COV/ABN/20/02 - Development of sensitive, rapid and high-throughput antibody assays for COVID-19

There is an urgent need for rapid diagnostic tests to support the NHS to contain COVID-19. Existing tests can be unreliable and some are not suited to high throughput. This project will use a new research approach using artificial intelligence (AI) software to identify the specific elements on COVID-19 surface thought to lead to an antibody response in patients (the "short-antigenic epitopes"). This approach could allow for mass screening of NHS staff/keyworkers, identification of high-risk patients/carriers, provide data on the prevalence of COVID-19, surveillance and allow targeted vaccination programs.