

Perspective of the regulator on readiness of registry data

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Patient Registry Initiative

$$\frac{C \quad B \quad G}{M \quad E \quad B}$$

Registry

An organised system that uses observational methods to collect uniform data on specified outcomes in a population defined by a particular disease, condition or exposure.

Regulators generally prefer *patient (disease) registries* over *product registries*

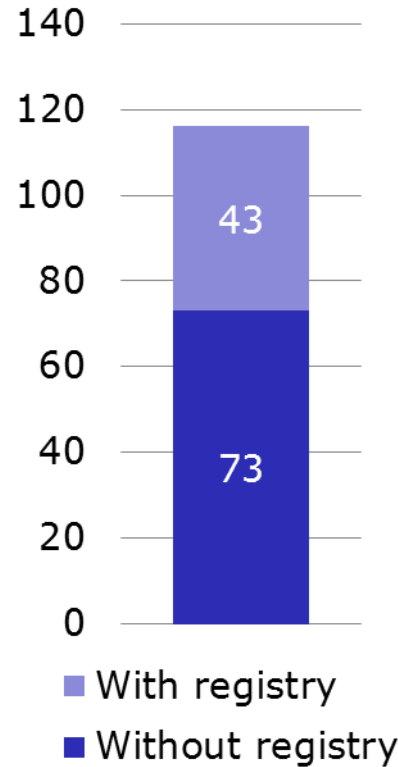
- They gather insights on clinical outcomes of conditions with different treatments, rather than on the outcomes of specific treatments
- They allow comparisons
- They are generally better integrated into health care systems.

Registries supporting new drug applications

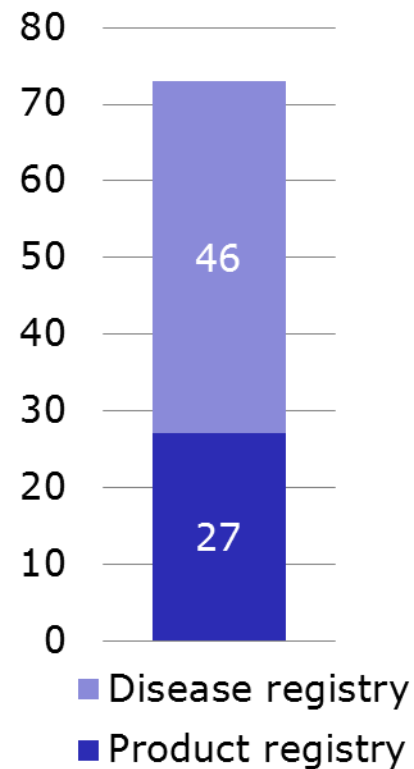
$\frac{C \ B \ G}{M \ E \ B}$

1 Jan 2007 to 31 Dec 2010

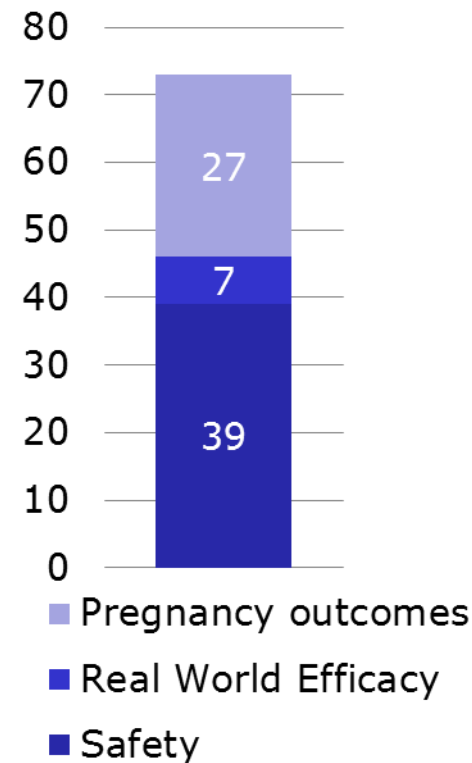
New Drugs



Type of Registry



Primary Aim



Key facts

43 new drugs with
1 to 6 registries

9 imposed registries

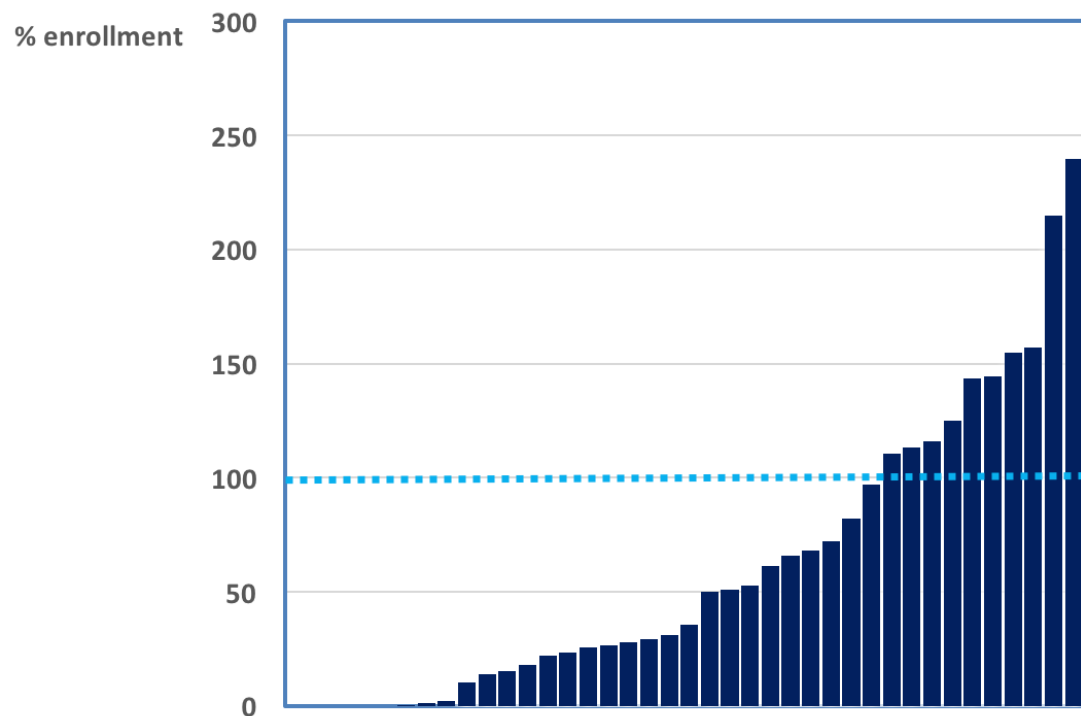
15 Orphan drugs

13 Conditional Approval /
Exceptional Circumstances

-> level of innovation and
orphan status predict
approval with registries

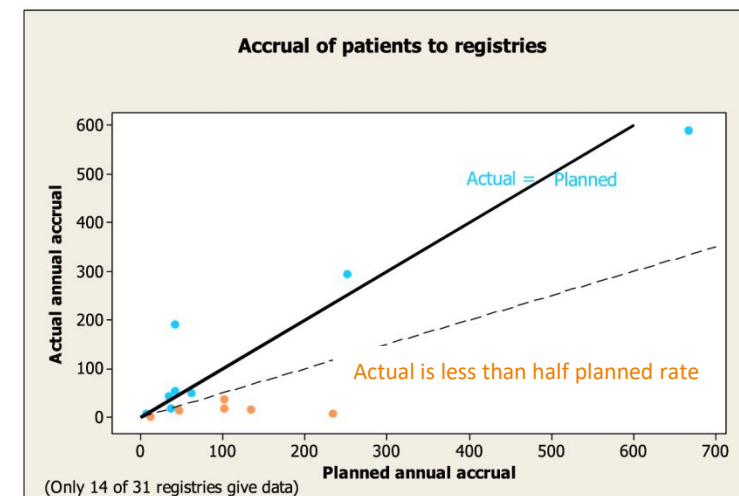
Enrolment

$$\frac{C \ B \ G}{M \ E \ B}$$



Enrolment in 41 of 73 registries (registry studies) with predefined sample sizes (a median of) 5 years after approval

Jonker C et al. *Clinical Therapeutics* 2018



Bouvy J et al. *Pharmacoepidemiol Drug Saf.* 2017;1–8

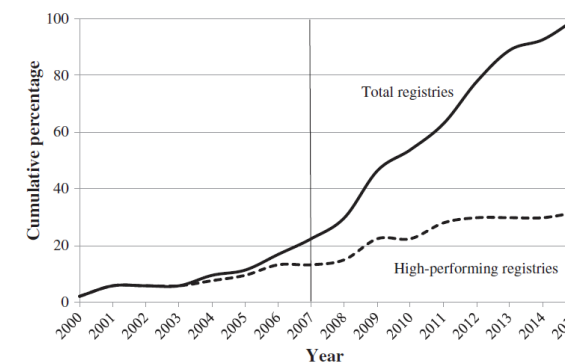


FIGURE 1 Cumulative distribution of postmarket product registries. Total registries represent the 54 registries identified that have initiated (nonpending status)

Zhao Y et al. *Pharmacoepidemiol Drug Saf.* 2018;1–8

Reasons for problems encountered

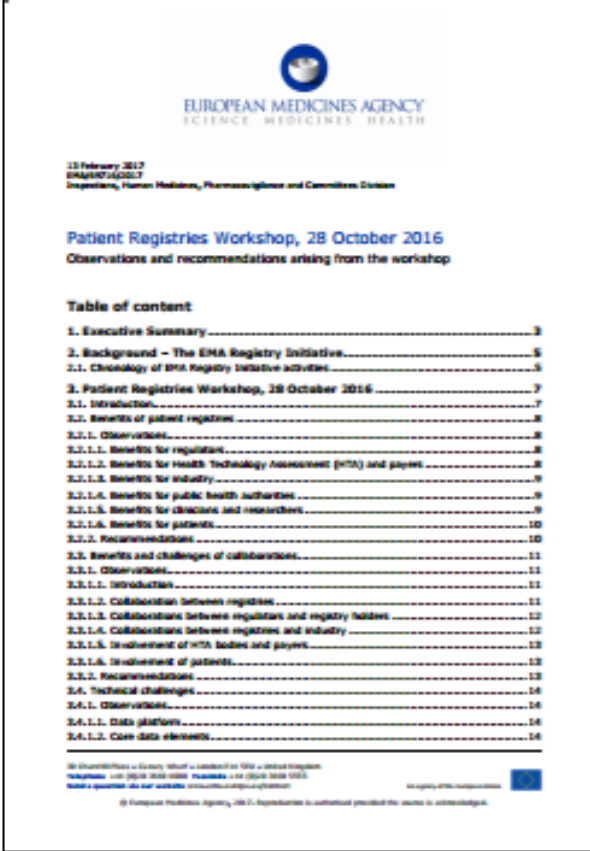
$$\frac{C \quad B \quad G}{M \quad E \quad B}$$

Approach to registries often suboptimal in scientific and resource terms

- Existing registries not fully exploited → duplication of efforts and inefficiencies
- Discrepancy between data collected by registries and data requested by regulators
- *Existing patient (disease) registries were not set up for regulatory purposes*
- *Challenges in using registries for regulatory studies:*
 - **Recruitment:** lack of physician engagement due to administrative burdens, patient consent, low product usage and competing registries
 - **Data quality:** representativeness of registry population, missing data
 - Lack of consistent data **quality control**
 - **Sustainability** (funding)
- So companies may prefer to establish individual product registries

The EMA's Patient Registry Initiative

- Launched, September 2015 – Cross-Committee Task Force
- *Aims to facilitate use of patient (disease) registries by introducing and supporting a systematic approach to their contribution to the benefit-risk evaluation of medicines*
- **Pilot phase, 2016:** Stakeholder feedback encouraged an active role of EU network in supporting collaboration for greater utilisation of disease registries



The image shows the cover of a report from the European Medicines Agency (EMA). At the top is the EMA logo and the text 'EUROPEAN MEDICINES AGENCY SCIENCE · MEDICINES · HEALTH'. Below this, it says '12 February 2017 EMA/017420/17 Regulatory, Human Medicines, Pharmacovigilance and Communications Division'. The title is 'Patient Registries Workshop, 28 October 2016' followed by 'Observations and recommendations arising from the workshop'. A 'Table of content' is listed with page numbers. At the bottom, there is a disclaimer: 'This document is a summary of the workshop and is not a formal EMA document. It is for information only and does not constitute a legal or regulatory position. It is not intended to be used as a basis for decision-making.' and a copyright notice: '© European Medicines Agency, 2017. Reproduction is authorized provided the source is acknowledged.'

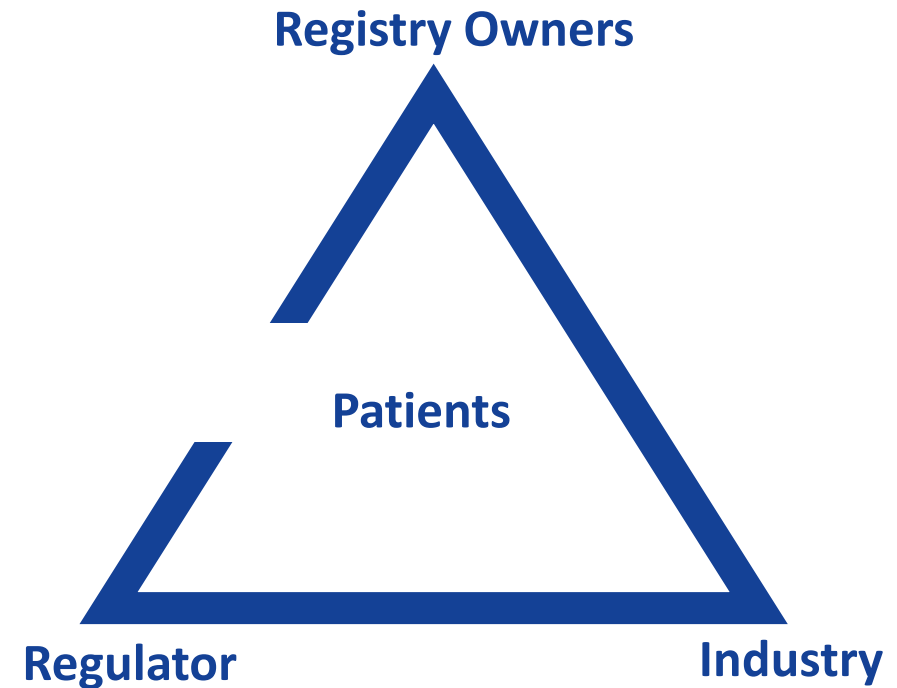
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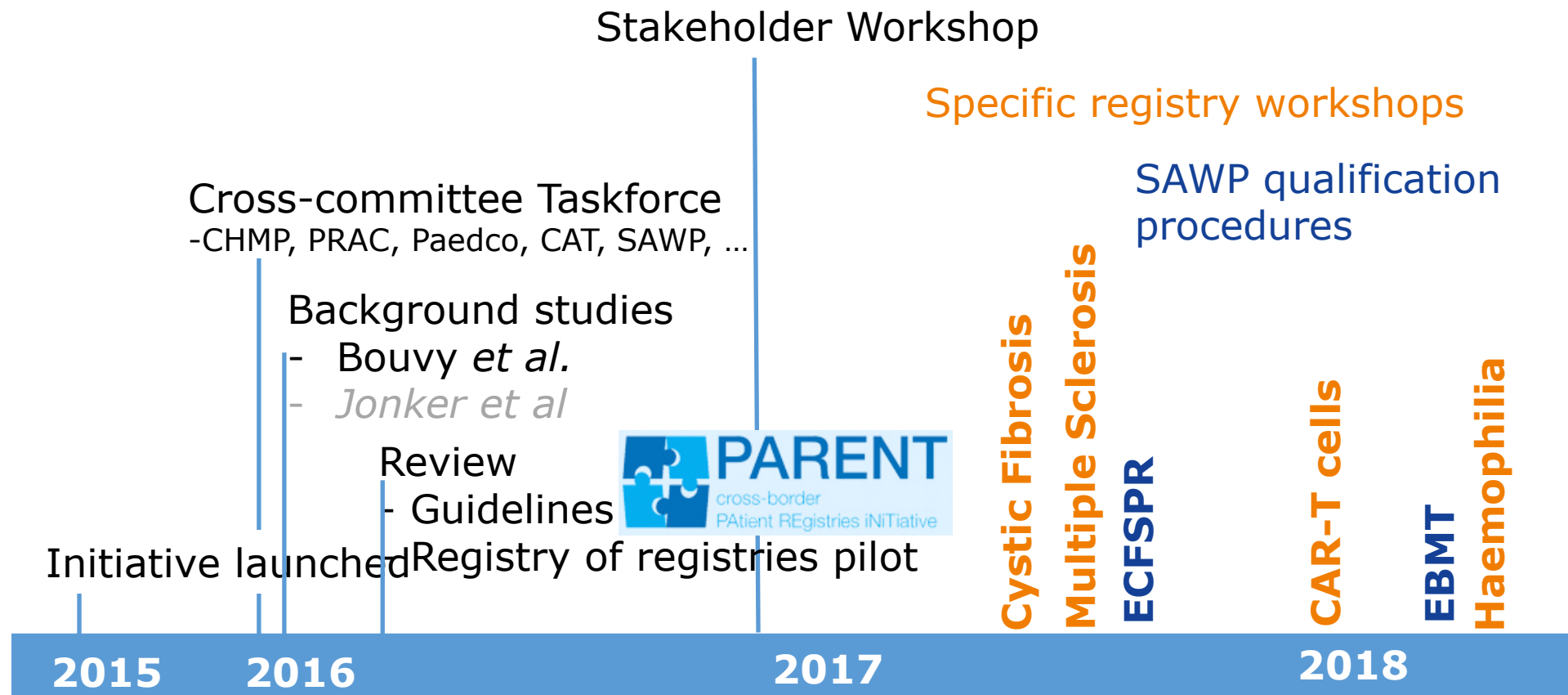
Patient Registry Initiative strategy - key components

- To promote dialogue between regulators, companies and registry holders to understand barriers and opportunities of using disease registries.
- To clarify concepts: **registry vs. study** that may be registry-based



Patient Registry Initiative

$\frac{C \ B \ G}{M \ E \ B}$



**Cystic Fibrosis Registries Workshop:
14th June 2017**

**Multiple-Sclerosis Registries Workshop:
7th July 2017**

**CAR T-Cell therapies Registries
Workshop: 9th February 2018**

**Haemophilia Registries Workshop:
8th June 2018**

**Participants: regulators, companies, registry
holders, health technology assessment bodies,
patient and health care representatives**

Diseases selection?

- ✓ Products recently authorised or authorisation process ongoing
- ✓ New products - business pipeline
- ✓ EU disease registries have requested support for harmonisation
- ✓ On-going qualification procedures for two EU-wide registry platforms

Lessons learned and challenges

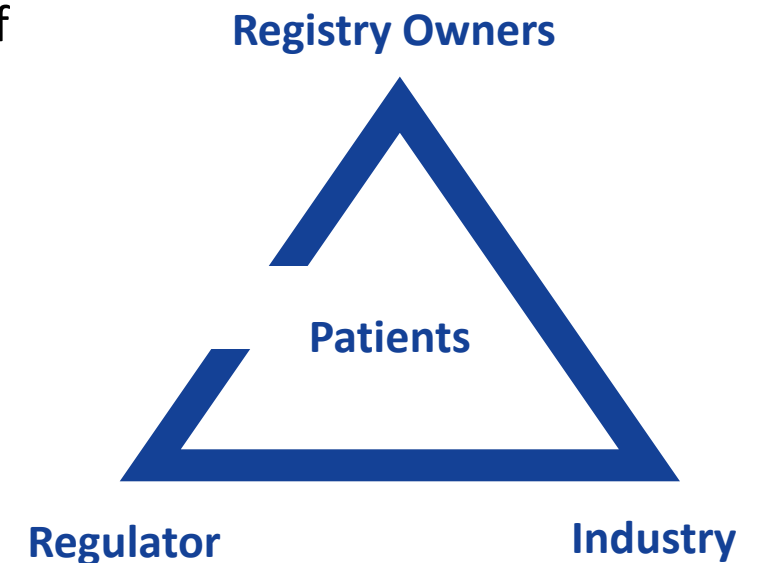
Governance

- **Regulators and marketing authorisation holders / applicants (MAHs/MAAs)**
 - Need to be aware of data that can be feasibly be collected by registries
 - Inform registries on their data needs - early discussions
 - Process for collecting and reporting adverse events defined / described in study protocol
- **Registry holders**
 - Develop policy for timely data sharing based on data protection and informed consent
 - Establish a system for centralised data application requests
 - Require sustainable funding for registries
- **All**
 - Transparency on access to, sharing of, and publication of data

How can regulators support use of disease registries?

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- **Methodological guidance** on use of disease registries from a regulatory perspective
- **Scientific Advice** on PASS/PAES study protocol using registries, e.g. joint collaborative studies
- **Inventory of disease registries**
https://www.ema.europa.eu/en/documents/regulatory-procedural-guideline/encepp-resource-database-inventory-patient-registries_en.pdf
- **Facilitation of interactions** between regulators, industry and registry holders during the entire life cycle of a product
- **Collaboration with EU initiatives**, e.g., EUnetHTA Joint Action 3, EC JRC European Platform on Rare Disease Registration
- **Qualification procedure**



Guideline on registry-based studies

$\frac{C \ B \ G}{M \ E \ B}$



1 24 September 2020
2 EMA/502388/2020

3 **Guideline on registry-based studies**
4 Draft

5

Draft approved by the Cross-Committee Task Force on Registries	May 2020
Draft sent to the EU Regulatory Network for consultation	9 July 2020
Start of public consultation	24 September 2020
End of consultation (deadline for comments)	31 December 2020

6
7

Comments should be included in the [form](#) published with this draft guideline, and should be sent to EMAregistries@ema.europa.eu by 31 December 2020.

8

- Recommendations on key methodological aspects that are specific to the use of patient registries by marketing authorisation applicants and holders (MAAs/MAHs)
- Aspects of patient registries that regulators consider important for their use in registry-based studies are included
- Checklist for evaluating the suitability of registries for registry-based studies

RWD/RWE in applications submitted in 2018-2019

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Objective: Characterise RWD/RWE included in centralised marketing authorisation applications (MAA) and extensions of indications (EoI) submitted in 2018-2019 and **explore its contribution** to benefit-risk decision-making.

RWE in MAAs and EoIs – Preliminary results

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RWD/RWE used in **40% of MAAs** (mainly post-authorisation) and in **18% of EoIs** (mainly pre- or post-authorisation)

Majority of products: **Antineoplastic** and **Immunosuppressants** (35% MAA and 42% EoI)

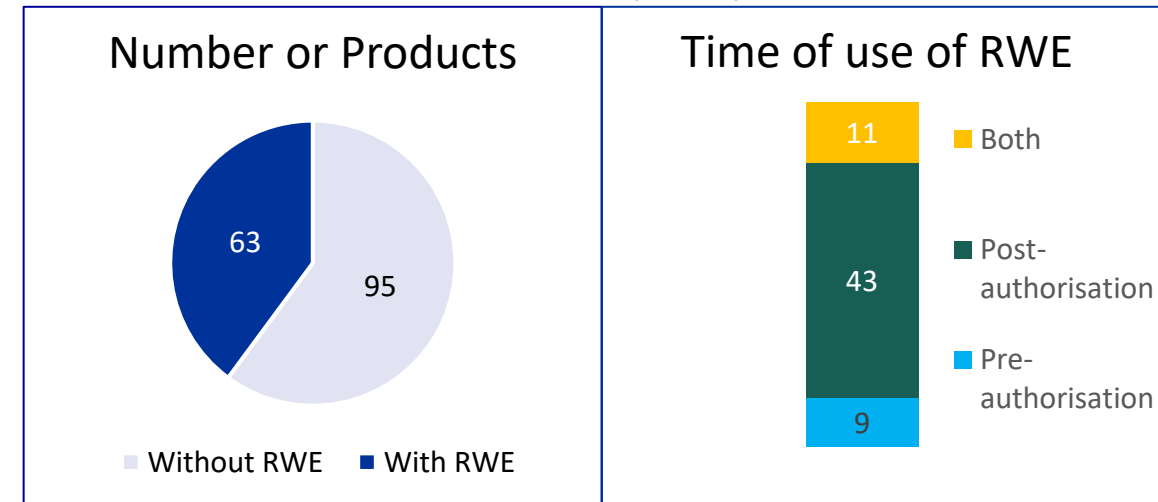
- Possible reasons: Single arm trial designs, Identification of patients for non-interventional study/Feasibility analysis, Patterns of drug utilisation, Need to collect data on long term safety/effectiveness

When used pre-authorisation: mainly **supporting** study looking at **efficacy/effectiveness**

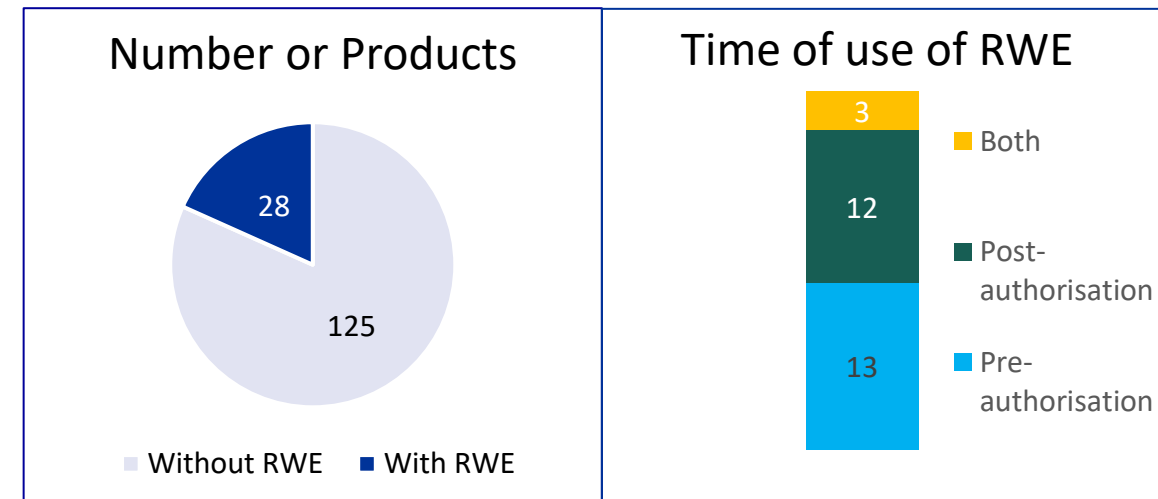
When used post-authorisation: mainly **RMP Category 3** (for studies included in RMP) looking at **safety**

Xavier Kurz (EMA), submitted

Initial MAA (n=158)



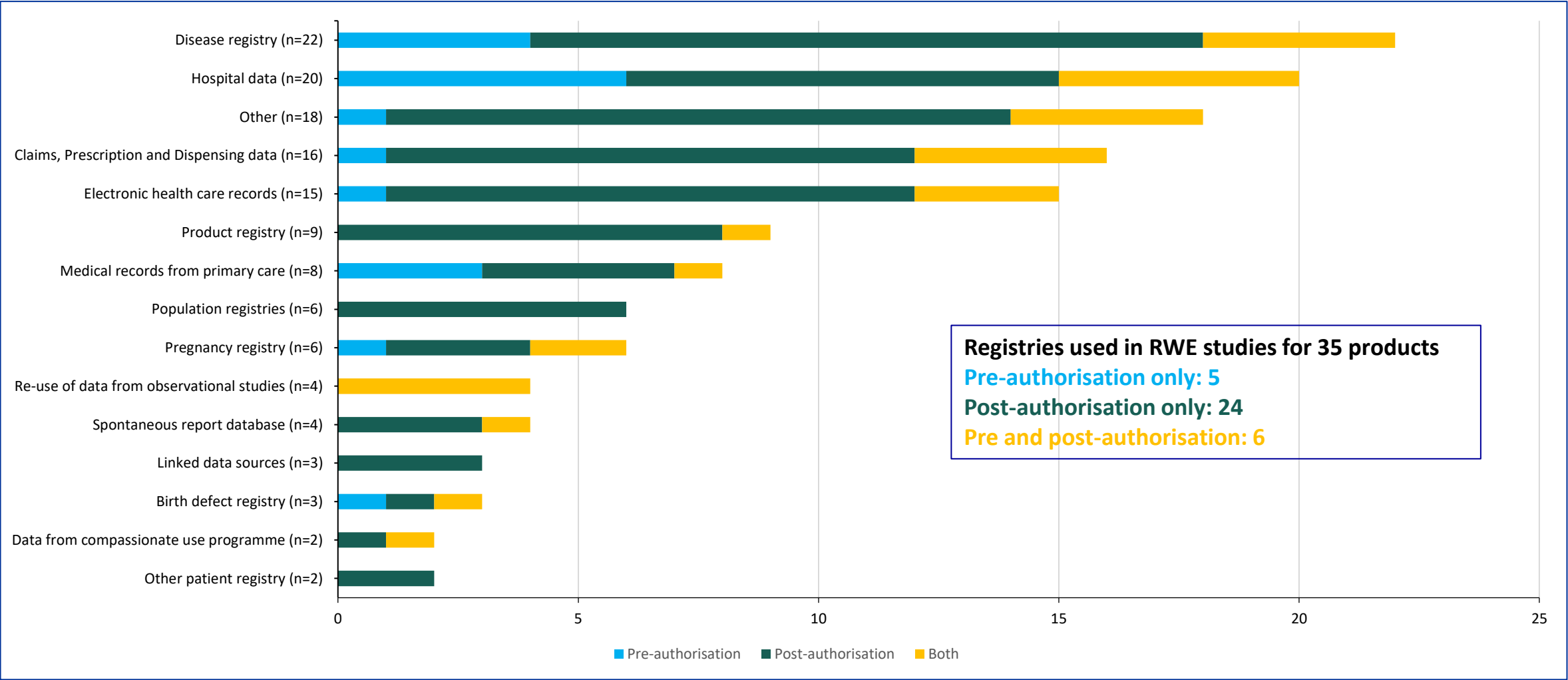
Extension of indication (n=153)



Preliminary results: MAAs

RWE studies (n=138), products submitted (n=63)

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* Example of "Other": follow-up questionnaires of cases of medication errors, medical charts, data sources not specified. "Other" is mainly selected in combination with other specified data sources

- Paradigm shift from “product registry owned by single company” to “(joint) collaboration with disease registry for long-term patient follow-up”
- Concerns about data quality of existing disease registries but workshops revealed high interest from companies and registry holders to collaborate
- Gap between the amount/type of data collected in disease registries and data requested by regulators
- Early interactions between regulators and registry holders may help bridge the gap
- EU regulatory network develops tools to support use of disease registries, such as methodological guidance (registry-based studies)



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