Computational methods of Drug Utilization and Pharmacoeconomics for Healthcare policies in order to develop new regulatory processes for Advanced Therapies.

Structured and advanced analysis of Big data, along with sharing the results with policy makers and disseminating them at various levels, has allowed for an improvement in the understanding of the system, the sustainability of the healthcare service, its accountability and transparency, as well as the quality and equity of care.

For this reason, nowadays, research activities applied to Real World Data (RWD) in the healthcare field have an increasingly predominant role in governance and healthcare planning.

In this context, the PhD project aims to develop research activities applied to RWD in healthcare with the objective of improving decision-making processes within pharmaceutical governance. It is based on the assumption that every decision should benefit from the most current and effective scientific knowledge applicable to the context in which they are to be applied.

Specifically, the PhD project aims to experiment and develop innovative computational methodologies of pharmacoutilization applied to RWD in advanced therapy research, exploring their roles, potentials, and limitations.

The use of computational analytical models applied to RWD will serve to develop, apply, and validate the following: pharmacoeconomic models to support decision-makers in the evaluation of advanced therapies, facilitating their dissemination and effective adoption within the context of the healthcare system; innovative tools for different models of governance in advanced therapies, allowing for comparative analysis across European, national, and regional levels of government; information tools for pharmacoutilization and pharmacoeconomics that can ensure greater effectiveness, efficiency, and cost-effectiveness in pharmaceutical governance actions related to advanced therapies.

The PhD project will be conducted within the Center of Pharmacoeconomics and Drug Utilization research (CIRFF) of the Department of Pharmacy, in collaboration with public governmental entities and national and international research centers in the field of pharmacoutilization, pharmacoeconomics, and regulatory sciences.

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