JOINT COMMITTEE ON VACCINATION AND IMMUNISATION

Minute of the JCVI Extraordinary Meeting on COVID-19 Immunisation
Thursday 13 May 2021 17:30-19:00

Members

Prof Wei Shen Lim (Chair)
Prof Anthony Harnden
Prof Jeremy Brown
Prof Simon Kroll
Dr Rebecca Cordery
Prof Matt Keeling
Dr Martin Williams
Prof Adam Finn
Prof Anthony Scott
Prof Rob Read
Dr Maggie Wearmouth
Dr Kevin Brown
Prof Maarten Postma
Ms Alison Lawrence

Co-opted members

Dr Jillian Johnston (NI)
Dr Lorna Willocks (Scotland)
Mrs Anne McGowan (Wales)
Dr Julie Yates (England)

Medical Advisor

Prof Jonathan Van Tam

Secretariat

Andrew Earnshaw
Ruth Parry
Jonathan Crofts
Helena Bird
Dr Mary Ramsay
Dr Gayatri Amirthalingam

Other invited observers

Antonia Williams (DHSC)
Fergus Cumming (DHSC)
Thomas Waite (DHSC)
Helen Miscampbell (DHSC)
Laura Squire (DHSC)
Meera Chand (PHE)
Nick Andrews (PHE)
Jamie Lopez Bernal (PHE)
Jonathan Leach (NHS E&I)
Emily Lawson (NHS E&I)

I. Welcome and Introduction

1. The Chair welcomed everyone to the meeting and thanked them for attending the extraordinary meeting on vaccines for SARS-CoV-2 (COVID-19). This meeting was to discuss advice relating to local increases of the B.1.617.2 variant.
2. The Chair reminded attendees of the confidential nature of the discussions, presentations and papers for the meeting. None of the information could be shared outside of the meeting.

3. The Chair asked Members to indicate any additional conflicts of interest over and above those declared at the last meeting. None were declared.

4. Members were informed that increasing case numbers of the B.1.617.2 variant were being seen in some local areas with an estimated doubling time of 4-7 days. Widespread seeding had been seen elsewhere in the UK with rising cases in the North West. SAGE had confirmed that this was a deteriorating situation. Ministers were discussing a range of options to slow the spread and were looking for advice from JCVI on vaccination as part of this. It was noted that there was uncertainty about the vaccine protection against infection and transmission of the B.1.617.2, however there was more confidence that fully vaccinated individuals may not experience severe disease, though this was based on a small amount of data.

II. Update from SAGE

5. Members were updated on changes in epidemiology since the previous update. Neutralisation data had been shared at the technical briefing using convalescent sera from the first wave against B.1.617.2. Analysis showed that there was a five-fold decrease in neutralisation (comparing to two-fold for B.1.1.7 and eight-fold for B.1.351). This had not yet been tested against vaccine sera. A single outbreak in vaccinated healthcare workers in India had been reported. It was considered biologically plausible that B.1.617.2 is more transmissible than B.1.1.7 however this was not proven.

6. Transmissibility had been looked at by SPI-M. Using S-gene positivity, R was estimated to be ~1.6 with high confidence that there was 50% more transmission that with B.1.1.7.

7. Monitoring was continuing for any signal of severe disease and hospitalisation. Data from Bolton indicated there was a slight rise in emergency department attendances and in ICU admissions. Samples from these cases had not been sequenced, although considering the prevalence of B.1.617.2, they were likely to be variant cases. Exponential growth had started in Bolton approximately 2 weeks ago, therefore the effect on hospitalisation was unlikely to be evident yet, given the temporality of infection, symptoms and hospitalisation.

III. Vaccine Effectiveness Update

8. The Committee noted an update from PHE on analysis of effectiveness of the vaccine against the B.1.617.2 variant. This followed on from data previously shared with members.

9. Data from the North West London care home outbreak showed there was no reduction in the provisional attack rate in vaccinated individuals. A relatively small proportion of those vaccinated were symptomatic, four were hospitalised as a precaution, however none had severe illness. This was considered to be good evidence of vaccine effectiveness as a mortality of ~20% would be expected in unvaccinated individuals in a care home

outbreak.

10. Data from sequencing linked to NIMS looked at the proportion of those with the variant and the interval after vaccination with the underlying assumption that if the vaccine was equally effective against B.1.617.2., it would be expected that a similar proportion of cases would be seen with each variant in every time interval post vaccination. The analysis suggested less than 20% effectiveness against B.1.617.2 after one dose, up to 70% effectiveness after two doses. However, when comparing vaccinated with unvaccinated persons, no differences in effectiveness was seen. Data were considered highly uncertain at this stage. There was the potential that travel history may act as a confounder, as those who had recently travelled were less likely to have had the vaccine in the last two weeks, and those vaccinated were less likely to have travelled and less likely to have been exposed to the variant. Further data on travel history were being sought.

11. Data from the Pillar 2 triple gene target positive test-negative case-control study (using S gene target positivity as a proxy for B.1.617.2) showed vaccine effectiveness of 22% from 21 days after the first dose and 83%, 14 days after the second, when comparing to unvaccinated.

12. Looking at results for S gene target failure (mainly B.1.1.7) showed vaccine effectiveness of 53% following dose 1 and 90% after dose 2 when comparing to unvaccinated; comparing to the 4-13 day period post vaccination showed similar effectiveness (59%, 92%).

13. Overall, the data showed that there is evidence of vaccine effectiveness particularly after two doses against the B.1.617.2 variant, however there was conflicting evidence as to whether this may be lower than effectiveness against B.1.1.7.

IV. Update on modelling

14. The Committee noted an update of modelling for SAGE (modelling varying amounts of increased transmissibility from B.1.617.2) which predicted that if step 3 of the road map is not taken, the infection wave starts later; if step 3 is carried out in full, the infection wave is earlier and higher and if steps 3 and 4 are carried out, even assuming good vaccine effectiveness, the infection wave was predicted to be large.

15. A simple model created by JBC to be able to rapidly test parameters (such as increased transmissibility) showed that in immune escape scenarios (30% and 50% increased transmissibility) hospitalisations and deaths could be higher than the peak seen in January after step 4. Delaying the road map would just delay the peak.

16. Members noted that modelling uses data from wave 2 (B.1.1.7) however it was not known whether B.1.617.2 affected younger people more - who were currently unvaccinated. The Modelling presented did not include age-based structures.

V. Discussion

17. The Committee discussed potential options for the vaccination programme in the context of the rising B.1.617.2 variant cases. Members noted that a large proportion of those in phase 1 of the programme had not yet received a second dose of vaccine. The B.1.617.2 variant was considered to be at least 50% more transmissible, with some effect on vaccine effectiveness against infection but with no clear data available on effectiveness against hospitalisation. Vaccination alone could not be relied upon to mitigate the rise in cases.

18. NHSE informed the Committee that next week enough AstraZeneca vaccine was to be sent to every area to ensure enough vaccine was available locally to fully vaccinate groups 1-10. After that, the preference was to use Pfizer-BioNTech vaccine. A large inventory of Pfizer-BioNTech vaccine was being built up for second dose supply, and from then on all received Pfizer doses would be delivered to vaccination centres. In the coming weeks significant numbers of second doses were due to be given, and delivery was on target to give all first doses by the end of July, based on 100% uptake. It was noted that time would be needed to increase capacity. Shortening the interval for Pfizer and AstraZeneca (current age restrictions still applied) would not be an issue in terms of delivery and supply. Average dose intervals were currently between 10 and 11 weeks. Operational considerations were more of a limiting factor than vaccine supply.

19. The Committee agreed that the top priority should be vaccinating those in clinically vulnerable groups who hadn't yet received a vaccine. Bringing forward vaccination in younger groups would become relevant if there was evidence of a high incidence of severe disease in this age group. A first dose of vaccine in younger age groups was unlikely to have much impact on transmission, and in susceptible individuals the evidence suggested that two doses was better at preventing disease. In the worst-case efficacy scenario observed, the first dose would provide 20% protection whereas the second dose would provide 70%. The impact of a second dose was quicker as the boost response was seven days, whereas for the first dose, an adequate immune response may take three weeks.

20. In the epicentres of the B.1.617.2 variant outbreak it was considered too late to prioritise vaccination of younger groups with the aim of blocking transmission, and measures such as NPIs would be the only way to help control case numbers. Supplying additional vaccine to areas who were already seeing substantial numbers of B.1.617.2 cases to vaccinate younger people would ultimately divert vaccine supply for other areas due to vaccinate older more vulnerable people. The variant was already seeded in areas all over the country and taking vaccine from elsewhere would increase the chances of B.1.617.2 becoming a larger clinical problem in other regions.

21. The Committee agreed that second doses should be prioritised in those who were most vulnerable to infection (phase 1) and to shorten the second dose

interval in areas affected. It was noted that bringing forward second doses of Astra Zeneca too much would likely reduce effectiveness.

22. The Committee acknowledged that one of the factors in the decision not to use AstraZeneca in those aged 30-40 years was that this would not affect the programme roll out, and that there wasn't an earlier wave of infection. The available AstraZeneca doses were planned for use, at this time, as second doses to those who have already received it. The Committee discussed that reversing the decision to not use AstraZeneca in those under 40 years could result in a loss of confidence in the programme. Members agreed that the current epidemiology did not change the risk benefit balance enough to offer AstraZeneca to those under 40 years.

23. Members discussed the possibility of increasing operating hours of vaccination centres to increase capacity. This had been trialled with 24-hour opening which was popular with healthcare workers, however less so with members of the public. As the programme was moving into vaccinating working age populations, extending into the evening may be more appropriate. It was noted that vaccination teams were working on ensuring slots were only available which were likely to be booked, in order to avoid idle time. Pop-up centres with different operational hours were already open in places with a high incidence of B.1.617.2, such as Bolton.

24. The Committee concluded that bringing the second dose interval forwards from 12 to 8 weeks would be reasonable. If there were a delivery capacity issue, it would be reasonable to prioritise epicentres for the shorter interval, however if there were no capacity issues, then the shorter interval should be rolled out nationally. This would enable faster roll out of the programme with the vaccines available. The overarching priority was to vaccinate those in vulnerable groups who had not yet received their first dose of vaccine.

25. Advice from the committee as discussed in this meeting was to be written up and provided to the Department of Health and Social Care as a priority.

Post meeting note: advice to mitigate the impact of B.1.617.2 was published as a news story on 14 May 2021 https://www.gov.uk/government/news/jcvi-advice-to-mitigate-impact-of-b1-617-2-variant

Declarations – (Conflicts of interest specific to COVID-19 vaccines)

Prof Wei Shen Lim (CHAIR)
Professor Lim has no registered conflicts of interest Other information Professor Lim's institution has received unrestricted investigator-initiated research funding from Pfizer for a study in pneumonia in which Professor Lim is the Chief Investigator (non-vaccine related), and from NIHR HTA for clinical trials in which Professor Lim is the Chief Investigator. Professor Lim is: Co-investigator of the NIHR-funded (COVID19) RECOVERY Trial. Co-investigator of the UKRI/NIHR funded PROTECT-CH (PROphylactic TrEatment of COVID in Care Homes) Platform Trial Expert Panel Member: NICE COVID19RapidGuidelines Member of the New and Emerging Respiratory Viral Threats Advisory Group (NERVTAG) and occasionally sits on SAGE. Member of UK-CTAP anti-virals sub-group Member of UK Specialist Commissioning Group – Remdesivir, Tocilizumab National Lead, NCEPOD Pneumonia National Lead, National CQUIN in Community Acquired Pneumonia National Lead, British Thoracic Society Community Acquired Pneumonia Audit Programme
Prof Anthony Harnden (Deputy Chair)
Professor Harnden has no registered conflicts of interest. Other information: Professor Harnden is a Partner at an Oxfordshire Practice which is a PCN lead practice for COVID- 19 vaccine administration Professor Harnden is a member of the Covid-19 Vaccine Deployment Clinical Review Group Professor Harnden is a University of Oxford employee but has had no involvement in the development or the clinical trials of the Oxford Astra Zeneca Covid 19 vaccine. He has received NIHR research funding as chief investigator for a programme of work on influenza in at risk children. Professor Harnden is a General Medical Council Board member and a Fellow of the Royal College of General Practitioners
Prof Adam Finn
Professor Adam Finn receives no personal payments from the manufacturers of vaccines. Non personal interest: Professor Finn is chief investigator in the Valneva COVID19 vaccine clinical trials programme in the UK and in the Sanofi COVID19 booster vaccine clinical trial in the UK. He is also local Principal or Co-investigator in the Oxford-Astra Zeneca COV001, COV002 and COV006

studies and the National Immunisation Schedule Evaluation Consortium study ComFluCov
Prof Matt Keeling
Professor Matt Keeling has no registered conflicts of interest. Other information Member of SPI-M and occasionally sits on SAGE
Prof Jeremy Brown
Professor Brown has no registered conflicts of interest Other information Professor Brown has/is: MRC and Wellcome research funding not related to COVID-19 vaccines University College London (UCL) and University College London Hospital (UCLH) BRC and Rosetrees charity funding for work on COVID-19 serological responses and post-COVID lung damage Local principle investigator for the multicentre PHOSP COVID study phenotyping patients after being hospitalized with COVID-19 pneumonia Working on UCL / UCLH clinical studies of the longer-term effects of COVID-19 pneumonia
Dr Martin Williams
Professor Martin Williams has no registered conflicts of interest. Other information Professor Williams holds a contract for work with Public Health England.
Dr Fiona Van der Klis
Dr Fiona van der Klis has no registered conflicts of interest
Ms Alison Lawrence
Ms Alison Lawrence has no registered conflicts of interest
Prof Maarten Postma
Professor Postma has no registered conflicts of interest
Prof Robert Read
Professor Read receives no payments from the manufacturers of vaccines. Professor Read has no registered conflicts of interest
Prof Anthony Scott

Professor Scott receives no payments from the manufacturers of vaccines. Professor Scott has no registered conflicts of interest Other information Professor Scott is Director of the Health Protection Research Unit at the London School of Hygiene and Tropical Medicine. He receives research funding from the National Institute for Health Research, the Medical Research Council, the Wellcome Trust and Gavi, The Vaccine Alliance, and the Bill & Melinda Gates Foundation.
Dr Maggie Wearmouth
Dr Wearmouth has no registered conflicts of interest
Professor Simon Kroll
Professor Kroll has no registered conflicts of interest Other information He is the Honorary Medical Director of Meningitis Now
Dr Rebecca Cordery
Dr Cordery has no registered conflicts of interest Other information Dr Cordery works for Public Health England
Dr Kevin Brown
Dr Brown has no registered conflicts of interest Other information Dr Brown works for Public Health England
Dr Jillian Johnston (co-opted member)
Dr Jillian Johnston has no registered conflicts of interest
Mrs Anne McGowan (co-opted member)
Mrs McGowan receives no payments from the manufacturers of vaccines Mrs McGowan has no registered conflicts of interest
Dr Lorna Willocks (co-opted member)

Dr Lorna Willocks has no registered conflicts of interest
Ms Julie Yates (co-opted member)
Ms Julie Yates has no registered conflicts of interest