

HTx Focus Group

Synergies between regulatory authorities, HTA organisations and clinical guideline developers

May 10th 2021



General remarks

- This session will be recorded
- Please mute yourself when not speaking
- For short questions use the chat



Content

- Background of HTx
- Today's focus
- Why you are here
- Four case studies
- Today's schedule
- Moderators



Presenters



■ Dr. ir. Wim Goettsch

- Special advisor HTA at the Dutch National Health Care Institute
- Associate professor HTA at Utrecht University, PI of the HTx project



■ Milou Hogervorst, PharmD, MSc

- PhD candidate in HTx at Utrecht University



Background HTx

- 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 goal *'Learning health care systems'*

Using

Data generated in the system
Latest methods

Adaptive

Static vs dynamic decision making

Measure

With right outcomes
In right population
At right time



The HTx project participants?

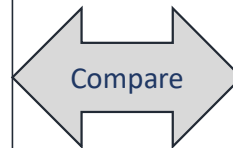
- 
- **Utrecht University (project coordinator) (UU)** Netherlands
 - **University of Copenhagen (UoC)**, Denmark
 - **University of Oulu (UoO)** Finland
 - **University of York (UoY)** UK
 - **Medical University of Sofia (MUS)** Bulgaria
 - **University of Bern (UBERN)** Switzerland
 - **Universidad 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



Statistics and artificial intelligence

RWD for evidence synthesis to support decision making

- Statistical prognostic and evidence synthesis methods
- Combining study designs
- Multiple treatment comparisons
- Individualised decision making



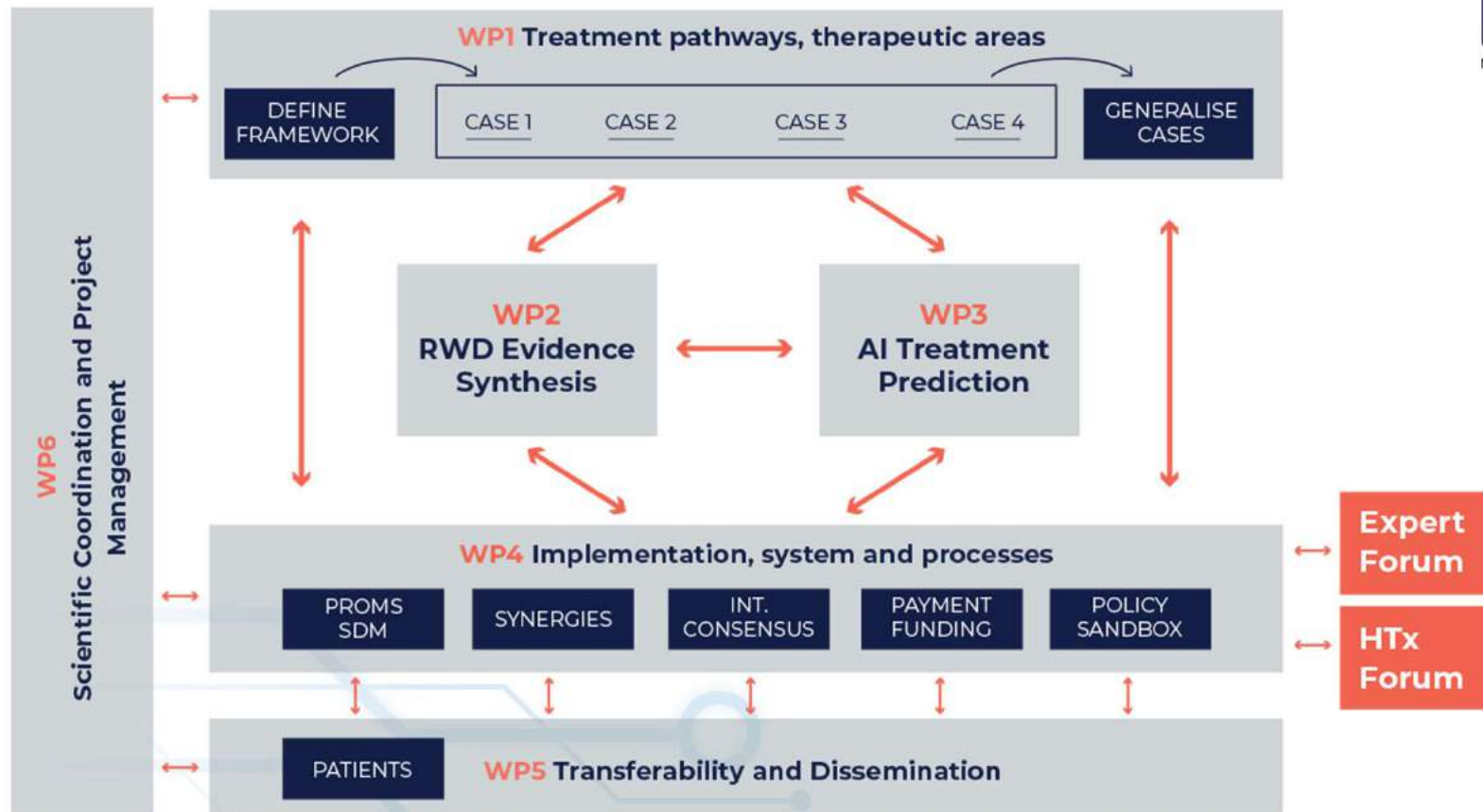
AI for predicting treatment outcomes based on RWD

- Machine learning systems
- Combining data sources
- Treatment pathways and sequences
- Individual treatment outcomes

Using 4 case studies

Head and neck cancer, diabetes mellitus, multiple sclerosis and myelodysplastic syndromes





Implementation as key theme

Why

- EUnetHTA letter to DG research in 2015, research focus:
 - Alignment of HTA at different levels
 - Synergy with clinical guidelines

In HTx

- Implementation of developed methods in HTA systems and processes
 - linked to pricing
 - reimbursement systems
 - clinical guidelines and regulation

How

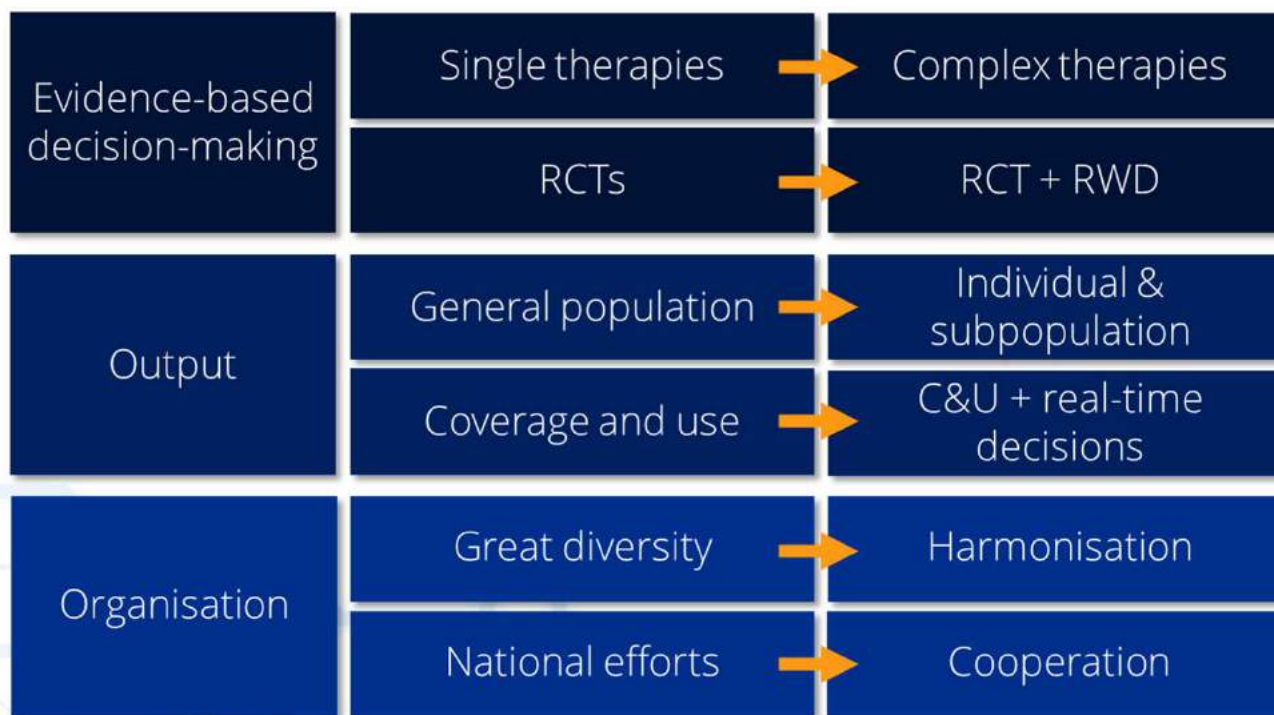
- International consensus building in HTx
 - On RWD use
 - Between regulators, HTA and clinicians
- Policy sandboxes

Goal

- Implementation as measure of success in HTx
- Strong focus on transferability and dissemination

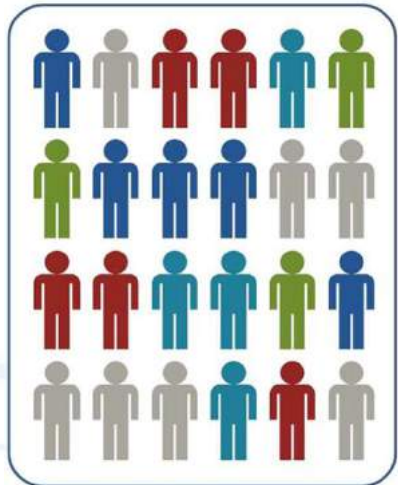


A changing landscape



Personalisation requires alignment

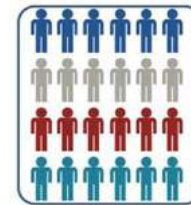
Patient population



“One size fits all”
approach to
medicine

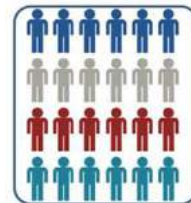


Treatment decision



- A is the best treatment *on average*.
- For some patients A might not be effective and/or safe

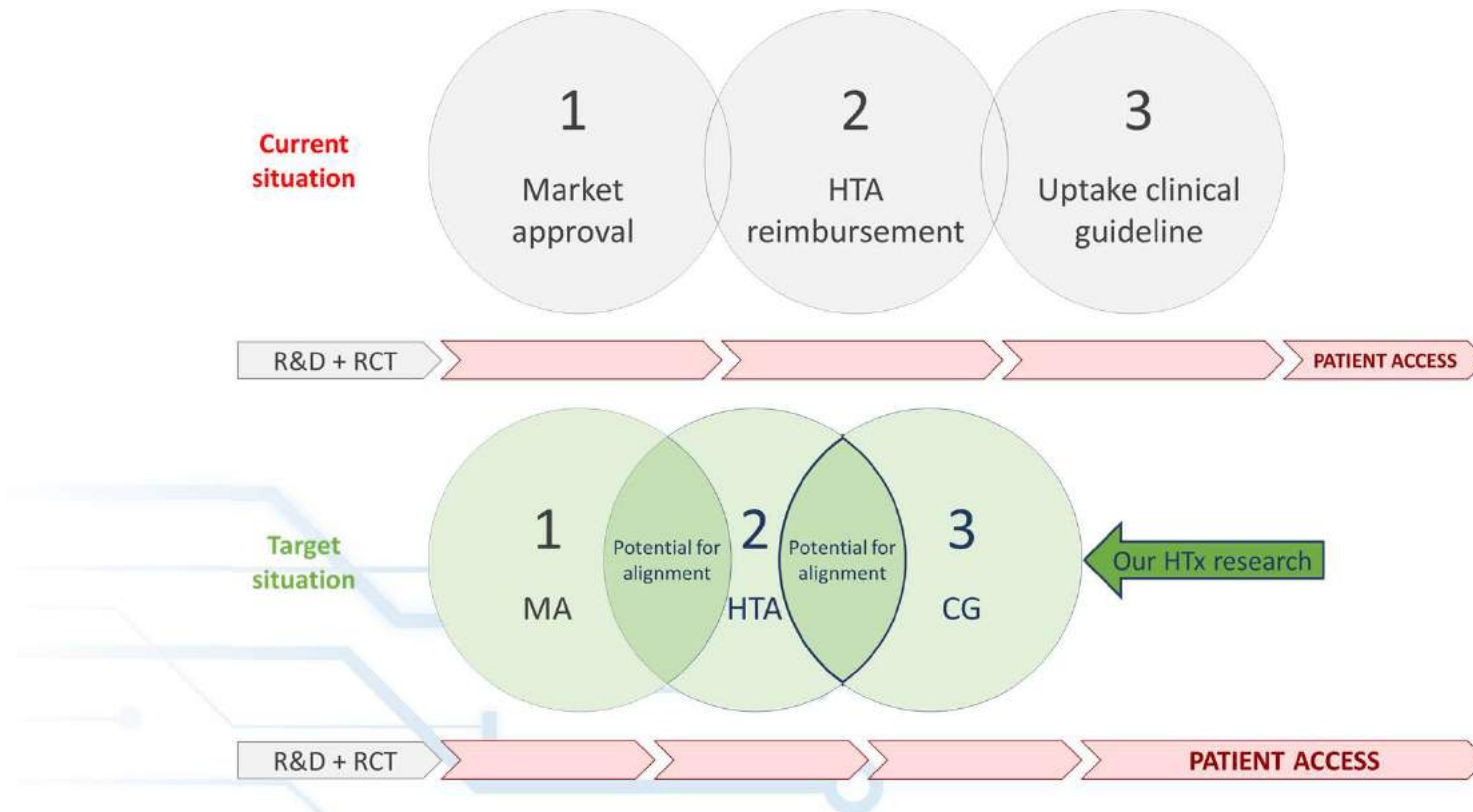
“personalized”
 (“precision”)
medicine



- ⇒ treatment A
- ⇒ treatment B
- ⇒ treatment C
- ⇒ treatment D

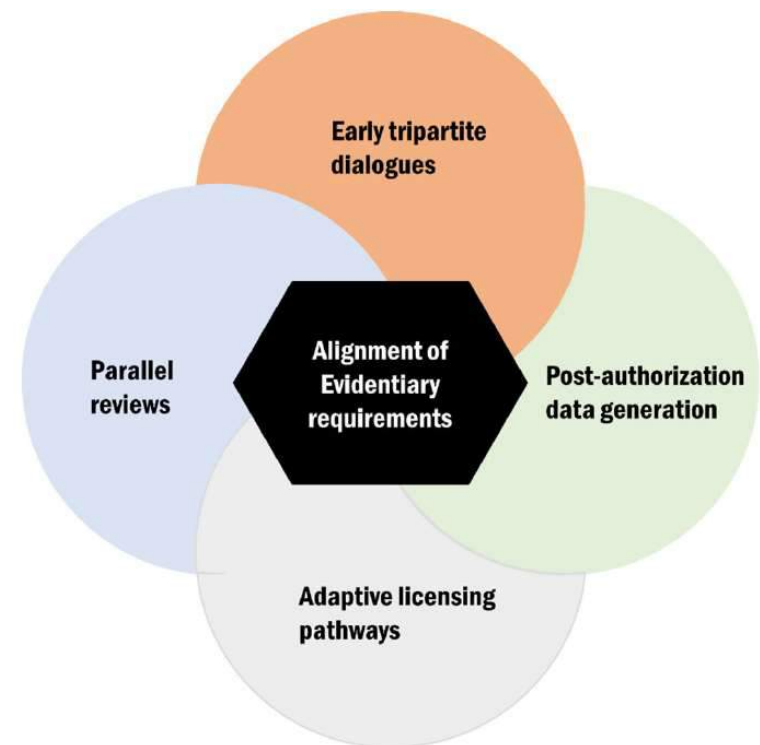


Streamlining the process



Ways towards synergy in literature

The need to align evidentiary requirements among stakeholders is an overarching theme across literature



Aligning evidentiary requirements

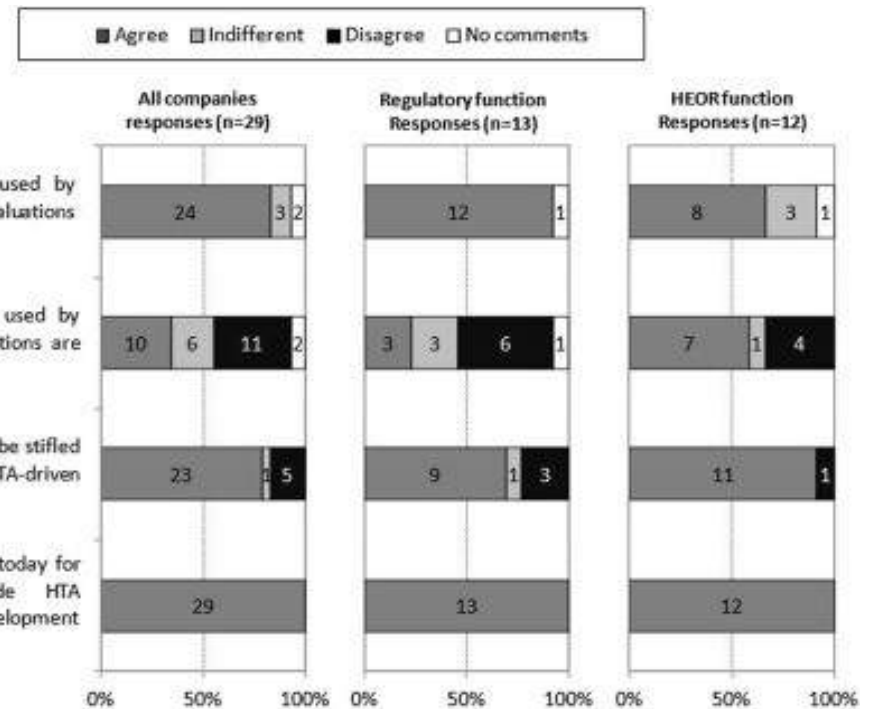
All respondents support synergy between regulatory and HTA stakeholders

The scientific requirements used by regulatory agency for their evaluations are transparent

The scientific requirements used by HTA agency for their evaluations are transparent

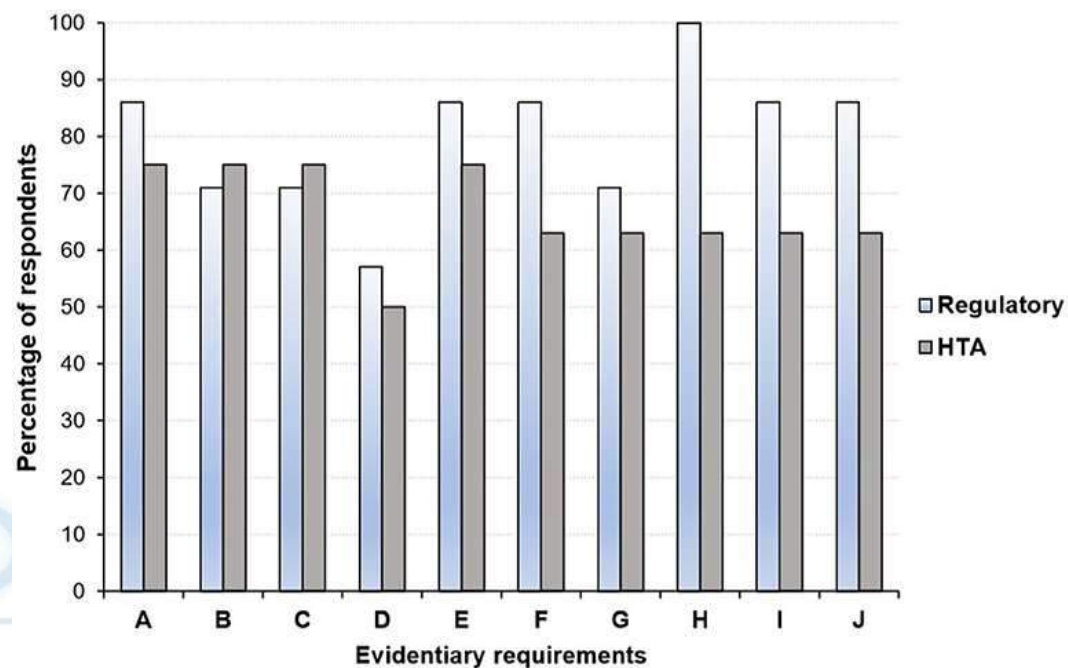
Incremental innovation could be stifled in an increasingly HTA-driven environment.

There is an increasing need today for my company to include HTA requirements earlier in development compared to 5 years ago.



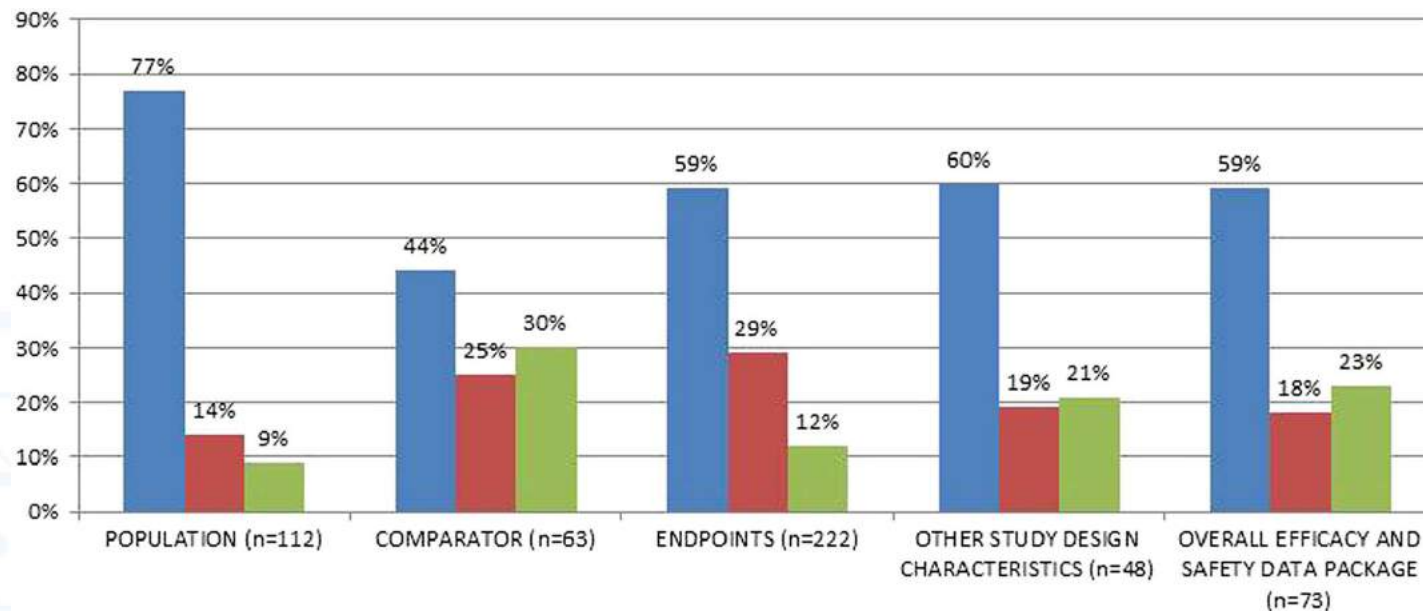
Where could alignment occur?

- (A) Acceptable primary end point.
- (B) Inclusion of active comparator arm in the trial.
- (C) Use of patient reported outcomes.
- (D) Use of health-related quality of life measures.**
- (E) Choice and use of surrogate measures.
- (F) Criteria considered in choice of comparator: therapeutic.
- (G) Use of subgroup analyses.
- (H) Inclusion and choice of secondary efficacy parameters.
- (I) Definition of unmet medical need.
- (J) Use of biomarkers to monitor patient outcomes. HTA, health technology assessment.



EMA/HTA parallel scientific advice

How aligned are the perspectives of EU regulators and HTA bodies?
A comparative analysis of regulatory-HTA parallel scientific advice



Synergy HTA - guidelines

HTA 59% does not refer to CGs
57% does not report consultations

CG 2/7 does not refer to HTA reports
5/7 does not report consultations

Final recommendation (yes/no)
90% identical

Recommended patient population
51% identical

Total no. of comparisons
N = 51

Treatment line unclear
N = 2

Included no. of comparisons
N = 49

UK: N = 21
FR: N = 10
DE: N = 3
NL: N = 7
PL: N = 8

Similar
N = 29 (59%)

Minor differences
N = 15 (30%)

Major differences
N = 8 (16%)

Same treatment line
N = 25 (51%)

Same treatment line start, continues in further lines
N = 4 (8%)

Same treatment line, described for more indications

Same treatment line, Different indication
N = 5 (10%)

Treatment starts at different line
N = 6 (12%)



Time from MA application to reimbursement

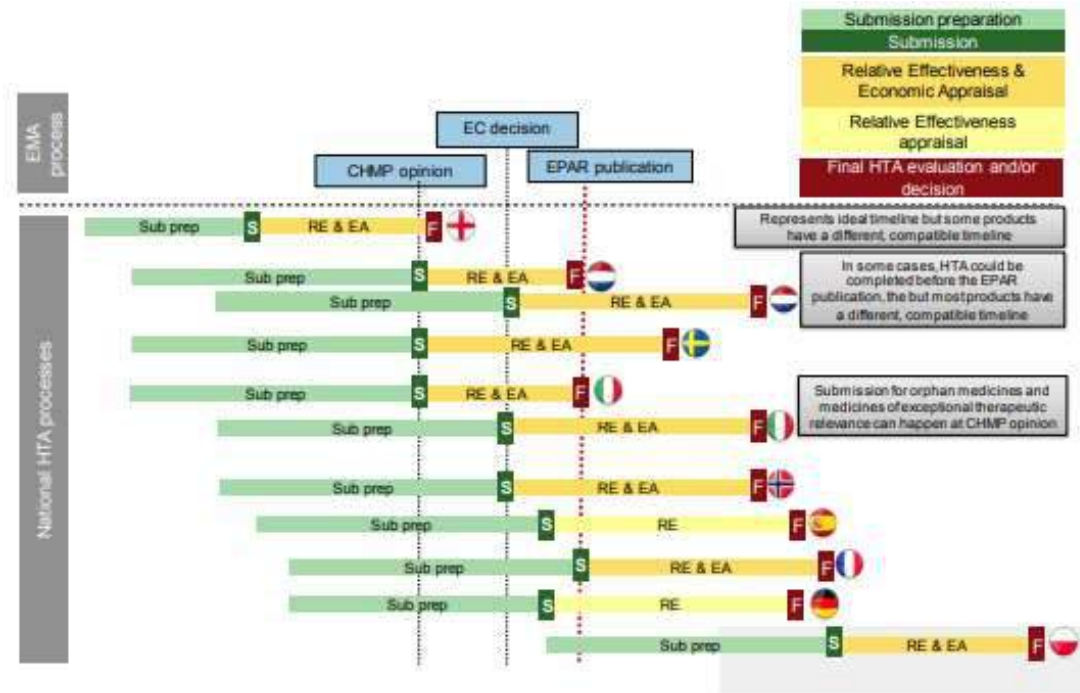
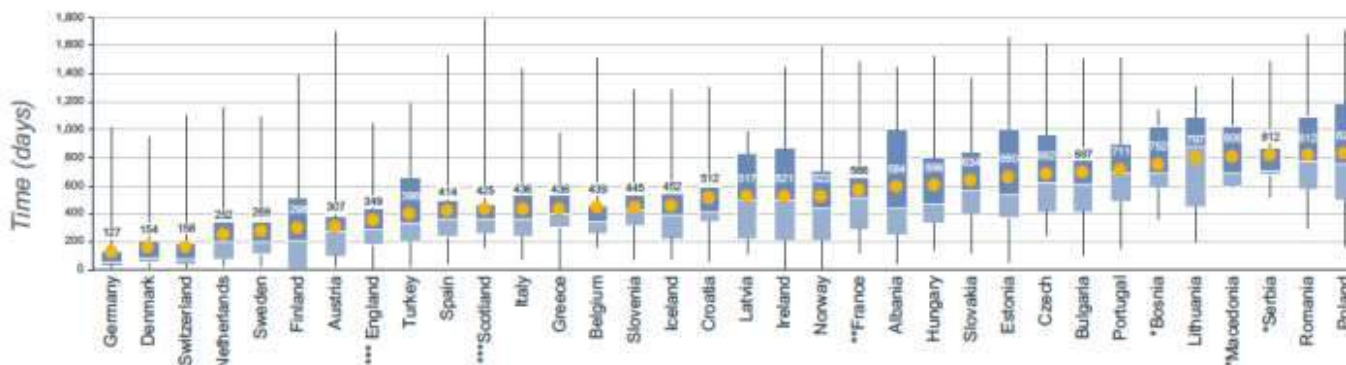


Figure 3: Average time to availability in days (2015–2018)

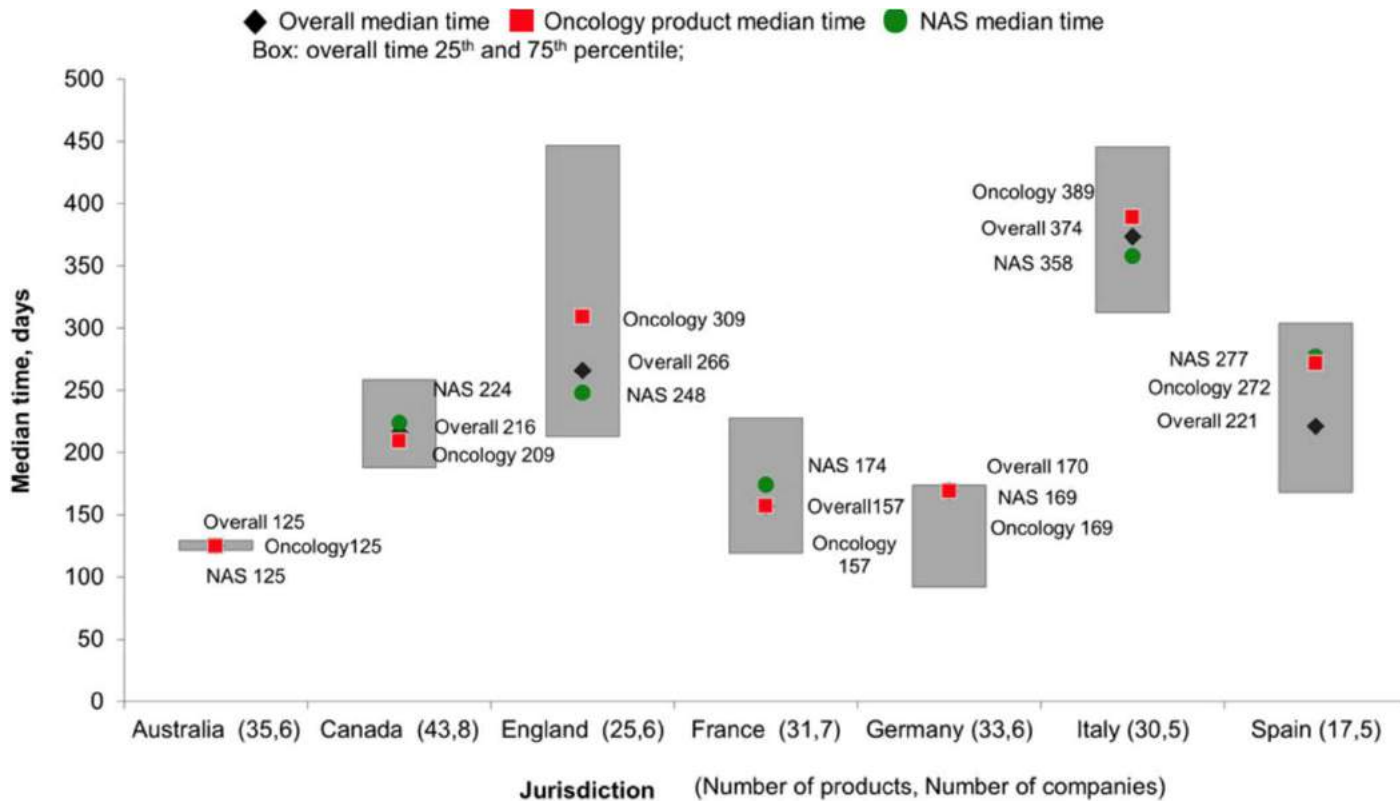
Source: EFPIA; EPAR refers to European public assessment report



Source: IQVIA

EFPIA 2020. The root cause of unavailability and delay to innovative medicines: Reducing the time before patients have access to innovative medicines

HTA review time + time lag MA - HTA



*Gap MA – HTA submission:
7-42 days*

*Companies seek advice before submission:
23-73% of total submissions*



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Wang et al. Companies' Health Technology Assessment Strategies and Practices in Australia, Canada, England, France, Germany, Italy and Spain: An Industry Metrics Study. *Frontiers in Pharmacology* 2020:11:2017

Time lag HTA/guideline

Country	Event	CG	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21		
EU	ECTRIMS / EAN guideline																								
	siponimod																								
Germany	DGN / KKNMS guideline																								
	fingolimod																								
	fampridine																								
	teriflunomide																								
	dimethyl fumarate																								
	cladribine																								
	ocrelizumab																								
France	ALD guidelines																								
	IFN β-1b (Betaferon)																								
	IFN β-1a (Avonex)																								
	IFN β-1a (Rebif)																								
	glatiramer acetate																								
Netherlands	NVN guideline																								
	natalizumab																								
	fingolimod																								
	fampridine																								
	teriflunomide																								
	alemtuzumab																								
	dimethyl fumarate																								
	pegIFN β-1a																								
	cladribine																								
	ocrelizumab																								
	siponimod																								



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Current initiatives



Regulatory - HTA

- EMA/HTA Scientific advice
- EMA/EUNetHTA parallel consultation
- PRIME
- MHRA/NICE Scientific advice programme
- ZIN/MEB parallel review
- MPA/TLV scientific advice
- Tapestry Network pilots scientific advice
- TGA/PBS scientific advice
- TGA/PBAC parallel submission
- Health Canada/CADTH parallel submission
- FDA/CMS parallel submission
- Green park collaborative scientific advice
- ...

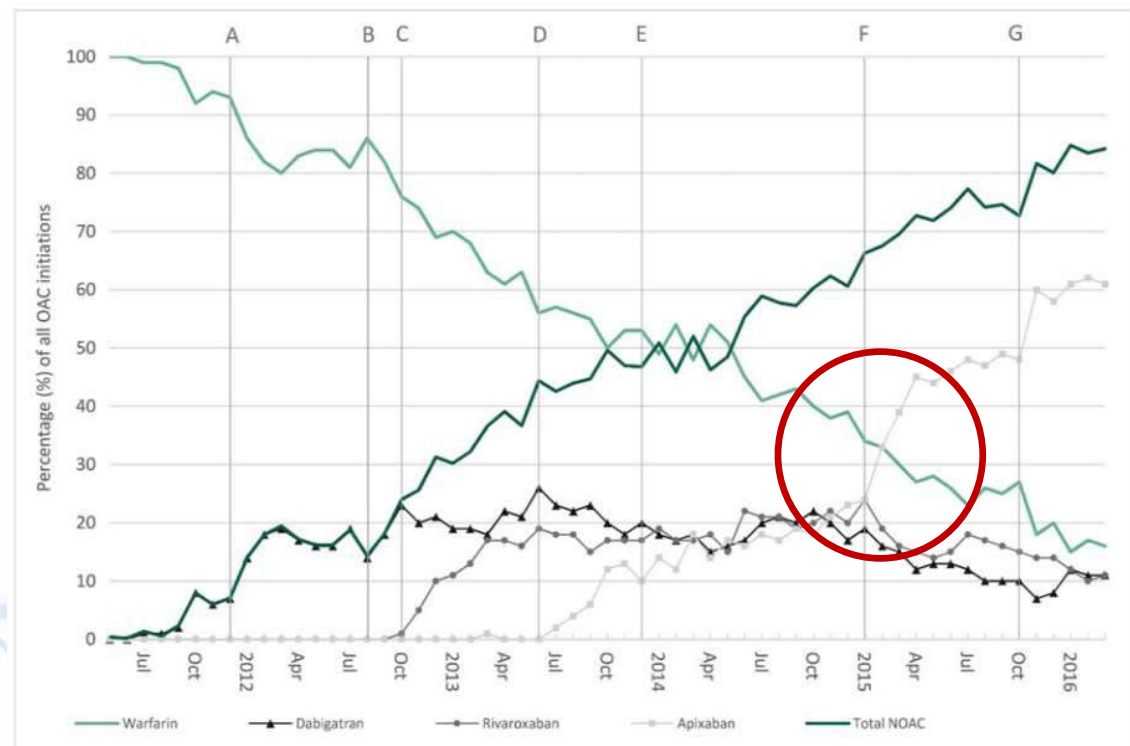
HTA – clinical guidelines

- GINATHA working group
- European Reference Networks
- Magic project
- NICE guidelines
- HAS guidelines
- ...



Clinical guidelines to facilitate patient access

No 'hard' yes or no, though a large effect



Today's focus

Find tangible ways to improve synergies between the processes of regulatory authorities, HTA organisations and clinical guidelines.

- 1. To which extent can we converge evidentiary needs among stakeholders?*
- 2. How can we achieve convergence of evidentiary needs among stakeholders?*



Topic 1 - Can we converge?

What are the crucial and feasible assessment criteria to align among regulatory authorities, HTA organisations, and clinical guideline developers (according to the PICOT framework)?

- How to define relevant patient populations and subgroup analysis?
- How to agree on characteristics of the intervention?
- How to determine the rightful comparator?
- How to decide on acceptable outcomes?
- How to determine the appropriate trial design?

PICOT



Topic 2 (1) – How?

How can we employ methods to achieve convergence among stakeholders?

- Which methods are or can be used in the stakeholders' tasks?
- If you would work through similar methods, what would you win and what would you lose?

How can we use early stakeholder dialogue to achieve convergence?

- When in the process should these conversation(s) take place?
- Who should be involved in these conversations?
- Which topics are most relevant to discuss here? (relates to topic 1)
- Who should initiate or lead these conversations?
- What would potentially prevent you from engaging in stakeholder dialogues?



Topic 2 (2) – How?

Are there other potential ways to converge evidentiary needs among stakeholders?

To which extent can we cooperate to achieve convergence?

- Should convergence be about information sharing or actual work load sharing?
- If you would share information or cooperate, what would you win and what would you lose?

How can we guarantee independency of stakeholders while converging?



The four case studies

Head and Neck Cancer

Diabetes Mellitus Type 1 & 2

Multiple Sclerosis

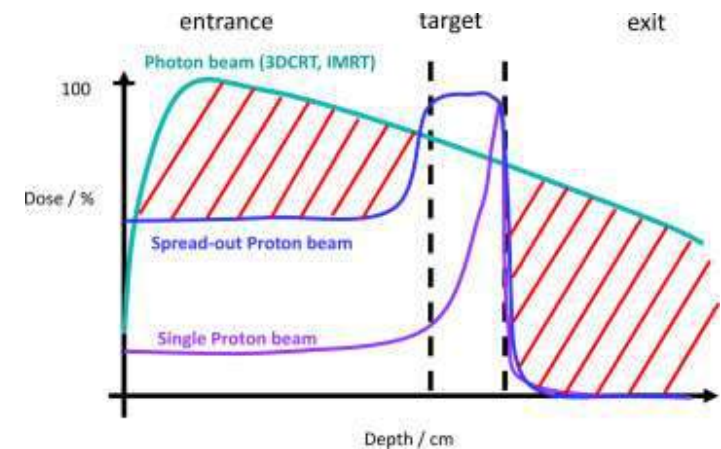
Myelodysplastic Syndromes



1. Head & Neck Cancer

Use of proton therapy

- Highly expensive
- Effective in specific population



GOAL

Statistical models that facilitate stratified medicine decisions by predicting for which patients' proton therapy is most beneficial



2. Diabetes Mellitus Type 1 & 2

Combinations of (e-)health technologies

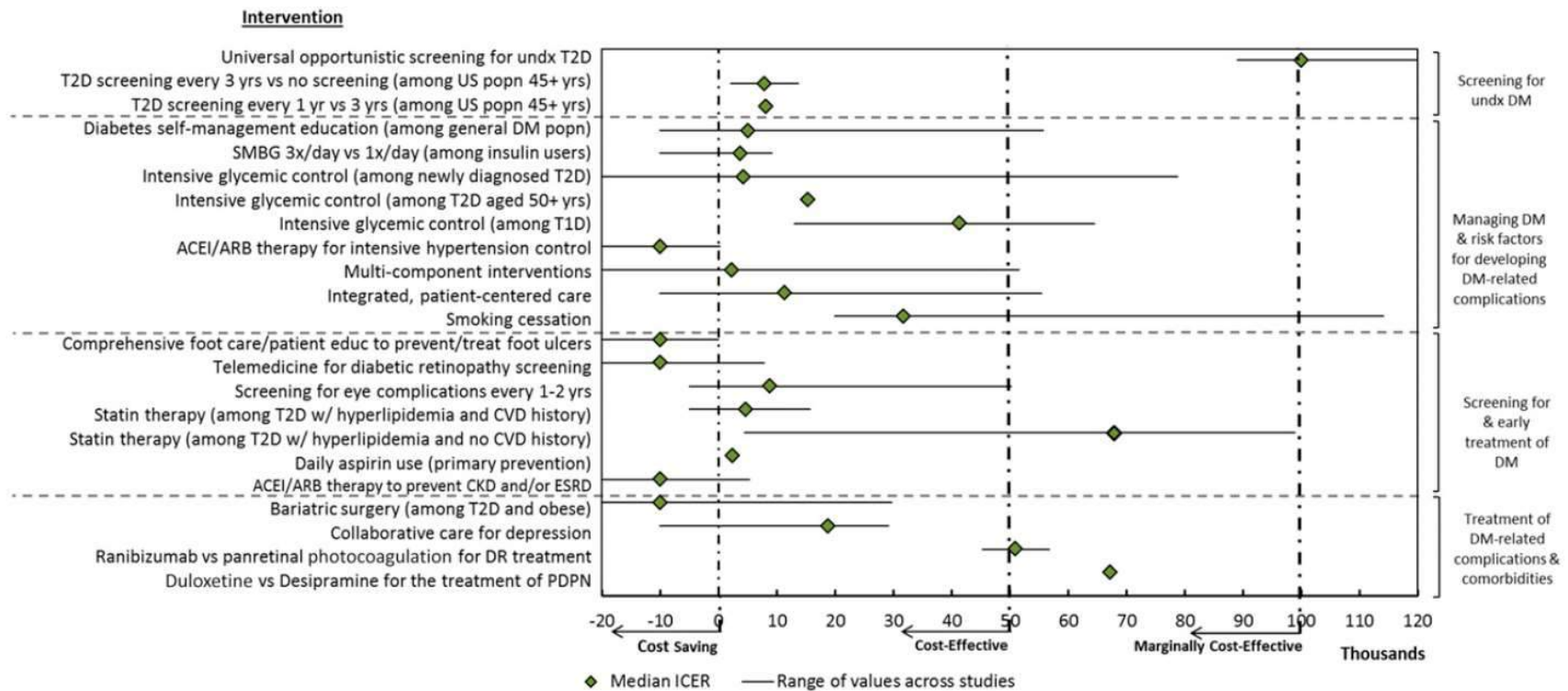
- Traditional medication (insulin + oral treatments)
- Insulin pumps, continuous glucose monitoring, glucose meters, tele-monitoring with data visualisation, life-style interventions

GOAL

Provide individualized treatment and monitoring strategies in patients with different types of diabetes and in different age groups



2. Diabetes Mellitus Type 1 & 2



3. Multiple Sclerosis

Optimal treatment for relapsing-remitting MS

- Many expensive immunomodulating treatments in short period
- The more effective, the more serious adverse events

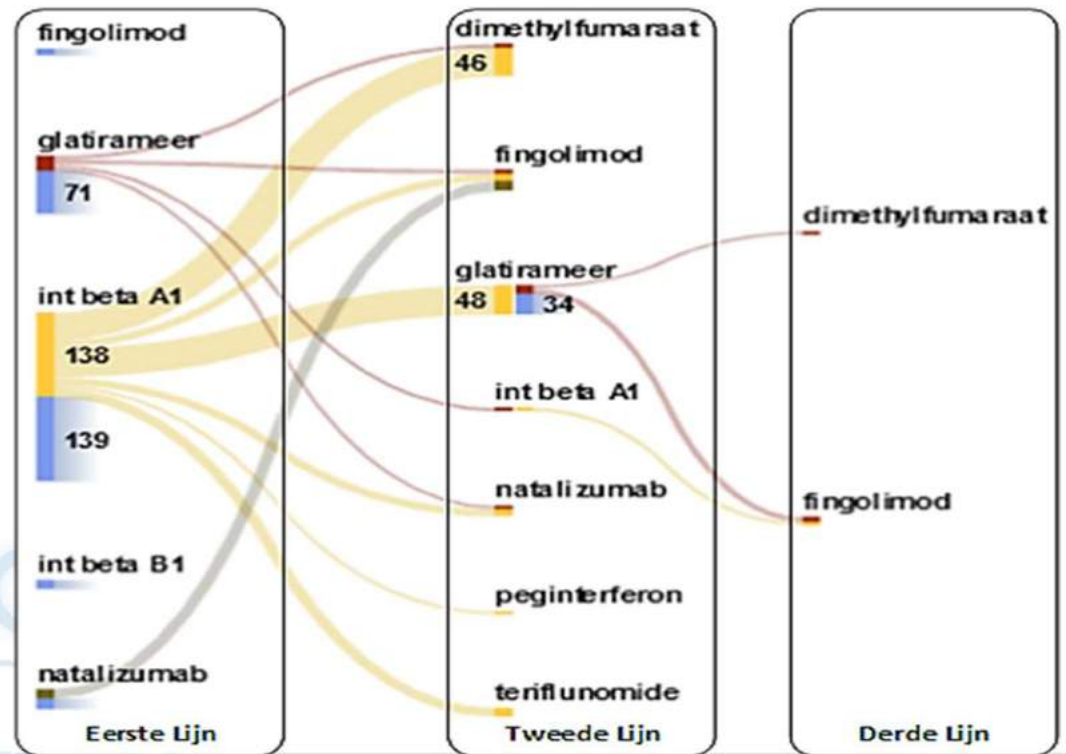
GOAL

Combine RCT and RWD to estimate treatment effects in subgroups for individualised treatment decision-making



3. Multiple Sclerosis

Use of MS medication in daily practice in the Netherlands



4. Myelodysplastic Syndromes

Comparing treatments for a rare disease

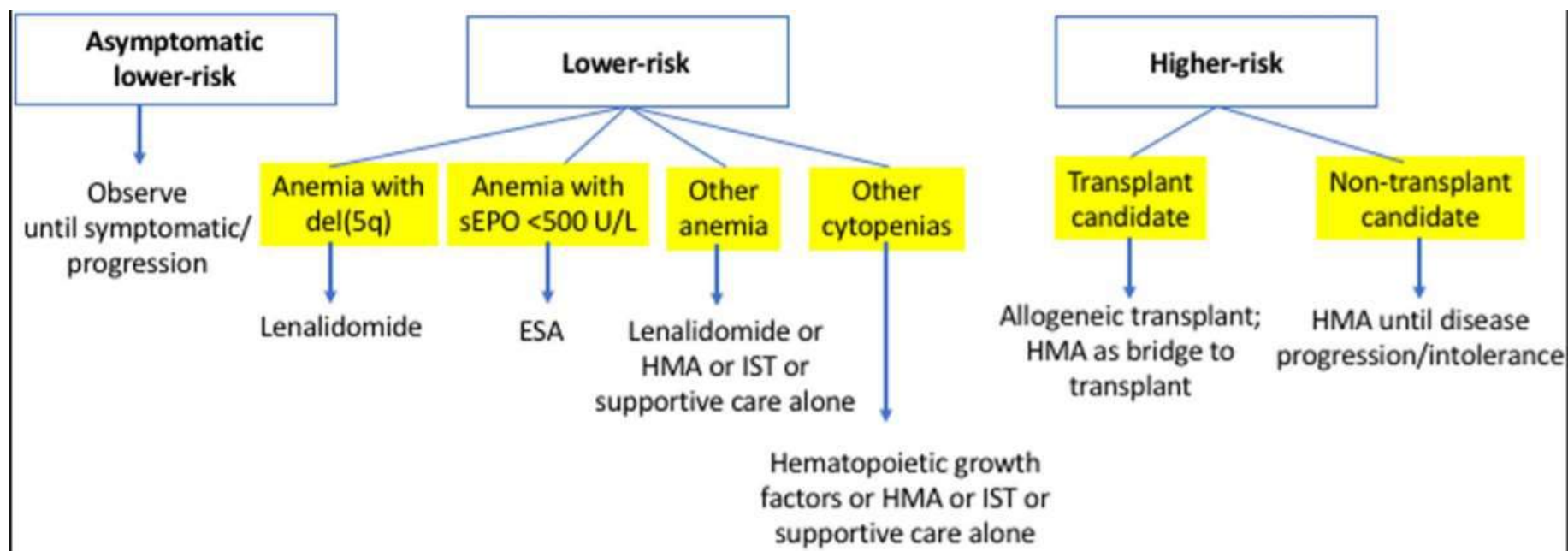
- Hard to diagnose and manage
- Finding optimal treatments based on small populations

GOAL

Developing prediction models and evaluating (cost-)effectiveness of treatment sequences and combinations for individualised treatment decisions using relevant patient reported outcomes (PROMS)



4. Myelodysplastic Syndromes



Schedule

9:30 – 10:00	Plenary opening (30 mins) <i>Welcome, introduction (organisers) and instruction</i>			
10:00 – 11:00	Focus group topic 1 (60 mins) <i>To which extent can we converge evidentiary needs among stakeholders?</i>			
	H&N cancer Prof. dr. Bert Leufkens Dr. Rick Vreman	DM Prof dr. Marieke de Bruin Dr. Mathias Møllebæk	MS Dr. Wim Goettsch Milou Hogervorst, PharmD, MSc	MDS Prof. dr. Aukje Mantel- Teeuwisse Dr. Junfeng Wang
11:00 – 11:15	Plenary sharing of findings + energizer (15 mins)			
11:15 – 11:30	BREAK (15 min)			
11:30 – 12:30	Focus group topic 2 (60 mins) <i>How can we achieve convergence of evidentiary needs among stakeholders?</i>			
	H&N cancer Prof. dr. Bert Leufkens Dr. Rick Vreman	DM Prof dr. Marieke de Bruin Dr. Mathias Møllebæk	MS Dr. Wim Goettsch Milou Hogervorst, PharmD, MSc	MDS Prof. dr. Aukje Mantel- Teeuwisse Dr. Junfeng Wang
12:30 – 12:45	Plenary sharing of findings (15 mins)			
12:45 – 13:00	Closure of session (15 mins) Rankings with mentimeter			



Our wonderful assistance

- Estefanía Collado Synapse research management partners
- Ayla Lokhorst Project Manager HTx at ZIN



Moderators Focus Group 1

Head and Neck Cancer

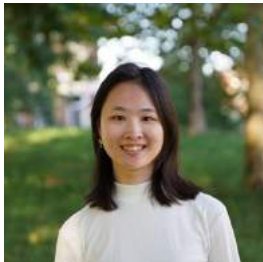


Dr. Rick Vreman



Assistant professor at Utrecht University, research focus on link between drug regulation and HTA
Advisor at the Dutch National Health Care Institute (ZIN)

Ting-An Lu, BSc



Master student Drug Innovation at Utrecht University, working on HTx synergy project as



Moderators Focus Group 2

Diabetes Mellitus

Prof. Dr. Marieke de Bruin



Professor in Drug Regulatory Science at Utrecht University
Previously employed at the EMA (PRAC) and the Dutch Medicines Evaluation Board (MEB)

Dr. Mathias Møllebæk



Postdoctoral Fellow at the University of Copenhagen Centre for Regulatory Science, research focus on medical information artifacts that address regulatory and clinical publics, such as medicine risk advisories and clinical guidelines



Moderators Focus Group 3

Multiple Sclerosis



Dr. Ir. Wim Goettsch



Special advisor HTA at the Dutch National Health Care Institute (ZIN)
Associate professor HTA at Utrecht University, PI of the HTx project
Former project leader and director at EUNetHTA Joint Action projects

Milou Hogervorst, MSc



PhD candidate in HTx at Utrecht University, research focus on HTA policies and the link between HTA and clinical guidelines



Moderators Focus Group 4

Myelodysplastic Syndromes



Prof. Dr. Aukje Mantel-Teeuwisse



Professor of Pharmacy and Global Health at Utrecht University
Managing Director of the Utrecht Centre of Pharmaceutical Policy
and Regulation

Dr. Junfeng Wang



Assistant professor in HTx at Utrecht University, research focus on
methods and statistics



Break-Out Focus Group 1

To which extent can we converge evidentiary needs among stakeholders?

60 minutes (10:00-11:00h)



Note

General

- This session will be recorded
- This session will last for 60 minutes, moderators track time

Communication

- Please turn your camera on
- Please mute yourself when not speaking
- For short questions use the chat



Your most important findings (1)

To which extent can we converge evidentiary needs among stakeholders?

H&N?

DM?

MS?

MDS?



BREAK

15 minutes (11:15 – 11:30h)



Break-Out Focus Group 2

How can we achieve convergence of evidentiary needs among stakeholders?

60 minutes (11:30-12:30h)



Note

General

- This session will be recorded
- This session will last for 60 minutes, moderators track time

Communication

- Please turn your camera on
- Please mute yourself when not speaking
- For short questions use the chat



Your most important findings (2)

How can we achieve convergence of evidentiary needs among stakeholders?

H&N?

DM?

MS?

MDS?



Wrap up HTx Focus Group

Synergies between regulatory authorities, HTA organisations and clinical guideline developers



Please, go to menti.com



The voting code: 2543 7068

Or use the QR-code:



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Take-aways

1. To which extent can we converge evidentiary needs among stakeholders?
2. How can we achieve convergence of evidentiary needs among stakeholders?



Thank you for your participation!

We will update you with a summary of the results this June/July

For follow-up questions or remarks contact Milou Hogervorst:
M.A.Hogervorst@uu.nl

