

Independent SAGE comment on proposal to reschedule second dose of SARS-CoV-2 vaccines in the UK - 3rd January 2020

A new variant of COVID-19 is out of control in Great Britain – it's a finely balanced decision but delaying a second dose of vaccine is justifiable, but only as part of a comprehensive ambitious strategy to suppress infections

On 30th December 2020, following MHRA approval of the Oxford AstraZeneca vaccine, the [four UK Chief Medical Officers](#), based on a recommendation by the [Joint Committee on Vaccination and Immunisation \(JCVI\)](#), issued clinical advice to prioritise maximum uptake of a single dose of either the Oxford AstraZeneca or the Pfizer BioNTech vaccine, in the latter case contradicting previous advice that a second dose should be administered three weeks after the first to be confident of achieving sustained high level protection. The second dose is to be given within 12 weeks of the first. This decision has been justified by the increasing transmissibility of a new variant of the SARS-CoV-2, B.1.1.7. that is spreading rapidly throughout Great Britain and, increasingly, to other countries. While there are sound theoretical and empirical public health reasons to support the decision to delay a second dose of the Oxford AstraZeneca vaccine, including evidence from trial data that a delayed second dose may be more effective, considerable concerns have been raised about a delay in administering a second dose of the Pfizer BioNTech vaccine. These concerns, voiced by the [British Medical Association](#) among others globally, raise several issues:

- a) Scientific - as the manufacturer and others have noted, there is no empirical evidence from clinical trial data that a delayed second dose will be as effective. Given the concerns that have been voiced, it is apparent that the review by Public Health England, published as an annex to the statement by the JCVI, has not succeeded in resolving this issue to the satisfaction of many health professionals and indeed patients.
- b) Ethical – those, including a large number of elderly people, many likely to have cognitive impairment, gave consent to be vaccinated on the basis that they were receiving the first dose of a two dose regime within the 3 week timeframe.
- c) Organisational – those involved, particularly currently busy primary care practices, in what is already an extremely complex operation to roll out the vaccine will now face major disruption as they seek to reschedule those already vaccinated with a single dose who have appointments for a second.
- d) Confidence – any change to a vaccine schedule, unless, or in some cases even if convincingly communicated, risks undermining confidence in the vaccination strategy. This is especially so given the public disagreement about the UK's strategy voiced by [Dr Anthony Fauci](#).
- e) Regulatory – concerns have been raised that a delay would be contrary to the approval granted by MHRA although this is not correct as the [Regulation 174 Advice for UK Healthcare Professionals](#) states that the two doses should be given “at least 21 days apart”.

Independent SAGE recognises that the first four points are valid concerns and, in normal circumstances, we would argue for continuation of the earlier plans to administer two doses of the Pfizer BioNTech vaccine 21 days apart. However, these are not normal circumstances and there are other important public health considerations.

It is now clear that the new variant of the virus, which seems to have emerged in the South East of England, [is substantially more transmissible](#) than earlier variants, by 40-80%. This increases the R number by between 0.4 and 0.8. It is also clear that the current Tier 4 restrictions are [unable to contain its spread](#), even with closure of schools and universities. The pandemic is now out of control, and the NHS is struggling, with some hospitals having to stop non-COVID activities. The NHS is no

longer being protected. For these reasons, there is a strong argument for maximising the coverage of the population with at least one dose of vaccine, even though this requires a change to the dosage schedule. **The urgency of concerted and effective action to suppress the new variant cannot be overstated.** While it is a very difficult and finely balanced decision, **Independent SAGE endorses the decision to pursue coverage of as high a proportion of the population as possible, as quickly as possible as part of a comprehensive strategy.**

This must, however, be accompanied by other measures, as follows:

- a) A policy of making the UK **COVID Secure**, drawing on reports by the [All Party Parliamentary Group on Coronavirus](#) and that by Independent SAGE on elimination - warnings of the potential for new, more transmissible variants to emerge have now been confirmed and the implementation of a vaccine programme in the presence of high circulating levels of the virus creates conditions that will encourage “escape” with spread of future vaccine resistant variants. This must include a higher level of restrictions as imposed in many countries than the current Tier 4, including a move to online teaching in all schools and universities and implementation of an effective Find, Test, Trace, Isolate, and Support system, with an emphasis on the Isolation and Support that has so far been lacking. It must also include clear messaging on how just how much the new variant has changed the situation.
- b) Publication of a **detailed and convincing strategy to scale up vaccine roll out** in England, reflecting the concerns of those who must implement it, as many of those involved remain unclear about what is planned, and be fully transparent about the situation with regard to [vaccine supply](#). Independent SAGE has consistently argued for much greater engagement with those affected by UK policies, which would help ensure that what is proposed is feasible and commands widespread acceptance. We cannot ignore evidence that some of those involved in implementing the vaccine strategy [lack confidence](#) in its organisation and it is imperative that previous failings with Test & Trace are not repeated. Equally, we are concerned by the lack of visibility of the Minister with designated responsibility for deployment of the vaccine. This strategy must include an extensive public engagement campaign led by trusted local figures, taking full account of evidence on the [risks of “backfire”](#) from poorly designed messaging, and ensuring clarity on when second disease of vaccine should be expected.
- c) Development of a **rigorous evaluation** within the new approach, including both randomised trials and evaluation of natural experiments of different intervals between doses, coupled with behavioural science and implementation research. The National Institute for Health Research should be leading such a national, real life research programme. Otherwise, future policy will be based on guesswork. This is especially important if it is proposed that individuals might receive two doses of different vaccines. The UK’s experience with the RECOVERY trial has shown what is possible quickly.
- d) Maintain a **real-time evaluation of ongoing viral variation**, through the COVID Genomics UK Consortium (COG-UK). We must expect the current variants B.1.1.7. to continue to evolve as transmissions continue, which may lead to viruses with reduced susceptibility to vaccines ([Independent SAGE document “Will new variants compromise vaccine effectiveness”](#)). Such information is critical to inform the next generation of vaccine development.
- e) Ensure **absolute transparency** about the strategy being pursued, the case for adopting it (the increased transmissibility of the new variant) and the evidence supporting it, including what remains unknown. This should include recognising that this strategy reflects the particular circumstances in Great Britain, which would explain why other countries where the new variant has not yet taken hold are likely to take a different view.

- f) **Restrict movement from and to Great Britain to the rest of the world** to the absolute minimum. Although it may already be too late, even now the UK should work through the WHO to ensure that anyone who does travel, including aircrew and road haulage drivers, are subject to a strict testing regime, ideally based on PCR tests. If the new variant of the virus becomes established elsewhere there will be extremely serious consequences for everyone and it is already clear that cases from the UK are seeding other countries.

Finally, recognising the complex issues that arise where an individual has already received one dose of the Pfizer Biontech vaccine and is scheduled to have another, we believe that this should be a matter for discussion between the clinician and patient involved, while recognising that giving the second dose now will mean that it is not available for others at a time when rapid expansion or coverage is a priority.