

In brief

Evidence on AstraZeneca vaccine rollout

11 March 2021

Question: What evidence is emerging regarding the effectiveness of the AstraZeneca vaccine, particularly regarding hospitalisations in the United Kingdom (UK)?

Background

- The AstraZeneca vaccine (AZD1222 / ChAdOx1) is a viral vector vaccine that can be stored at 2-8°C.
- The original recommended schedule was two doses, 28 days apart.
- The UK announced on 30 December 2020 its plan to administer [two doses, 12 weeks apart](#).
- In Australia, the Therapeutic Goods Administration has determined that the vaccine can be safely [administered 4-12 weeks apart](#).
- The AstraZeneca vaccine has an acceptable safety profile. Some European countries initially advised against use in older people due to lack of data. However, this is being reviewed and Germany has since approved the vaccine for those [65 years and over](#).

Impact on hospitalisation

- [BMJ](#) (19 Feb 2021): The number of deaths in the UK within 28 days of a positive COVID-19 test reported as steadily falling. In the three weeks to 14 February 2021, deaths in care homes fell by 62% to a level previously seen around the end of October 2020. Hospital admissions fell in all age groups, however this may be as a result of the concurrent lockdown.
- [University of Edinburgh preprint](#) (21 Feb 2021): Article showed that four weeks after the first doses of the Pfizer and AstraZeneca vaccines were administered in Scotland, the risk of hospitalisation from COVID-19 fell by up to 85% (95% confidence interval 76 to 91) and 94% (95% confidence interval 73 to 99), respectively.
- [Lancet preprint](#) (3 March 2021): Substantial reductions in the risk of COVID-19-related hospitalisation in elderly, frail patients with extensive co-morbid disease following a single dose of either Pfizer (71.4% reduction) or AstraZeneca (80.4% reduction) vaccines.
- [medRxiv preprint](#) (4 March 2021): Single dose reported to be approximately 80% effective at preventing hospitalisation among people aged ≥70 years in UK. Significant reduction in symptomatic cases in older adults, with even greater protection against severe disease following a single dose of either Pfizer or AstraZeneca. Protection was maintained for the duration of follow-up (>6 weeks). Reports a clear effect of the vaccines against the UK variant of concern.

A Critical Intelligence Unit living [evidence table on COVID-19 vaccines](#) is updated daily.

Evidence checks are archived a year after the date of publication

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