Analysis of Dependently or Parametrically Truncated Survival Data

Rebecca Betensky
Harvard University
Massachusetts, USA

Abstract

Randomly truncated survival data arise when the failure time is observed only if it falls within a subject-specific truncating set. Two assumptions are commonly made:

1. the truncation process is quasi-independent of the failure process and

2. the truncation process follows a uniform distribution. However, methods are not available when independence does not hold, and formal tests of goodness-of-fit are not available.

In this talk I will address these needs and describe a structural modeling approach for use when dependence holds and propose goodness-of-fit tests for use in semi-parametric analyses.

This work is joint with *Emily Martin* and *Micha Mandel*.