Heterogeneity of Treatment Effects

CCTS Biostatistics Core

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This page includes publications and tools that our consultants have found useful. For more information on this topic, including advice about how to apply it in your research, consider scheduling a consultation with a biostatistician.

While we hope this resource list serves as a helpful starting point for other researchers, we provide no guarantee of its comprehensiveness or of the accuracy or reliability of the works cited. If you have concerns or suggestions to improve this page, please contact us.

Resources

Dusseldorp, Elise, Claudio Conversano, and Bart Jan Van Os (2010). "Combining an Additive and Tree-Based Regression Model Simultaneously: STIMA". In: *Journal of Computational and Graphical Statistics* 19.3, p. 514–530. ISSN: 1537-2715. DOI: 10.1198/jcgs.2010.06089. http://dx.doi.org/10.1198/jcgs.2010.06089.

Dusseldorp, Elise, Philip Spinhoven, Abraham Bakker, et al. (2007). "Which Panic Disorder Patients Benefit from Which Treatment: Cognitive Therapy or Antidepressants?" In: *Psychotherapy and Psychosomatics* 76.3, p. 154–161. ISSN: 1423-0348. DOI: 10.1159/000099842. http://dx.doi.org/10.1159/000099842.

Loh, Wei-Yin and Peigen Zhou (2020). "The GUIDE Approach to Subgroup Identification". In: *Design and Analysis of Subgroups with Biopharmaceutical Applications.* Springer International Publishing, p. 147–165. ISBN: 9783030401054. DOI: 10.1007/978-3-030-40105-4_6. http://dx.doi.org/10.1007/978-3-030-40105-4_6.

Loh, Wei-Yin, Luxi Cao, and Peigen Zhou (2019). "Subgroup identification for precision medicine: A comparative review of 13 methods". In: *WIREs Data Mining and Knowledge Discovery* 9.5. ISSN: 1942-4795. DOI: 10.1002/widm.1326. http://dx.doi.org/10.1002/widm.1326.

Shahn, Zach and David Madigan (2017). "Latent Class Mixture Models of Treatment Effect Heterogeneity". In: *Bayesian Analysis* 12.3. ISSN: 1936-0975. DOI: 10.1214/16-ba1022. http://dx.doi.org/10.1214/16-BA1022.

Sobel, Michael E. and Bengt Muthén (2012). "Compliance Mixture Modelling with a Zero-Effect Complier Class and Missing Data". In: *Biometrics* 68.4, p. 1037–1045. ISSN: 1541-0420. DOI: 10.1111/j.1541-0420.2012.01791.x. http://dx.doi.org/10.1111/j.1541-0420.2012.01791.x.

Zigler, Corwin M. and Thomas R. Belin (2011). "The potential for bias in principal causal effect estimation when treatment received depends on a key covariate". In: *The Annals of Applied Statistics* 5.3. ISSN: 1932-6157. DOI: 10.1214/11-aoas477. http://dx.doi.org/10.1214/11-AOAS477.