Faculté de pharmacie
Séminaire de l'axe
« Médicament et santé des populations »

"Inverse Probability of Censoring Weights under Missing Not At Random with Application to CD4 Outcomes in HIV-Positive Patients in Kenya"

Dr. Judith Lok, Ph.D,
Associate Professor,
School of Public Health, Harvard

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À l'invitation du professeur Mireille Schnitzer

Right-censoring is Missing Not At Random (MNAR) when the prognosis of patients after censoring is different from the prognosis of patients in follow-up, even given observed characteristics just prior to the dropout time. Analyzing MNAR data is complicated. Often, bounds and sensitivity analyses are the only option. We propose a method to obtain point estimates for the trajectory of a mean/median over time when dropout is MNAR, if so-called outreach data are available: additional data on a subsample of patients lost-to-follow-up, successfully located afterwards. We propose an extension of Inverse Probability of Censoring Weighting to this setting.

We illustrate our method by estimating the response to antiretroviral therapy (ART) among HIV-positive patients in Kenya. The available data are MNAR: more patients in the outreach sample died shortly after dropout than expected on the basis of their initially observed covariates, and more patients in the outreach sample were off treatment, in part because of limited access to ART outside the program evaluated. Taking MNAR into account leads to a substantial downward adjustment of the response to ART.

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