

Contribution ID: 133 Type: not specified

Joint Modelling of Longitudinal and Event-Time Data for the Analysis of Longitudinal Medical Studies

Tuesday, 12 September 2023 15:15 (30 minutes)

Joint modelling is a modern statistical method that has the potential to reduce biases and uncertainties due to informative participant follow-up in longitudinal studies. Although longitudinal study designs are widely used in medical research, they are often analysed by simple statistical methods, which do not fully exploit the information in the resulting data. In observational studies, biomarkers are measured at irregular follow-up visit times, and in randomised controlled trials, participant dropout is common during the intended follow-up; which are often correlated with patient's prognosis. Joint modelling combines longitudinal biomarker and event-time data simultaneously into a single model through latent associations. We describe the methodology of joint models with some applications in health research.

Keywords

Joint modelling, Longitudinal Data, Survival Data

Classification

Both methodology and application

Primary author: Prof. KOLAMUNNAGE-DONA, Ruwanthi

Presenter: Prof. KOLAMUNNAGE-DONA, Ruwanthi

Session Classification: INVITED ISBIS: Methodologies and Applications in Joint Models for Longi-

tudinal and Survival Data

Track Classification: Biostatistics