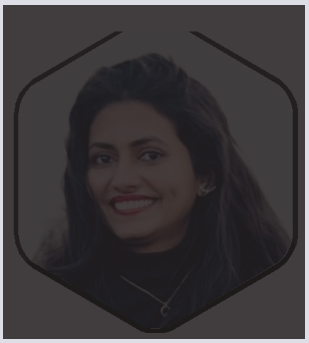
INVITED SPEAKERS



Ms. Elizabeth Varghese is a Clinical Trials Statistician at the Usher Institute, University of Edinburgh, and the statistician for the NIHR RIGHT4: Preventing Deaths from Acute Poisoning in Low and Middle Income Countries program. She collaborates with senior statisticians and clinical investigators to conduct high-impact clinical trials and develop novel statistical methodologies. Varghese has extensive experience in clinical trials, including roles as Documentation Author in Biostatistics at Cytel Statistical Software and Services and Project Technical Officer at the Indian Council of Medical Research. She holds a Master's degree in Biostatistics from MG University, India, and her research interests focus on the application of advanced statistical techniques in clinical trials, epidemiological studies, and public health research.

Observational studies – what is the right design?

Observational research studies have a valuable role to play in medical toxicology, either as a vehicle for generating hypotheses or to guide clinical practice. In this presentation we offer guidance on some key points to consider when designing an observational study. We discuss approaches used to minimize bias, to ensure adequately precise results are, and to maximize the generalisability of the findings. We introduce the STROBE (Strengthening The Reporting of OBservational studies in Epidemiology) reporting checklist and its extensions such as RECORD and explain how these can also offer a helpful guide regarding choices of observational study design. Throughout, we provide practical illustrations of the important design concepts using example studies from medical toxicology.