Oxford leads first trial investigating dosing with alternating vaccines

RESEARCH (/NEWS-LISTING?CATEGORY=228) CORONAVIRUS (/NEWS-LISTING?CATEGORY=8178)

COVID-19 VACCINE (/NEWS-LISTING?CATEGORY=8307)

The University of Oxford is to lead the first trial to explore alternating different COVID-19 vaccines, to explore the potential for flexibility in delivery and look for clues as to how to increase the breadth of protection against new virus strains.

Our vaccine work is progressing quickly. To ensure you have the latest information or to find out more about the trial, please visit the Oxford COVID-19 vaccine web hub (https://www.research.ox.ac.uk/Area/coronavirus-research/vaccine) or visit the COVID-19 trial website (https://covid19vaccinetrial.co.uk/) .

The study, run by the National Immunisation Schedule Evaluation Consortium (NISEC) and backed by £7 million of government funding from the Vaccines Taskforce, will evaluate the feasibility of using a different vaccine for the initial 'prime' vaccination to the follow-up 'booster' vaccination. This will help policy-makers explore whether this could be a viable route to increase the flexibility of vaccination programmes.

Matthew Snape, Associate Professor in Paediatrics and Vaccinology at the University of Oxford, and Chief Investigator on the trial said:

'If we do show that these vaccines can be used interchangeably in the same schedule this will greatly increase the flexibility of vaccine delivery, and could provide clues as to how to increase the breadth of protection against new virus strains.'

The trial, referred to as the COVID-19 Heterologous Prime Boost study or 'Com-Cov' study, will recruit over 800 volunteers aged 50 and above from eight National Institute for Health Research (NIHR) supported sites in England to evaluate the four different combinations of prime and booster vaccination: a first dose of the Oxford-AstraZeneca vaccine followed by boosting with either the Pfizer vaccine or a further dose of the Oxford-AstraZeneca vaccine, or a first dose of the Pfizer vaccine followed by boosting with either the Oxford-AstraZeneca vaccine or a further dose of the Pfizer vaccine.

These will be evaluated at two different dosing schedules: at a four-week interval for an early interim data readout and at a twelve-week interval for comparison to current UK policy.

Using blood samples collected from the trial volunteers, the study will monitor the impact of the different dosing regimens on participants' immune responses and for any additional adverse reactions to the new combinations of vaccines. The study will last for 13 months, and volunteers can find out more about the study at comcovstudy.org.uk. (https://comcovstudy.org.uk/)

Professor Snape continued:

'This is a tremendously exciting study that will provide information vital to the roll out of vaccines in the UK and globally. We call on those aged 50 years and above who have not yet received a COVID-19 vaccine to visit the website to find out more about the study and see if there is a study site near them.'

Dr Maheshi Ramasamy, Senior Clinical Researcher and Investigator on the trial, said:

'As we roll out vaccination in the UK, we have the opportunity to look at how to get the most out of the vaccines available to us. This innovative study looks at whether using different combinations of of two currently approved vaccines is a good alternative to the standard schedule. We will also be looking at the impact of the interval between doses on immune responses.

Deputy Chief Medical Officer and Senior Responsible Officer for the study Professor Jonathan Van-Tam said:

'Given the inevitable challenges of immunising large numbers of the population against COVID-19 and potential global supply constraints, there are definite advantages to having data that could support a more flexible immunisation programme, if needed and if approved by the medicines regulator.

'It is also even possible that by combining vaccines, the immune response could be enhanced giving even higher antibody levels that last longer; unless this is evaluated in a clinical trial we just won't know.

'This study will give us greater insight into how we can use vaccines to stay on top of this nasty disease.'

Professor Andrew Ustianowski, National Clinical Lead, NIHR COVID Vaccine Research Programme said:

'This is another exciting step forward in finding a variety of vaccine options for the UK and globally, for which the NIHR is integral to ensuring the participant recruitment for this study and the gaining of robust data on safety and effectiveness.

'We need people from all backgrounds to take part in this trial, so that we can ensure we have vaccine options suitable for all. Signing up to volunteer for vaccine studies is quick and easy via the NHS Vaccine Research Registry.'

If the study shows promising results, the MHRA would formally assess the safety and efficacy of any new vaccination regimen before it would be rolled out to patients.