Danish Society for Biopharmaceutical Statistics

Two-part DSBS Course

Survival Analysis in Clinical Trials

Part 1: 15-16 March 2023, 9:00-16:00

Part 2: 28-29 March 2023, 9:00-16:00

Hosted by Novo Nordisk A/S

Part 1 will be an introduction to survival analysis – concepts and results, extending into analysis of competing risks.

Part 2 will cover analysis of multi-state models for recurrent events, including events with duration, and competing risks.

The course will consist of lectures and exercises (SAS) and participants must bring their laptop.

It is possible to sign up only for the first, only for the second or for both parts of the course.

Lecturers

Per Kragh Andersen
Section of Biostatistics
University of Copenhagen

Henrik Ravn
Biostatistics and Methods, Innovation & Outreach
Novo Nordisk A/S

For further information about the course, please contact Henrik Ravn hnrv@novonordisk.com

Venue

Novo Nordisk A/S
Laurentsvej 45
Bygning 8Q, Sal B
2880 Bagsværd

Registration

The course fee is DKK 2,000 per part, corresponding to DKK 4,000 for the full course. Lunch is included.

Please register for the first, the second or both parts of the course using this link or by using the QR-code:

Deadline

Please register no later than **Friday, 3 March 2023**

There is a limit on the number of attendees and the first come, first serve principle will be applied.

If you after registration want to cancel your participation, please contact Mona Nielsen mona@novonordisk.com

Survival Analysis in Clinical Trials

Course plan

Part 1

Day 1	**Standard survival analysis**
	Independent censoring
	Kaplan-Meier & Nelson-Aalen
	Occurrence/exposure rate
	Log-rank test
	Cox model
	SAS PROC LIFETEST and PHREG

Day 2	**Competing risks**
	Cause-specific hazard (Nelson-Aalen)
	Cumulative incidence (Aalen-Johansen)
	Regression - Cause-specific hazard function (Cox) - Hazard model for the sub-distribution (Fine-Gray)
	SAS PROC LIFETEST and PHREG

Part 2

Day 1	**Multi-state models**
	Recap of part 1
	Recurrent events – intensity-based models
	Frailty models
	SAS PROC PHREG

Day 2	**Marginal analyses of recurrent events**
	Without competing risks: - Mean function (Nelson-Aalen and robust variance) - Mean function regression
	With competing risks
	SAS PROC PHREG