

Value-Based and Affordable Precision Medicine: Recommendations for Health Economic Modelling, Innovative R&D Funding and Provider-Payment

Matthijs Versteegh, PhD

Versteegh@imta.eur.nl



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 824997.



DISCLOSURES

iMTA is part of Erasmus University and receives funding from public and private payers. All contract research work is conducted independently, and all contracts have a publication clause to guarantee the freedom to publish results

The HecoPerMed project is funded solely by the European Union

THE HECOPERMED PROJECT

'Health Economics for Personalised Medicine' (HEcoPerMed) aims to identify the **best health economic modelling** and **payment strategies** for personalised medicine in order to **recognise valuable interventions** and **stimulate their adoption** across the EU.



Erasmus School of
Health Policy
& Management



syreon
Research Institute



Susanne Giesecke



Maren Walgenbach



Maureen Rutten-van
Mólken



Balázs Nagy



Sarah Wordsworth



Manuela Kienegger



Wolfgang Ballensiefen



Heleen Vellekoop



László Szilberhorn



Rositsa Koleva Kolarova



Andreas Weinhäusel



Hecopermed.eu

Simone Huygens



Tamás Zelei



Apostolos Tsiachristas



Günter Schreier



Matthijs Versteegh

OVERVIEW HECOPERMED PROJECT

WP1

1. Guidance on health economic modelling

- Provide a systematic review of existing model-based economic evaluations of personalised medicine
- Develop guidance on health economic modelling and identify best practices
- Conclude on current estimates of the value of personalised medicine

2. Application of best practice health economic modelling in personalised medicine

- Select three case studies in the area of personalised medicine
- Develop cost-effectiveness and budget impact models by using guidance developed in WP1
- Test and validate the applicability of the developed guidance and suggest adjustments

3. Financing and payment models

- Identify existing financing models and explore the views, concerns, and preferences of stakeholders with regards to designing appropriate financial incentives for personalised medicine
- Establish a set of appropriate financing and payment models for personalised medicine and provide recommendations for their adoption

"Case Studies"

"Financing and Payment"



Workshop II

Stakeholders' Conference



WP4

"Benefits & Challenges"



ational & Platforms, erMed

EcoPerMed
INTERNATIONAL CONSORTIUM

The guidance consists of 8 topics and 21 items

Perspective and
discounting

Test-treatment
combinations

Effectiveness data

Extrapolating survival

Additional elements of
value

Incorporating compliance

Uncertainty analysis

Managed entry agreements

R9: When a treatment requires the use of a test to stratify patients, include the (downstream) costs and health outcomes of testing for both individuals who test positive and individuals who test negative in the model.

R10. Include the costs and health outcomes of testing relatives of index patients with inheritable genetic mutations in the model.

R11 Where possible, use effectiveness data from trials with two (or more) alternative treatment strategies.

R13 When the comparative effectiveness of a treatment for a patient population with a specific genetic marker is estimated using an external data source for the comparator, account for the prognostic value of the genetic marker and differences in its prevalence across the different data sources.



R16: Only include elements of value recommended by national HTA guidelines in the base-case analysis. If additional elements of value are included in scenario analyses, ensure possible elements of negative value are equally considered and included for both the intervention and the comparator.

R17. Include parameters reflecting patient and clinician compliance in economic evaluations for decision-makers who require cost-effectiveness results under realistic circumstances.

R20: Identify uncertainties in structural assumptions and decisions and investigate their impact on cost-effectiveness results through sensitivity analysis. Parameterise structural aspects where possible.

R21: If a managed entry agreement is being considered for an intervention, include its conditions in the model evaluating the intervention.

