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Dr. Wang is experienced in providing consulting services to life sciences companies, with a focus on real-world evidence (RWE) generation and health economics and outcomes research (HEOR). His expertise encompasses such topics as the analysis of clinical trial data and real-world databases, indirect treatment comparisons, health economics modeling, support for health technology assessment (HTA) submissions, surveys, and chart reviews. Dr. Wang has provided support for pharmaceutical products in different phases of development and contributed to studies in a diverse range of therapeutic areas, including cardiovascular disease, dermatology, hematology, immunology, infectious disease, metabolic disorders, neurology, oncology, and rheumatology. His work has been published in peer-reviewed journals and presented at clinical and economic research conferences.

EDUCATION

2018 Sc.D., environmental health and biostatistics, Harvard T.H. Chan School of Public Health
2015 M.S., environmental health, Harvard T.H. Chan School of Public Health
2013 B.S., environmental science, Peking University
2013 B.Econ, economics, Peking University

PROFESSIONAL EXPERIENCE

2018–Present Analysis Group, Inc.
Vice President (2023–Present)
Manager (2021–2023)
Associate (2018–2020)
2017 Analysis Group, Inc.
Summer Associate

ARTICLES AND PUBLICATIONS

Mysler E, Burmester GR, Saffore CD, Liu J, Wegrzyn L, Yang C, Betts KA, **Wang Y**, Irvine AD, Panaccione R. Safety of Upadacitinib in Immune-Mediated Inflammatory Diseases: Systematic Literature Review of Indirect and Direct Treatment Comparisons of Randomized Controlled Trials. *Advances in Therapy*. 2024 Jan 2:1-31.

Wang Y, Gao W, Han X, Jiang J, Sandler B, Li X, Zema C. Cardiovascular outcomes by time-varying New York Heart Association class among patients with obstructive hypertrophic cardiomyopathy: A retrospective cohort study. *Journal of Medical Economics*. 2023 Dec 31;26(1):1495-506.

Mahon R, Tiwari S, Koch M, Ferraris M, Betts KA, **Wang Y**, Gao S, Proot P. Comparative effectiveness of erenumab versus rimegepant for migraine prevention using matching-adjusted indirect comparison. *Journal of Comparative Effectiveness Research*. 2023 Dec(0):e230122.

Song Y, **Wang Y**, Wong SL, Yang D, Sundar M, Tundia N. Real-world treatment patterns and effectiveness of cladribine tablets in patients with relapsing forms of multiple sclerosis in the United States. *Multiple Sclerosis and Related Disorders*. 2023 Nov 1;79:105052.

Armstrong AW, Soliman AM, Betts KA, **Wang Y**, Gao Y, Stakias V, Puig L. Long-Term Benefit–Risk Profiles of Treatments for Moderate-to-Severe Plaque Psoriasis: A Network Meta-Analysis. *Dermatology and Therapy*. 2022 Jan;12(1):167-84.

Xie J, **Wang Y**, Xu Y, Fine JT, Lam J, Garrison LP. Assessing health-related quality-of-life in patients with symptomatic obstructive hypertrophic cardiomyopathy: EQ-5D-based utilities in the EXPLORER-HCM trial. *Journal of Medical Economics*. 2022 Dec 31;25(1):51-8.

Desai N, Xie J, **Wang Y**, Sutton MB, Whang J, Fine JT, Garrison Jr LP. Projecting the Long-term Clinical Value of Mavacamten for the Treatment of Obstructive Hypertrophic Cardiomyopathy in the United States: An Assessment of Net Health Benefit. *Clinical Therapeutics*. 2021 Dec 12.

Semigran M, **Wang Y**, Xie J, Xu Y, Sutton MB, Desai NR. Estimated Number Needed to Treat with Mavacamten vs Placebo to Improve Functional Capacity and Left Ventricular Outflow Tract Obstruction in Patients with Symptomatic Obstructive Hypertrophic Cardiomyopathy. *Circulation*. 2021 Nov 16;144(Suppl_1):A10969-.

Yazdi MD, **Wang Y**, Di Q, Requia WJ, Wei Y, Shi L, Sabath MB, Dominici F, Coull B, Evans JS, Koutrakis P. Long-term effect of exposure to lower concentrations of air pollution on mortality among US Medicare participants and vulnerable subgroups: a doubly-robust approach. *The Lancet Planetary Health*. 2021 Oct 1;5(10):e689-97.

Armstrong AW, Soliman AM, Betts KA, **Wang Y**, Gao Y, Puig L, Augustin M. Comparative Efficacy and Relative Ranking of Biologics and Oral Therapies for Moderate-to-Severe Plaque Psoriasis: A Network Meta-analysis. *Dermatology and Therapy*. 2021 Jun;11(3):885-905.

Shear NH, Betts KA, Soliman AM, Joshi A, **Wang Y**, Zhao J, Gisoni P, Sinvhal R, Armstrong AW. Comparative safety and benefit-risk profile of biologics and oral treatment for moderate-to-severe plaque psoriasis: A network meta-analysis of clinical trial data. *Journal of the American Academy of Dermatology*. 2021 Feb 22.

Wei Y, **Wang Y**, Wu X, Di Q, Shi L, Koutrakis P, Zanobetti A, Dominici F, Schwartz JD. Causal effects of air pollution on mortality rate in Massachusetts. *American Journal of Epidemiology*. 2020 Nov;189(11):1316-23.

Betts KA, Woolley JM, Mu F, Wang Y, **Wang Y**, Dua A, Wu EQ. Post-discharge health care costs and readmission in patients with hyperkalemia-related hospitalizations. *Kidney International Reports*. 2020 Aug 1;5(8):1280-90.

Hong C, **Wang Y**, Cai T. A divide-and-conquer method for sparse risk prediction and evaluation. *Biostatistics*. 2020 Sep 10.

Wei Y, **Wang Y** (co-first author), Di Q, Choirat C, Wang Y, Koutrakis P, Zanobetti A, Dominici F, Schwartz JD. Short term exposure to fine particulate matter and hospital admission risks and costs in the Medicare population: time stratified, case crossover study. *The BMJ*. 2019 Nov 27;367.

Wang Y, Hong C, Palmer N, Di Q, Schwartz J, Kohane I, Cai T. A fast divide-and-conquer sparse Cox regression. *Biostatistics*. 2019 Sep 23.

Yazdi MD, **Wang Y**, Di Q, Zanobetti A, Schwartz J. Long-term exposure to PM_{2.5} and ozone and hospital admissions of Medicare participants in the Southeast USA. *Environment International*. 2019 Sep 1;130:104879.

Awad YA, Di Q, **Wang Y**, Choirat C, Coull BA, Zanobetti A, Schwartz J. Change in PM_{2.5} exposure and mortality among Medicare recipients: Combining a semi-randomized approach and inverse probability weights in a low exposure population. *Environmental Epidemiology*. 2019 Aug;3(4).

Wei Y, **Wang Y**, Lin CK, Yin K, Yang J, Shi L, Li L, Zanobetti A, Schwartz JD. Associations between seasonal temperature and dementia-associated hospitalizations in New England. *Environment International*. 2019 May 1;126:228-33.

Schwartz JD, **Wang Y**, Kloog I, Yitshak-Sade MA, Dominici F, Zanobetti A. Estimating the effects of PM_{2.5} on life expectancy using causal modeling methods. *Environmental Health Perspectives*. 2018 Dec 5;126(12):127002.

Sun S, Laden F, Hart JE, Qiu H, **Wang Y**, Wong CM, Lee RS, Tian L. Seasonal temperature variability and emergency hospital admissions for respiratory diseases: a population-based cohort study. *Thorax*. 2018 Oct 1;73(10):951-8.

Wang Y, Liu P, Li YJ, Bateman AP, Martin ST, Hung HM. The reactivity of toluene-derived secondary organic material with ammonia and the influence of water vapor. *The Journal of Physical Chemistry A*. 2018 Sep 4;122(38):7739-47.

Wang Y, Nordio F, Nairn J, Zanobetti A, Schwartz JD. Accounting for adaptation and intensity in projecting heat wave-related mortality. *Environmental Research*. 2018 Feb 1;161:464-71.

Liu P, Li YJ, **Wang Y**, Bateman AP, Zhang Y, Gong Z, Bertram AK, Martin ST. Highly viscous states affect the browning of atmospheric organic particulate matter. *ACS Central Science*. 2018 Feb 28;4(2):207-15.

Wang Y, Lee M, Liu P, Shi L, Yu Z, Awad YA, Zanobetti A, Schwartz JD. Doubly robust additive hazards models to estimate effects of a continuous exposure on survival. *Epidemiology*. 2017 Nov;28(6):771.

Di Q, **Wang Y**, Zanobetti A, Wang Y, Koutrakis P, Choirat C, Dominici F, Schwartz JD. Air pollution and mortality in the Medicare population. *The New England Journal of Medicine*. 2017 Jun 29;376(26):2513-22.

Wang Y, Shi L, Lee M, Liu P, Di Q, Zanobetti A, Schwartz JD. Long-term exposure to PM_{2.5} and mortality among older adults in the southeastern US. *Epidemiology*. 2017 Mar;28(2):207.

Wang Y, Bobb JF, Papi B, Wang Y, Kosheleva A, Di Q, Schwartz JD, Dominici F. Heat stroke admissions during heat waves in 1,916 US counties for the period from 1999 to 2010 and their effect modifiers. *Environmental Health*. 2016 Dec;15(1):1-9.

Liu P, Li YJ, **Wang Y**, Gilles MK, Zaveri RA, Bertram AK, Martin ST. Lability of secondary organic particulate matter. *Proceedings of the National Academy of Sciences*. 2016 Nov 8;113(45):12643-8.

Wang Y, Shi L, Zanobetti A, Schwartz JD. Estimating and projecting the effect of cold waves on mortality in 209 US cities. *Environment International*. 2016 Sep 1;94:141-9.

Wang Y, Kloog I, Coull BA, Kosheleva A, Zanobetti A, Schwartz JD. Estimating causal effects of long-term PM_{2.5} exposure on mortality in New Jersey. *Environmental Health Perspectives*. 2016 Aug;124(8):1182-8.

Shi L, Liu P, **Wang Y**, Zanobetti A, Kosheleva A, Koutrakis P, Schwartz J. Chronic effects of temperature on mortality in the Southeastern USA using satellite-based exposure metrics. *Scientific Reports*. 2016 Jul 20;6(1):1-8.

Akintoye E, Shi L, Obaitan I, Olusunmade M, **Wang Y**, Newman JD, Dodson JA. Association between fine particulate matter exposure and subclinical atherosclerosis: A meta-analysis. *European Journal of Preventive Cardiology*. 2016 Apr 1;23(6):602-12.

Li YJ, Liu P, Gong Z, **Wang Y**, Bateman AP, Bergoend C, Bertram AK, Martin ST. Chemical reactivity and liquid/nonliquid states of secondary organic material. *Environmental Science & Technology*. 2015 Nov 17;49(22):13264-74.

Zhang Y, Sanchez MS, Douet C, **Wang Y**, Bateman AP, Gong Z, Kuwata M, Renbaum-Wolff L, Sato BB, Liu PF, Bertram AK. Changing shapes and implied viscosities of suspended submicron particles. *Atmospheric Chemistry and Physics*. 2015 Jul 16;15(14):7819-29.

Liu PF, Abdelmalki N, Hung HM, **Wang Y**, Brune WH, Martin ST. Ultraviolet and visible complex refractive indices of secondary organic material produced by photooxidation of the aromatic compounds toluene and m-xylene. *Atmospheric Chemistry and Physics*. 2015 Feb 10;15(3):1435-46.

Guan T, Yao M, Wang J, Fang Y, Hu S, **Wang Y**, Dutta A, Yang J, Wu Y, Hu M, Zhu T. Airborne endotoxin in fine particulate matter in Beijing. *Atmospheric Environment*. 2014 Nov 1;97:35-42.

PRESENTATIONS AND SPEAKING ENGAGEMENTS

“Outcomes by New York Heart Association Class among Patients with Obstructive Hypertrophic Cardiomyopathy.” 2022 American College of Cardiology Annual Meeting, Washington DC (April 2022)

“Cause-specific risk and medical cost associated with acute exposure to PM_{2.5} among older adults,” International Society for Environmental Epidemiology, Sydney, Australia (September 2017)

“Doubly robust exposure-response curve estimation using penalized spline: Application to long-term PM_{2.5} and probability of death in a year,” International Society for Environmental Epidemiology, Sydney, Australia (September 2017)

“Doubly robust additive hazards models to estimate the effect of exposure on survival: Application to long-term PM_{2.5} exposure,” International Society for Environmental Epidemiology, Rome, Italy (September 2016)

“Spatial and temporal variability of the health effects of heat waves in the United States,” Environmental Biostatistics Seminar, Boston, MA (November 2015)

LANGUAGES

English (fluent), Chinese (native)