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Adjusting for incomplete death ascertainment in joint models: A multiple-imputation approach

ΠΑΡΑΣΚΕΥΗ 10/6/2016
13:00

**ΑΙΘΟΥΣΑ 607, 6^{ος} ΟΡΟΦΟΣ,
ΚΤΙΡΙΟ ΜΕΤΑΠΤΥΧΙΑΚΩΝ ΣΠΟΥΔΩΝ
(ΕΥΕΛΠΙΔΩΝ & ΛΕΥΚΑΔΟΣ)**

ΠΕΡΙΛΗΨΗ

In longitudinal studies measurements are often collected on different types of outcomes for each subject. These may include several longitudinally measured responses (such as blood values relevant to the medical condition under study) and the time at which an event of particular interest occurs (e.g., death, development of a disease or dropout from the study). These outcomes are often separately analyzed; however, in many instances, a joint modeling approach is either required or may produce a better insight into the mechanisms that underlie the phenomenon under study.

Joint models work well when both outcomes are recorded accurately. When a survival event is inaccurately recorded (e.g., un-reported deaths among dropouts), the bias can be severe even for mild levels of error. We show how the true vital status collected in a random sample of dropouts can serve, through a multiple-imputation approach to adjust for the biases introduced by death under-reporting, by filling in the unknown vital status in patients who dropped out but whose vital status was not ascertained.

Constantin T. Yiannoutsos

Professor of Biostatistics, Indiana University School of Public Health, Department of Biostatistics

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FRIDAY 10/6/2016
13:00

**ROOM 607, 6ᵗʰ FLOOR,
POSTGRADUATE STUDIES BUILDING
(EVELPIDON & LEFKADOS)**

ABSTRACT

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