Independent report

JCVI statement on use of the AstraZeneca COVID-19 vaccine: 7 April 2021

Published 7 April 2021
Since the start of the pandemic over 4 million COVID-19 infections have been confirmed in the UK causing more than 120,000 deaths. Over 30 million people have received their first dose of COVID-19 vaccine since the start of the programme, which Public Health England (PHE) estimate has prevented at least 6,000 deaths in the first 3 months of 2021. Analysis of infection data since the introduction of the COVID-19 vaccines in the UK demonstrates that vaccination is highly effective and substantially reduces the risk of infection and severe COVID-19 disease.

There have been reports of an extremely rare adverse event of concurrent thrombosis (blood clots) and thrombocytopenia (low platelet count) following vaccination with the first dose of AstraZeneca ChAdOx1 nCoV-19 vaccine (AZD1222). There has been no signal for thrombosis/thrombocytopenia following receipt of other COVID-19 vaccines approved for use in the UK (Pfizer-BioNTech and Moderna). Given the very low numbers of events reported overall, there is currently a high level of uncertainty in estimates of the incidence of this extremely rare adverse event by age group. However, the available data do suggest there may be a trend for increasing incidence of this adverse event with decreasing age, with a slightly higher incidence reported in the younger adult age groups. In contrast, the risks of severe disease associated with COVID-19 increases steeply with age, with the youngest adults at lowest risk. There are currently no known risk factors for this extremely rare condition, which appears to be an idiosyncratic reaction on first exposure to the AstraZeneca COVID-19 vaccine.

Alternatives to the AstraZeneca COVID-19 vaccine currently approved for use in the UK include the Pfizer-BioNTech BNT162b2 and Moderna mRNA-1273 vaccines. JCVI has weighed the relative balance of benefits and risks and advise that the benefits of prompt vaccination with the AstraZeneca COVID-19 vaccine far outweigh the risk of adverse events for individuals 30 years of age and over and those who have underlying health conditions which put them at higher risk of severe COVID-19 disease. JCVI currently advises that it is preferable for adults aged <30 years without underlying health conditions that put them at higher risk of severe COVID-19 disease, to be offered an alternative COVID-19 vaccine, if available. People may make an informed choice to receive the AstraZeneca COVID-19 vaccine to receive earlier protection.

There are some adults <30 without underlying health conditions who are in phase 1, who were prioritised due to an increased risk of exposure and/or to reduce the risk of passing the infection on to vulnerable individuals. This includes health and social care workers, unpaid carers and household contacts of immunosuppressed individuals. Acting on a precautionary basis, if these persons are still unvaccinated, it is preferable for them to be offered an alternative COVID-19 vaccine, if available. JCVI is currently finalising its advice on phase 2 of the programme, particularly for healthy people under 30 years of age, and this will be published in due course.

To date, there are no reports of the extremely rare thrombosis/thrombocytopenia events following receipt of the second dose of the AstraZeneca COVID-19 vaccine. All those who have received a first dose of the AstraZeneca COVID-19 vaccine should continue to be offered a second dose of AstraZeneca COVID-19 vaccine, irrespective of age. The second dose will be important for longer lasting protection against COVID-19.

JCVI advises that all individuals offered a COVID-19 vaccine should be fully informed about the benefits and risks of vaccination. This should include clear information on the extremely rare thrombosis/thrombocytopenia adverse event, how to monitor for symptoms that might be related to the adverse event, and what action should be taken by individuals and health professionals in the event of such symptoms arising. PHE is preparing updated information for those being offered COVID-19 vaccines, and for health professionals, which will be available through the GOV.UK website.