

Analysis of Recurrent Infections in Danish Children Diagnosed with Cancer

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When modeling recurrent events, several statistical models are available. In analysis of time to event data, the models primarily differ on whether the recurrent events can be assumed independent and on the definition of the risk interval and the risk set. In a given study there may be several reasonable ways to specify a model; however, it is important to be aware of the assumptions of the chosen model as they determine the interpretation of the results. In this study, different statistical methods for analysis of recurrent events were applied to time to event data on recurrent infections among Danish children diagnosed with cancer. The purpose of the study was to investigate whether children diagnosed with cancer are more prone to recurrent infections than a comparison group of children without cancer and to study and evaluate the usefulness of different statistical models for analysis of recurrent events.

Key words: Survival analysis, recurrent events, childhood cancer.