# Introduction to Survival Analysis: a CPD module

#### Course overview

Time-to-event data are collected when individuals are followed over time. This course aims to provide grounding in statistical concepts and methods for the analysis of time-to-event data. Course participants will also gain an understanding of the design issues involved and learn to apply these methods using SPSS and R software, as well as find out how to interpret their results.

### Who should attend? Is it right for me?

This course is suitable for those who have no previous experience of data analysis, as well as those seeking to refresh their skills.

#### What is the course schedule?

This course runs online. The lecture videos will be available online and can be watched at any time (from two weeks before to two weeks after the course is scheduled to take place). A suggested timetable is given in the table below, which highlights the live sessions provided for participants to ask questions.

# What will delegates learn?

By the end of this course delegates will:

- Be able to use various statistical methods to summarise and analyse time-to-event data
- Have an appreciation of how to analyse their data and interpret their results
- Have an understanding of how to use standard statistical software in this analysis

### What does the course cover?

- Introduction to survival data including the concept of censoring
- Comparing survival between groups using Kaplan-Meier curves and log-rank tests
- Regression modelling and variable selection including the Cox model and other alternative models
- Design issues such as choice of endpoint and sample size calculations
- Introduction to software which can assist these processes



### **Timetable**

Time	Session
9:30 - 10:30	Session 1: Introduction to Survival Data (recorded video)
10:30 - 10:45	BREAK
10:45 - 11:45	Session 2: Analysis of one and two groups (recorded video)
11:45 - 12:15	Live Q&A – TEAMS link to be provided
12:15 - 12:45	BREAK
12:45 - 14:30	Session 3: Regression modelling (recorded video)
14:30 - 14:45	BREAK
14:45 - 16:00	Session 4: Design issues (recorded video)
16:00 - 16:30	Live Q&A – TEAMS link to be provided

## To find out more

Contact Dr Susanna Dodd in the Department of Health Data Science: <a href="mailto:s.r.dodd@liverpool.ac.uk">s.r.dodd@liverpool.ac.uk</a>.

Alternatively, visit the department's website at

https://www.liverpool.ac.uk/population-health/about/health-data-science/courses-and-workshops/.





