**Beini Lyu, MD,PhD**

Assistant professor

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**Education**

2017-2021 Ph.D. in Epidemiology, University of Wisconsin-Madison

2008-2016 M.D. in Clinical Medicine, Peking University

**Appointment/Position**

2022/09- present, ***Assistant professor***, Peking University Institute for Global Health and Development

2021/06 – 2022/06 ***Research associate***, Cardiovascular and Clinical Epidemiology track, Departments of Epidemiology, Johns Hopkins Bloomberg School of Public Health

**Research Funding**

1. **Principal Investigator**, National Natural Science Foundation of China (NSFC) Young Scholar Grant (No. 72404006), “The Decision-making Mechanism and Intervention Trial on Polypharmacy among Older Adults Based on the Socio-ecological Model”, 2025-2028
2. **Principal Investigator**, Survey of Medical Assessment for Robot Technology (SMART) parallel study grant, “Clinical Efficacy and Health Economics Evaluation of Robot-Assisted Hip and Knee Replacement Based on Real-World Data”
3. **Principal Investigator**, American Society of Diagnostic and Interventional Nephrology Micro research grant, “Exploring community characteristics and race on vascular access management*”*
4. **Participation,** Sichuan Provincial Key Research and Development Project (Provincial-University Collaborative Science and Technology Cooperation), “Development of Integrated Semantic Understanding for DIA Mass Spectrometry Intelligent Analysis Technology for Risk Assessment of Metabolic Syndrome”
5. **Participation**, National Institute of Health/National Institute of Diabetes and Digestive and Kidney Diseases R01, “Medication Use and Adverse Events in CKD”

**Publications (\*corresponding)**

1. Xiao N, Li R, Li S, Yu Y, Yang F, Yang J, Liu GG, **Lyu B**\*. Associations of serial negative income shock and all-cause mortality: a longitudinal study in China. ***BMJ Public Health.*** 2024. 2 (2).
2. Li S, Pan S, Jiang S, Shin JI, Liu GG, **Lyu B**\*. Prescription medication use among patients with type 2 diabetes in the United States: 1999-2020. ***Diabetes Obes Metab***. 2024. doi: 10.1111/dom.15619.
3. Pan S, Li S, Jiang S, Shin JI, Liu GG, Wu H, **Lyu B\*.** Trends in Number and Appropriateness of Prescription Medication Utilization among Community-Dwelling Older Adults in the US: 2011-2020. ***J Gerontol A Biol Sci Med Sci***. 2024. doi: 10.1093/gerona/glae108.
4. Wu Z, Yu J, **Lyu B**, Lin H, Li S, Liu GG. Alcohol Consumption Patterns for Excessive Drinkers in a Multi-Ethnic Society Short Running Title: Drinking Patterns and Health Education. ***Risk Manag Healthc Policy.*** 2024. Jun 12:17:1577-1586
5. Xu Y, Boyle TA**, Lyu B**, Ballew SH, Selvin E, Chang AR, Inker LA, Grams ME, Shin JI. Glucagon-like peptide-1 receptor agonists and the risk of atrial fibrillation in adults with diabetes: a real-world study. ***J Gen Intern Med***. 2024. doi: 10.1007/s11606-023-08589-3.
6. **Lyu B\*,** Inker LA, Shin JI. In Reply to Comparison of Measured and Estimated GFR for Rivaroxaban Dosing in Hospitalized Older Adults. ***Am J Kidney Dis.*** 2024 Jan;83(1):118.
7. **Lyu B\*,** Xu Y, Inker LA, Chang AR, Nolin TD, Coresh J, Grams ME, Shin JI. Discordance in GFR Estimating Equations and Dosing Guidance by Body Mass Index and Age. ***Am J Kidney Dis.*** 2023 Oct;82(4):505-507.
8. Sun J, You R, **Lyu B,** Li X, Gao Y, Wen Y, Qu C, Wang Y. HLA-DR Helps to Differentiate Erythrodermic Cutaneous T-cell Lymphoma from Erythrodermic Inflammatory Dermatoses in Flow Cytometry***. Acta Derm Venereol***. 2023 Aug 1;103:adv5668.
9. The association between socioeconomic status and use of potentially inappropriate medications in older adults. Hwang J, **Lyu B**, Ballew S, Coresh J, Grams ME, Couper D, Lutsey P, Shin JI.

***J Am Geriatr Soc***. 2023. doi: 10.1111/jgs.18165.

1. **Lyu B,** Sang Y, Selvin E, Chang AR, Alexander CG, Cohen CM, Coresh J, Shaleve V, Chodick G, Karasik A, Carrero JJ, Fu EL, Xu Y, Grams ME, Shin JI. Pharmacologic Treatment of Type 2 Diabetes in the United States, Sweden, and Israel: A Comparison across three Health Systems. ***Diabetes Care***. 2022; 45(12):2926-2934.

Diabetes time report: <https://diabetestimes.co.uk/global-pharmacologic-treatments-of-type-2-diabetes-outlined-in-new-study/>

Elsevier Practice Update: <https://www.practiceupdate.com/content/pharmacologic-treatment-of-type-2-diabetes-in-the-us-sweden-and-israel/144124>

1. **Lyu B,** Singh T, Astor BC. Epidemiology and outcomes for chronic kidney disease. ***Nephrology Self-Assessment Program***. 2022; 21 (2).
2. **Lyu B**, Hwang YJ, Selvin E, Jameson BC, Chang AR, Grams ME, Shin JI**.** Antidiabetic agents and the risk of hypoglycemia: a real-world study. ***Journal of General Internal Medicine***. 2023;38(1):107-114.
3. **Lyu B**, Chang AR, Inker LA, Selvin E, Grams ME, Shin JI**.** Socioeconomic Status and obesogenic medication use in the United States. ***the Lancet Regional Health-Americas****.* 11 (2022): 100249*.*

*The Lancet Regional Health-Americas Editorial Commentaries:* [*Obesogenic and leptogenic medication utilization in people with obesity: Is there a prescription for improvement?*](https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(22)00076-X/fulltext)

Healio Primary Care news: <https://www.healio.com/news/primary-care/20220419/adults-with-lower-socioeconomic-status-more-likely-to-use-obesogenic-medications>

1. **Lyu B**, Grams ME, Inker LA, Chang AR, Selvin E, Shin JI**.** Weight changes following antidiabetic mediation use: real-world evidence from health system data. ***Obesity Science & Practice***.2022. Feb 17;8(5):657-669.
2. **Lyu B**, Grams ME, Chang AR, Inker LA, Coresh J, Shin JI. SGLT2 Inhibitors, GLP-1 Receptor Agonists, and DPP4 Inhibitors and risk of hospitalization. ***American Journal of cardiology***. 2022 Feb 15;165:124-130.

Faculty opinions recommendation: [Faculty Opinions: Sodium-Glucose Cotransporter 2 Inhibitors, Glucagon-Like Peptide-1 Receptor Agonists, and Dipeptidyl Peptidase-4 Inhibitors, and Risk of Hospitalization.](https://facultyopinions.com/article/741410199)

1. **Lyu B,** Chan MR, Yevzlin AS, Gardezi A, Astor BC. Arteriovenous access and risk of mortality and hospitalization among elderly hemodialysis patients- a target trial emulation approach. ***American Journal of Kidney Diseases***. 2022 Jan;79(1):69-78.

Healio Nephrology news: <https://www.healio.com/news/nephrology/20210630/arteriovenous-access-types-demonstrate-similar-risk-profiles>

USRDS Publication Spotlight: <https://www.usrds.org/publications/>

1. Panthofer AM, **Lyu B**, Astor BC, Singh T, Aziz F, Mandelbrot DA, Parajuli S, Mohamed M, Djamali A, Garg N. Post-Kidney Transplant Serum Magnesium Exhibits a U-Shaped Association with Subsequent Mortality: An Observational Cohort Study.***Transplant International.*** 2021 Oct;34(10):1853-1861.
2. Hwang YJ, **Lyu B**, Chang AR, Inker LA, Grams ME, Shin JI. Sodium-glucose cotransporter-2 inhibitors and the risk of abnormal serum potassium level: a population-based cohort study. ***Clinical Journal of American Society of Nephrology.*** 2021 Jul;16(7):1094-1096.
3. **Lyu B**, Mandelbrot DA, Djamali A, Astor BC. Graft Function Variability and Slope and Kidney Transplantation Outcomes. ***Kidney International Reports.*** 2021.6(6):1642-1652.
4. **Lyu B**, Chan MR, Yevzlin AS, Astor BC. Catheter dependence after arteriovenous fistula or graft placement among elderly patients on hemodialysis. ***American Journal of Kidney Diseases***. Am J Kidney Dis. 2021 Sep;78(3):399-408.
5. **Lyu B**, Hansen KE, Jorgenson MR, Astor BC. Proton pump inhibitor and H2 receptor antagonist use and change in bone mineral density among kidney transplant recipients. ***Am J Nephrol***. 2020;51(6):433-441.
6. **Lyu B**, Jorgenson MR, Hansen KE, Djamali A, Astor BC. Proton pump inhibitors, but not H2 receptor antagonists, are associated with incident fractures among kidney transplant recipients. Transplantation***. Transplantation***. 2020;104(12):2609-2615.
7. **Lyu B**, Hagen EW, Ravelo LA, Peppard PE. Blood pressure dipping and sleep quality in the Wisconsin Sleep Cohort.  ***J Hypertens***. 2020; 38(3):448-455.

*J Hypertens Editorial Commentaries:* [Time to rethink the management of underlying sleep disturbances in nondippers?](https://journals.lww.com/jhypertension/Fulltext/2020/03000/Time_to_rethink_the_management_of_underlying_sleep.6.aspx)

1. Jorgenson MR, Descourouez JL, **Lyu B,** Astor BC, Saddler CM, Mandelbrot DA, Parajuli S. Management of BK Viremia is Associated with a Lower Risk of Subsequent Cytomegalovirus Infection in Kidney Transplant Recipients. ***Clin Transplant***. 2020;34(3):e13798.
2. Tiwari R, **Lyu B**, Alagusundaramoorthy S, Astor BC, Mandelbrot DA, Parajuli S. Association of diagnosed obstructive sleep apnea with kidney transplant outcomes. ***Clin Transplant****.* 2019; 33(12).
3. Jorgenson MR, Descourouez JL, **Lyu B**, Astor BC, Garg N, Smith JA, Mandelbrot DA. The Risk of Cytomegalovirus Infection after Treatment of Acute Rejection in Renal Transplant Recipients. ***Clin Transplant.*** 2019; 33(8):e13636.
4. Jorgenson MR, Descourouez JL, Cardinale B, **Lyu B**, Astor BC, Garg N, Saddler CM, Smith JA, Mandelbrot DA. Risk of opportunistic infection in kidney transplant recipients with cytomegalovirus infection and associated outcomes. ***Transpl Infect Dis***. 2019 Jun; 21(3):e13080.
5. **Lyu B**, Banerjee T, Scialla JJ, Shafi T, Yevzlin AS, Powe NR, Parekh RS, Astor BC. Vascular Calcification Markers and Hemodialysis Vascular Access Complications. ***Am J Nephrol***. 2018; 48(5):330-338.
6. Cai W, Hite ZL, **Lyu B**, Wu Z, Lin Z, Gregorich ZR, Messer AE, McIlwain SJ, Marston SB, Kohmoto T, Ge Y. Temperature-sensitive sarcomeric protein post-translational modifications revealed by top-down proteomics. ***J Mol Cell Cardiol***. 2018; 122:11-22.

**Honors and Awards**

* The Chinese Government Award for Outstanding Self-Financed Student Abroad, 2022
* Donn D’Alessio Outstanding Student Award, Department of Population Health Sciences, UW-Madison, 2021.
* University of Wisconsin-Madison Holtz Center science and technology studies conference mini grant, 2020
* American Society of Nephrology Kidney STARS award recipient, 2020
* American Heart Association Student Scholarships in Cardiovascular Disease, 2020

Proposal: *Graft function slope and variability and risk of cardiovascular events in kidney transplant recipients*

* Student Research Travel Award, UW-Madison, 2019.
* Merit Student of Peking University, 2009, 2010, and 2014.
* Scholarship for Merit Medical Student, Peking University, 2011, 2012, 2013 and 2014.
* National Scholarship, Chinese government, 2009.

**Presentations**

1. International Society for Pharmacoeconomics and Outcomes Research (ISPOR) EUROPE 2023, Copenhagen, 2023/11, podium presentation

* *Trends in prescription drug use among adults with diabetes in the United States From 1999-2018*
* *Description of polypharmacy and PIM use trends in the elderly from the perspective of deprescribing*

1. EPI | Lifestyle and Cardiometabolic Health Scientific Sessions, American Heart Association, Chicago, 2022/03

* *Socioeconomic status and use of obesogenic and anti-obesity medications in the United States-a population-based study*

1. Annual Meeting of the American Society of Nephrology, online, 2021/11.

* *Weight changes following antidiabetic mediation use: real-world evidence from health system data*

1. American Diabetes Association's Virtual 81st Scientific Sessions, online, 2021/06

* *SGLT2 Inhibitors, GLP-1 Receptor Agonists, and DPP-4 Inhibitors and Risk of All-Cause Hospitalization*

1. Annual Meeting of the American Society of Nephrology, online, 2020/10.

* *Catheter dependency after vascular access placement among elderly patients on hemodialysis: an intention-to-treat analysis.*
* *Vascular access type and risk of mortality and hospitalization among elderly hemodialysis patients: a target trial emulation approach.*
* *Short-term variability in graft function is associated with long-term mortality but not allograft survival in kidney transplant recipients.*

1. Annual Meeting of the American Society of Nephrology; DC, 2019/11.

* *Proton pump inhibitors use and risk of major fracture in kidney transplant recipients.*

1. Society for Epidemiology Research 52nd Annual Meeting, Minneapolis, Minnesota, 2019/7

* *Proton pump inhibitor and H2 receptor antagonist use and change in bone mineral density among kidney transplant recipients*