Real-World Evidence in Drug Development: Creating the Right Environment for Enhanced Pre-Launch Evidence

Pieter Stolk
University Medical Centre Utrecht, The Netherlands
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The challenge

- HTA organisations often have to base their assessments on efficacy data from pre-launch trials, with epidemiological studies and economic data used for assumptions about budget impact and cost-effectiveness.

**Efficacy**

- Patient benefit and harm in experimental and closely monitored research studies, normally RCTs

**Effectiveness**

- Patient benefit and harm when the technology is actually applied in everyday practice
The challenge

- Actual effectiveness studies only start post-launch. This status quo is under increasing pressure, as decision-makers respond to budget constraints and aim to identify the ‘right place’ for new treatments.

- Ideally, these decisions would be informed by a better understanding of the (added) value of treatments for patients. However, at launch a better insight into real-world effectiveness is dependent on whether the required evidence has been generated.
Increasing Focus on Comparative Effectiveness

**Pharma R&D**
Earlier understanding of effectiveness of new products.

**Regulatory**
Increasing interest. Potential for improving public health if efficacy-effectiveness gap identified.

**HTA/Payer**
Require evidence of benefit of treatment compared with standard of care in own jurisdiction.

<table>
<thead>
<tr>
<th>Population</th>
<th>Intervention</th>
<th>Comparator</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study population not consistent with the population for which reimbursement is being sought</td>
<td>Study medication schedule (dose, dose titration/escalation, frequency, route of admin, monitoring) inconsistent with routine practice</td>
<td>Study comparator(s) do not include current standard of care (SOC) for the reimbursement population</td>
<td>Primary Study outcomes of limited interest from reimbursement perspective, study underpowered to deliver meaningful results for outcomes of interest (e.g. HRQoL)</td>
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<td>Uncertainty of treatment effects in subgroups based on pivotal trial population.</td>
<td>Effectiveness likely impacted by adherence (of intervention and/or comparators) in routine practice</td>
<td>Indirect comparison vs SOC is uncertain due to a small number of trials from which to form a valid network</td>
<td>Study underpowered to deliver meaningful results for outcomes of interest (e.g. HRQoL)</td>
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Addressing the challenge in a multi-stakeholder fashion (the list is to give examples, not meant to be exhaustive!)

Research projects:
- **GetCReal**: Developing new methods and tools in a pre-competitive, multistakeholder setting
- **BD4BO**

IMI coordination/support:
- Support, investigate direction, identify (research gaps).

Pilots:
- **SEED**
- **EAMS**
- **EMA AL/AP pilots**
• GetReal aims to show how robust new methods of RWE collection and synthesis could be developed and considered for adoption earlier in pharmaceutical R&D and the healthcare decision making process.

• Focus on: policy frameworks, understanding drivers of effectiveness, pragmatic trial design, evidence synthesis.
Real-world data according to GetReal

An umbrella term for data regarding the effects of health interventions (e.g. safety, effectiveness, resource use, etc) that are not collected in the context of highly-controlled RCT's.

Instead, RWD can either be primary research data collected in a manner which reflects how interventions would be used in routine clinical practice or secondary research data derived from routinely collected data.

Data collected include, but are not limited to, clinical and economic outcomes, patient-reported outcomes (PRO) and health-related quality of life (HRQoL). RWD can be obtained from many sources including patient registries, electronic medical records, and claims databases.
Visit www.imi-getreal.eu
Key features & questions for discussion RWE

**Features**

- **Acceptability**
  - Acceptability of RWE evidence for regulatory/HTA/payer

- **Relevance**
  - Relevance of RWE evidence ‘above and beyond’ other studies.

- **Feasibility**
  - Feasibility of ‘collecting’ evidence (e.g. pragmatic trials).

**For discussion today**

- Examples of use of real world data providing input to decision-makers?
- What are positive and negative incentives for RWE?
- Potential solutions for addressing current challenges for generating effectiveness evidence/way forward (also in a pre-launch environment).

**Reflections from EU and US perspective**
Thank You

Pieter Stolk
Project manager
University Medical Center Utrecht, The Netherlands

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