

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

Guido Attilio Condorelli<sup>1,2,3</sup>, Deborah Bonifacio<sup>3</sup>, Oana Maria Dragostin<sup>1</sup>

1 “Dunarea de Jos” University of Galati, Faculty of Medicine and Pharmacy, Galati, Romania

2 Department of Biomedical and Biotechnological Sciences, Section of Pharmacology, University of Catania, Italy

3 Pharmaceutical Management Company (PMC) ltd., Bucharest, Romania

*Corresponding author:* condorelliguido@icloud.com/deborahbonifacio7@gmail.com

*The presenting author:* Condorelli Guido Attilio

## 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.

## BUILDING A TRANSDISCIPLINARY MATRIX FOR VALIDATING CLINICAL INNOVATION IN THE AGE OF REAL-WORLD EVIDENCE

