

<b>Project title:</b> Digital Therapeutics to scale up rehabilitation to reach people in need: the DANCEREX Proof-of-Concept study for chronic neurological disorders	
<b>Project ID</b> PNRR-POC-2022-12376360	
<b>CUP:</b> C83C22001340001	
<b>Description:</b> The Global Burden of Diseases Study estimates that chronic neurological diseases (CNDs), including neuroinflammatory and neurodegenerative disorders, are among the leading causes of disease burden worldwide. Digital therapeutics (DTx) are a new class of software-based treatments to prevent, manage or treat diseases. Despite the need for early interventions, rehabilitation remains a specialized and costly service, accessible only to few patients with moderate or advanced disease. Within neurorehabilitation, dance therapy has proven effective for CNDs such as Multiple Sclerosis and Mild Cognitive Impairment due to Alzheimer's, improving behavior, cognition, communication and movement from the early stages, while enhancing patient engagement. This project proposes a Proof of Concept study to develop and test a new DTx (DANCEREX–DANCE REhabilitation EXperience) designed to expand rehabilitation and reach more people in need. Previous telerehabilitation studies showed worse adherence in the last treatment months, likely due to loss of motivation and the need for a more holistic experience. DANCEREX-DTx is a rehabilitation app combining a multidimensional dance-based program with motivational support and behavioral algorithms to foster physical and cognitive activity. The aims are: to test usability and acceptability; to assess safety and efficacy in a pilot trial; to explore effects on neuroinflammation and brain connectivity.	
<b>Financing Programme and Mission:</b> This research was funded by the European Union—Next Generation EU—NRRP M6C2—Investment 2.1 Enhancement and strengthening of biomedical research in the NHS	
<b>IRCCS Role Partner</b>	
<b>Principal investigator: Amato Maria Pia (PI) Baglio Francesca (CoPI)</b>	
UO1 Department of Neuromotor Rehabilitation, IRCCS Fondazione Don Carlo Gnocchi, as Principal Investigator (PI)	Scientific Coordinator: Francesca Baglio
UO2 Neuropsychology Unit, IRCCS Istituto Centro San Giovanni di Dio Fatebenefratelli, as Operative Unit	Scientific Coordinator: Maria Cotelli
UO3 Riccardo Massa Dept of human sciences for education, Università degli Studi Milano Bicocca as Operative Unit	Scientific Coordinator: Fabrizia Mantovani
UO4 Clinical Neuroscience Dept / Neurobioimaging Lab, IRCCS Centro Neurolesi Bonino Pulejo, as Operative Unit	Scientific Coordinator: Viviana Lo Buono
<b>Starting Date:</b> 02/05/2023	
<b>State of the project:</b> Ongoing	
<b>Funding</b> 997.000 €	
<b>Website:</b> <a href="https://www.fatebenefratelli.it/strutture/irccs-brescia">https://www.fatebenefratelli.it/strutture/irccs-brescia</a>	