



Interactions with Regulators in EU

PD Dr. Christoph Gerlinger
EFSP regulatory chair



EFSPi/PSI Regulatory Affairs Committee

- Co-ordinates review of regulatory guidance within EFSPi members
- Chair Anna Berglind (PSI), co-chair Christoph Gerlinger (EFSPi)
- Members
 - UK: Chrissie Fletcher, Daniel Evans, Frances Lynn, Jon Blatchford, Julie Anderson, Jürgen Hummel, Kerry Gordon, Lesley France
 - FR: Maylis Coste; SE: Anna Berglind, Per Larsson; DE: Christoph Gerlinger, Ruthild Sautermeister; BE: Anne Daniau; IE: Erika Daly; CH: Kaspar Rufibach
 - Companies: Amgen, AZ, Bayer, BI, BioMarin, Grünenthal, GSK, Icon, Medicomp, Novo, PDD, Pfizer, Quintiles, Roche, Servier
- 7 countries represented (+3 from last year)



Key activities in the past year

Meeting with MHRA statisticians 2015-09-14

Summary to be published

Meeting with BSWP 2015-10-09

Summary published in EFSPi newsletter

Contributed to EMA workshop on
extrapolation 2016-05-17/18

Co-organized by Christoph

Presentation by Marisa



Upcomming activities

Meeting with MHRA statisticians (tbd
Nov/Dec)

Meeting with BSWP (Sep 30th)

Expert groups to prepare for commenting

Estimands

Extrapolation

Statistics in CMC

1st EFSPi regulatory statistics workshop



1st EFSPI regulatory statistics workshop

- Scientific Committee: Norbert Benda, Egbert Biesheuvel, Hans Ulrich Burger, Tim Friede, Christoph Gerlinger, Armin Koch, David Wright and Emmanuel Zuber
- Venue Biozentrum Basel

1st EFSPI regulatory statistics workshop

- Session 1: Estimands, upcoming guidelines
 - Thomas Permutt (FDA), Norbert Benda (BfArM), Mouna Akacha (Novartis)
- Session 2: Implications of Estimands Selection on Labeling
 - Ann-Kristin Leuchs (BfArM), Kaspar Rufibach (Roche), Chrissie Fletcher (Amgen), Christoph Gerlinger/Michael Kunz (Bayer)
- Session 3: Extrapolation (e.g. from adults to children)
 - Jacob Brogren (MPA), Kristina Weber/Armin Koch (MH Hannover), Michael Looby (Novartis)
- Session 4: Risk Benefit assessments
 - David Wright (MHRA), George Quartey (Roche), Alexander Schacht (Lilly)
- Session 5: Statistics in Quality and Quality Attributes
 - Jens Lamerz (Roche), Bruno Boulanger (Arlenda), EU regulatory statistician (tbd)
- Session 6: Short topics discussions [debate]



Your input please:

What are your hot topics to discuss with regulatory statisticians?

Topics for discussion with BSWP needed by July 7th



Update on data sharing

PD Dr. Christoph Gerlinger
EFSP regulatory chair



Key Activities

5 papers from EF SPI working party on data sharing in BMC Medical Research Methods (scheduled for July 8th)

Commented on ICMJE data sharing proposal

Participated at Data Sharing Conference Wellcome Trust / MRCT Center of BWH and Harvard

Uptake of data sharing

not many requests for 3019 studies listed

| | |
|--|-----|
| Number of Research Proposals submitted up to 31 May 2016 | 218 |
|--|-----|

| | | |
|---------------|---|----|
| Data Analysis | In process | 93 |
| | Withdrawn by the requestor | 1 |
| | Complete | 1 |
| Publication | In process | 0 |
| | Published and/or results summary received View details of these research proposals | 1 |
| | No publication or results summary (18 months after data access closed) | 0 |





European Federation of Statisticians in the Pharmaceutical Industry
Promoting Professional Standards in Europe

Update on ICH E9(R1) Estimands and Sensitivity Analyses

Chrissie Fletcher
EFPIA lead for E9 WG

Paris 2016-07-05

Seeking harmony: estimands and sensitivity analyses for confirmatory clinical trials

Clinical Trials

1–3

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Devan V Mehrotra¹, Robert J Hemmings², Estelle Russek-Cohen³, on behalf of the ICH E9/RI Expert Working Group

Abstract

In October 2014, the Steering Committee of the International Conference on Harmonization endorsed the formation of an expert working group to develop an addendum to the International Conference on Harmonization E9 guideline (“Statistical Principles for Clinical Trials”). The addendum will focus on two topics involving randomized confirmatory clinical trials: estimands and sensitivity analyses. Both topics are motivated, in part, by the need to improve the precision with which scientific questions of interest are formulated and addressed by clinical trialists and regulators, specifically in the context of post-randomization events such as use of rescue medication or missing data resulting from dropouts. Given the importance of these topics for the statistical and medical community, we articulate the reasons for the planned addendum. The resulting “ICH E9/RI” guideline will include a framework for improved trial planning, conduct, analysis, and interpretation; a draft is expected to be ready for public comment in the second half of 2016.

Current practices in choosing estimands and sensitivity analyses in clinical trials: Results of the ICH E9 Survey

C. Fletcher*^{1,2}, S. Tsuchiya^{3,4}, D. Mehrotra⁵ on behalf of the ICH E9(R1) Working Group

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²*Clinical Development Expert Group, European Federation of Pharmaceutical Industries and*

Submitted and under review by TIRS
(DIA Journal)

⁵*Merck Research Laboratories, 351 N. Sumneytown Pike, North Wales, PA 19454, USA*

*email: fletcher@amgen.com (phone: +44 1223 436264)

Abstract

An addendum to the International Conference on Harmonisation E9 guidance document (Statistical Principles for Clinical Trials) is currently under development. The aim of the addendum is to promote harmonised standards on the choice of estimand (well defined measure of the treatment effect that is being estimated) in clinical trials, and describe a consensual framework for planning,

E9 WG Progress

- Detailed technical discussions what defines an estimand and which estimands can be estimated
 - Causal Inference (Rubin) versus Statistical Inference (Lehmann)
 - ‘Classes’ of estimands, ‘valid’ estimands
- How best to update E9?
 - Addendum has major impact to analysis sets, missing data, and sensitivity analyses
- Preliminary case studies shared of impact of E9(R1) on protocol writing
- Impact of E9(R1) to other E documents (e.g. E3, E6, E8)

E9 WG Key Milestones

- Finalise technical document (addendum) for sign-off by ICH Assembly at next ICH conference (7-10th Nov 2016)
- Long public consultation period anticipated
- Developing technical appendix
- Continue local consultations
 - EFSPI
 - EFPIA
 - Others?

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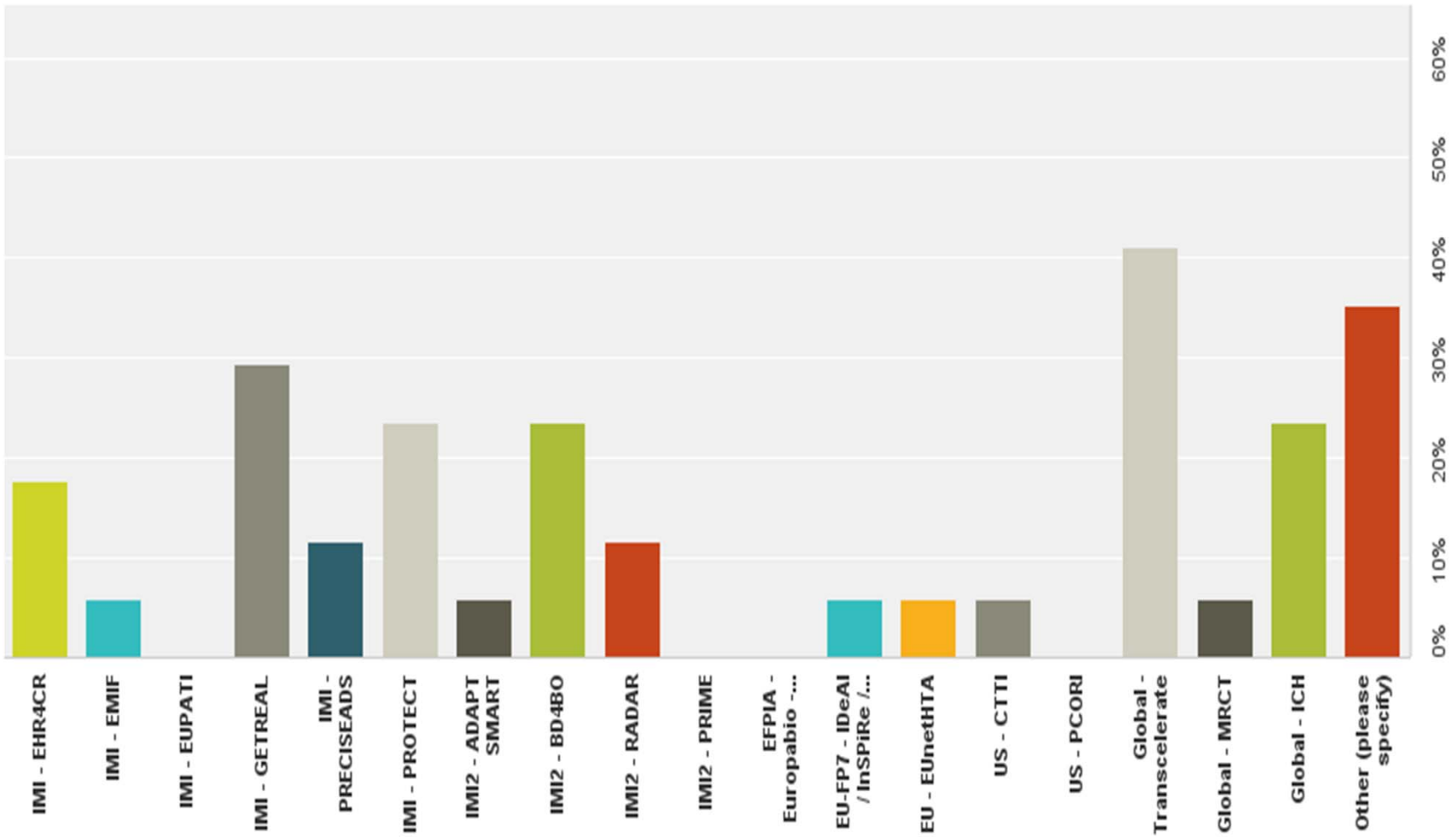
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IMI Update

Survey results

Paris 2016-07-05

Q37: In which of the following initiatives is your team involved



IMI GetReal

Overall objectives

GetReal aims to show how robust **new methods of RWE collection and synthesis** could be developed and considered for adoption **earlier** in pharmaceutical R&D and the healthcare decision making process. This will require companies, healthcare decision makers and other stakeholders to work together to generate a consensus on **best practice** in the use of RWE in regulatory and reimbursement decision-making.

Alternative evidence generating strategies will deliver more focused research in pharmaceutical R&D, and allow healthcare decision makers to be **more certain** when providing patients with access to new treatments.

Example GetReal Outputs



Original research

- Drivers of effectiveness
- Analytical methods
- Prediction models
- Methodological guidance



Methods

- Detection of bias
- Adjustment of bias
- Aggregate RWD in NMAs
- Individual patent RWD in NMAs



Summaries

- Study types
- Sources of data
- Methods
- Literature reviews



Case studies

- Retrospective analyses of relative effectiveness issues
- Disease area specific issues
- Stakeholder views



Tools

- Software
- Checklists & templates
- Design options for pragmatic clinical trials

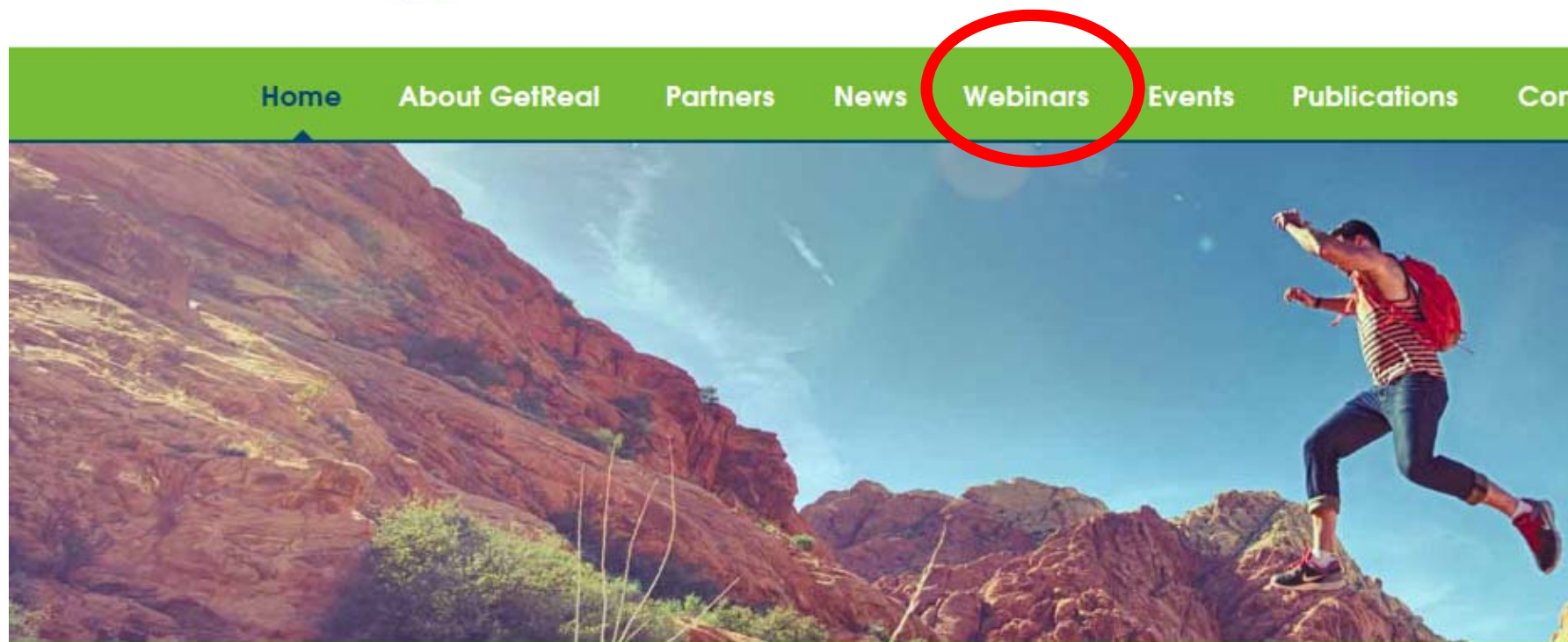
**Illustrative examples – not a complete list of GetReal outputs*

Evidence synthesis and predictive modelling

- Involvement of statisticians in network meta-analyses / indirect comparisons
 - Following best practices
 - HTA agencies note some NMA applications poor quality
- Methodology and approaches are evolving
 - RCT and Non-RCT expertise
- Use of modelling and risk algorithms increasing
 - Opportunities for statisticians



<https://www.imi-getreal.eu/>



IMI GetReal

Launched in October 2013, GetReal is a three-year project of the Innovative Medicines Initiative (IMI), a EU public-private consortium consisting of pharmaceutical companies, academia, HTA agencies and regulators (e.g., NICE, HAS, EMA and ZIN), patient organisations and SMEs.

GetReal aims to show how robust new methods of RWE collection and synthesis could be adopted earlier in

WP4 webinar - Synthesis and integration of real-world evidence in network meta-analyses and outcome prediction

10 May, 2016 - 15.00-16.00 CET (14.00-15.00 UK time)

2016 05 10 15 00 WEBINAR GetReal – Synthesis and integrat... Drug Development

Estimating agreement between sources of evidence

— RCTs
— RWE

A network diagram with nodes A, R, C, Q, and O. Red lines represent RCTs and blue lines represent RWE. A play button is overlaid on the diagram.

Download the webinar slide pack

GetReal
Bridging efficacy to effectiveness:
The IMI GetReal project
*Meta-analyses, outcome prediction,
evidence synthesis and modelling*
WP4 Webinar 10 May 2016

Read the webinar report

WP4 webinar report

SPEAKERS



Matthias Egger
Director of the Institute



Christine Fletcher
Executive Director



Eva-Maria Didden
Postdoctoral research



Georgia Salanti
Research group leader at

GetReal Events

Save the date!

This WP4 webinar is part of a series of outputs on IMI GetReal foreseen throughout 2016:

WP1 WEBINAR: 22 March 2016 - 12.4pm



+Real-Life Data in
Drug Development

On behalf of GetReal, Workpackage 4 (WP4) invites you to our Stakeholder Workshop:

Evidence Synthesis and Predictive Modelling of Relative Effectiveness

PAVING THE WAY TO BEST PRACTICE

Date: 15th September 2016 (9.30 – 16.30 BST)

Venue: Thistle Holborn, The Kingsley, Bloomsbury Way, London WC1A 2SD

EFSPi



European Federation of Statisticians in the Pharmaceutical Industry

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EFPIA Update

Paris 2016-07-05

New model has simpler structure with clearer decision-making responsibilities

| Board | | | | | |
|--------------------------------|----------------------------------|---------------------------------|--------------------------|----------------------------|-------------------------|
| BSCs | Patient Access | Innovation | International | Finance/ Operations | Director-General |
| Priority | HTA | IMI Strategy | U.S. & Canada | | Ethics & Compliance |
| WGs | LoE Biologics ^{***^} | Clinical Trials | Growth Markets | | Communications |
| (cross-functional) | Orphan Drugs ^{***} | Data Protection | Global Health* | | Brussels Advocacy |
| | Supply Chain | Adaptive Models | | | |
| | Health Systems | ATMPs ^{**} | | | |
| | Pricing/ Reimbursement | Personalised Meds ^{**} | | | |
| Expert WGs (functional) | Competition | Intellectual Property | International Regulatory | | Patient Think Tank |
| | | EU Regulatory | | | PIE ^{****} |
| | | Preclinical Development | | | |
| | | Pharmacovigilance | | | |
| | | Clinical Development | | | |
| | | Regulatory IT | | | |
| | | Technical Development | | | |
| | | Envi Health & Safety | | | |
| | | Animal Welfare | | | |
| | | EFPIA Security Forum | | | |
| | | IMI Operational Group | | | |
| | European Markets Committee (EMC) | | | | |
| | CEE Taskforce | | | | |
| | Greece Taskforce | | | | |

← 2+ statisticians