A FLOWGRAPH MODEL FOR BLADDER CARCINOMA

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Abstract:

Superficial bladder cancer have been the subject of numerous studies for many years, but the evolution of the disease still remains not well understood. After the tumor has been surgically removed, it may reappear at a similar level of malignancy or progress to a higher level. The process may be reasonably modeled by means of a Markov process [1]. However, in order to fully model the evolution of the disease this approach is insufficient. The semi-markov framework allows a more realistic approach, but calculations become frequently intractable. In this context, flowgraph models [2] provide an efficient approach for the analysis of time-to-event data, and the recent incorporation of covariates in this methodology [3] makes it suitable to successfully manage the evolution of superficial bladder carcinoma.

References:

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[2] Huzurbazar, A. (2005). *Flowgraph Models for Multistate Time-To-Event Data.* New York: Wiley.

[3] Huzurbazar, A. and Williams, B. (2010). Incorporating Covariates in Flowgraph Models: Applications to Recurrent Event Data. *Technometrics,* 52 (2), 198-208.