

EUROPEAN
MEDICINES
AGENCY

What are the regulatory needs in terms of registry data?

Joint HMA/EMA multi-stakeholder workshop on Patient Registries
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An agency of the European Union



RCT's and RWD

RCTs gold standard for providing information regarding drug efficacy and safety

Value of RWD is increasingly acknowledged

- Transform, accelerate and de-risk decision making
- Improve efficiency in design and conduct of trials
- Increase public health impact

Marketing Authorisation

- Contextualize study results
- Ensure generalisability of results to target population

Post-Authorisation

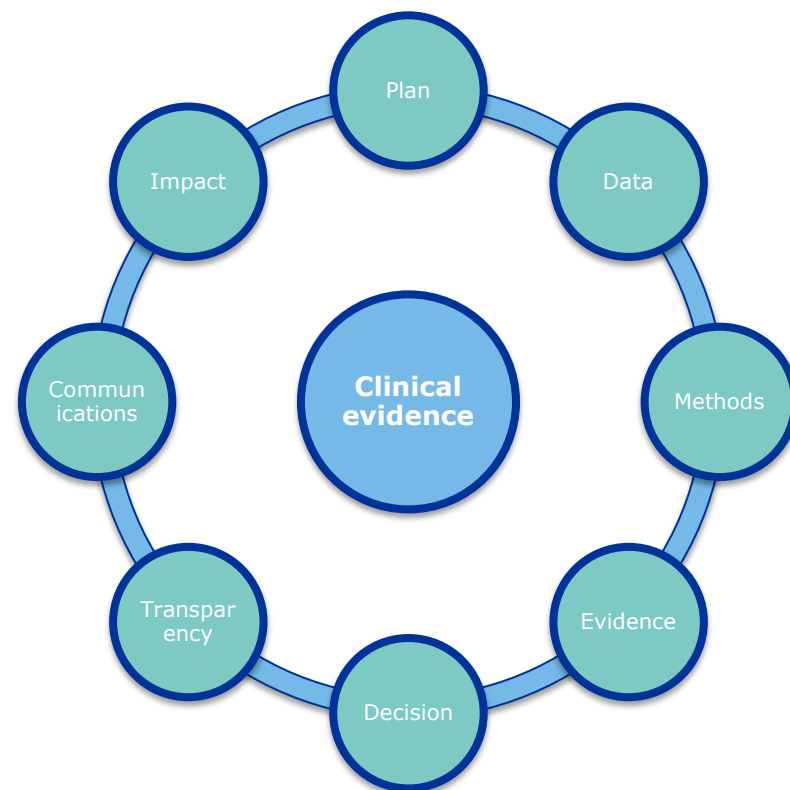
- Appreciate real-world value
- Long-term B/R balance



Treachery of Images (1929) by René Magritte









The vision: Clinical evidence 2030

- Evidence generation is planned and guided by data, knowledge and expertise
- Research question drives evidence choice: embraces spectrum of data and methods
- **Clinical trials remain core but are bigger, better and faster**
- **Real world evidence is enabled, and value is established**
- The patient voice guides every step of the way
- Healthcare systems are supported in their choices
- High levels of transparency underpin societal trust





Key differences between RCT's and RWE

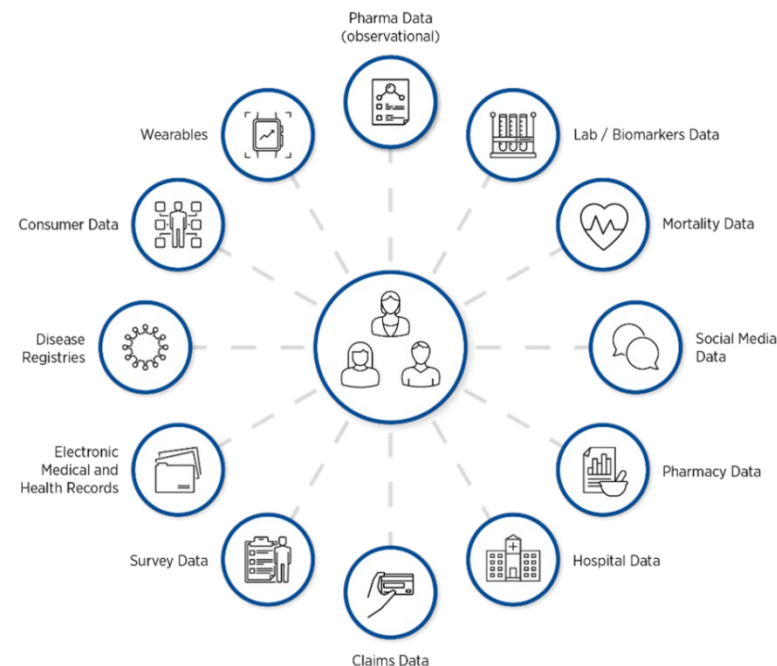
	RCT	RWE	
OBJECTIVE	 Does the drug work in an ideal setting?	Does the drug work in real life?	
	Regulatory approval	Drug performance in actual clinical practice	 PURPOSE
TREATMENT	 Fixed pattern	Variable pattern	
	Placebo / selected alternative intervention	Active comparator / usual care	 COMPARATOR
STUDY GROUP	 Homogenous, highly selective	Homogenous, any subjects	
	High	Low to high	 COMPLIANCE
FOLLOW-UP	 Designed, continuous monitoring	Variable, patient and doctor dependent	
	High internal, low to medium external	Low internal, medium to high external	 VALIDITY

Source: <https://www.medengine.fi/opinion/what-is-your-real-world-data-strategy/>



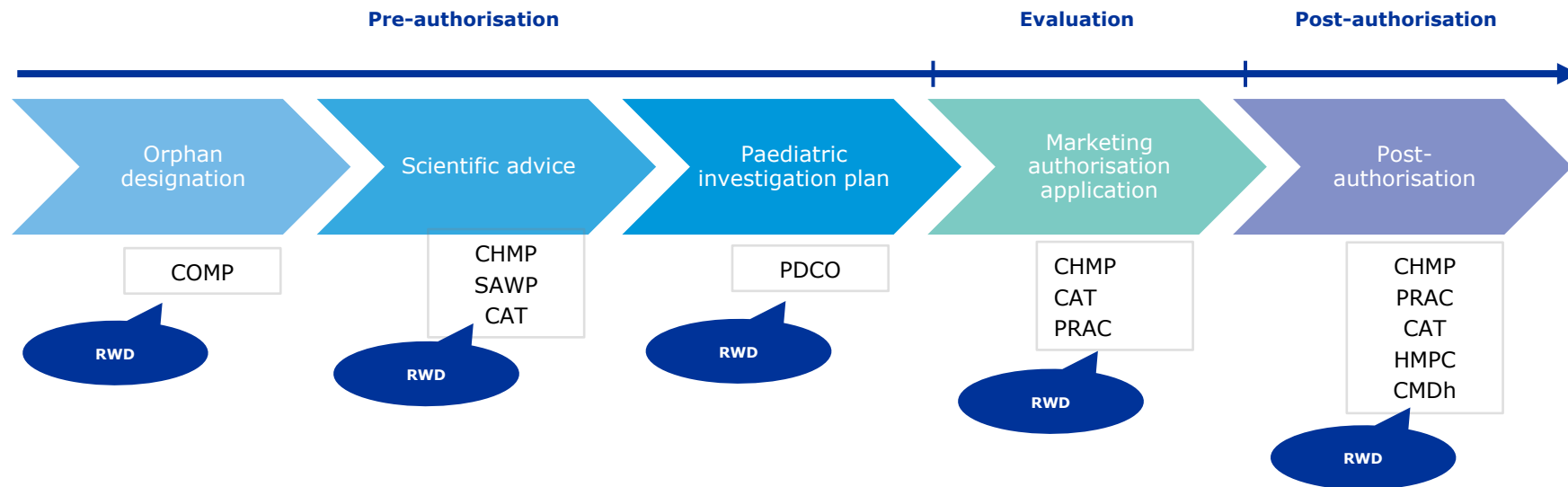
RWD

- Personalised medicine – smaller target populations
RWD could complement RCT evidence
- Various types of RWD
- Regulators largely rely on patient registries:
Systematic, curated, disease-specific data in clinical practice with good quality standards while reflecting real-world behaviors and effects
- Traditionally regulators use RWD for safety evaluation and long-term B/R, but...
- Exposure to RWD across all phases of drug development is increasing.





RWD use across the medicinal product lifecycle





Three main areas for which RWD analyses can support EMA committees' decision-making

1

Understand the clinical context

Disease epidemiology

Clinical management

Drug utilisation

2

Support the planning and validity

Design and feasibility of planned studies

Representativeness and validity of completed studies

3

Investigate associations and impact

Effectiveness and safety studies

Impact of regulatory actions



Combining PRE- and POST-marketing authorisation use of registries

PRE-marketing authorization use of a registry (RWD)

- ❖ For a better knowledge on **disease** characteristics
 - Disease course, natural or with SOC
 - Identification of biomarkers

POST-marketing authorization use of a registry (RWD)

- ❖ For a better knowledge on the **medicine's or treatment's** characteristics
 - Refine benefit (quantitative, comparative)
 - Increase safety data
 - Further optimize treatment (posology)
 - Identification of surrogates for treatment effect

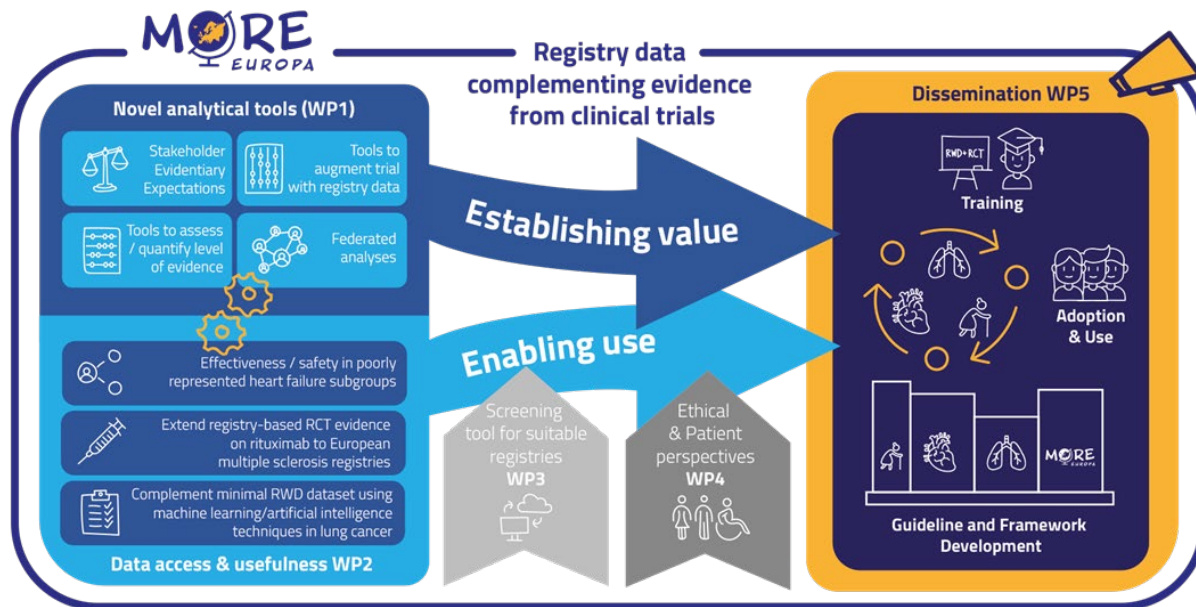


Use cases

Medicinal product	Indication	Authorisation	Use of RWE
Zolgensma (onasemnogene abeparvovec) ATMP	For the treatment of spinal muscular atrophy and a specific mutation in patients <2 years of age	2020	Data from a single-arm study. Data from two natural history studies provided the information of the natural course of the disease.
Rybelsus (semaglutide)	For the treatment of adults with insufficiently controlled type 2 diabetes mellitus as an adjunct to diet and exercise	2020	Medullary Thyroid Carcinoma Surveillance Study: a Case-Series Registry to evaluate further a potential association between treatment with long-acting GLP-1 RAs and the occurrence of medullary thyroid carcinoma in humans.
Nulibry (fosdenopterin)	To treat patients with molybdenum cofactor deficiency (MoCD) type A	2022	The outcome results in patients treated with Nulibry were compared with historical data from studies involving patients who did not receive Nulibry or any other treatment.



The More-EUROPA project



More-EUROPA Kick-Off Meeting May 2023

WP1/WP5: Web based survey study to get insight on the views of different players on the topic of evidence needs, more specifically the role of real-world data and patient registries in their line of work.



Web based survey study – Preliminary results (WP 1 team)

108 regulators

Age groups:

18-30 years: 2%
31-40 years: 19%
41-50 years: 30%
51-60 years: 31%
61-70 years: 15%
71+ years: 1%

Gender: 63% women

Work experience:

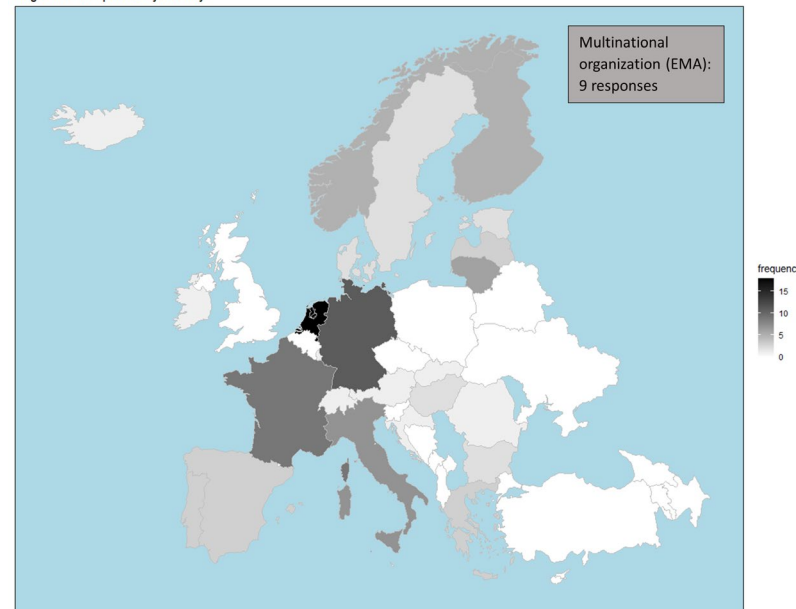
<2 years: 12%
3-5 years: 13%
6-10 years: 17%
>10 years: 57%

Other responders:

n = 95

27 HTA/payers
28 Industry
40 Academia/others

Regulators: Responses by Country

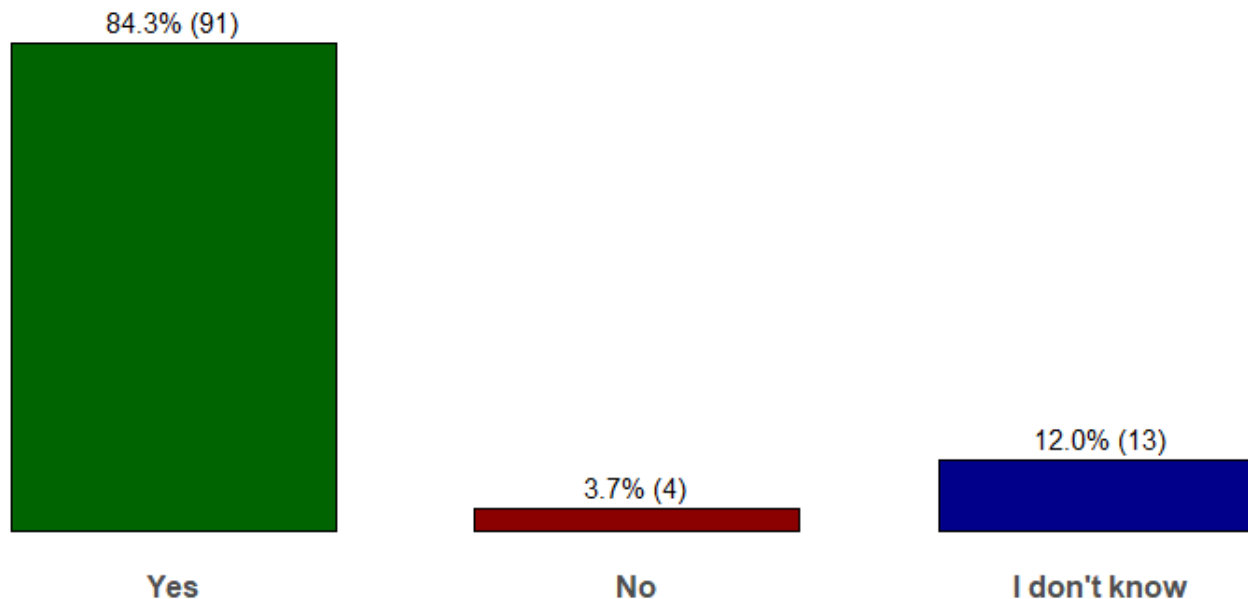


**percentages do not round up to 100 because of rounding and/or missing data*



EU-regulators agreement with the definition of patient registries

"An organized system that collects uniform data (clinical and other) to identify specified outcomes for a population defined by a particular disease, condition or exposure"

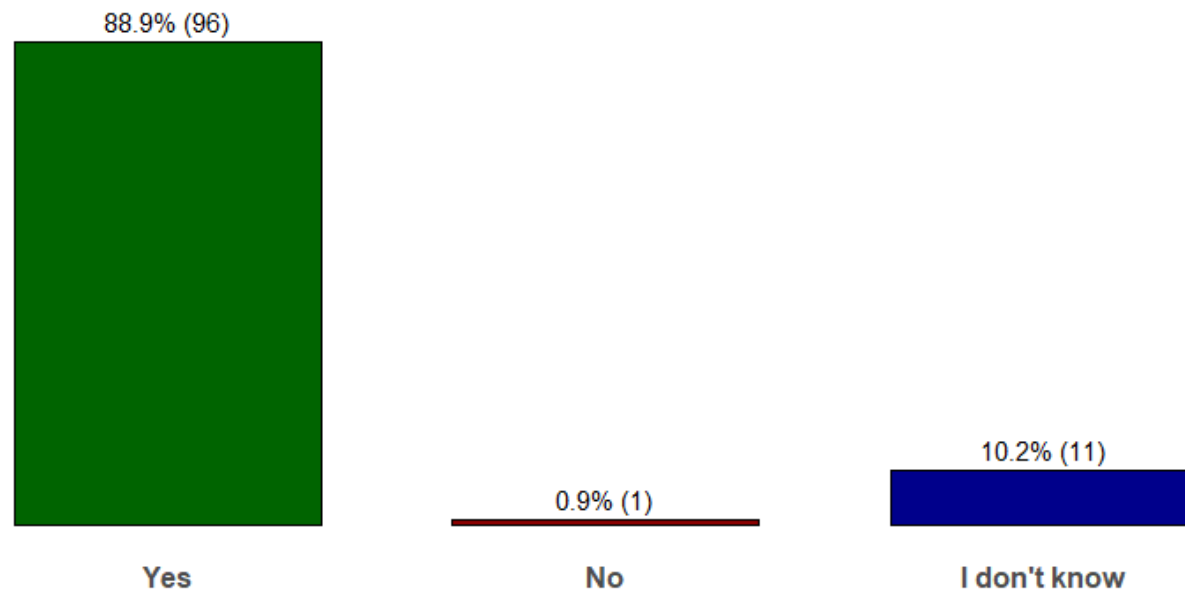


*absolute frequency in brackets



EU-regulators agreement with the definition of registry-based registries

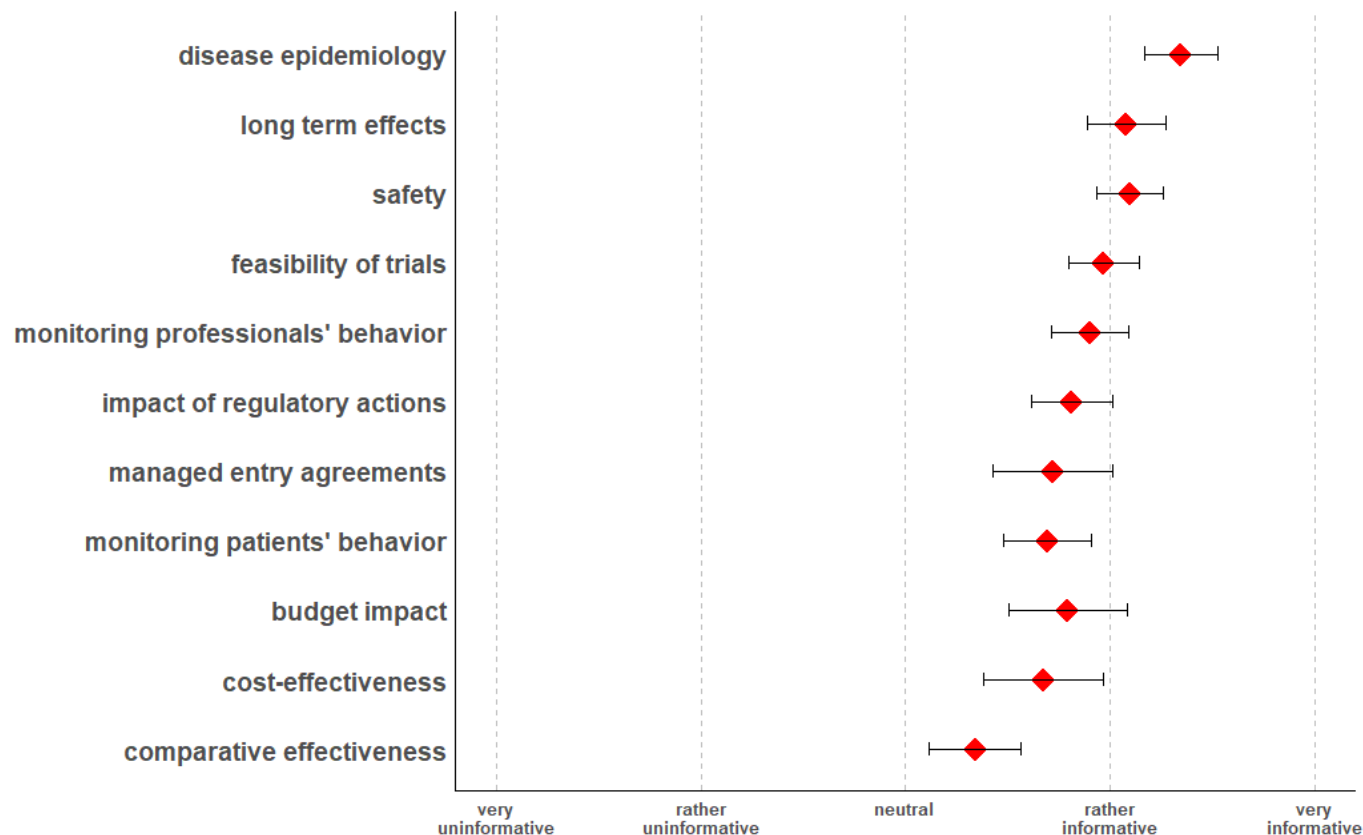
"The investigation of a research question using the data collection infrastructure or patient population of one or more patient registries"



*absolute frequency in brackets



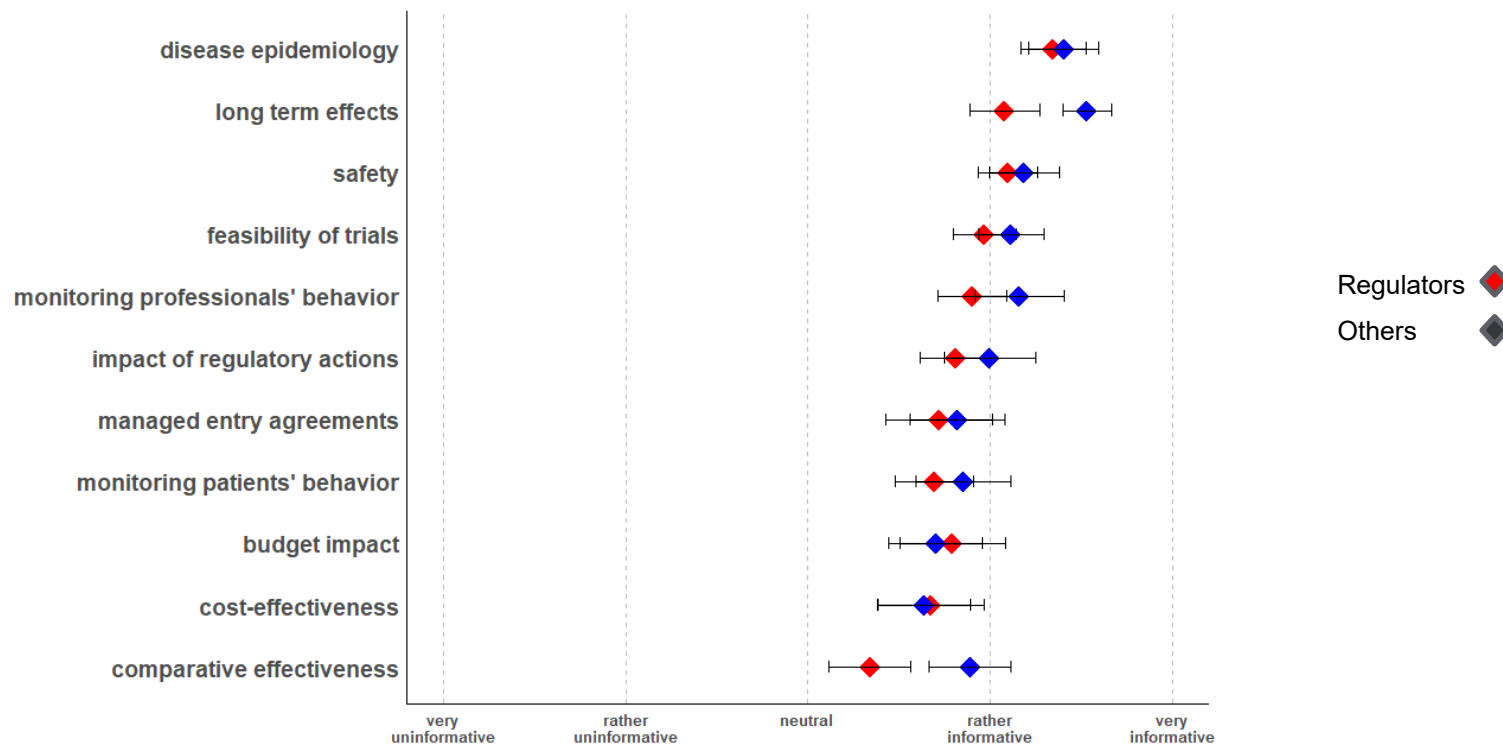
In your view, how informative are patient registry data for studying the following aspects?



*displaying means and standard deviations

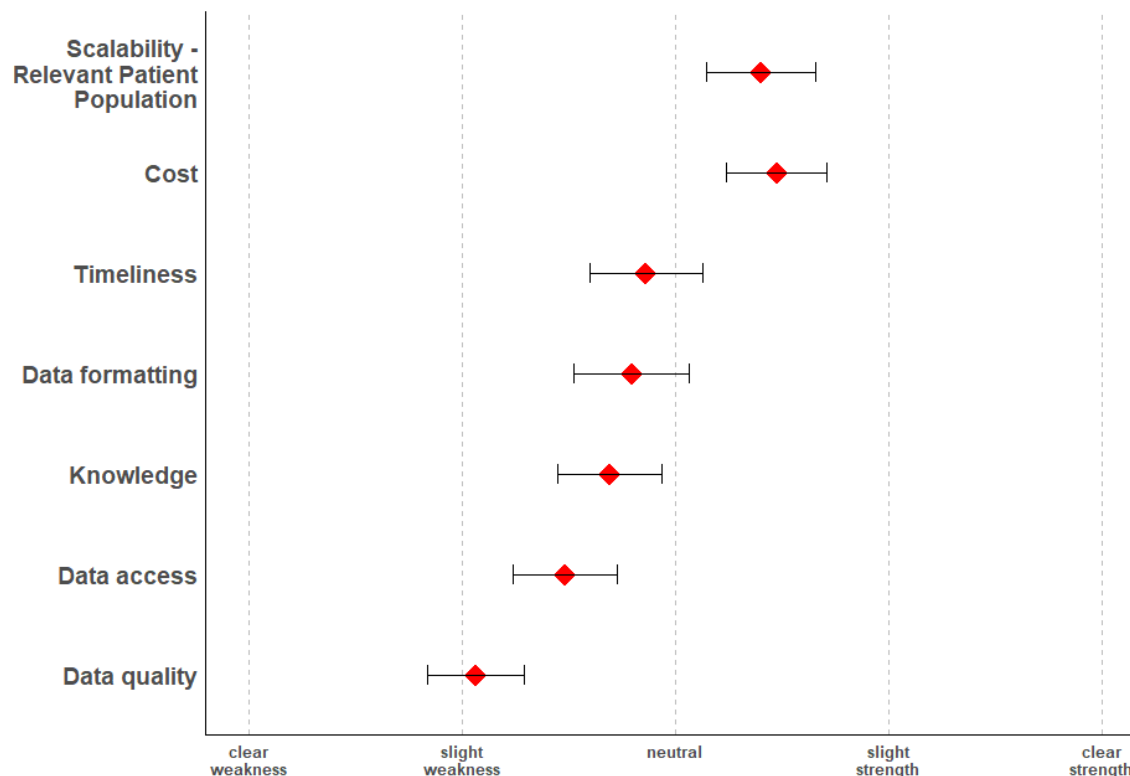


In your view, how informative are patient registry data for studying the following aspects?



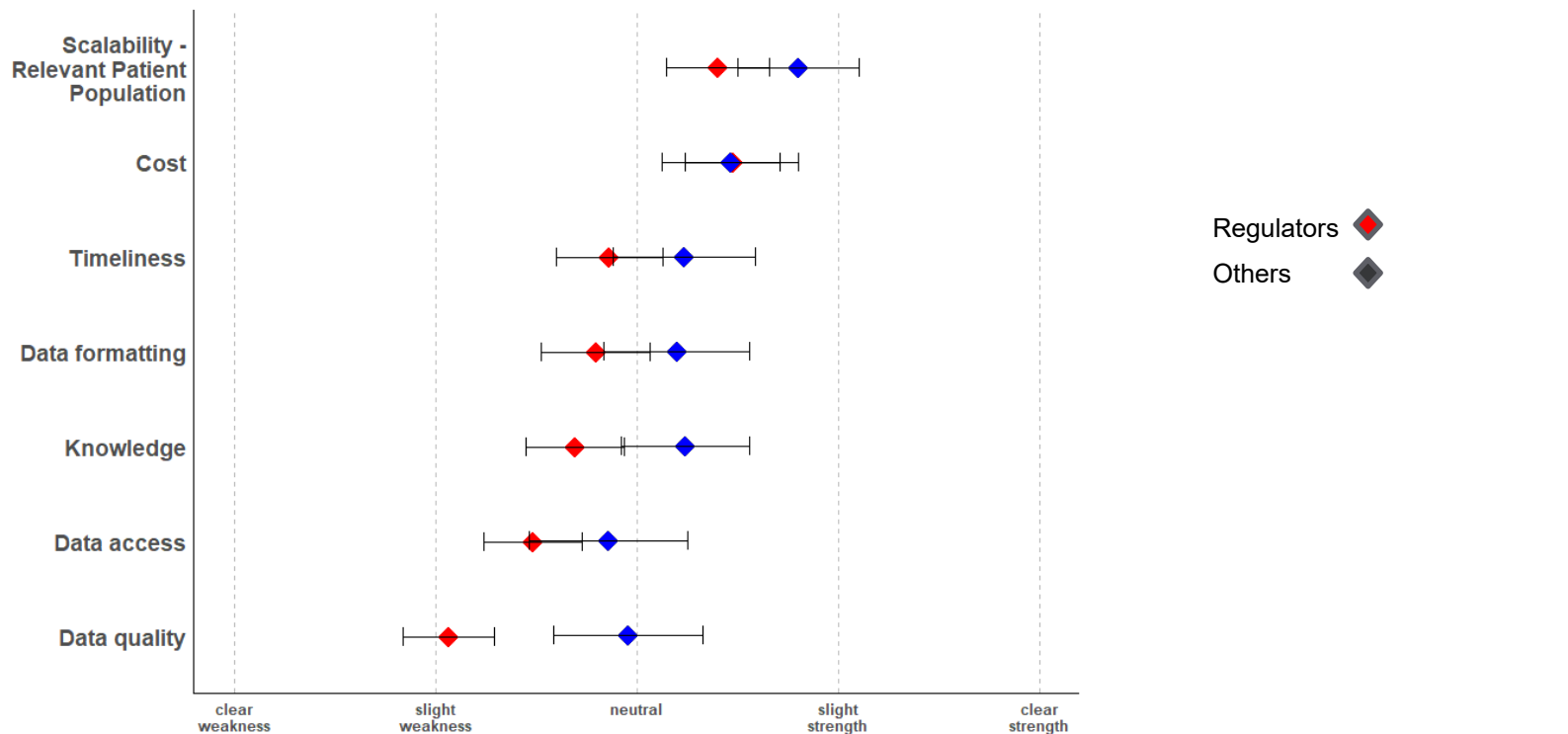


Do you view each of these aspects as a potential weakness or strength of using data from existing patient registries for decision-making?





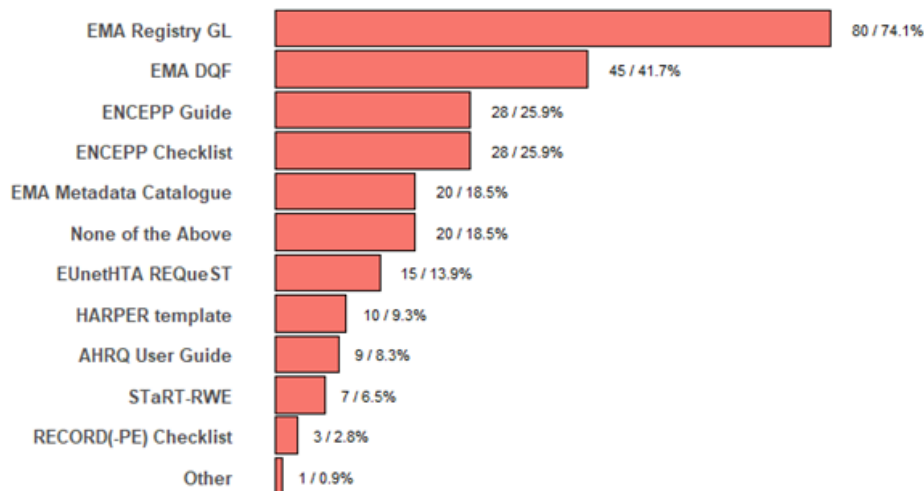
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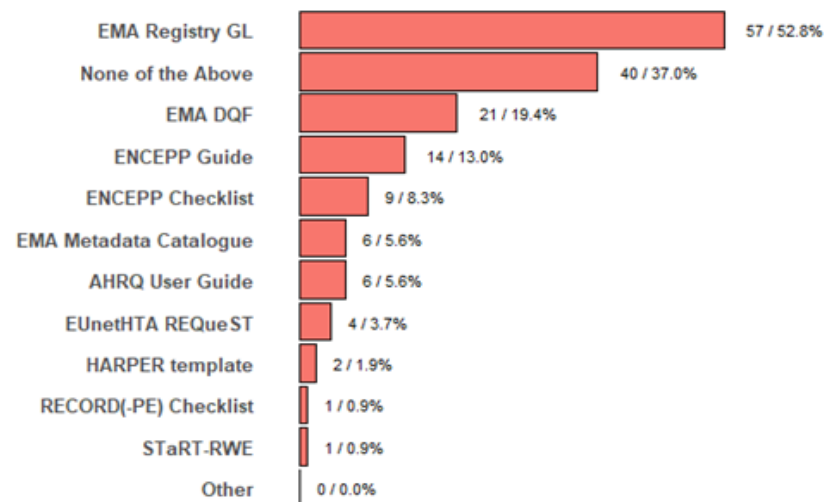
EU regulators' familiarity with guidance documents

Regulators: Which guidance are you familiar with?



Use of guidance documents when assessing registry-based evidence

Regulators: Which guidance do you use?





Conclusions

- RWE in supporting the evaluation of medicines across different phases of development has been evolving, driven by the ability to answer specific research questions
- There is large agreement with EMA-definitions for patient registries and registry based studies
- In general patient registries are considered informative to study disease epidemiology, long term effects, and safety
 - Other responders a bit more positive regarding its use for assessing long term effects and comparative effectiveness
- Scalability – relevant patient population and cost are considered as slight strengths of registries
- Data quality and data access are considered as slight weakness of patient registries
 - Other responders generally a bit more positive except for costs
- Regulators are familiar with EMA and ENCEPP registry-guidance, but there is less actual use
 - Surprisingly large number reports using none of the guidances



Take Home Messages from the Regulator Perspective

- RWE have been used and will continue to be used (Regulators cannot afford not to use these data)
- Data (or registry) quality and transparency is crucial

The crucial regulatory need

- Powerful tool when used in complement to RCTs
- Enabling the use of RWE and establishing its value supports safer and more effective use of innovative medicines



Source: <https://copperbowl.de/Chess-Pieces-Tier-List-Cape-Fear-Games-61289.html>