On the Way to a New Pharmacovigilance Model through the Innovative Medicines Initiative : PROTECT

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PROTECT

Pharmacoepidemiological Research on Outcomes of Therapeutics by a European ConsorTium

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http://www.imi-protect.eu/index.html

PROTECT

The goal of PROTECT is to strengthen the monitoring of benefit-risk of medicines in Europe by developing innovative methods that will enhance the early detection and assessment of adverse drug reactions from different data sources (clinical trials, spontaneous reporting and observational studies).

These methods will be tested in real-life situations.

PROTECT: Key participants

Public

- EMA (Co-ordinator)
- Danish Medicines Agency (DKMA)
- Spanish Medicines Agency (AEMPS)
- MHRA
- FICF (Barcelona)
- INSERM (Paris)
- Mario Negri Institute (Milan)
- University of Groningen
- University of Utrecht
- Imperial College (London)
- University of Newcastle – Upon -Tyne
- Munich University
- PGRx
- Outcome Europe
- IAPO
- WHO UMC
- GPRD
- CEIFE

EFPIA

- GSK (Deputy Co-ordinator)
- Sanofi- Aventis
- Roche
- Novartis
- Pfizer
- Amgen
- Genzyme
- Merck Serono
- Bayer Schering
- Astra Zeneca
- Lundbeck
- NovoNordisk

PROTECT: Key participants

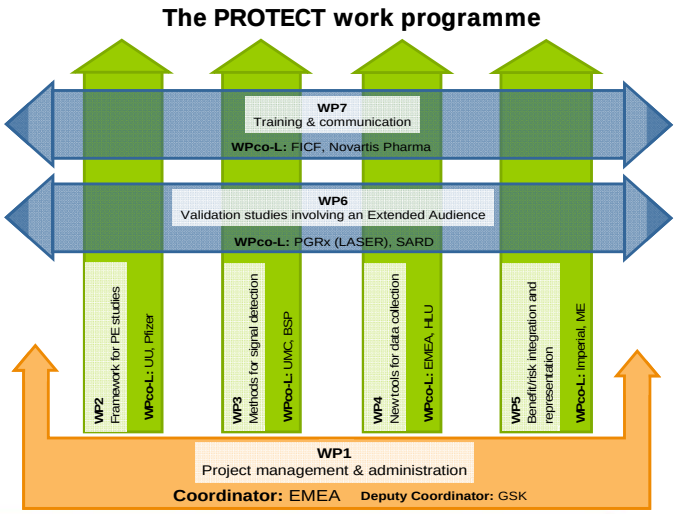
1st Consortium Assembly, 15 May 2009

Objectives

The objectives and deliverables will be addressed in PROTECT using six distinct Work Packages (WPs), each developing certain specific scientific components of the overall Project. One additional WP will be responsible for the governance and management of the Project.

Work Package	Work Package title
1	Project management and administration
2	Framework for pharmacoepidemiological studies
3	Methods for signal detection
4	New tools for data collection from consumers
5	Benefit-risk integration and representation
6	Validation studies involving an Extended Audience
7	Training and communication

Project Plan



WP2: Framework for Pharmacoepidemiological Studies

Objective

To develop, test and disseminate methodological standards for the design, conduct and analysis of pharmacoepidemiological studies, applicable to different safety issues using different data sources

Example

To develop study protocols for pilot PE studies between selected drugs and key AEs

To provide guidelines on how to identify public health impact of AEs

To investigate discrepancies in results between databases and explore differences with other data sources

To evaluate identified signal from signal detection strategies applied by WP3 in electronic health databases

WP3: Methods for Signal Detection

Objective

To develop new methods, and assess existing ones, for signal detection from spontaneous reports, electronic health records and clinical trials

Example

To provide advice on good signal detection practices

To develop new methods for signal detection

To implement and examine the value of screening methods in EHR

To evaluate the performance of disproportionality analysis based on novel grouping tools applied to adverse reactions

WP4: New Tools for Data Collection from Consumers

Objective

To develop modern methods of data collection directly from consumers in their natural language in several EU countries, including using web-based screens, text messaging and computerised telephone interviews

Example

To assess the feasibility, efficiency and usefulness of these tools

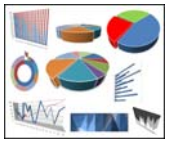
To pilot approaches between data sources

To measure the acceptability of these methods and assess the transferability of data collection methods in different countries and for other conditions

WP5: Benefit-Risk Integration and Representation

Objective

To develop methods for use in benefit-risk assessment including both the underpinning modelling and the presentation of the results, with a particular emphasis on graphical methods



Example

To identify, characterise and test methods of collating data on benefit and risks from various data sources

To identify, test and compare modelling approaches that would allow continuous benefit-risk modelling along the lifecycle of the products

To develop methods of graphical expression of the benefits and risk of the medicinal products

Work Packages

WP6 Objective

To validate methods developed in WP2 to 5 in various data sources owned or managed by Consortium Partners or members of the Extended Audience

WP7 Objective

To identify training opportunities and support training programmes in the fields addressed by PROTECT

Potential impact of Project Results

Improving benefit-risk evaluation at the time of authorisation and monitoring in the post-Marketing phase is an essential activity for the drug development process.

New methods of data collection from consumers

- These new methods will be increasingly important for medicines where numbers of patients in pre-authorisation studies are limited and close surveillance of treated patients post –marketing is needed (e.g. orphan drugs, advance therapy products)
- Direct patient data collection will help monitor the effects of drug use in pregnancy as pregnant women are usually excluded from clinical trials
- Use of modern technology also has the potential to be used to collect drug utilisation, outcome and other pharmacovigilance data on other target populations
- By recruiting and collecting data directly from the patients, data on long term follow up of safety, efficacy and outcomes can be collected.

Potential impact of Project Results

Signal detection

- Optimisation of methods of signal detection from spontaneous reports and development of methods using electronic patient record data will impact on the use of a drug over its life-cycle
- Tools to be developed will use the available drug safety data in an efficient and appropriate manner will give the earliest possible detection of emerging safety issues

Framework for pharmacoepidemiological studies

- Standard recommendations for essential methodological parameters for the conduct of PE studies will be disseminated
- Methodological standards will help to build an appropriate infrastructure and research tools to rapidly address any urgent safety issues arising in the EU.
- Guidelines on how to identify and use national drug utilisation data will help in quicker assessment of the public health impact of safety signals
- As these methods will be tested in a wide range of data sources, PROTECT will facilitate the evaluation of safety issues in different population groups

Potential impact of Project Results

Benefit-risk integration and representation

- PROTECT will provide a clearer understanding of how to weigh benefits and risk of a medicine and highlight the data and value judgments needed in these process
- The development of a shared framework it also has the potential to avoid unnecessary delays in decision-making about the licensing of medicines.

Training and communication

- PROTECT will promote the dissemination of project results among interested stakeholders and the development of continuous training programmes in pharmacoepidemiology and pharmacovigilance (link to EU2P)
- PROTECT will also promote the widespread use of new tools and methods by scientists from academia, regulatory authorities and pharmaceutical companies.

Management Structure and Procedures

The Consortium Assembly (CA)

One representative of each PROTECT participant or a person representing him.

Responsibilities:

- To adopt annual budget
- Review Project Management Plan
- To provide recommendations to the Steering Committee regarding any aspect of the PROJECT

Meeting: once a year

The External Advisory Board (EAB)

10 experts from pharmacovigilance, pharmacoepidemiology, biostatistics, benefit assessment and public health

Responsibilities:

- To identify any critical step, activity in the work programme
- To provide general guidance, and recommendations
- To consult additional experts if necessary
- To provide input to the Steering Committee
- To advise the steering committee on the communication and dissemination of outcomes

Meeting: once a year

List of members of the External Advisory Board

Name	Affiliation	Expertise
De Vries Corinne, PhD	Department of Pharmacy and Phamacology, University of Bath, UK	Pharmacoepidemiology
Trevor Gibbs, MD	Former Head of Global Pharmacovigilance and Product Safety, GSK, UK	Pharmacovigilance Health Outcomes Public Health
David Haerry	European AIDS Treatment Group (EATG), Brussels, Belgium	Public Health Patients' preference
Vicky Hogan, MSc	Associate Director General, Marketed Health Products Directorate (MHPD), Health Canada, Canada	Benefit-risk assessment
Michael Lewis, MD	EPES Epidemiology, Pharmcoepidemiology and Systems Research GmbH, Berlin, Germany	Pharmacoepidemiology
Allen Mitchell, MD	Slone Epidemiology Center, Boston, USA	Perinatal epidemiology Pharmacoepidemiology
Marcus Müllner, MD	Head of AGES PharmMed (Austrian Medicines and Medical Devices Agency), Austria	Benefit-risk assessment Clinical epidemiology Pharmacovigilance
Gerald Dal Pan, M.D., M.H.S.	Director Office of Drug Safety, Center for Drug Evaluation and Research (CDER), Food and Drug Administration (FDA), USA	Pharmacovigilance Drug development Public Health & Risk management
Munir Pirmohamed, MD	Department of Pharmacology and Therapeutics, University of Liverpool, UK	Pharmacology Pharmacovigilance
Samy Suissa, PhD	Division of Epidemiology/Biostatistics, McGill University, Montreal, Canada	Biostatistics Pharmacoepidemiology

Management Structure and Procedures

Steering Committee

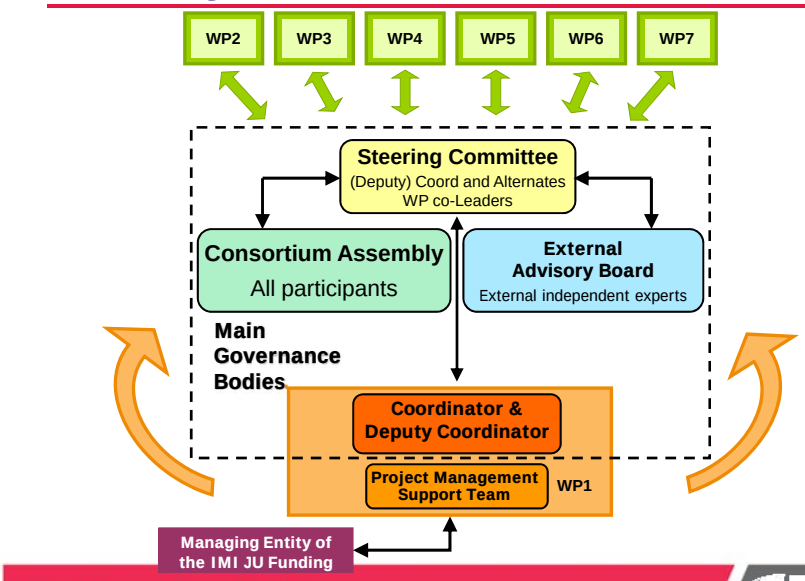
It has the central role in the governance structure and the management of the project, includes all Work Package co-leaders , the Coordinator, the Deputy Coordinator

Responsibilities:

- To finalise and approve the PROTECT Management Plan
- To take decisions for the initiation and execution of activities
- To approve the budget allocation to Work Package members
- To provide scientific recommendations to Work Package leaders
- To take decisions regarding communication and dissemination of the Project delievarbles
- To discuss and resolve conflicts that may arise during the course of the project
- To take decisions regarding the admission of new Partners from the Extended Audience.

Meeting: once a month

Management structure



Dissemination of Results

The Project will generate a number of reports providing standards and recommendations which Will be widely disseminated through:

PROTECT web portal
It will include a webpage accessible to the general public where relevant deliverables for public Use will be posted http://www.imi-protect.eu/index.html

Publications
Most deliverables of the project will be produced in the first instance as reports delivered to the IMI JU and they will also be published and disseminated through the appropriate mediums

ENCePP network
The European Network of Centres for Pharmacoepidemiology and Pharmacovigilance is a project led by the EMEA intended to further strengthen the post-authorisation monitoring Of medicinal products in Europe. The results of the PROTECT programme will be made available to all ENCePP members. http://www.encepp.eu/