

# EFSPI/PSDM Meeting on Data Visualisation

**Wednesday April 19, 2023**

Informed decisions on medical data can be facilitated through a data-driven understanding of scientific questions. This does not only involve design and analysis of studies, but also effective communication of results. Nowadays, there is an increased interest in communication and visualisation of results, as witnessed by the installation of various working groups, including the EFSPI Special Interest Group on Data Visualisation. In addition, within-company initiatives aiming at the impact of quantitative scientists on decision-making have been taken. The Netherlands Pharmaceutical Statistics and Data Management (PSDM) group and the European Federation of Statisticians in the Pharmaceutical Industry (EFSPI) are organizing this joint meeting to present current views on Data Visualisation, including a hands-on workshop.

## Program\*

### Face to face (09:00-12:00)

#### **EFSPI special interest group (SIG) on data visualisation**

Workshop on data visualisation.

### Hybrid (13:00-17:00)

#### **Maarten Boers (Amsterdam UMC, Netherlands)**

Introduction to Data Visualisation: Creating Tables and Graphs That Work

#### **Stefan Döring and Benjamin Lang (Boehringer-Ingelheim, Germany)**

From Customer-centric User Research to Data Visualization App: A Journey of Developing Modules to Support Exploratory Biomarker Analysis

#### **Mark Baillie (Novartis, Switzerland)**

How can we make better graphs? Lessons learned from a company wide data visualisation initiative

#### **Bodo Kirsch (Bayer and SIG, Germany)**

Case study in data visualisation

#### **Speakers and organisers**

Panel Discussion

\* See next pages for practical information and abstracts



## Venue

Danone Nutricia Research  
Uppsalalaan 12  
Utrecht  
the Netherlands

## Registration

Please register at:

[EFSPI.PSDM.dataviz@gmail.com](mailto:EFSPI.PSDM.dataviz@gmail.com)

In person fee €125, -  
Virtual fee € 25, -

CLOSING date is Friday April 7

Please add this meeting in  
your own calendar

*For any further information  
please see the next page  
or feel free to contact  
any one of the organizers*

## Practical Information

Our intention is to organise this event as a traditional face to face (in-person) meeting including an interactive workshop and network opportunities during the breaks.

However, if it is not possible for you to attend in person, you'll have the opportunity to attend the afternoon session virtually at a lower cost (€25). A link on how to connect virtually will be send to you in advance of the meeting.

For information regarding registration and/or the scientific content, please feel free to contact anyone of the organizers: Corine Balje (c.balje@clin-q.com), Egbert Biesheuvel (egbert.biesheuvel@viatris.com), Alexandra James (ajstatistics@gmail.com), Paul Vervuren (paul.vervuren@danone.com) or Pierre Verweij (pierre.verweij@idorsia.com)

## Registration Process

In order to keep the registration fees low, we have installed a very simple and pragmatic registration process without a credit card system.

Please register at [EFSPi.PSDM.dataviz@gmail.com](mailto:EFSPi.PSDM.dataviz@gmail.com) and you will receive an invoice to be paid in advance of the meeting.

The registration is open until Friday April 7.

## Logistics

The registration desk is open from 8:30 until 9:00.

The venue has limited seatings (around 60) and therefore we will use the 'First come, first served' principle.

The in-person registration fee for the whole program (€125) will include lunch and beverages, Parking fees are at you own account (see next section). Virtual attendance of the afternoon is €25.

Final agenda and exact start and stop times will be provided no later than 2 weeks before the event.

## Travel Instructions

Danone Nutricia Research facilities are at the Utrecht Uithof (Uppsalalaan 12) and can be easily reached by car or by tram from Utrecht Central Station.

You can park in the P&R (day tickets at the machine at your own account, €6.00 per day, pin or credit card).

After registration you will receive more information on how to prepare your journey to reach us.

## Abstracts

### **Workshop on data visualisation**

The workshop “How to make better visualization of data to inform decisions” has been developed by “The Effective Statistician” in collaboration with the PSI/EFSPI Special Interest Group on Data Visualisation. It has been held for various audiences over the last years with very positive feedback.

The aim of the workshop is to help focusing on the right questions to generate an effective and informative visualization. It is a training on the main concepts of the basic ‘gestalt’ principles and visual perception. In between the audience will be divided into small groups for hands-on exercises using pen and paper. No laptops or tablets are needed and no programming skills are required! This workshop is for anyone who wants to improve its visualization skills and understanding of graphical principles, specifically data scientists, statisticians, analysts and people reporting data.

### **Maarten Boers (Amsterdam UMC, Netherlands)**

*Introduction to Data Visualisation: Creating Tables and Graphs That Work*

### **Stefan Döring and Benjamin Lang (Boehringer-Ingelheim, Germany)**

*From Customer-centric User Research to Data Visualization App: A Journey of Developing Modules to Support Exploratory Biomarker Analysis*

The process of developing modules to support exploratory biomarker analysis involves multiple stages: user research, prototyping and testing throughout multiple iterations. In this presentation, we will share our journey of building a data visualization app that facilitates biomarker analysis for researchers in the pharmaceutical industry. We will discuss our customer-centric approach to user research and how it influenced the design of the app's modules. By understanding the needs of our users, we were able to develop features that enable efficient data exploration and analysis. We will also demonstrate the app's visualization capabilities and explain how they enhance the analysis of complex biomarker data sets. Our goal is to provide a platform that empowers researchers to uncover valuable insights and accelerate the development of life-saving treatments.

### **Mark Baillie (Novartis, Switzerland)**

*How can we make better graphs? Lessons learned from a company wide data visualisation initiative*

Data visualisation is at the core of exploring and understanding data, communicating results and conclusions, and supporting decision-making. Increasing our graphical expertise can strengthen our impact as professional statisticians and quantitative scientists. By using the right graphical principles, we can better understand data, highlight core insights and influence decisions toward appropriate actions. Without it, we can fool ourselves and others and pave the way to wrong conclusions and actions. This talk will provide an overview of a concerted effort to improve the way we develop and consume graphics at Novartis. We present the initiative motivation and guiding principles, before describing seven work packages in more detail and the lessons learned from the experience.

**Bodo Kirsch (Bayer and SIG, Germany)**

*Case study in data visualisation*

Bayer implemented a process to bring the functional experts involved in a clinical trial together with interactive data visualization tools. This process was named Data Insight Generation. It helped to gain a deeper understanding of the study data and allows for easy data exploration within a one or two days meeting shortly after the end of the study. The talk will summarize the process, address the hurdles to take during the implementation and the benefit it finally brought.