# Harnessing Digital Medicine for Pandemic Preparedness and Next Generation Healthcare

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Drug repurposing is a widely explored approach to address indications ranging from oncology to COVID-19. However, discovering promising candidates represents the first of many steps needed to optimally harness a repurposed drug's potential. These candidates often need to be delivered in combination with other therapies. In the quest for truly optimised drug repurposing, multiple challenges need to be overcome - The right drugs and corresponding doses need to be identified, which will have a profound impact on the drugs that ultimately comprise that combination. Using traditional approaches, this can be an insurmountable barrier given the very large drug and dose parameter space that is created. In addition, for certain diseases, a one-size-fits-all approach serves as a barrier to individualising treatment and can profoundly impair patient outcomes, as even effective drugs given at incorrect dosages can result in little to no efficacy. Furthermore, these doses may need to be modulated dynamically during the course treatment, since the patient response to treatment can also be dynamic. We will discuss our recent advances in clinical trials innovation and the clearance of first-in-class patient studies, as well as results from our ongoing clinical development studies. The ultimate objectives of WisDM and N.1, which are already being observed in the clinic, are to dynamically tailor patient-specific treatment outcomes, reduce healthcare costs, and increase accessibility to practice-changing and optimised medicine