

Sengwee Darren Toh, ScD

Recent Publications:

Toh S, Reichman ME, Graham DJ, Hampp C, Zhang R, Butler MG, Iyer A, Rucker M, Pimentel M, Hamilton J, Lendle S, Fireman BH; for the Mini-Sentinel AMI-Saxagliptin Surveillance Writing Group. Prospective post-marketing surveillance of acute myocardial infarction in new users of saxagliptin: A population-based study. *Diabetes Care* doi: 10.2337/dc17-0476

Toh S. Pharmacoepidemiology in the era of real-world evidence. *Curr Epidemiol Rep* 2017;4(4):262-265

Mazor KM, Richards A, Gallagher M, Arterburn DE, Raebel MA, Nowell WB, Curtis JR, Paolino AR, **Toh S**. Stakeholders' views on data sharing in multi-center studies. *J Comp Eff Res* 2017;6(6):537-547

Toh S, Hampp C, Reichman ME, Graham DJ, Balakrishnan S, Pucino F, Hamilton J, Lendle S, Iyer A, Rucker M, Pimentel M, Nathwani N, Griffin MR, Brown NJ, Fireman BH. Risk of hospitalized heart failure among new users of saxagliptin, sitagliptin, and other antihyperglycemic drugs: A retrospective cohort study. *Ann Intern Med* 2016;164(11):705-714

Darren Toh is an Associate Professor in the Department of Population Medicine at Harvard Medical School and Harvard Pilgrim Health Care Institute. He is a pharmacoepidemiologist with an interest in the comparative safety and effectiveness research of medical products. His research has been focused on 1) assessing the risks and benefits of medical products using electronic data collected as part of healthcare delivery, and 2) developing and applying privacy-protecting analytic and data-sharing methods to improve the feasibility, efficiency, and validity of multi-center research.

Dr. Toh's research activities are conducted primarily within distributed data networks. Within these networks, he has developed, refined, and applied a suite of cutting-edge privacy-protecting analytic methods to perform rigorous statistical analysis without the need to share patient-level data. These methods have become the standard methods used in the FDA-funded Sentinel System, a congressionally mandated national surveillance system for medical product safety. They are also being used by other networks, such as the National Patient-Centered Clinical Research Network (PCORnet). He is Principal Investigator of a series of projects funded by the National Institutes of Health (NIH), Patient-Centered Outcomes Research Institute (PCORI), and the Food and Drug Administration (FDA) to further develop and expand the use of these methods.

In his role as Director of Applied Surveillance in the Sentinel System, Dr.



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Toh supervises a team of PhD-level research scientists and MS-level analysts, oversees all FDA-initiated safety queries, works with senior FDA leadership in the strategic planning of the program, and engages with national experts in medical product safety. He is also director of the coordinating center of the FDA-funded Medication Exposure in Pregnancy Risk Evaluation Program (MEPREP), a large population-based pregnancy research consortium. Dr. Toh is serving a 3-year term as Chair-Elect, Chair, and Past Chair of the International Society for Pharmacoepidemiology (ISPE)'s Education Committee, which is responsible for all the pre-conference and online courses of the Society. He received his doctoral degree in epidemiology at Harvard School of Public Health.