (October 21–25, 2020)
- Hu T, Sarpong EM, Song Y, Done N, Liu Q, Signorovitch J, Petigara T. "Incidence of non-invasive pneumococcal pneumonia in children in the United States before and after introduction pneumococcal conjugate vaccines (PCV7 and PCV13) during 1998-2018." IDWeek, Virtual Congress (October 21–25, 2020)
- Bhagat H, Xu Y, Spalding J, Song Y, Zhao J, Zhou M, Fadli E, Yang H. "Patient preferences for triazole antifungals in the treatment of invasive mold infection: A discrete choice experiment." IDWeek, Washington, DC (October 2–6, 2019)
- Signorovitch J, Betts K, Song Y, Sorg R, Li J, Behl A, Kalsekar A. "Comparative efficacy and tolerability of combination treatment with daclatasvir and asunaprevir versus peginterferonalpha/ribavirin-based regimens for patients infected with genotype 1b hepatitis C virus." 24th Conference of the Asian Pacific Association for the Study of the Liver (APASL), Istanbul, Turkey (March 12, 2015)

Cardiology and endocrinology

- Clair J, Cremer P, Klein A, Luis A, Perrin R, Portman M, Raisinghani A, Song Y, Wang Y, Paolini JF. "Baseline demographics and disease characteristics of patients enrolled in REgiStry Of the NAtural history of recurreNt periCarditis in pEdiatric and adult patients (RESONANCE)." American College of Cardiology (ACC) Annual Scientific Session & Expo, New Orleans, LA (March 4–6, 2023)
- Gaggin HK, Greene SJ, Zhou M, Lautsch D, Song Y, Signorovitch J, Stevenson AS, Blaustein RO, Butler J. "Contemporary outpatient management of patients with and without worsening heart failure with reduced ejection fraction (HFrEF) within a single integrated system: results from electronic medical record data in the CHART-HF study." American Heart Association (AHA) Scientific Sessions, Chicago, IL (November 5–7, 2022)
- Greene SJ, Gaggin HK, Zhou M, Lautsch D, Song Y, Signorovitch J, Stevenson AS, Blaustein RO, Butler J. "Medication changes and reasons for no medication change among outpatients with heart failure with reduced ejection fraction: results from CHART-HF." AHA Scientific Sessions, Chicago, IL (November 5–7, 2022)
- Raisinghani AB, Buckley LF, **Song Y**, Chatfield J, Wang Y, Malinowski A, Berman R, He C, Wu E, Martin DR. "Real-world experience and unmet needs in the current management of recurrent pericarditis: a physician survey and medical chart review." ACC Annual Scientific Session & Expo, Washington, DC (April 2–4, 2022)
- Li J, Song Y, Sun C, Liu S, Li Y. "Insulin resistance as a mediator for the association of protein intake with type 2 diabetes in a Chinese population." 98th Annual Meeting and Expo of the Endocrine Society (ENDO), Boston, MA (April 1–4, 2016)

Other therapeutic areas

- Fishman J, Kalilani L, **Song Y**, Swallow E, Wild I. "Dosage titration of AED treatments and related healthcare resource use and costs: a retrospective chart review in the US." AMCP Annual Meeting, Denver, CO (March 27–30, 2017)
- Song Y, You NC, Song Y, Kang M, Hou L, Wallace R, Eaton C, Tinker L, Liu S. "Relation of dietary fat intake to peripheral leukocyte telomere length in postmenopausal women." Society of Epidemiologic Research (SER), Boston, MA (June 20, 2013)
- Song Y, You NC, Goto A, Song Y, Hou L, Kroenke CH, Manson JE, Rohan TE, Tindle HA, Tinker LF, Liu S. "Unhealthy lifestyle in relation to peripheral leukocyte telomere length in postmenopausal women." 2012 American Heart Association (AHA) Scientific Sessions, Los Angeles, CA (November 6, 2012)

JOURNAL REFEREE EXPERIENCE

Referee for *The BMJ*, the *Annals of Internal Medicine*, the *American Journal of Epidemiology*, the *Journal of Managed Care & Specialty Pharmacy, The American Journal of Clinical Nutrition*, The *Journal of Nutrition*, the *Journal of Diabetes*, and the *Asia Pacific Journal of Clinical Nutrition*.