

The Hows and Whys of Estimating Return on Investment (ROI) of HEOR to the Biopharmaceutical Industry

Criteria for HEOR Project Selection

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Disclaimer

The views and opinions expressed in this presentation are solely those of the speaker and do not necessarily reflect the views, positions, or policies of Ionis Pharmaceuticals

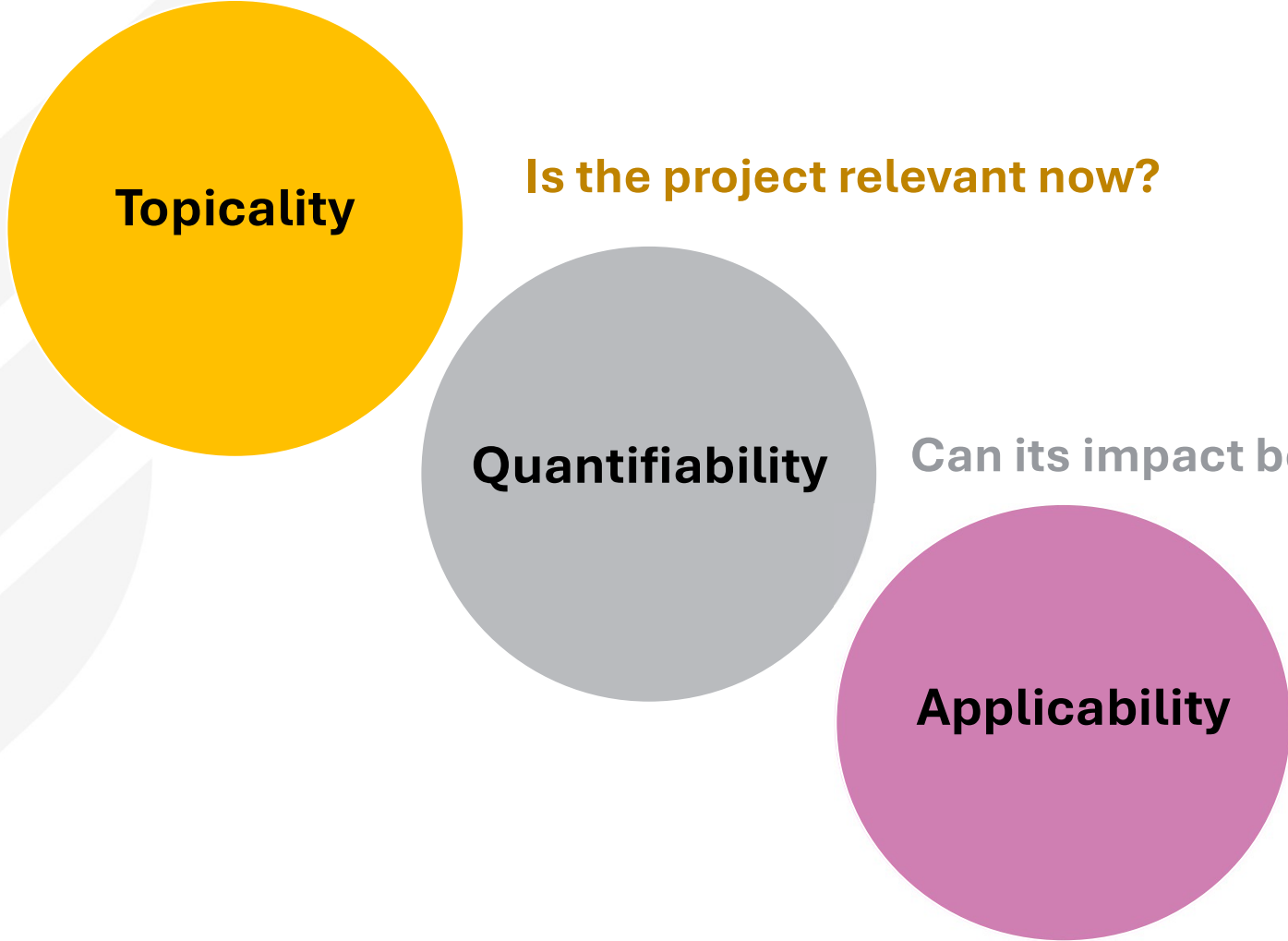
How to go about it?





- Not all HEOR projects are equally suited for ROI estimation
- attempting to measure everything threatens dilution of credibility
- Challenge is to turn criteria into something decision-oriented, concrete, and insightful
- Ultimately, we want to further understand and demonstrate that HEOR can make a difference, change a decision
 - From Valued Tactical ➡ **Valued Strategic** partner

We propose three criteria to prioritize HEOR projects for ROI Estimation



Topicality

Is the project relevant now?

Quantifiability

Can its impact be measured credibly?

Applicability

Does it represent a meaningful share of HEOR investment?

Prioritization Criteria #1: Topicality

Is the work aligned with relevant and current developments?

- Projects that sit at intersection of active debate and/or current methodological innovation
 - Disruptive: Decision makers are seeking evidence
 - Methods are evolving or under scrutiny
 - HEOR has a visible seat at the table



Guidance on reporting requirements for multiplicity issues and subgroup, sensitivity and post hoc analyses in joint clinical assessments

Adopted on 10 June 2024 by the HTA CG pursuant to Article 3(7), point (d), of Regulation (EU) 2021/2282 on Health Technology Assessment



FDA use of Real-World Evidence in Regulatory Decision Making



Prioritization Criteria #1: Topicality

Is the work aligned with relevant and current developments?

Examples

- Early phase PICOS development
 - Endpoint strategy
 - Comparative efficacy & safety
- Economic modeling & global pricing interdependency (MFN)
- RWE: External control arms (ECA)/Trial emulation

Implementation

- Pre-emptively address JCA requirements
 - Trial input & Analysis Plans
 - Planning Indirect Treatment Comparisons (ITC)
- Seek global pricing alignment (MFN)
- Clinical trial design (RWD/synthetic control arms)

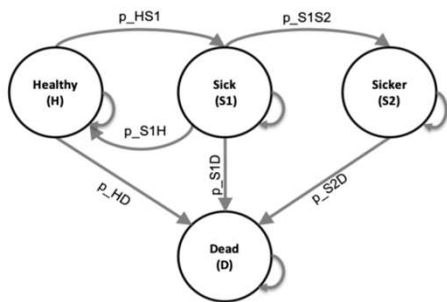
Why it matters to ROI

- High visibility & organization attention
 - Easier attribution of impact
- Outcomes likely influence high-stakes decisions
 - JCA drives EU/HTA comparative effectiveness metrics
 - MFN pricing spills over effects across markets, launch sequencing
 - ECAs reduce trial investment and increase speed to regulatory approval

Prioritization Criteria #2: Quantifiability

Can one credibly measure the impact in economic or decision terms?

- Projects where inputs, outcomes and downstream consequences can be linked in a transparent and defensible way
 - Without ROI it becomes speculative



Economic Models



Patient-Focused Drug Development: Incorporating Clinical Outcome Assessments Into Endpoints For Regulatory Decision-Making

Guidance for Industry, Food and Drug
Administration Staff, and Other Stakeholders

DRAFT GUIDANCE

COA Dossiers

Patient-Reported Outcome Measures: Use in Medical Product Development to Support Labeling Claims

COA=Clinical Outcomes Assessments

Prioritization Criteria #2: Quantifiability

Can one credibly measure the impact in economic or decision terms?

Examples

- Economic modeling supporting HTA evaluation and pricing negotiations
- Label enabling evidence on COAs/PRO validation to support promotional claims
- RWE / External Control Arms
 - Trial resources optimization
 - Accelerated drug uptake

Implementation

- Link to specific decisions (e.g., access, price, regulatory decision making)
- Translate investment into economic value narrative
- Clear counterfactual:

“What would happen without HEOR investment?”

Why it matters to ROI

- Enables credible value demonstration
- Resources are limited
- Reproducible, scalable
- Reduces skepticism from leadership

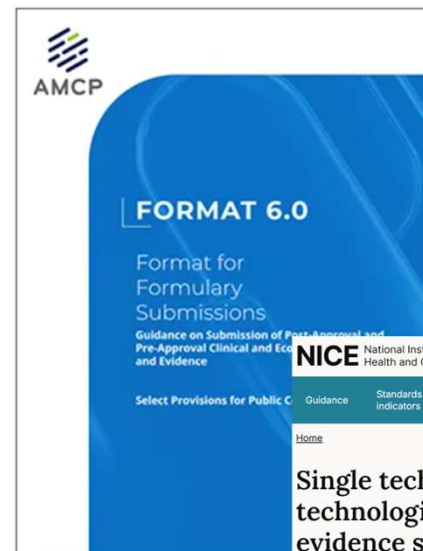
Prioritization Criterion #3: Applicability

Does project represent where we actually spend time and money?

- Ensure that ROI analyses focus on HEOR activities that are material to the organization
 - Increases relevance to leadership
 - Scalability across programs, indications, geographies



Comparative Effectiveness Research



Value Dossiers



Prioritization Criteria #3: Applicability

Does project represent where we actually spend time and money?

Examples

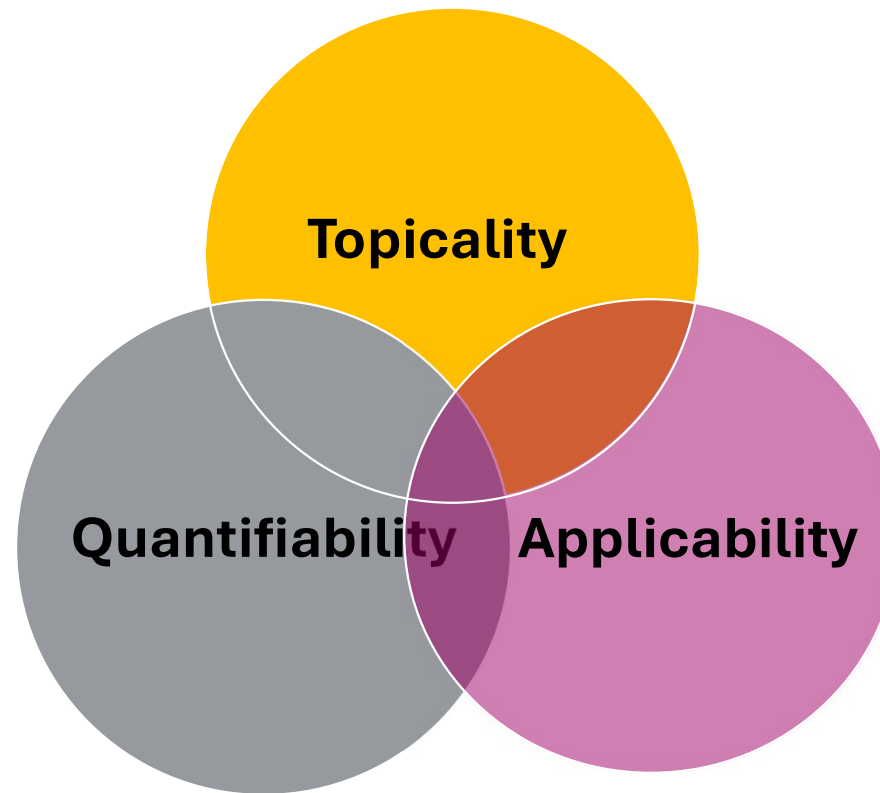
- Observational/pragmatic comparative studies and indirect treatment comparisons (ITC)
- Value dossiers (AMCP, global, country-specific HTA submissions)
- Global cost-effectiveness and budgetary impact models

Implementation

- Scalable
- Relevant across assets, indications and geographies
- Represent core HEOR competencies, not one-offs

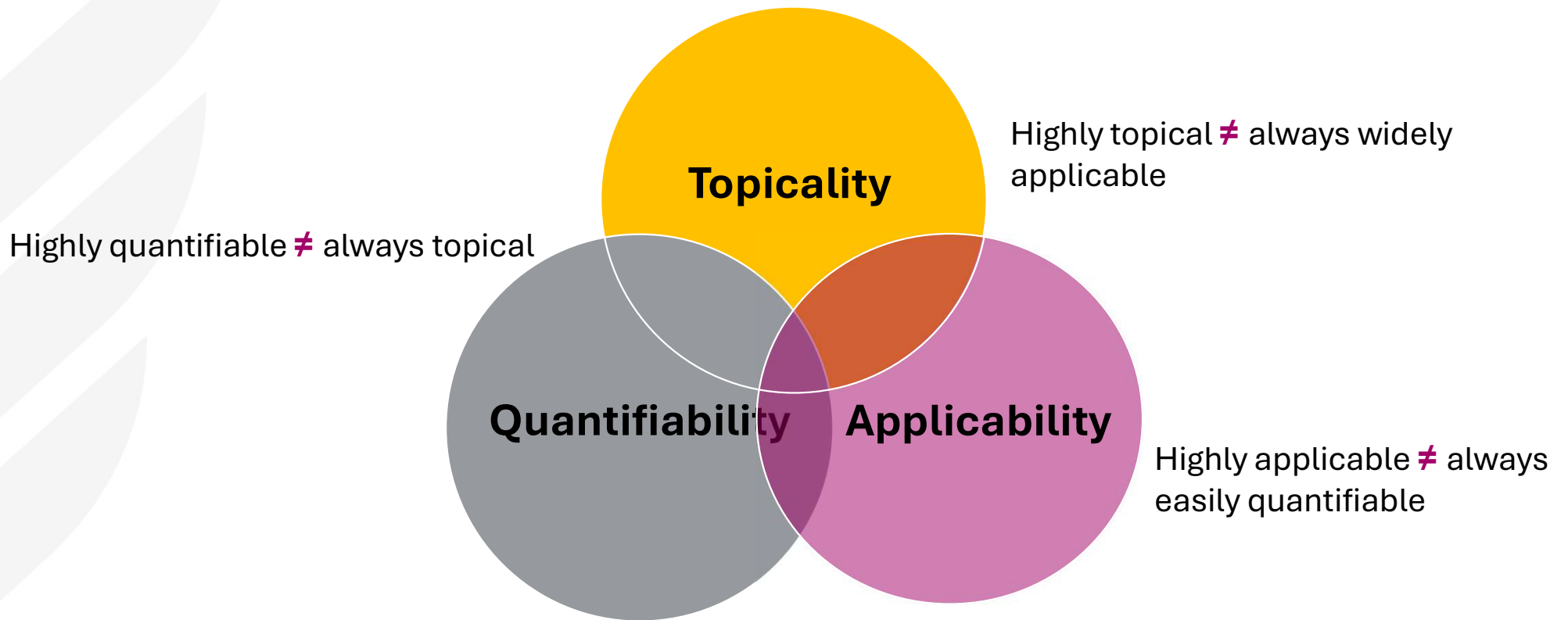
Why it matters to ROI

- Ensures generalizability across portfolio
- Meaningful share of HEOR budgets and FTE effort



**Optimal ROI HEOR project candidates sit at the intersection of
relevance, measurability and scale**

But there are trade-offs



Goal is Balance - not Maximizing a Single Dimension

Considerations

- **Time horizon matters**, may undervalue long-term investments
 - Short-term: launch acceleration, pricing outcomes seem quite tangible
 - Long-term investments behave more like building value infrastructure (e.g., registries, CE)
- **Attribution Complexity**
 - HEOR work is embedded within multiple functions (cross-functional)
 - ROI estimation should be viewed as contribution-based, not purely causal
- **Equity and Ethical Importance / External impact**
 - Not all investments have to maximize financial return
 - ROI should not replace broader notions of value
- **Additional criteria remain open for discussion and refinement**

In Closing

- **Selective ROI estimation strengthens the case for HEOR by focusing on:**
 - What **matters now**, can be **measured**, and represents **meaningful organizational investment**
- **Embedding ROI into company decision-making:**
 - Can be integrated into **portfolio prioritization and planning workstreams**
 - Provides a structured way to **inform investment trade-offs across assets**
- **Strategic impact:**
 - Elevates HEOR as an **enterprise-level function strengthening role in decision-making**

Ultimately, ROI is not just about measurement but positioning and reinforcing HEOR as a strategic driver of value across the organization



Thank You!