

Funding programmes and regulatory science research

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Application of regulatory science: win-win for research consortia and regulators

- Early engagement of regulators is key for innovation planning and development in the context of understanding regulatory requirements
- Enabling faster translation of health technology innovation into practice



- Regulators are informed about ongoing research, including methodology
- Awareness of opportunities and bottlenecks, e.g. innovative pathways of earlier access; need for better regulatory evaluation methodology of AI

Horizon Europe call 2022: “New methods for the effective use of real-world data and/or synthetic data in regulatory decision-making and/or in health technology assessment”



The challenge

- Harness RWD and synthetic data for regulatory decision-making and for health technology assessment (HTA)

Research & innovation needs

- Develop evidentiary standards in the analysis of real-word data (RWD) and/or synthetic data for regulatory decision making and/or HTA
- Define methodological standards for the regulatory acceptability of RWD and/or synthetic data
- Develop machine learning methods to help process and analyse RWD and/or synthetic data for regulatory decision making and HTA

EU research & innovation policies

- Synergise with the European Health Data Space and the DARWIN initiative

The MetReal project cluster



(01/2023 - 12/2027)



(12/2022 - 11/2026)



(01/2023 - 12/2026)



(01/2023 - 12/2026)



(01/2023 - 12/2026)



(11/2023 - 10/2026)

More-EUROPA: More Effectively Using Registries to support Patient-centered Regulatory and HTA decision-making

ONCOVALUE: Implementing value-based oncology care at European cancer hospitals: An AI-based framework for assessing real life effectiveness of novel cancer therapies in real-time

Real4Reg: Development, optimisation and implementation of artificial intelligence methods for real world data analyses in regulatory decision-making and health technology assessment along the product lifecycle

REALM: Real-world-data Enabled Assessment for health regulatory decision-Making

REDDIE: Real-world evidence for decisions in diabetes

INSAFEDARE: Innovative applications of assessment and assurance of data and synthetic data for regulatory decision support



Real4Reg: Unlocking Real-World Data with AI



- **Develop AI/ML-based methods & tools** for the effective analyses of RWD in regulatory decision-making & HTA for medicines
- **Conduct a retrospective observational cohort study**, based on national healthcare registers and claims data
- **Use-cases aligned with regulatory decision-making:** pre-authorisation, evaluation and post-authorization:
 - description of the study population (breast cancer, ALS)
 - historical controls & synthetic data (breast cancer, ALS)
 - safety assessment (fluoroquinolones)
 - effectiveness + drug repurposing (SGLT2 Inhibitors)

5



7 million EUR



2023-2026



10 partners



SUSTAIN-HTA



- **Understand the needs** of European HTA bodies for new innovative HTA methods and tools
- Take stock of the innovative HTA methods and tools developed so far, e.g. in recent EU-funded projects
- **Support HTA bodies in the uptake** of innovative methods and tools, tailored to their needs.

→ **Bridge the gap between HTA method development and implementation**

6



4.5 million EUR



2024-2027



15 partners



Trends

- Increasing emphasis on translation of basic research into clinical practice
- The regulatory step is a necessary step
- Awareness of regulatory aspects among researchers is of growing importance
- Interaction with regulators can be mandated in call topics
- Funding opportunities for new methods useful in regulatory or HTA decision making: NAMs, RWE, clinical trials methodologies, new statistical methods...



Thank you

