



Welcome to EFSPI's

8th Statistics Leaders Meeting

July 4, 2017

AbbVie Deutschland facilities
Ludwigshafen, Germany

Welcome to Ludwigshafen!





Outline

- Welcome Stefan
- Logistics Daniele
- EFSPI Marisa
- Statistics Leaders Meeting Stefan

Organization

- Organizing Committee
 - Stefan Driessen
 - Uli Burger
 - Chrissie Fletcher
 - Marisa Bacchi
 - Daniele Compagnone
 - Maylis Coste
- Local Organization
 - Daniele Compagnone (AbbVie)
 - **Thank You AbbVie** for Hosting the Meeting & the great dinner last night

Logistics

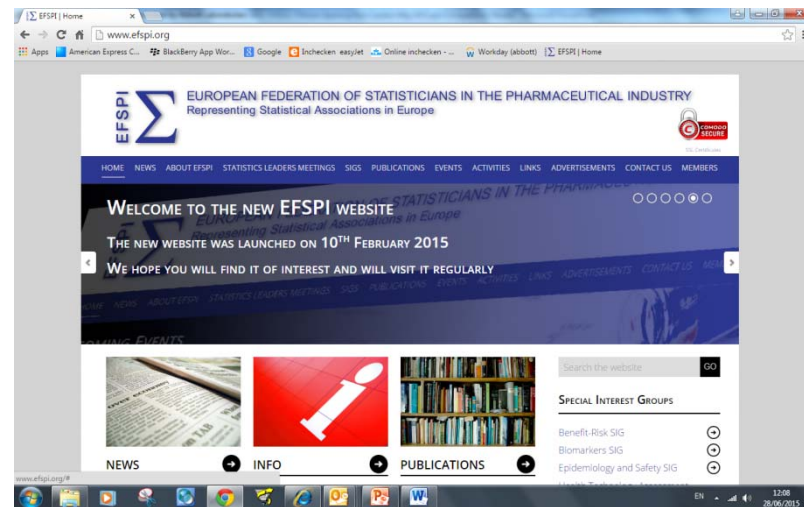
- WiFi → KRYPTON (no password needed)
- Extra room (breakout sessions) → 304
- Before lunch → group picture!
- Lunch → beside the meeting room
- Smoking → only at the designated areas
- Taxi → please sign in on the list
- Rear exit → Ludwigshafen main station
- Before leaving → please return name badge
- Questions? → Martina Berroth or me



This is an EFSPI Meeting

- Please visit our website:

www.efspi.org



July 4, 2017, Ludwigshafen

8th EU Statistics Leaders Meeting



EFSPI



- EFSPI = European Federation of Statisticians in the Pharmaceutical Industry
- Founded in 1992
- EFSPI is an “umbrella”, non-profit making organisation
- A federation of 10 National European Groups
- No individual members
- Our national organisations collectively represent ~ 2200 members



EFSPi

Strategic Objectives 2016-2018

1. Represent the association members of EFSPi and provide a united and respected voice on key scientific, regulatory and statistical issues in drug development

- Develop program of scientific meetings and partner with association members to provide opportunities to discuss and align on key scientific, regulatory and statistical issues (responsible: Scientific Chair)
- Utilise EFSPi Statistics Leaders forum to discuss and align on emerging statistical areas and identify priorities and opportunities for EFSPi to lead/promote these areas in the health care environment (responsible: Statistics Leader Chair)



8th

Statistical Leaders Meeting

| Year | Venue | Host | # attendees |
|-------------|---------------------|---------------------|-------------|
| 2017 | Ludwigshafen | AbbVie | 39 |
| 2016 | Paris | <i>Sanofi</i> | 34 |
| 2015 | Brussels | <i>MSD</i> | 32 |
| 2014 | Basel | <i>Roche</i> | 31 |
| 2013 | Copenhagen | <i>Novo Nordisk</i> | 23 |
| 2012 | Amsterdam | <i>Abbott</i> | 26 |
| 2011 | London | <i>Amgen</i> | 22 |
| 2010 | Berlin | <i>Bayer</i> | 26 |



You have been selected for the Statistical Leaders forum

- 55 Active members
 - All 10 EFSPI countries
 - Pharma: 40
 - CROs: 10
 - BioTech: 2
 - Med. Devices 2
 - Nutrition: 1
- Agenda's, presentations, and minutes of the EU Statistical Leaders Meetings 2010 – 2016 available on the EFSPI website:

http://www.efspi.org/EFSPI/Statistics_Leaders_Meetings/Previous_Meetings/EFSPI/Statistics_Leaders_Meetings/Previous_Meetings.aspx?hkey=29eeb7f4-a023-47f2-96e8-046a1a2dd254



Aim Meeting

- Set up by EFSPI
- Network and share ideas
- Shape and influence our environment
 - Education & Continuing Professional Development
 - Methodology Development & Identification of Best Practice
 - Regulatory and Industry policies
 - Effective working with differing resourcing models
- Help to shape the strategy for EFSPI



Professional Accreditation

- Systems for accreditation of statisticians are available in some countries
- A combination of education and experience is vital
- Proposal by FenStatS
 - FenStatS to set the criteria and standard
- National Associations
 - receive and evaluate applications
- **Feedback possible during afternoon session**





EFPIA Clinical Development Expert Group

- Clinical Trial Design Taskforce
- Lead: Chrissie Fletcher
- Aim: white paper on innovation in CT design and advances in this area to support future clinical development strategies
 - Goal: EFPIA endorsement of paper in Q1 2018 and going into public domain as position paper
- Link with ICH E8 "General Considerations for CTs" revision; kick-off mid November
- Request for people interested
 - Contact: fletcher@amgen.com



Past Regulatory Interaction

- FDA and EMA guidances on multiplicity commented
Thanks to Erika Daly
- EMA the First In Humans Guideline commented
Thanks to Bruno Boulanger
- PSI/EFSPi expert working group on Confidentiality of Interim Results to be established following a suggestion from BSWP
Lead: Jürgen Hummel



Future Regulatory Interaction

EFSPi/PSI regulatory committee will meet with

- EMA's BSWP on October 26th or 27th
- MHRA statisticians on November 20th

- More or less informal exchange
- Your chance to have your question asked



Update - Data Transparency

Study protocols and SAPs need to be posted in redacted form in US since 2017-04-18

- Already required by EMA under Policy 070

International Committee of Medical Journal Editors (ICMJE) published Requirement for Data Sharing Statements

- Submissions from 2018-07-01 must state if (and if yes, how) data shall be shared
- Trials from 2019-01-01 must include a data sharing plan in trial registration
- Data sharing is not required, „but investigators should be aware that editors may take into consideration data sharing statements when making editorial decisions.“
- 4 out of 5 papers by EF SPI data sharing working group were cited



Update - Estimands

ICH E9 R1 reached step 1 of ICH procedure

- Release for comments July/August 2017
- Training material will be released shortly thereafter
- 6 months consultation period

Planned EFSPi activities

- Comments on draft
- Webinars on concept
- Meeting to discuss draft
- Webinar/Training on principal stratification



Update – 2nd EFSPi Workshop on Regulatory Statistics

October 5-6, 2017 Basel

Speakers from EMA, FDA, academia, and industry

€300,- (250,- until July 31st) for 1½ days

- Session 1: Multiplicity: FDA guideline
- Session 2: Estimands: ICH E9 addendum
- Session 3: Estimands: First real life experience
- Panel Discussion Estimands
- Session 4: Predictive biomarkers for therapeutic decision making
- Session 5: Role of early development in regulatory approval
- Session 6: Open disease specific drug development issues
- Session 7: Contributed short topics – discussions



SIG Update



SIG AIMS

Purpose of AIMS:

- “To support PSI Committees and PSI/EFSPi Special Interest Groups (SIGs) with the technological application and implementation of statistics. To develop understanding of new analytical tools and approaches to share with PSI & EFSPi members via appropriate forums. To ensure PSI & EFSPi members are supported with understanding the requirements for the implementation of industry data standards.”

SIG AIMS

- + Membership changes with the SIG now having
 - + 2 CRO staff (PPD, PRA)
 - + 4 Pharma staff (Amgen, Astrazeneca, GSK, Servier)
 - + 2 Academia staff (Bordeaux University)
 - + One potential further member but need more!!!

- + Got clear remit that R should be the initial focus of the group so moved forward
 - + Met with vendors who validate in R
 - + Sought feedback from various sources on potential solutions to validation of R (this has been the main activity)
 - + Had the PSI Regulatory committee raise the topic in their F2F meeting with the MHRA who stated
 - + **"There are no regulations that restrict the use of software. Validation principles to show the results are accurate need to be applied, including which functions used and how they are accessed. All validation processes need to be traceable."**

SIG AIMS

- + What have the group actually produced?
 - + One "R" article published in PSI SPIN magazine and EFSPI newsletter
 - + One "R Shiny" article in final draft to publish in autumn PSI SPIN magazine (and EFSPI newsletter at a similar time)
 - + One further "R Shiny" article conceptually agreed for later in the year

SIG AIMS

- + We have agreed objectives for the next 12 months
 - + Update PSI website to include SIG details and articles
 - + Target one article per quarter for publication current topics in the list with agreed authors are:
 - + R notebook
 - + Literate programming
 - + Reproducible research Cloud computing
 - + Bayesian: Linking R with other software (ie. Bugs) MCMC now available in SAS comparison
 - + High performance in R vs SAS
 - + Intro to Validation (Tips)
 - + SAS Viya
 - + Run a parallel session at the 2018 PSI conference
 - + Already agreed in principal at the PSI Board meeting on 7th June
 - + Idea would be for 2 presentations then a working demonstration of a tool (we already have the material for most of this)
 - + Increase membership

SIG Toxicology

- In March 2017 we held a 2 day workshop, covering current hot topics in industry. Topics included:
 - Repeated Measures analyses in Toxicology,
 - Historical control data,
 - CRO and Pharma statistician interactions,
 - Carcinogenicity studies and
 - How do we empower our scientists to perform some routine analyses, whilst also ensuring quality of results.
- During 2017 we plan to hold regular webinars for a wide audience to join, all based around toxicology and non-clinical topics. We are also always interested to hear from anyone who works in this area, so that we can share our work wider. Please contact Gareth Thomas gareth.thomas@envigo.com
- We are also starting to plan our next workshop, which will likely take place in 2018.



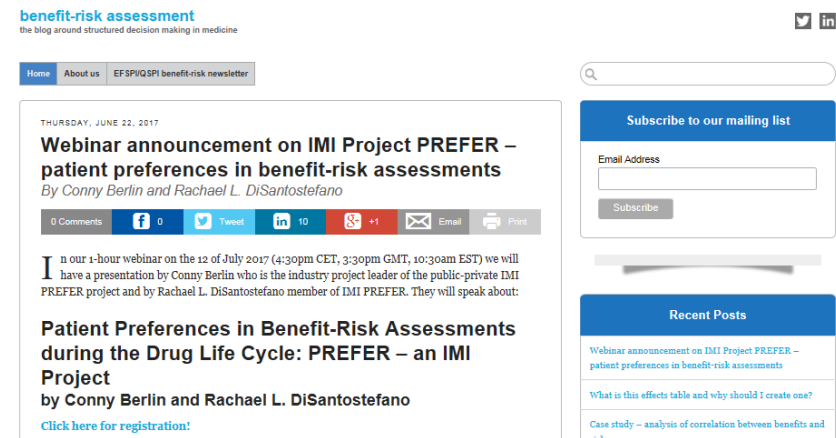
SIG Small Populations

- Chair: Egbert Biesheuvel
- 12 members
- Link with 3 FP7 projects:
 - IDEAL,
 - INSPIRE,
 - ASTERIX
- Provided feedback on INSPIRE congress and PSI presentation on Small Populations
- SIG focus now on role of historic controls
- Request to EFSPi: keep promoting SIG

SIG Benefit - Risk

- Chair: Alexander Schacht
- Several webinars planned for this year
- Active blog:

www.benefit-risk-assessment.com



The screenshot shows a blog post from 'benefit-risk assessment' dated Thursday, June 22, 2017. The title is 'Webinar announcement on IMI Project PREFER – patient preferences in benefit-risk assessments' by Conny Berlin and Rachael L. DiSantostefano. The post includes social media sharing options (Facebook, Twitter, LinkedIn, StumbleUpon, Email, Print) and a 'Subscribe to our mailing list' form with an email address field and a 'Subscribe' button. Below the main content, there is a 'Recent Posts' section listing other articles.

- Question to EFSPI: availability of company independent virtual meeting facility – skype is often problematic

Agenda

| Time | Topic | Presenter / Facilitator |
|---------------|---|--|
| 8:30-9:00 | <i>Registration + Coffee</i> | |
| 9:00 - 9:15 | <ul style="list-style-type: none"> • Welcome address + Intro <ul style="list-style-type: none"> ○ Org. Ctee ○ EFSPI President ○ Recap Stats Leaders meeting 2016 <ul style="list-style-type: none"> ▪ SIGs (AIMS, ...) ○ Qualification Biostatisticians | Stefan Driessen, Daniele Compagnone Marisa Bacchi Stefan Driessen |
| 9:15 – 9:45 | <ul style="list-style-type: none"> • Future of Statistical groups – F-up of workshop 2016 <ul style="list-style-type: none"> ○ Statistics and Decision making support | Maylis Coste, Sylvain Nicolas |
| 9:45 – 10:45 | <ul style="list-style-type: none"> • Close collaboration with Academia? <ul style="list-style-type: none"> ○ What can they do for us? ○ What can we (EFSPI) do for them? ○ What can we (Statistical Leaders) do for them? ○ How can we support EU supported academic initiatives (ASTERIX, IDEAL, ASPIRE) and how already ongoing collaborations (IMI) | Uli Burger |
| 10:45 - 11.15 | <i>Coffee Break</i> | |

Agenda cont.

| Time | Topic | Presenter / Facilitator |
|---------------|---|-------------------------------------|
| 11:15 – 12:30 | <ul style="list-style-type: none"> • Invited session by host AbbVie <ul style="list-style-type: none"> ○ Company intro ○ Discussion topics as determined by Host: <ul style="list-style-type: none"> • Patented clinical trial designs | Daniele Compagnone |
| 12:30 – 12:45 | <ul style="list-style-type: none"> • Data Science - intro <ul style="list-style-type: none"> ○ Background RSS section on Data Science ○ Example of Data Science in action (AZ) | Andy Garrett, Jim Weatherall |
| 12:45-14:00 | <i>Lunch break</i> | |
| 14:00 – 15:45 | <ul style="list-style-type: none"> • Data Science - workshop <ul style="list-style-type: none"> ○ Presentation Survey results ○ Outline topics for discussion ○ Break-out groups, present back to main group ○ Wrap up | Andy Garrett, Jim Weatherall |
| 15:00 – 15:15 | <i>Refreshments Break</i> | |
| 15:45 – 16:15 | <ul style="list-style-type: none"> • What should be the priorities for EFPSI ? <ul style="list-style-type: none"> ○ Statistics Leaders identify the priorities for EFPSI based on outcome Stats Leaders workshop 2016 (“the bubbles”) | Marisa Bacchi, Maylis Coste |
| 16:15 – 16:30 | <ul style="list-style-type: none"> • Program Statistical Leaders Meeting 2018 | Stefan Driessen |
| 16:30 | <i>2017 Meeting Closure</i> | |



Back Up slides



EFSPI

Strategic Objectives 2016-2018

1. Represent the association members of EFSPI and provide a united and respected voice on key scientific, regulatory and statistical issues in drug development

- Develop program of scientific meetings and partner with association members to provide opportunities to discuss and align on key scientific, regulatory and statistical issues (responsible: Scientific Chair)
- Utilise EFSPI Statistics Leaders forum to discuss and align on emerging statistical areas and identify priorities and opportunities for EFSPI to lead/promote these areas in the health care environment (responsible: Statistics Leader Chair)

2. Set and promote professional standards in Europe for the development, application, understanding and communication of statistics in drug development and related fields

- Write 1-2 professional position papers / best practice papers per year in collaboration with representatives from association members and SIGs (responsible: Council representatives, SIG Chairs)
- Hold Annual EFSPi meeting, produce monthly newsletters, and disseminate relevant information (responsible: Communication Office, Scientific Chair)
- Foster collaboration between local organizations to promote relationships and share best practices (responsible: EFSPi president)

3. Enhance the profile of EFSPi and strengthen alliances and collaborations with other bodies within Europe and other regions

Seeking opportunities to collaborate with:

- the EMA Biostatistics Working Group and regulatory statisticians (responsible: Regulatory Chair)
- the EUnHTA Network (responsible: HTA SIG)
- International statistical community and associations important to the Special Interest Groups (SIGs)(responsible: SIG Chair)
- the European Federation of Pharmaceutical Industry Associations (EFPIA) (responsible: President, Scientific Chair)

On the following key activities:

- ❖ Methodology/research and good research practice papers/reports
- ❖ Training opportunities, scientific meetings and discussing mutual areas of interest
- ❖ Development and review of regulatory and payer guidelines
- ❖ Professional development and successfully adapting to changes in the environment

EFSPI Current SIGs*

- Biomarker (leader = Athula Herath, heratha@MedImmune.com)
- Benefit-risk (leader = Alexander Schacht, schacht_alexander@lilly.com)
- Health Technology Assessment, HTA (leader = Chrissie Fletcher, fletcher@amgen.com)
- Integrated Data Analysis (leader = Byron Jones, byron.jones@novartis.com)
- Medical Devices (leader = Martin Wadepuhl, wadepuhl.m.vsa@t-online.de)
- Modelling & Simulation (leader = Chris Campbell, ccampbell@mango-solutions.com)
- Real World data (leader = Maurille, maurille@amgen.com)
- Toxicology (leader = Gareth Thomas, ThomasG@UKOrg.Huntingdon.com)
- Small Populations (leader = Egbert Biesheuvel, egbert.biesheuvel@danone.com)
- AIMS (leader = Craig McIlloney, craig.mcilloney@ppdi.com)



Professional accreditation



June 2017

Background

- Systems for accreditation of statisticians are available in some countries
 - United States, Netherlands, United Kingdom, Canada, Hong Kong
- A combination of education and experience is vital



Criteria

The criteria are based on the systems applied by ASA and RSS

- A.MSc degree in statistics or education deemed equivalent
- B.Five years of documented working experience as statistician
- C.Continual Professional development after graduation
- D.Communication and pedagogical skills
- E.Comply to FenStats ethical standards and other relevant standards
- F.Member of national statistical association

SM2

Slide 35

SM2

At the date of certification or to be renewed every year?

Sebastien MARQUE, 6/5/2017



FenStat and National Associations roles

- FenStatS
 - set the criteria and standard for accreditation
 - keep a register of accreditations
 - evaluate the accreditation process
- National Associations
 - Receive applications
 - Evaluate the applications
 - Issue credentials to successful applicants



Questions for the National Associations

- Are the roles separated in a good way?
- Continuous application terms or fixed dates
- Application fees
- Recruitment of auditors
- Are extensions (eg biostatistics) useful?

What assistance is needed from FenStatS?



FenStatS project group for accreditation

- Arne Bathke, Austria
- Dominik Rozkrut, Poland
- Feridun Turkman, Portugal
- Gerardo Sanz Sáiz, Spain
- Luigi Pieri, Italy
- Magnus Pettersson, Sweden
- Paul Koopman, the Netherlands
- Sebastien Marque, France

ACCREDITATION AS PROFESSIONAL STATISTICIAN

John Doe, MSc

From Brussels, Belgium
DOB 1 december 1968



Has, the 19th April 2017 fulfilled the requirements of accreditation as statistician as set out by FenStatS (criteria dated 1 April 2017). Further information on the criteria and the accredited professional can be acquired from FenStatS (www.fenstats.eu).

Jane Doe,
President of Fenstats

M Kilroy
President of Sweden Statistical Association