OP40 Circumstances That Unlock Payer Acceptability Of Innovative Trial Designs: A Case Study And Primary Research-Based Global Analysis

Sudha Sundaram, Vesshnu Sutharsan, Catherine Kielar (catherine.kielar@avalerehealth.com) and Emil Nørtoft

Introduction: Innovative designs have been used to enhance trial efficiency and enable access to novel treatments when traditional randomized controlled trials (RCTs) were considered operationally challenging to implement. Besides demonstrating scientific and regulatory rigor, innovative approaches also need to be perceived favorably by payers. This work delves into payer perspectives on innovative designs, identifying circumstances that contribute to higher payer acceptability.
Methods: Using targeted searches, we mapped clinical trials since 2010 with novel design elements, including adaptive, master protocol, hybrid, enrichment, and innovative endpoints. Sixty-two asset-indication examples using these designs were identified across different therapeutic areas. Based on the availability of health technology assessment (HTA) reports and the innovative element's impact on final HTA outcome, 17 of these identified examples were developed as case studies to highlight the designs' implications for access. Interviews with eight payer-experts across US, France, Germany, and Japan were conducted to further validate the research, explore scenario analyses, and clarify how circumstances impacted payer acceptability of the studied innovative trial designs.
Results: While oncology has historically spearheaded innovative trial designs, other therapeutic areas are now incorporating innovative elements. Nonetheless, published payer guidance on innovative designs remains limited. We identified seven circumstances impacting payer acceptance of innovative designs: disease prognosis, eligible patient population size, type of treatment, mode of action, availability of treatment alternatives, comparative benefit versus standard of care, and launch sequence. Patient population size had the greatest impact on payer decisions, followed by comparative benefit and type of treatment; this suggests that payers may be inclined to accept innovative trial designs for small populations with high unmet need or therapies with transformative clinical benefits.
Conclusions: Innovative trials trade some scientific validity for increased practicality compared to traditional RCTs. Stakeholders need to align on appropriateness and scientific validity of innovative designs for access decisions, while implementing measures to minimize uncertainties. Collaboration across stakeholders including regulators, payers, and manufacturers is needed to refine innovative methodologies and guide policies to improve the relevance of innovative trials for decision-making.

OP41 Pharmaceutical Technologies Conditionally Approved By The National Institute For Health And Care Excellence: A Critical Analysis

Yankier Pijeira Perez and Dyfrig Hughes (d.a.hughes@bangor.ac.uk)

Introduction: There are concerns with the National Institute for Health and Care Excellence (NICE) conditional approval process with respect to the quality and reliability of the methods of evidence generation, analysis, and reporting; and on the increasing focus on OwR (only with research) in preference to OiR (only in research). Our study critically appraises the methods, quality, and risk of bias of the evidence generated in response to NICE conditionally approved technologies.
Methods: Our study reviewed pharmaceutical technologies appraised by NICE: technology appraisals approved between March 2000 and September 2022 and highly specialized technologies approved up to October 2023. From those, we identified appraisals with OiR and OwR conditional recommendations, and summarized the evidence requested by NICE as part of conditional approval. Then, evidence resubmitted to NICE for reappraisal was analyzed for its compliance with NICE's initial recommendations for further research and assessed using the Cochrane Collaboration's tools for risk of bias in randomized trials and the ROBINS-I tool for the non-randomized evidence.
Results: NICE made 54 conditional recommendations relating to technology appraisals (TAs) (13 OiR and 41 OwR) and five highly specialized technologies (HSTs). From those, 16 TAs presented additional evidence for reappraisal [nine OiR and seven OwR] and three HSTs [three OwR]. Two of the nine reappraised TAs with OiR recommendation and four of the seven OwR fully complied with NICE's request for further evidence. All three HSTs complied in full. However, the majority of reappraised TAs and HSTs included evidence that was deemed to be at serious, high, moderate, or unclear risk of bias.
Conclusions: The quality of evidence presented to NICE following conditional approval varies considerably. There is often widespread noncompliance with requests for further research when conditionally approving a pharmaceutical technology. Complying with NICE's requests, however, does not necessarily guarantee high-quality evidence when the technology is reappraised. Evidence generated in response to NICE conditional approval recommendations should be subject to quality standards.

https://doi.org/10.1017/S0266462324001028