

JCVI advice on co-administration of COVID-19 and Influenza vaccines

Background

PHE would like to propose that based on first principles the gap between administration of the influenza (or other inactivated vaccines) and Covid-19 vaccines could come down to 14 days or less depending on the circumstances.

The minute of the JCVI August meeting noted:

55. Members considered that vaccination during the influenza season could lead to situations where individuals had recently (last 28 days) received an influenza vaccine or could be scheduled to receive an influenza vaccine within 28 days of a COVID-19 vaccine. Concomitant administration could also be logistically desirable. Members considered that data should be developed on the safety and immunogenicity of concomitant administration of influenza and candidate COVID-19 vaccines.

56. Members noted that there were limited data available to determine intervals between vaccines at this time. Generally, advice in the Green Book: Immunisation Against Infectious Disease should be followed regarding intervals between vaccines unless data from vaccine trials indicated otherwise. The Committee agreed that without data to indicate otherwise there should be a 28 days interval between COVID-19 and influenza vaccines. It was noted that many of the candidate vaccines could be two-dose schedules. It was considered possible that the Committee could advise, dependent on data to support it, prioritising administration of the first dose in as many eligible individuals as possible, before considering an offer of the second dose. Sequencing of vaccines would, in part, be dependent on whether influenza vaccine was a priority at that time of year. Data on responses to a single dose of COVID-19 vaccines would be required for further consideration.

On coadministration of inactivated vaccines the Green Book (chapter 6 contraindications and special considerations) says:

Intervals between vaccinations

Most inactivated vaccines can be given at the same visit or at any time period from each other. Please see Chapter 11 for intervals between vaccines in the routine schedule and relevant chapter for recommendations about specific vaccines.

Where more than one live vaccine is required, earlier guidance recommended that they should be administered on the same day or at four-week interval. This advice was based on evidence with measles and smallpox vaccines and supported by the theory that interferon production stimulated by replication of the first virus prevented replication of the second agent, thus leading to an attenuated response. A similar reason was used to explain false negative tuberculin tests in those who had received MMR. More recent evidence suggests that the underlying theory does not hold for all live vaccines, particularly those administered by other routes. Please refer to the relevant chapter for recommendations about specific vaccines.

Chapter 11 (The UK immunisation schedule)

Intervals between vaccinations

Intervals between vaccines doses of different inactivated vaccines can be administered at any time before, after, or at the same time as each other. Doses of inactivated vaccines can also be given at any interval before, after, or at the same time as a live vaccine and vice versa.

A minimum four-week interval is normally recommended between successive doses of the same vaccine - for example between each of the three doses of DTaP-containing vaccine in the primary schedule. A better response is made to some vaccines when an eight-week interval is observed between infant doses. Although shorter intervals may be advised to achieve more rapid protection, e.g. for travel or during an outbreak, this may lead to a lower immune response, particularly in infants, and may therefore provide less durable protection.

JCVI is asked to consider:

- although no data for COVID-19 vaccines on potential interference between vaccines given in close proximity currently exists, in the absence of such data first principles would suggest that interference between inactivated vaccines with different antigenic content is likely to be limited;
- based on experience with other inactivated vaccines any potential interference is most likely to generate a slightly attenuated immune response and therefore it is not desirable to routinely schedule vaccines to be given to large numbers of people at the same time (or maybe at shorter intervals) until data on co-administration is generated;
- an interval of two weeks should allow for any reported adverse events (which usually occur with 7 days) to be distinguished for each vaccine and avoid the AE being wrongly attributed to the their coadministration;
- however, in circumstances where there are a small proportion of individuals in an eligible who have received recent flu vaccine who require COVID vaccination for rapid protection (or vice versa) vaccination can go ahead as the benefit of some rapid protection may outweigh the risk of any minor attenuation of response.
- this would allow the NHS to plan to deliver a COVID programme towards the end of the flu programme season without the operational complexity of trying to defer a small number of individuals who may have received seasonal flu

JCVI Secretariat

September 2020