

Beyond the Trial: Building a Transdisciplinary Matrix for Validating Clinical Innovation in the Age of Real-World Evidence

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Abstract:

Clinical innovation often relies on traditional Clinical Trials, which are increasingly seen as limited in real-world applicability. This study proposes a transdisciplinary matrix to validate clinical hypotheses beyond the constraints of conventional trials, integrating neuropharmacological, economic, and ethical dimensions. Emphasis is placed on Indirect Treatment Comparisons (ITCs), Real-World Evidence (RWE), and Bayesian approaches to better reflect clinical complexity. The model incorporates Patient-Reported Outcomes, cost-effectiveness analyses, and ethical frameworks to foster equitable and informed clinical decision-making. By doing so, we propose a multidimensional methodology to realign research with the realities of modern medicine.

Keywords: transdisciplinary, clinical innovation, real-world evidence, cost-effectiveness, ethics, neuropharmacology.

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