# Editorial

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The joy in survival analysis is twofold: (1) it is encountered almost everywhere in biomedical research and (2) it complicates everything. This special issue of the 2018 Survival Analysis for Junior Researchers (SAfJR) conference, hosted in Leiden, The Netherlands, 24–26 April 2018, exemplifies this.

The five papers out of the 39 contributed presentations of the conference (22 oral, 17 poster) present a diversity of time-to-event processes. Some discuss classical time-to-outcome processes such as time-to-death and time-to-recurrence, but also some less well known event processes are discussed, demonstrating that 'time-to' is not the exclusive preserve of outcome measures. The paper by Gasparini and colleagues introduces a survival analysis approach to an informative observation process, modelling the 'time-to-the-next-observation-visit' within a joint model. Weber and colleagues exhibit how to properly analyse hospital infection data, correcting for differences in length of hospital stay by modelling the time-to-hospital-discharge process. Moreover, Pajouheshnia and colleagues present an excellent review of methods that account for time-dependent treatment in a prognostic model, with the preferred approaches modelling the time-to-treatment process.

Therefore, time-to-event processes can be found in many and sometimes unexpected places. It is pivotal to spot them because much of our standard statistical machinery is not so standard anymore in the time-to-event setting. For instance, Park and colleagues show how variable selection through penalised regression can be done through h-likelihood in a random-effects accelerated failure time model. Meanwhile, for mediation analysis, Burgos Ochoa and colleagues present an overview of methods that can be used in the survival setting, and illustrate how equivalences between methods that hold in the GLM-setting break down for survival data.

We hope this Special Issue contributes to identifying lurking time-to-event processes in biomedical research, and we are confident that the five manuscripts can direct researchers to solutions for how to analyse these processes accurately.

Besides this, we hope that the joy we find in survival analysis, which was omnipresent at the 2018 SAfJR conference in Leiden, will contaminate the readership of Statistical Neerlandica.

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