The Presentation and Analysis of Bivariate Survival Studies.

Studies involving matched or paired survival data, as particular cases of dependent or bivariate survival data, occur reasonably often in a variety of practical contexts. This presentation attempts to provide additional graphical and inferential techniques to facilitate the analysis of such data based on the bivariate survivor function and various ratios of probability functions.

In addition, a new non-parametric approach of estimating the distribution of the difference in survival times within a pair in order to make inferences on an appropriate summary of such a distributional estimate is discussed.

All the techniques are illustrated on data from a matched study comparing survival in two distinct populations of Malignant Melanoma patients and a paired study comparing time to failure of two Orthodontic brackets.