

COVID-19

Considerations on Thrombotic Events Following
Administration of the Oxford-AstraZeneca COVID-19
Vaccine in Europe

7 April 2021

In vaccination campaigns such as the current one for COVID-19, it is customary for countries to report potential adverse effects following immunization. While this does not necessarily mean that such events are related to the vaccination itself, they must be investigated. It also shows that the surveillance system is working and that effective controls are in place. The World Health Organization (WHO) is in regular contact with the European Medicines Agency (EMA) and other regulatory authorities around the world to obtain the most recent information on the safety of all COVID-19 vaccines.

The Pan American Health Organization (PAHO) is issuing this communiqué in response to the information circulating about potential risks associated with use of the COVID-19 vaccine developed by AstraZeneca and Oxford University, in light of the reports of events in several European countries.

- As of 17 March 2021, there were reports in Europe of coagulation disorders potentially related to administration of the Oxford-AstraZeneca vaccine. In response to those reports, some European Union countries temporarily suspended use of the AstraZeneca COVID-19 vaccine as a precautionary measure.
- Both the COVID-19 Subcommittee of the WHO Global Advisory Committee on Vaccine Safety (GACVS) and the Pharmacovigilance Risk Assessment Committee (PRAC) of EMA have been carefully assessing the available safety data on the Oxford-AstraZeneca vaccine.
- As of today, there is no evidence of a problem related to specific lots of the vaccine or particular manufacturing facilities.
- For the moment, GACVS and PRAC have concluded that the vaccine is not necessarily associated with an increase in the overall risk of blood clots (thromboembolic pulmonary and deep vein thrombosis events).
- On 24 March, PRAC recommended that section 4.4 of the technical specifications (special warnings and precautions for use) be updated with a description of the events, an indication that the cases reported had occurred primarily in women under 55, and a recommendation for a pre-vaccination risk-benefit analysis of people at risk for thromboembolic events (e.g., use of oral contraceptives, a history of previous events, etc.). It also recommended ruling out COVID-19 infection as a causal event.

- At the EMA's request, AstraZeneca issued a note to professionals that underscored the positive benefit-risk balance and at the same time informed them about the reports of cases of thrombocytopenia and rare thrombotic phenomena, alerting professionals to identify related signs and symptoms.
- On 7 April, PRAC issued a new bulletin based on the evaluation of 62 cerebral venous sinus thrombosis (CVST) events and 24 splanchnic vein thrombosis (SVT) events reported to spontaneous notification systems in a total population of approximately 25 million people vaccinated with the Oxford-AstraZeneca vaccine. As of that date, most cases had occurred in women under 60 years of age, within two weeks after vaccination. Taking into account all evidence available to date, PRAC decided that these very rare coagulation events should be included in the information on Vaxzevria (the new name for Oxford-AstraZeneca's COVID-19 vaccine). As of 4 April, in a total vaccinated population of 34 million, 169 cases of CVST and 53 of SVT had been reported in Europe; however, PRAC confirmed that the overall benefit-risk ratio for the vaccine remains favorable.
- Also on 7 April, based on the information it had considered, GACVS emphasized that although it is possible that these events could be linked to the vaccine, this has not been confirmed and additional specialized studies are needed in order to better characterize the possible association between vaccination and risk factors.
- Based on information previously issued by the EMA, on 29 March, Canada's National Advisory Committee on Immunization proposed that the Public Health Agency of Canada suspend use of the Oxford-AstraZeneca vaccine in people under the age of 55. Some European countries have imposed age-related restrictions, but others are continuing its use in the adult population.
- Based on the available information, WHO and the EMA currently consider the benefits of the Oxford-AstraZeneca COVID-19 vaccine to outweigh its risks, given the risk of morbidity and mortality from COVID-19, and recommend that vaccinations continue.
- The aforementioned committees continue to meet and review supplementary data in order to issue further recommendations. This communiqué will be updated as new evidence and conclusions from the current assessments emerge.

Recommendations:

- **Considering that the benefits of the vaccine outweigh the risks, PAHO recommends that all countries continue using the Oxford-AstraZeneca vaccine to fight COVID-19 while the above-mentioned events are investigated. It furthermore recommends that the safety of all COVID-19 vaccines be monitored and that the reporting and investigation of presumed adverse events be encouraged.**
- **Patients should seek immediate medical care if (especially within 4 to 20 days following vaccination) they have difficulty breathing, chest pain, inflammation in the legs, persistent abdominal pain, neurological symptoms (including persistent and severe headaches or blurred vision), or small spots of blood under the skin beyond the injection site.**
- **Following PRAC guidelines, it is important to emphasize the importance of seeking a specialist for rapid treatment of these events in order to facilitate recovery and prevent complications.**

References

AstraZeneca's COVID-19 vaccine: EMA finds possible link to very rare cases of unusual blood clots with low blood platelets: <https://www.ema.europa.eu/en/news/astrazenecas-covid-19-vaccine-ema-finds-possible-link-very-rare-cases-unusual-blood-clots-low-blood>

Canada - Use of AstraZeneca COVID-19 vaccine in younger adults: <https://www.canada.ca/en/public-health/news/2021/03/use-of-astrazeneca-covid-19-vaccine.html>

COVID-19 Vaccine AstraZeneca: Risk of thrombocytopenia and coagulation disorders: https://www.ema.europa.eu/en/documents/dhpc/direct-healthcare-professional-communication-dhpc-vaxzevria-previously-covid-19-vaccine-astrazeneca_en.pdf

GACVS statement: [https://www.who.int/news/item/19-03-2021-statement-of-the-who-global-advisory-committee-on-vaccine-safety-\(gacvs\)-covid-19-subcommittee-on-safety-signals-related-to-the-astrazeneca-covid-19-vaccine](https://www.who.int/news/item/19-03-2021-statement-of-the-who-global-advisory-committee-on-vaccine-safety-(gacvs)-covid-19-subcommittee-on-safety-signals-related-to-the-astrazeneca-covid-19-vaccine)

PRAC report: https://www.ema.europa.eu/en/documents/prac-recommendation/signal-assessment-report-embolic-thrombotic-events-smq-covid-19-vaccine-chadox1-s-recombinant-covid_en.pdf

Interim statement of the COVID-19 subcommittee of the WHO Global Advisory Committee on Vaccine Safety: <https://www.who.int/news/item/07-04-2021-interim-statement-of-the-covid-19-subcommittee-of-the-who-global-advisory-committee-on-vaccine-safety>

Official website of the European Medicines Agency (EMA): <https://www.ema.europa.eu/en/news/covid-19-vaccine-astrazeneca-benefits-still-outweigh-risks-despite-possible-link-rare-blood-clots>

Official website of the World Health Organization (WHO): <https://www.who.int/news/item/17-03-2021-who-statement-on-astrazeneca-covid-19-vaccine-safety-signals>

Official website of the Pan American Health Organization (PAHO): <https://www.paho.org/en/covid-19-vaccines>

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