

# Utility of Prognosis and Propensity Scores in Identifying Heterogeneous Effects of Second-Step Treatments to Depressed Outpatients: A STAR\*D Re-Analysis

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6<sup>th</sup> Floor Multipurpose Room (6602)

## **Abstract**

Little is known about selecting augmenting or switching antidepressant medications for major depressive disorder after intolerance or lack of remission with an initial selective serotonin reuptake inhibitor. The equipoise-stratified design in the STAR\*D trial allowed participants to exclude or include specific treatment strategies. Comparisons between treatment strategies were therefore potentially confounded. We explore the usefulness of propensity scores and prognosis scores in two nonparametric tests for treatment effect heterogeneity. Preliminary results indicate both approaches are sensitive to a number of factors. Discussions on sensitivity analyses are included.

## **Biographical Note**

**Zhehui Luo, MS, PhD**, joined the Department of Epidemiology and Biostatistics at Michigan State University as a tenure-track assistant professor in 2009. Dr. Luo has a PhD in economics (with an emphasis on health economics and econometrics) and an MS in statistics. She has extensive experience in epidemiological and health services research, collaborating with a broad range of investigators in a multidisciplinary environment. Her primary research interest is to develop and apply modern and appropriate econometric and statistical methods in policy analysis and program evaluation in trial-based and observational studies. She is currently funded by NIMH (PI: Luo, MH092737) to develop new methodological approaches in comparative effectiveness research for heterogeneous treatment effects of pharmacotherapy and behavioral interventions.

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<sup>1</sup> The PI Biostatistics Seminar Series is held on Tuesdays at New York State Psychiatric Institute. If you are interested in receiving regular announcements for our seminars in the future, or if you need further information, please contact Jina James (jamesji@nyspi.columbia.edu, (212) 543-5589).