

SHORT BIO	Drug developer in the pharmaceutical industry across Phase I–IV clinical and real-world studies in multiple therapeutic areas, including Oncology, Neurology/CNS, Inflammation/Immunology, Nephrology, and rare diseases. Over 17 years of experiences in clinical and real-world data analytics with over 150 peer-reviewed publications on statistical and AI/ML methods. Extensive experience in global regulatory/HTA submissions and over 5 years of people management.	
ACADEMIC	The University of Chicago , Department of Statistics	
	Postdoctoral scholar, Statistics. Mentor: Michael L. Stein	2014 – 2016
	<i>Statistical modeling of large geospatial data</i>	
	Michigan State University , Department of Probability and Statistics	
	Ph.D., Statistics. Advisor: Tapabrata Maiti	2010 – 2014
	<i>Bayesian clustering of pediatric and breast cancer data</i>	
	M.S., Statistics	2008 – 2010
	Shanghai Jiao Tong University , School of Mathematical Sciences	
	B.S., Mathematics.	2004 – 2008
APPOINTMENT	Otsuka Pharmaceutical Development and Commercialization, Inc. , Princeton, NJ, USA	
	Director, Statistician lead , Medical and Real-World Data Analytics	2022 – Present
	<ul style="list-style-type: none"> Lead a team of 8 biostatisticians/programmers for over 30 phase 3/4 clinical trials and real-world studies in global regulatory (NDA/BLA/510(k)/De Novo/DiGA) and HTA Support global medical affairs & HEOR evidence & value generation across all indications. Advanced analytics on Bayesian/ML, LLM+RAG, RWD, enrichment/adaptive design. 	
	Pfizer Inc. , Cambridge, MA, USA	
	Associate Director , Biostatistics, Inflammation & Immunology	2021 – 2022
	<ul style="list-style-type: none"> <i>Statistical lead</i>: phase II/FIH clinical trials for 3 compounds with multiple indications, Bayesian optimal phase 2/3 adaptive designs, hierarchical composite endpoints testing. 	
	Eisai Inc. , Woodcliff Lake, NJ, USA	
	Associate Director , Biostatistics, Neurology	2020 – 2021
	<ul style="list-style-type: none"> <i>Statistical lead</i>: phase III trials (Lecanemab for Alzheimer's Disease); Support Aducanumab Ad Com prep with Biogen; placebo modeling (Bayesian/AI) & vendor oversight 	
	Eli Lilly & Company , Indianapolis, IN, USA	
	Research Scientist , Oncology/Statistical Innovation Center	2018 – 2020
	<ul style="list-style-type: none"> <i>Statistical lead</i>: phase I–III oncology trials, Bayesian adaptive design with biomarker enrichment; regulatory interaction (IND/NDA). 	
	Dow-DuPont , Data Science & Informatics, Indianapolis, IN, USA	
	Senior Analyst , Project Leader, Co-coordinator of UIUC Intern program	2016 – 2018
	<ul style="list-style-type: none"> Early-stage prediction to de-risk pipeline; global regulatory affairs; Led lab automation with over 20 shiny apps and AI-powered molecule discovery with 34× improved efficiency. 	

HONORS AND AWARDS

2021 “Most innovative” Oral Presentation Award, Pfizer Global Statistics Conference
 2019 Excellence Award in Poster Competition (1st Place), American Statistical Association Biopharmaceutical Section Regulatory-Industry Statistics Workshop
 2018 NIH/NTP worldwide data challenge (top 10) for “Predictive Models for Acute Oral Systemic Toxicity” using ML/AI, as project lead of Dow-UIUC team & invited speaker/panelist at NIH
 2018 Society of Toxicology Top 10 Best Risk-assessment Related Abstracts Recognition (two hits)
 2017/4, ECTC Catalyzing Innovation Award – category: *IMPOSSIBLE*, Dow AgroSciences
 2016/10, Silver Appreciation Awards, Dow AgroSciences
 2014-15, NSF Travel Grant for visiting U of Washington, U of Michigan, Purdue, TAMU
 2014, IISA Travel Fund for Young Researchers, Riverside
 2014, Doctoral Dissertation Completion Fellowship, MSU Graduate School
 2012-13, Doctoral Dissertation Continuation Fellowship, MSU Graduate School
 2013, Summer Research Fund, Ford motor company via Eli Broad College of Business, MSU
 2013, Research Fellowship, Center for Limnology & Dept. of Zoology, U of Wisconsin
 2013, Research Fellowship, IWK Health Centre, Canada
 2012, ASA Travel Award, ENVR Workshop, Raleigh, NCSU

TEACHING EXPERIENCE

Department of Statistics, The University of Chicago Spring 2015
 • “Nonstationary Gaussian Random Fields”: STAT 34000 – *Gaussian Processes*, guest lecturer

Department of Statistics, Purdue University Fall 2014 & Spring 2016
 • “Nonstationary Modeling for Large Spatial Data Sets” & “Partitioning models”: STAT 598 - Spatial Statistics, guest lecturer

Department of Statistics and Probability, MSU 2009 – 2013
 • “Reversible jump MCMC”: STT 874, Fall 2014 – *Intro to Bayesian Analysis*, guest lecturer
 • STT 200, STT 201, STT 315, independent lecture

CONSULTING EXPERIENCE

Consultant, *Center for Statistical Training and Consulting at MSU* 2010 – 2012
 • Resolve 100+ cases opened by faculty and graduates from 42+ departments, including 26+ grant-funded projects, 38+ journal articles and 25+ PhD dissertations
 • State of Michigan Government consultancy on clustering tools [PCCAT] for policy making in environmental quality (used 10+ years); State Police on analyzing sexual assault evidence kits

PUBLICATIONS

- [1] Kapadia, S., **Zhang, Z.**, Csoboth, C., Patel, M., Thase, M. E., Papakostas, G. I. (2025). Adjunctive Brexpiprazole in Patients With Unresolved Symptoms of Depression on Antidepressant Treatment Who are Early in the Disease Course: Post Hoc Analysis of Randomized Controlled Trials. *The International Journal of Neuropsychopharmacology*. <https://doi.org/10.1093/ijnp/pyaf050>.
- [2] Ardic, F., **Zhang, Z.**, Hogan, M. (2025) Effects of adjunctive brexpiprazole in patients with major depressive disorder and sleep disturbance: a post hoc analysis of three randomized trials. *Frontiers in Psychiatry*. 16. doi: 10.3389/fpsy.2025.1618176.
- [3] Mattingly, G. W., Turkoglu, O., Chang, D., Ward, C., Skubiak, T., **Zhang, Z.**, Cutler, A. J. (2025). 52-Week Open-Label Safety and Tolerability Study of Centanafadine Sustained Release in Adults With Attention-Deficit/Hyperactivity Disorder. *Journal of Clinical Psychopharmacology*. DOI:10.1097/JCP.0000000000002020.
- [4] Lohrmann, E., Jaeger, T., Enekebe, K., **Zhang, Z.**, Wilt, T., Riggen, M., Stemhagen, A., Nair, I., Nunna, S., Fernandes, A. W., Gandhi, H., Sergeyeva, O., George, V. (2025). Five Years of

Post-Marketing Liver Safety Data from the Tolvaptan Risk Evaluation and Mitigation Strategy. *Clinical Kidney Journal*. 18(3), sfaf062.

- [5] Ismail, Z., Meehan, S.R., Farovik, A., Kapadia, S., Palma, A.M., **Zhang, Z.**, McIntyre, R.S. (2025). Effects of brexpiprazole on patient life engagement in schizophrenia: post hoc analysis of Positive and Negative Syndrome Scale data. *Current Medical Research and Opinion*. 1-9.
- [6] Ismail, Z., Meehan, S. R., Farovik, A., Miguelez, M., Kapadia, S., Regnier, S., **Zhang, Z.**, Brown, M. T., Milien, M., McIntyre, R. S. (2024). Assessment of patient life engagement in schizophrenia using items from the Positive and Negative Syndrome Scale. *Schizophrenia Research*. 274, 337-344.
- [7] Lynum, K., Castro, C. F., **Zhang, Z.**, Patel, M., Tohen, M. (2024). Aripiprazole once-monthly for the treatment of adult patients with earlier-stage bipolar I disorder – a post hoc analysis of data from a double-blind, placebo-controlled, 52-week randomized withdrawal trial. *International Journal of Bipolar Disorders*. 12(37), 1-12.
- [8] McIntyre, R., Such, P., Yildirim, M., Madera-McDonough, J., Jin, N., Watkin, S., **Zhang, Z.**, Larsen, F., Harlin, M. (2024). Use of an Injection of Aripiprazole Given Once Every 2 Months in People With Bipolar I Disorder. *Therapeutic Advances in Psychopharmacology*. 14. 1-13.
- [9] McIntyre, R. S., Bubolic, S., **Zhang, Z.**, MacKenzie, E. M., Therrien, F., Miguelez, M., Boucher, M. (2024). Effects of Adjunctive Brexpiprazole on Individual Depressive Symptoms and Functioning in Patients With Major Depressive Disorder and Anxious Distress: Post Hoc Analysis of Three Placebo-Controlled Studies. *Journal of Clinical Psychopharmacology*. 44(2), 133-140.
- [10] Reinisch, W., Pradhan, V., Saira, A., **Zhang, Z.**, Gale, J. (2024). Alternative endoscopy reading paradigms determine score reliability and effect size in ulcerative colitis. *Journal of Crohn's and Colitis*. 18(1), 82-90.
- [11] Citrome, L., Such, P., Yildirim, M., Madera-McDonough, J., Beckham, C., Jin, N., Watkin, S., **Zhang, Z.**, Larsen, F., Harlin, M. (2024). Use of an Injection of Aripiprazole Given Once Every 2 Months in People With Schizophrenia. *Therapeutic Advances in Psychopharmacology*. 14, 1-13.
- [12] **Zhang, Z.**, Lin, Y., Liu, J. (2023). Probability of Study Success (PrSS) Evaluation Based on Multiple Endpoints in Late Phase Oncology Drug Development. *Statistics in Biopharmaceutical Research*. 15(3), 675-688.
- [13] Citrome, L., Such, P., Yildirim, M., Madera, J., Beckham, C., **Zhang, Z.**, Larsen, F., Harlin, M. (2023). Safety and Efficacy of Aripiprazole 2-Month Ready-to-Use 960 mg: Secondary Analysis of Outcomes in Adult Patients with Schizophrenia in a Randomized, Open-Label, Parallel-Arm, Pivotal Study. *Journal of Clinical Psychiatry*, 84(5), 23m14873.
- [14] McIntyre, R. S., Such, P., Yildirim, M., Madera, J., Beckham, C., **Zhang, Z.**, Larsen, F., Harlin, M. (2023). Safety and Efficacy of Aripiprazole 2-Month Ready-to-Use 960 mg: Secondary Analysis of Outcomes in Adult Patients with Bipolar I Disorder in a Randomized, Open-Label, Parallel-Arm, Pivotal Study. *Current Medical Research & Opinion*, 39(7), 1021–1030.
- [15] **Zhang, Z.**, Bhattacharjee, A., Marques, J., Maiti, T. (2021). Spatio-Temporal Patterns in Portuguese Regional Fertility Rates: A Bayesian Approach for Spatial Clustering of Curves. *Journal of Official Statistics*. 37(3), 611–653.
- [16] Giri, S., Mishra, A., **Zhang, Z.**, Lathrop, R. G., Alnahit, A. O. (2021). Meteorological and Hydrological Drought Analysis and Its Impact on Water Quality and Stream Integrity. *Sustainability*. 13 (15), 8175.
- [17] Qiu, Z., Kennen, J. G., Giri, S., Walter, T., Kang, Y., **Zhang, Z.** (2019). Reassessing the relationship between landscape alteration and aquatic ecosystem degradation from a hydrologically sensitive area perspective. *Science of the Total Environment*. 650, 2850–2862
- [18] Giri, S., **Zhang, Z.**, Krasnuk, D., Lathrop, R. G. (2019). Evaluating the impact of land uses on stream integrity using machine learning algorithms. *Science of the Total Environment*. 696, 1338–1358.

- [19] **Zhang, Z.**, Lim, C., Maiti, T., Kato, S. (2018). Spatial Clustering of Curves with Functional Covariates: A Bayesian Partitioning Model with Application to Spectra Radiance in Climate Study. *arXiv:1604.00059*.
- [20] **Zhang, Z.**, Sinha, S., Maiti, T., Shipp, E. (2018). Bayesian variable selection in the accelerated failure time (AFT) model with an application to the SEER breast cancer data. *Statistical Methods in Medical Research*. 27(4), 971–990. [Preprint] [Codes]
- [21] Snow, N. P., **Zhang, Z.**, Finley, A. O., Rudolph, B. A., Porter, W. F., Williams, D. M., Winterstein, S. R. (2018). Regional-based mitigation to reduce wildlife–vehicle collisions. *Journal of Wildlife Management and Wildlife Monographs*. 82, 756–765.
- [22] Hernandez-Suarez, J. S., Nejadhashemi A.P., Kropp, I. M., Abouali, M., **Zhang, Z.**, Deb, K. (2018). Evaluation of the impacts of hydrologic model calibration methods on predictability of ecologically-relevant hydrologic indices. *Journal of Hydrology*. 564, 758–772.
- [23] Daneshvar, F., Nejadhashemi A.P., **Zhang, Z.**, Herman, M. R. (2018). Assessing the relative importance of parameter estimation in stream health based environmental justice modeling. *Journal of Hydrology*. 563, 211–222.
- [24] Giri, S., Qiu, Z., **Zhang, Z.** (2018). Assessing the impacts of land use on downstream water quality using a hydrologically sensitive area concept. *Journal of Environmental Management*. 213, 309–319.
- [25] Hamaamin, Y. A., Nejadhashemi, A. P., **Zhang, Z.**, Giri, S., Adhikari, U., Herman, M. R. (2018). Evaluation of Neuro-Fuzzy and Bayesian Techniques in Estimating Suspended Sediment Loads. *Sustainable Water Resources Management*. 2018/2.
- [26] Herman, M. R., Nejadhashemi A.P., Abouali, M., Hernandez-Suarez, J. S., Daneshvar, F., **Zhang, Z.**, Anderson, M. C., Sadeghi, A. M., Hain, C. R. (2018). Evaluating the Role of Evapotranspiration Remote Sensing Data in Improving Hydrological Modeling Predictability. *Journal of Hydrology*. 556, 39–49.
- [27] Li, Y., Bence, J. R., **Zhang, Z.**, Ebener, M. P. (2017). Why do lake whitefish move long distances in Lake Huron? Bayesian variable selections of factors explaining fish movement distance. *Fisheries Research*. 195, 169–179.
- [28] Zhou, W., Zheng, C., **Zhang, Z.** (2017). Two-Sample Smooth Tests for the Equality of Distributions in One and Higher Dimensions. *Bernoulli*. 23(2), 951–989. [Preprint]
- [29] Giri, S., Qiu, Z., **Zhang, Z.** (2017). A Novel Technique for Establishing Soil Topographic Index Threshold in Defining Hydrologically Sensitive Areas in Landscapes. *Journal of Environmental Management*. 200, 391–399.
- [30] Rojas-Downing, M. M., Nejadhashemi, A. P., Abouali, M., Daneshvar, F., Al-Masraf, S. A., Herman, M. R., Harrigan, T., **Zhang, Z.** (2017). Pasture Diversification to Combat Climate Change Impacts on Grazing Dairy Production. *Mitigation and Adaptation Strategies for Global Change*. 23 (3), 405–431.
- [31] Feng, W., Lim, C., Maiti, T., **Zhang, Z.** (2016). Spatial Regression and Estimation of Disease Risks: A Clustering based Approach. *Statistical Analysis & Data Mining*. 9(6), 417–434.
- [32] Woznicki, S. A., Nejadhashemi, A. P., Abouali, M., Herman, H. R., Esfahanian, E., Hamaamin, A. Y., **Zhang, Z.** (2016). Ecohydrological Modeling for Large-scale Environmental Impact Assessment. *Science of the Total Environment*. 543, 274–286.
- [33] Pianosi, P. T., **Zhang, Z.**, Hernandez, P., Huebner, M. (2016). Measuring Dyspnea and Perceived Exertion in Healthy Adults and with Respiratory Disease: New Pictorial Scales. *Sports Medicine – Open*. 2, 2–17.
- [34] Hamaamin, Y. A., Nejadhashemi, A. P., **Zhang, Z.**, Giri, S., Woznicki, S. A. (2016). Bayesian Regression and Neuro Fuzzy Methods Reliability Assessment for Estimating Streamflow. *Water*. 8(7), 287.

- [35] Daneshvar, F., Nejadhashemi, A. P., **Zhang, Z.**, Herman, H. R., Shortridge, A., Marquart-Pyatt, S. (2016). Evaluating Stream Health Based Environmental Justice Model Performance at Different Spatial Scales. *Journal of Hydrology*. 538, 500–514.
- [36] Esfahanian, E., Nejadhashemi, A. P., Abouali, M., Adhikari, U., **Zhang, Z.**, Daneshvar, F., Herman, M. R. (2016). Development and Evaluation of a Comprehensive Drought Index. *Journal of Environmental Management*. 185, 31–43.
- [37] Herman, M., Nejadhashemi, A. P., Daneshvar, F., Abouali, M., Ross, D. M., Woznicki, S. A., Zhang, Z. (2016). Optimization of bioenergy crop selection and placement based on a stream health indicator using an evolutionary algorithm. *Journal of Environmental Management*. 181, 413–424.
- [38] **Zhang, Z.**, with Dass, S. C., Lim, C., Maiti, T. (2015). Clustering Curves based on Change point analysis: A Nonparametric Bayesian Approach. *Statistica Sinica*. 25, 677–708.
- [39] Castro, E. A., **Zhang, Z.**, Bhattacharjee, A., Martins, J. M., Maiti, T. (2015). Regional Fertility Data Analysis: A Small Area Bayesian Approach. In DK Dey, A Loganathan & SK Upadhyay (eds), *Current Trends in Bayesian Methodology with Applications*. CRC Press.
- [40] Giri, S., Nejadhashemi, A. P., **Zhang, Z.**, Woznicki, S. A. (2015). Integrating statistical and hydrological models to identify implementation sites for agricultural conservation practices. *Environmental Modelling & Software*. 72, 327–340.
- [41] Sanchez, G., Nejadhashemi, A. P., **Zhang, Z.**, Marquart-Pyatt, S., Habron, G., Shortridge, A. (2015). Linking Watershed-scale Stream Health and Socioeconomic Indicators with Spatial Clustering and Structural Equation Modeling. *Environmental Modelling & Software*. 70, 113–127.
- [42] Woznicki, S. A., Nejadhashemi, A. P., Ross, D. M., **Zhang, Z.**, Wang, L., Esfahanian, A. (2015). Ecohydrological model parameter selection for stream health evaluation. *Science of the Total Environment*. 511, 341–353.
- [43] Herman, M., Nejadhashemi, A. P., Daneshvar, F., Ross, D. M., Woznicki, S. A., **Zhang, Z.**, Esfahanian, A. (2015). Optimization of Conservation Practice Implementation Strategies in the Context of Stream Health. *Ecological Engineering*. 84, 1–12.
- [44] Pianosi, P. T., Huebner, M., **Zhang, Z.**, Turchetta, A., McGrath P. J. (2015). Dalhousie Pictorial Scales Measuring Dyspnea and Perceived Exertion during Exercise for Children and Adolescents. *Annals of the American Thoracic Society*. 12(5), 718–726.
- [45] **Zhang, Z.**, Lim, C., Maiti, T. (2014). Analyzing 2000-2010 Childhood Age-adjusted Cancer Rates in Florida: A Spatial Clustering Approach. *Statistics and Public Policy*. 1(1), 120–128.
- [46] Huebner, M., **Zhang, Z.**, McGrath, P., Therneau, T., Pianosi, P. (2014). Modeling trajectories of perceived leg exertion during maximal cycle ergometer exercise in children and adolescents. *BMC Medical Research Methodology*. 14(1), 4.
- [47] Liu, Y., **Zhang, Z.**, Zhang, Q., Baker, G. L., Worden, R. M. (2014). Biomembrane disruption by silica-core nanoparticles: Effect of surface functional group measured using a tethered bilayer lipid membrane. *Biochimica et Biophysica Acta (BBA) – Biomembranes*. 1838(1), 429–437.
- [48] Pianosi, P. T., Huebner, M., **Zhang, Z.**, McGrath P. J. (2014). Dalhousie dyspnea and perceived exertion scales: psychophysical properties in children and adolescents. *Respiratory Physiology & Neurobiology*. 199, 34–40.
- [49] Giri, S., Nejadhashemi, A. P., Woznicki, S. A., **Zhang, Z.** (2014). Analysis of best management practice effectiveness and spatiotemporal variability based on different targeting strategies. *Hydrological Processes*. 28(3), 431–445.
- [50] Passalacqua, N. V., **Zhang, Z.**, Pierce, S. J. (2013). Sex determination of human skeletal populations using latent profile analysis. *American Journal of Physical Anthropology*, 151(4), 538–543.
- [51] Mowat, F. M., Breuwer, A. R., Bartoe, J. T., Annear, M. J., **Zhang, Z.**, Smith, A. J., Bainbridge, J. W., Petersen-Jones, S. M., Ali, R. R. (2013). RPE65 gene therapy slows cone loss in Rpe65-deficient dogs. *Nature: Gene Therapy*. 20, 545–555.

- [52] Sanchez, G., Nejadhashemi, A. P., **Zhang, Z.**, Woznicki, S. A., Habron, G., Marquart-Pyatt, S., Shortridge, A. (2013). Development of a socio-ecological environmental justice model for watershed-based management. *Journal of Hydrology*. 518, 162–177.
- [1] **Zhang, Z.** (2025). AI-Driven Endpoint Optimization in Dose-Finding Studies. *Midwest Biopharmaceutical Statistics Workshop*.
- [2] **Zhang, Z.**, with Xiao, H., Diaby, K. (2025). Enhancing HTA model adaptations with AI: Leveraging large language models and R-Shiny for local cost-effectiveness analyses. *R for Health Technology Assessment (HTA) workshop*.
- [3] **Zhang, Z.**, Yu, K., Jiang, H. Clustering Trajectories of eGFR Using Latent Process Mixed Models and Unsupervised Learning. *American Society of Nephrology (ASN)*, 2025.
- [4] **Zhang, Z.**, Jiang, H., Cochran, J., Ash, J., Rothman, B., Carlton, T., Meyer, C., Petrova, M., Carpenter, D., Xiao, H., Pham, T., Forbes, A. Responders and participant-reported depressive symptom clusters that may benefit from CT-152 therapy for major depressive disorder. *British Association for Psychopharmacology (BAP)*, 2025; *Psych Congress Elevate*, 2025.
- [5] **Zhang, Z.**, Jiang, H., Cochran, J., Ash, J., Rothman, B., Carlton, T., Meyer, C., Petrova, M., Carpenter, D., Xiao, H., Pham, T., Forbes, A. Efficacy of CT-152 for major depressive disorder using the self-reported 9-Item Patient Health Questionnaire in participants with baseline anxiety symptoms or difficulty sleeping. *British Association for Psychopharmacology (BAP)*, 2025; *Psych Congress Elevate*, 2025.
- [6] Lynum, K., **Zhang, Z.**, Atkins, N., Walker, A., Xiao, H., Stamatis, C., Nag, S., Tohen, M. Development of a Machine Learning Model Predicting Response to Aripiprazole Once-Monthly in Patients Diagnosed With Bipolar I Disorder. *Psych Congress*, 2025.
- [7] Stamatis, S., **Zhang, Z.**, Cochran, J., Ash, J., Rothman, B., Carlton, T., Meyer, C., Lakhan, S., Carpenter, D., Forbes, A. Evaluating changes in anxiety symptoms with Rejoyn (CT-152) among participants with major depressive disorder and comorbid anxiety. *Psych Congress*, 2025; *Association for Behavioral and Cognitive Therapies*, 2025.
- [8] Meyer, C., **Zhang, Z.**, Cochran, J., Ash, J., Rothman, B., Carlton, T., Stamatis, S., Lakhan, S., Carpenter, D., Forbes, A. Assessment of efficacy outcomes based on treatment adherence to Rejoyn (CT-152), a digital therapeutic for patients with major depressive disorder, during the MIRAI trial. *Psych Congress*, 2025.
- [9] Lynum, K., **Zhang, Z.**, Walker, A., Atkins, N., Yildirim, M. Efficacy of Aripiprazole Once-Monthly and Aripiprazole 2-Month Ready-To-Use on Insight in Schizophrenia: Post Hoc Analyses of Three Trials. *Psych Congress*, 2025.
- [10] McIntyre, R. S., **Zhang, Z.**, Abdrabboh, A., Ardic, F. Effects of adjunctive brexpiprazole on depression and life engagement in patients with noradrenaline-mediated symptoms. *Neuroscience Education Institute (NEI)*, 2025.
- [11] Lynum, K., **Zhang, Z.**, Atkins, N., Walker, A., Xiao, H., Stamatis, C., Yildirim, M., Nag, S., Tohen, M. Development of a Machine Learning Model Predicting Response to Aripiprazole Once-Monthly in Patients Diagnosed With Schizophrenia. *Psych Congress*, 2025.
- [12] Lynum, K., **Zhang, Z.**, Walker, A., Atkins, N., Citrome, L. Aripiprazole AOM 400 For Patients Living With Bipolar-I Disorder: Number Needed to Treat, Number Needed to Harm, and Likelihood to be Helped or Harmed. *Neuroscience Education Institute (NEI)*, 2025.
- [13] Lynum, K., **Zhang, Z.**, Walker, A., Atkins, N., Yildirim, M. 2025. Efficacy Of Aripiprazole Once-Monthly And Aripiprazole 2-Month Ready-To-Use In People With Schizophrenia Prescribed Medications With Sedating Effects. *Neuroscience Education Institute (NEI)*, 2025.
- [14] Ash, J., **Zhang, Z.**, Jiang, H., Peters-Strickland, T., Carlton, T. Symptoms of major depressive disorder that potentially benefit from the digital therapeutic CT-152. *American Psychiatric Association*, 2025; *European College of NeuroPsychopharmacology (ECNP)* 2025.

- [15] Jiang, H., Yu, K., **Zhang, Z.** Predicting CKD Progression Using Advanced Statistical and Machine-Learning Approaches. *American Society of Nephrology (ASN)*, 2025.
- [16] Javanbakht, A., Abdrabboh, A., Ardic, F., Brain, C., **Zhang, Z.**, Hefting, N. Efficacy of brexpiprazole in combination with sertraline on individual symptoms of post-traumatic stress disorder in adults. *Psych Congress*, 2025.
- [17] Lylum, K., Walker, A., Atkins, N., **Zhang, Z.**, Chepke, C., Goldberg, J. F. Efficacy Of Aripiprazole Once-Monthly And Aripiprazole 2-Month Ready-To-Use On Sleep Disruption In People With Bipolar I Disorder: Post Hoc Analyses Of Data From Two Randomized Controlled Trials. *American Society of Clinical Psychopharmacology meeting (ASCP)*, 2025.
- [18] Lylum, K., Walker, A., Atkins, N., **Zhang, Z.**, Goldberg, J. F. Efficacy Of Aripiprazole Once-Monthly And Aripiprazole 2-Month Ready-To-Use On Illness Insight In Bipolar I Disorder: Post Hoc Analysis Of Data From Two Randomized Controlled Trials. *International Society for Bipolar Disorders (ISBD)*, 2025.
- [19] Citrome, L., Chumki, S. R., Such, P., Wang, D., Palma, A. M., **Zhang, Z.**, Atri, A. Brexpiprazole for agitation associated with dementia due to Alzheimer’s disease: number needed to treat, number needed to harm, and likelihood to be helped or harmed. *American Association for Geriatric Psychiatry (AAGP)*, 2025; *Alzheimer’s Association International Conference (AAIC)*, 2025; *The American Journal of Geriatric Psychiatry*. 33 (10), S20.
- [20] Correll, C., Pflug, B., **Zhang, Z.**, Palma, A. M., Such, P. Efficacy and safety of brexpiprazole in early-episode schizophrenia: post hoc analysis of clinical trials in adults and adolescents. *European Congress of Psychiatry*, 2025.
- [21] Oberdhan, D., Ward, C., **Zhang, Z.**, Skubiak, T., Adler, L. A. A Post hoc Analysis Evaluating the Baseline Characteristics That Facilitate Early Identification of Those who are Likely to Respond to Centanafadine at Week 6. *American Professional Society of ADHD and Related Disorders (APSARD)*, 2025.
- [22] Oberdhan, D., Brunner, L., Ward, C., **Zhang, Z.**, Faraone, S. V., Adler, L. A. Efficacy of Centanafadine for the Treatment of Adults with Severe Combined Presentation of Attention-Deficit Hyperactivity Disorder. *American Professional Society of ADHD and Related Disorders (APSARD)*, 2025.
- [23] Oberdhan, D., Ward, C., Skubiak, T., **Zhang, Z.**, Jin, N., Adler, L. A. Effect of Centanafadine on the AIM-A After 6 Weeks of Treatment in Adults with ADHD: A Pooled Analysis of Two Phase 3 Trials. *American Professional Society of ADHD and Related Disorders (APSARD)*, 2025.
- [24] Diaby, K., **Zhang, Z.**, Vashist, A. (2024). Automated Health Economic Analysis Using R Shiny, Short Course at *ISPOR* — The Professional Society for Health Economics and Outcomes Research.
- [25] Cochran, J., Jiang, H., Saboonchi, H., Valandas, R., **Zhang, Z.**, Vashist, A., Kulkarni, A., Bhattacherjee, S., Nguyen, V., Carlton, T., Rush, J. A. (2024). CT-152, a Prescription Digital Therapeutic for Major Depressive Disorder: A Real-World Analysis of Durability of Treatment Effect. *Psych Congress*, 2024.
- [26] Cochran, J., Ash, J., **Zhang, Z.**, Jiang, H., Rothman, B., Carlton, T., Peters-Strickland, T., Petrova, M., Carpenter, D., Forbes, A. Adherence and Engagement Metrics With the Novel Prescription Digital Therapeutic, CT-152. *Psych Congress*, 2024; *Neuroscience Education Institute (NEI)*, 2024.
- [27] Cochran, J., Ash, J., **Zhang, Z.**, Jiang, H., Rothman, B., Carlton, T., Peters-Strickland, T., Petrova, M., Carpenter, D., Forbes, A. Emotional Faces Memory Task Performance and Clinical Outcomes for the Novel Prescription Digital Therapeutic, CT-152. *Psych Congress*, 2024; *Neuroscience Education Institute (NEI)*, 2024.
- [28] Lylum, K., Such, P., **Zhang, Z.**, Lawson, W., Goldberg, J. F. Safety and Efficacy of Aripiprazole Once-Monthly Maintenance Treatment in Black/African American Adults Diagnosed With Bipolar I Disorder: A Post-hoc Analysis of Data From a 52-Week, Open-Label Study. *Psych Congress*, 2024.

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