



Future-proof HTA

The need for innovative HTA methods for more complex and personalized medicine

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Farmaco-epidemiologie en Klinische Farmacologie



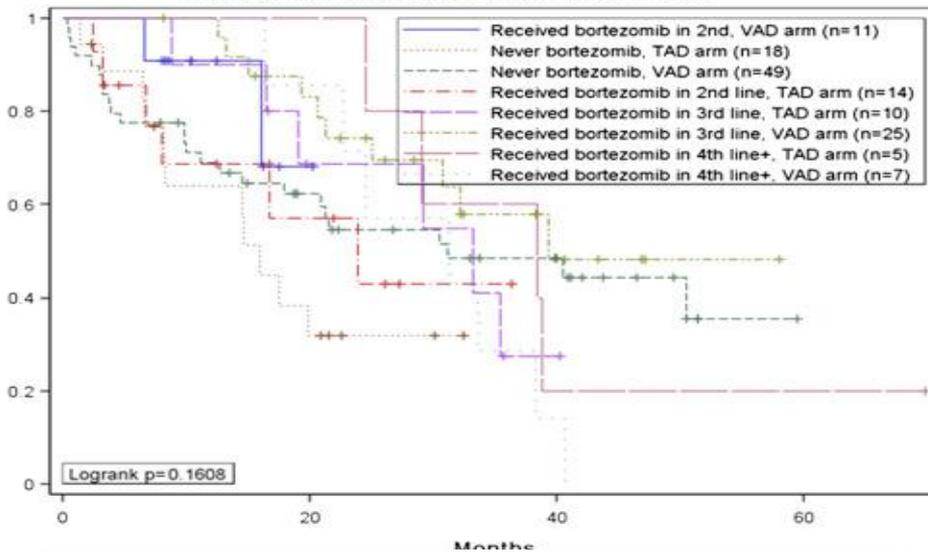
Universiteit Utrecht

New realities?

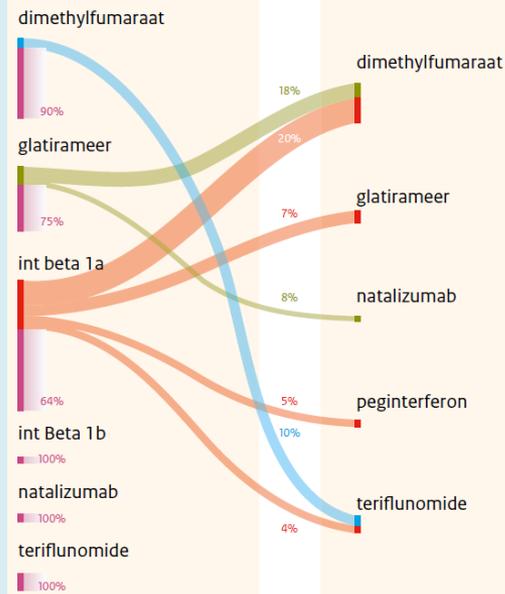
MM treatment in NL daily practice

MS treatment in NL daily practice

Product-Limit Survival Function Estimates



Franken, MG. et al. Policymaker, Please Consider Your Needs Carefully: Does Outcomes Research in Relapsed or Refractory Multiple Myeloma Reduce Policymaker Uncertainty Regarding Value for Money of Bortezomib? Value in Health 2014, Volume 17 , Issue 2 , 245 - 253



2014-2016

Bron: Zorginstituut Nederland o.b.v. declaratiedata van zorgverzekeraars, verstrekt via Vektis (2018) en Zorginstituut Nederland / GIP (2018)



Changing HTA paradigms (future-proof HTA?)

- **Personalized treatments**

- Smaller populations
- Combinations of treatments, different sequences
- Companion diagnostics (genetic testing)



- **Real world evidence (RWE)**

- **Internationalization**

- Clinical assessments on an European level for single technologies (pharma and medtech)



About the HTx project

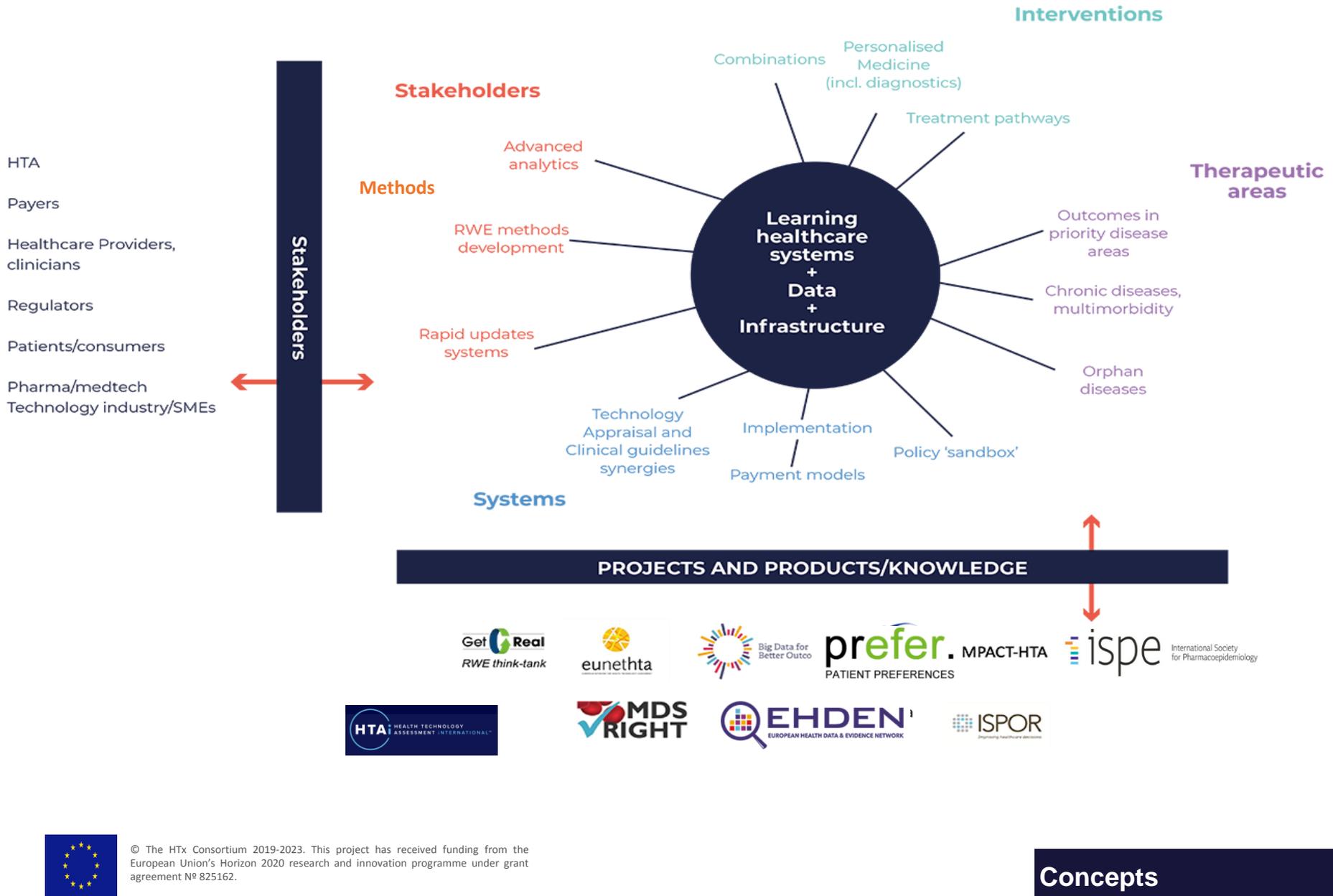
- **Horizon 2020 project** supported by the **European Union**, kicking-off in **January 2019** and lasting for **5 years**.
- Facilitate the development of methodologies to deliver more **customized information on the effectiveness and cost-effectiveness of complex and personalised combinations of health technologies**.
- Provide methods to **support personalised treatment advice** that will be shared with patients and their physicians.
- In close collaboration with the European Network for HTA (EUnetHTA) and its stakeholders **pilot the implementation of these methods in Europe**.



HTx – Participants

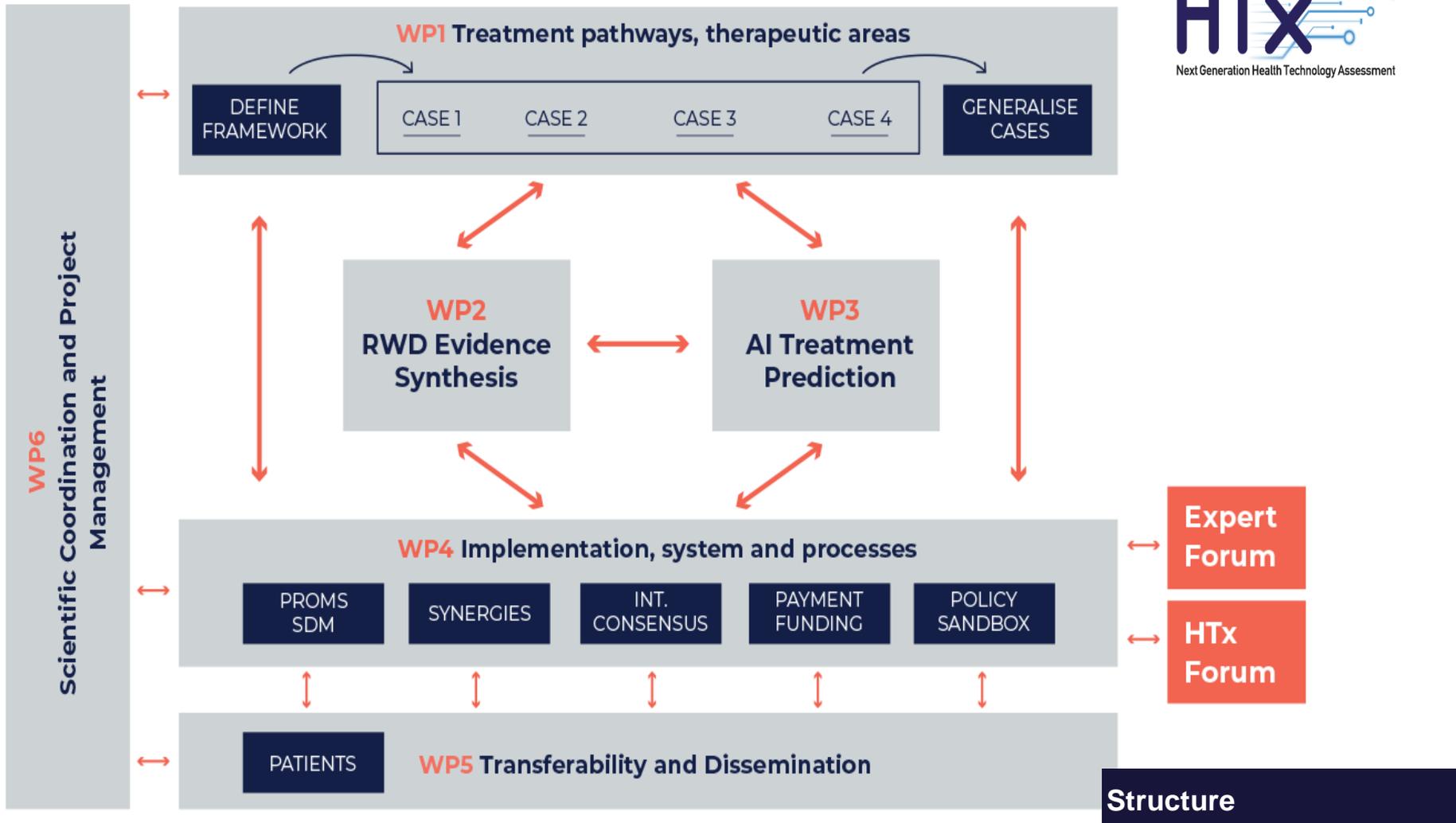
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- **Utrecht University (project coordinator) (UU) Netherlands**
 - **University of Copenhagen (UoC), Denmark**
 - **University of Oulu (UoO) Finland**
 - **University of York (UoY) UK**
 - **Medical University of Sofia (MUS) Bulgaria**
 - **University of Bern (UBERN) Switzerland**
 - **Universidad Politecnica de Madrid (UPM) Spain**
 - **European Organisation for Research and Treatment of Cancer (EORTC) Belgium**
 - **Dental and Pharmaceutical Benefits Agency (TLV) Sweden**
 - **National Health Care Institute (ZIN) Netherlands**
 - **National Institute of Health and Care Excellence (NICE) UK**
 - **Syreon Research Institute (SRI) Hungary**
 - **Synapse research management (SYNAPSE) Spain**
 - **EURORDIS Rare Diseases Europe (EURORDIS) France**
 - **University of Maastricht (UM) Netherlands**





© The HTx Consortium 2019-2023. This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 825162.

Concepts



Methods

- Prediction modelling on the basis of data using different study designs (RCT, RWD etc) (WP2)
- Health-econometric tools to take into account effects and costs (WP2)
- Develop AI/ML methods to forecast individual patient treatment outcomes (WP3)

Focus on combinations (and/or sequences) of health technologies not evaluated in RCT as such

WP1



Case studies

- Proton therapy for head and neck cancer
- Monitoring and treatment pathways in diabetes (T1DM and T2DM)
- Pharmacological treatments for relapsing multiple sclerosis (MS)
- Different treatment modalities in patients with myelodysplastic syndrome (MDS)

Including framework to generalize results to other indications and settings

WP1



Implementation and transferability

- Developing PROMS that are fit for purpose
- Link to flexible funding and reimbursement models
- International consensus on RWD and resulting HTx models between HTA, regulators and guideline developers
- Transferability of case study findings and methods across participating countries
- Develop and disseminate training materials to patients



How can success of HTx be measured?

- Clear methods developed for certain disease area's;
- Are practically used in healthcare practice
 - By HTA organisations to facilitate HTA for personalised treatments (including support appropriate use);
 - By healthcare providers as part of new guidelines
 - For individual patients and their clinicians
- Provides a general framework that can help other groups to develop methods for specific disease areas
- Has a clear link to national reimbursement and pricing processes.

