

Pharmacovigilance

Key considerations for Risk Management Plans

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Outline of the presentation

- 1. Introduction
 - Background
 - Evolution of pharmacovigilance
- 2. Risk Management Plan
 - Content
 - Considerations
- 3. Conclusions



Introduction

Who am I?

- Deputy European Union Qualified Person for Pharmacovigilance (EU QPPV) at MSD
- Based in the Netherlands
- Over 18 years in Pharmacovigilance
 - Medicines Evaluation Board (CBG-MEB)
 - European Medicines Agency (EMA)

Providing an EU perspective



Introduction

What is Pharmacovigilance?

WHO definition: The science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug related problems

Objectives of pharmacovigilance are (per EU GVP Annex I – Definitions):

- preventing harm from adverse reactions of authorised medicinal products; and
- promoting the safe and effective use of medicinal products, in particular through providing timely information about the safety of medicinal products to patients, healthcare professionals and the public

Monitoring of the Benefit/Risk profile of medicinal products throughout their lifecycle



Introduction

Why is Pharmacovigilance important?

At start of medicinal product lifecylce:

- Limitations around knowledge of safety profile
 - Inclusion/exclusion criteria
 - Study population different
 - Study population limited

Need for continuous monitoring after authorisation to ensure patient safety Very rare ADRs are identified still for 'old' medicinal products too





Introduction

It all started with AE collection

- Softenon / thalidomide
- Example of serious ADR detected through spontaneous reporting of cases
- Sparked organisations to formally collect AEs

Followed by Periodic Safety Update Reports (PSUR)

- Mandatory in Europe since 1997
- Summary of available safety information





Introduction

Moving towards a more pro-active approach:

- Signal detection/management ٠
- Post-authorisation Studies ۲
- **Risk Management Plans** ۲

(channeling, compliance, 1. Counting crude numbers of indication) spontaneous adverse events 1987

2. Exposure correlates duration of use, confounding by

3. Proactive Risk Management Plans, more focus on drug use context, molecular/genetic correlates

2005



Courtesy professor H Leufkens University of Utrecht/MEB Utrecht

2007

Risk Management Plan

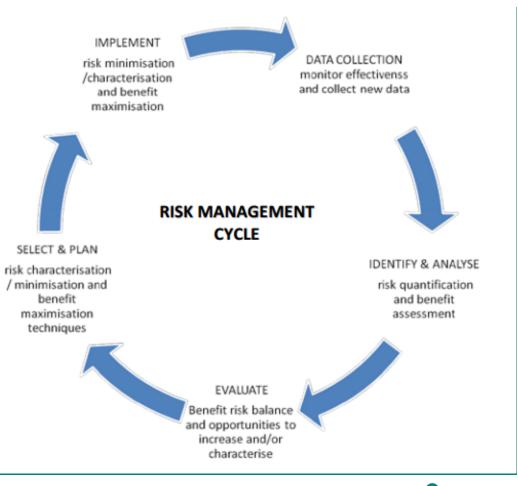
Pro-active approach to pharmacovigilance

Risk Management Plan - A set of pharmacovigilance activities and interventions designed to identify, characterise, prevent or minimise risks relating to a medicinal product

For a new chemical entity or new biological, the uncertainty is highest:



But process of identifying, evaluating, planning and executing continues throughout the lifecycle for all medicinal products



Risk Management Plan

EU RMP is structured according to GVP Module V, rev. 2

Part I	Product(s) overview
Part II	Safety specification
Module SI	Epidemiology of the indication(s) and target population(s)
Module SII	Non-clinical part of the safety specification
Module SIII	Clinical trial exposure
Module SIV	Populations not studied in clinical trials
Module SV	Post-authorisation experience
Module SVI	Additional EU requirements for the safety specification
Module SVII	Identified and potential risks
Module SVIII	Summary of the safety concerns
Part III	Pharmacovigilance plan (including post-authorisation safety studies)
Part IV	Plans for post-authorisation efficacy studies
Part V	Risk minimisation measures (including evaluation of the effectiveness of risk minimisation activities)
Part VI	Summary of the risk management plan
Part VII	Annexes



Risk Management Plan

Safety Specification (Part II) description (in line with ICH E2E) leads to:

- Important Identified Risks
- Important Potential Risks

Summary of the safety concerns

• Missing Information

Identified risk – there is adequate evidence of an association with the medicinal product of interest (ICH)

Potential risk – there is some basis for suspicion of an association with the medicinal product of interest but where this association has not been confirmed (ICH)

Missing Information – gaps in knowledge about a medicinal product, related to safety or use in particular patient populations, which could be clinically significant (GVP)

"Important"?

- Risk that could have an impact on the risk-benefit balance of the product or have implications for public health (ICH)
- <<we'll come back to this later >>



Risk Management Plan

Pharmacovigilance Plan (Part III)

- Description of pharmacovigilance activities designed to identify and characterise risks associated with the use of a medicinal product
- Closely linked to GVP Module VIII on Post-authorisation safety studies (PASS)
- Routine pharmacovigilance activities:
 - Continous activities required for <u>all</u> authorised medicinal products, like AE collection and analysis, signal detection, PSURs
 - Not tied specifically to a safety concern in the RMP
- Additional pharmacovigilance activities:
 - Post-authorisation safety studies (non-clinical studies, clinical trials or non-interventional studies)
 - Linked to a specific safety concern in the RMP with details/milestones/protocols included in the RMP



Risk Management Plan

Risk Minimisation Measures (Part V)

- Interventions intended to prevent or reduce the occurrence of adverse reactions associated with the exposure to a medicine, or to reduce their severity or impact on the patient should adverse reactions occur
- Closely linked to GVP Module XVI on Risk minimisation measures and effectiveness indicators
- Routine risk minimisation activities:
 - Apply to every authorised medicinal products, and include the summary of product characteristics; the package leaflet; the pack size
- Additional risk minimisation activities:
 - Only when needed for the safe and effective use of the medicinal product, with details and justification provided in the RMP should not be a repetition of the routine
 - Examples are, educational programmes; controlled access programmes; anything other than routine details on how the effectiveness of these activities will be measured should be provided



Considerations

'Important' risks to be included in the RMP

What is 'Important'?

- Impact on the risk-benefit balance / implications for public health
 - not all safety information, not all ADRs
- Include those risks for which additional activities are planned to further characterise or minimise
- Rule of thumb: Consider to include what is planned to be reflected in the 'Contraindications' and 'Warnings&Precautions'
- Difference between completely new products and more mature/older products:
 - More uncertainty around the safety profile versus more well-established safety profile
 - Modified requirements for RMPs for generics, fixed combinations

Considerations

Evolution of the RMP over time

- Expectation that the RMP changes over time -
 - Risks are removed, new ones introduced, activities completed, new ones started, due dates amended, etc.
 - New indications are added, or use in a new population is introduced, or changes in handling of the medicinal product
 - Safety profile becomes more well-established over time less risks and activities expected in the RMP
 - Sometimes, even 'empty' no important risks, missing information or additional activities
- Harmonisation of the RMP
 - Different MAHs with medicinal products that contain the same active substance (generics)
 - In Europe, project (HaRP) where Health Authority publishes which risks and additional activities that can be used to keep RMPs aligned (limited to old products)
 - Alignment with RMP of innovator product (if possible)



Considerations

Risk communication in risk minimisation activities

- For HCPs and/or patients and caregivers? What is the correct target audience?
- What is the best tool? How to ensure the message gets across?

Effectiveness measurement of risk minimisation activities

- Discussion on what and how in RMP sometimes a study
- Not always easy to do in practice -

RMM: Prescription restriction	Indicator to assess effectiveness
Contraindication in patients with certain medical condition	% patients prescribed the drug with the contraindicated medical condition (EHR)
Restricted treatment period	% patients who were prescibed longer than recommended (EHR and PR)
Dose adjustment for concomitant medication	% patients with adjusted concomitant medication (EHR and PR)

Example:

Measurements in Electronic Health Records (EHR) or in Pharmacy Records (PR)



Conclusions

- RMP describes the risks that need further characterisation or minimisation
- RMP is a 'living document' it changes over time
- Routine activities are in place by default RMP focus is on the additional activities
- Details of additional PV activities and additional risk minimisation should be in the RMP
- Measurement of effectiveness of additional risk minimisation measures can be challenging





Thank you

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