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Abstract

Real-world patient data and artificial intelligence (AI) algorithms are at the heart of an accelerating digital health revolution. It promises direct benefits for people with or without disease and is expected to become a key driver of digital economies.

By partnering with Digital Health initiatives in the Grand-Est in France, Baden-Württemberg in Germany and Basel in Switzerland, the Clinnova programme takes the necessary steps in establishing a shared approach for data interoperability and data integration bridging the worlds of biomedical research and healthcare. Conceptualized to function across borders, Clinnova is a precision medicine initiative involving leading clinicians across University hospitals and private clinics in Luxembourg, France, Germany and Switzerland.

Using clinical, biomedical and patient-generated data from prospective patient cohorts in inflammatory bowel disease (IBD), rheumatic diseases (RD) and multiple sclerosis (MS), the Clinnova partners emphasize data quality and standardization to train effective AI algorithms. In a first step, the goal is therapeutic decision support for personalized treatment in chronic, immune-related diseases. In a second step, Clinnova intends to accelerate fundamental research by enabling hypothesis-driven efforts to delineate shared disease aetiologies, novel biomarkers and therapeutic targets as well as preventative cues. In Luxembourg, the first prospective patient cohort was launched in IBD earlier this year, under the medical leadership of Dr Spyridon Sofos at the CHL.