Vaccination against COVID-19: insight from arterial and venous thrombosis occurrence using data from VigiBase

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This study observed an imbalance between venous and arterial thrombotic events in mRNA vaccines while with AZ1222 they are evenly shared. Our analysis highlights cerebral vein thrombosis with the three vaccines. https://bit.ly/3mZqguE

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To the Editor:

Coronavirus disease 2019 (COVID-19) is associated with a prothrombotic phenotype characterised by coagulopathy and endothelial dysfunction [1–4]. Following some cases of thrombosis after vaccination, the Oxford–AstraZeneca COVID-19 vaccine (AZD1222) was temporarily suspended by some European countries. The European Medicines Agency concluded that the benefits of the vaccine in combating the COVID-19 outbreak continue to outweigh the risk of side-effects. On 19 March, 2021, Germany reported 13 cases of sinus or cerebral vein thrombosis, with more than 1.6 million AstraZeneca COVID-19 vaccine doses administered. Some of these patients also had a heparin-induced thrombocytopenia (HIT)-like syndrome, which suggests an immunological event as one of the potential origins of thrombosis.