



# EMA/DIA Statistics Forum: The Role of Observational Data in Assessing the Benefits and Risks of Drugs

Course # 17593  
1 December 2017  
European Medicines Agency, London, United Kingdom

## PROGRAMME CHAIR

### Jim Slattery

Statistician, Surveillance and Epidemiology,  
Pharmacovigilance Department, European  
Medicines Agency (EMA), EU

## PROGRAMME COMMITTEE

### Sigrid Behr

Group Head Quantitative Safety &  
Epidemiology, Novartis, Switzerland

### Hans Ulrich Burger

Global Head Biostatistics Neuroscience and  
Ophthalmology, F. Hoffmann-La Roche,  
Switzerland

### Stephen Evans

Professor of Pharmacoepidemiology,  
London School of Hygiene and Tropical  
Medicine, UK

### Jürgen Kübler

Quantitative Scientific Consulting, Germany

### Andrew Thomson

Statistician, European Medicines Agency  
(EMA), EU

### Richardus Vonk

Head of Research and Clinical Sciences  
Statistics, Bayer, Germany

## DETAILS OF THE INFORMATION DAY

Location:

European Medicines Agency  
30 Churchill Place  
Canary Wharf  
London E14 5EU,  
United Kingdom

## OVERVIEW

Analyses of observational data have played a central role in assessing post authorisation drug safety for many years. However, systematic collection of clinical practice records in electronic form has increased the range and quality of possible analyses and the use of such data in other areas of research. This raises important questions for those designing and conducting the research and those attempting to base regulatory decisions on the results.

Topics include:

- How to select the most reliable methods from the diverse range of study designs used in observational analyses
- Which types of questions can be addressed using observational data alone and which require interventional techniques and, in particular, randomisation of alternative treatments
- How the observational data can best be used to enhance and extend the current methods used in clinical research
  - Follow-up through routine clinical data collection
  - Value of additional non-randomised control data: concurrent or historical
- How to assess research based on observational studies and, in particular, how to pre-specify criteria of 'success' in an observational study in a way that would allow confident design of a research programme to meet regulatory requirements

## WHO SHOULD ATTEND

Statisticians and researchers involved in drug research based on observational data such as Real-World Data Specialists, Statisticians in R&D, Epidemiologists, and PRAC members

**08:30 WELCOME COFFEE****09:00 SESSION 1****INTRODUCTION**

Chair:

**Jim Slattery**, Statistician, Surveillance and Epidemiology, Pharmacovigilance Department, European Medicines Agency (EMA), EU

Controlled clinical trials are considered as gold standard in drug development and this session will explore the potential role of observational evidence in a regulated environment.

Taking the totality of evidence into account in a systematic way for decision making at all stages of drug development, the session discusses innovative approaches to combine information from randomised trials and observational studies.

Observational data may be considered the best available / achievable information in a number of situations; recent examples and experiences for the use of observational data will be presented.

**Need for Observational Evidence**

Anja Schiel, Senior Adviser / Statistician, Unit for HTA and reimbursement, Department for Pharmacoeconomics, Norwegian Medicines Agency, Norway; Chair of EMA's Biostatistics Working Party

**What Do We Need to Be Able to Do to Formalise Use of Observational Evidence?**

Rob Hemmings, Unit Manager, Statistics and, Pharmacokinetics Unit, MHRA, UK; Chair of EMA's Scientific Advice Working Party

**FDA Priorities and Action Plan Regarding Observational Data**

Mark Levenson, Director, Division of Biometrics VII, Office of Biostatistics, CDER, FDA, USA

**10:00 COFFEE BREAK****10:30 SESSION 2****METHODS/STRENGTH OF EVIDENCE - PART 1**

Chair:

**Sigrid Behr**, Group Head Quantitative Safety & Epidemiology, Novartis, Switzerland

Randomised controlled trials are sometimes not feasible or not sufficient to fully assess the benefits and risks of a new drug. But how can observational data be incorporated in the pre- and post-approval data generation plan? This session will discuss frameworks for the use of observational data and provides guidance on how to enhance the reliability.

**Threshold Crossing - A Useful Way to Incorporate Historical Data in Pivotal Trials?**

Martin Posch, Head, Center for Medical Statistics, Informatics, and Intelligent Systems Medical University of Vienna, Austria

**Aspects of Observational Study Design that Enhance Reliability**

Olaf Klungel, Professor Pharmacoepidemiologic Methods, Pharmacoepidemiology & Clinical Pharmacology, Utrecht University, Netherlands

**The Importance of Prospective Observational Research in the Clinical Development of New Treatments**

Mark Belger, Principal Research Scientist, European Statistics Group, Eli Lilly and Co. Ltd, UK

**Identifying the Best Approach for Real-World Evidence Generation**

Nicolle Gatto, Senior Director, Group Lead, WSS Epidemiology, Pfizer Inc., USA

**12:00 LUNCH****13:00 SESSION 3****METHODS/STRENGTH OF EVIDENCE - PART 2**

Chair:

**Hans Ulrich Burger**, Global Head Biostatistics Neuroscience and Ophthalmology, F. Hoffmann-La Roche, Switzerland

The totality of evidence into account in a systematic way for decision making at all stages of drug development will be discussed as well as innovative approaches to combine data from randomised trials and observational data.

**Recently Developed Designs of Late-Phase Clinical Trials**

Jonathan Alsop, Founder, Numerus, UK

**Embedding Randomised Clinical Trials into Clinical Practice**

Mario Ouwens, Statistical Science Director, AstraZeneca, Sweden

**Cross Design Synthesis Method of Data from Randomised Clinical Trials and Observational Studies**

Christoph Gerlinger, Senior Director, Statistics, Bayer, Germany

**14:30 COFFEE BREAK****15:00 SESSION 4****EXAMPLES**

Chair:

**Andrew Thomson**, Statistician, Biostatistics & Methodology Support Office, European Medicines Agency (EMA), EU

Observational data where considered the best available / achievable information in a growing number of situations will be looked at. This session will also present recent examples and experiences for the use of observational data.

**Observational Methods and Post-Authorisation Studies: Lessons Learned from Bosentan Risk Management**

Erwan Muros-Le Rouzic, Associate Director Epidemiology, Actelion, Switzerland

**An Example of a Single Arm Pivotal Study in a Rare Disease**

Carol Reid, Associate Director, Biostatistics, Roche Products Ltd, UK

**Do Dynamic Borrowing Methods Control the Risk of Using Historical Data?**

David Dejudin, Biostatistician, F. Hoffmann-La Roche, Switzerland

**16:00 SESSION 5****WHERE NEXT? PANEL DISCUSSION**

Chair:

**Jürgen Kübler**, Quantitative Scientific Consulting, Germany

While much progress has been achieved over the past years, there is significant uncertainty about the role of observational data in drug development. An expert panel will discuss the current status and the way forward.

Panellists:

Sigrid Behr, Hans-Ulrich Burger, Stephen Evans, Rob Hemmings, Olaf Klungel, Mark Levenson, Anja Schiel, Jim Slattery

**17:00 END OF FORUM**

**SEND YOUR COMPLETED REGISTRATION FORM TO DIA EUROPE, MIDDLE EAST & AFRICA CONTACT CENTRE TEAM,  
E-mail: [basel@DIAGlobal.org](mailto:basel@DIAGlobal.org) Fax: +41 61 225 51 52 For more information please call +41 61 225 51 51**

Registration fees*	Fees
Industry	600.00 EUR <input type="checkbox"/>
Government/Academia/Charitable/Non-Profit (full time)	300.00 EUR <input type="checkbox"/>

\*Registration fee includes: refreshments, sandwich lunch and delegate material  
Payment is due 30 days after registration and must be paid in full by commencement of the event.

## HOTEL INFORMATION

Participants are kindly requested to make their own hotel reservation.

## ATTENDEE DETAILS

Please complete in block capital letters or attach the attendee's business card here.

Prof  Dr  Ms  Mr

Last Name

First Name

Company

Job Title

Address

Postal Code  City

Country

Telephone

Fax

Email\*

\*(Required for confirmation)

DIA reserves the right to include your name and affiliation on the attendee list.

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**Credit cards:** Payments by VISA, Mastercard or AMEX can be made by completing the details below. Please note that other types of credit card cannot be accepted.

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**Bank transfers:** When DIA completes your registration, an email will be sent to the address on the registration form with instructions on how to complete the bank transfer. Payments in EURO should be addressed to "Account Holder: DIA." Please include your name, company, Event ID #17593 as well as the invoice number to ensure correct allocation of your payment.

Payments must be net of all charges and bank charges must be borne by the payer. **If you have not received your confirmation within five working days, please contact DIA EMEA.**

By signing below, I confirm that I agree with DIA EMEA Terms and Conditions of booking. These are available from the office or on <http://www.diaglobal.org/EUTerms>

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- Industry (Member/Non-member) € 200.00
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