### Letter to the Editor (Author Reply)

Taiwan J Ophthalmol 2022;12:502

# Authors' comments on "branch retinal vein occlusion post severe acute respiratory syndrome coronavirus 2 vaccination"

Dear Editor,

We appreciate the comments by Sriwijitalai W. regarding our article "Branch retinal vein occlusion post severe acute respiratory syndrome coronavirus 2 vaccination." As Sriwijitalai W. pointed out, we cannot assert from this case report that branch retinal vein occlusion (BRVO) was caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccination. However, considering our report on recurrent BRVO,[1] and other reports on the development of retinal vascular disease and systemic vascular disease, [2,3] we believe that we cannot rule out the possibility that it may have been triggered. Pottegård et al.[3] reported in their prospective study that the rates of developing venous embolus, thrombocytopenia, abnormal coagulation, and other types of bleeding within 28 days after the administration of the adenovirus vector vaccine ChAdOx1-S (AstraZeneca plc) SARS-CoV-2 vaccination were significantly higher than the expected rates based on age- and sex-specific incidence rates among the general population. Therefore, based on the results of their prospective studies with a massive number of cases, we believe that the incidence rates of venous thromboembolic events, including cerebral venous thrombosis, are at least increased by the coronavirus disease 19 (COVID-19) vaccination.

The SARS-CoV-2 vaccination is now routinely recommended. Thus, we need to investigate and report the actual side effects associated with the SARS-CoV-2 vaccination in as many countries as possible. As Sriwijitalai W. pointed out, a comprehensive laboratory analysis is required to rule out other possibilities when a side effect has been recorded.

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#### Conflicts of interest

The authors declare that there are no conflicts of interests of this paper.

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#### References

- Tanaka H, Nagasato D, Nakakura S, Tanabe H, Nagasawa T, Wakuda H, et al. Exacerbation of branch retinal vein occlusion post SARS-CoV2 vaccination: Case reports. Medicine (Baltimore) 2021;100:e28236.
- 2. Pichi F, Aljneibi S, Neri P, Hay S, Dackiw C, Ghazi NG. Association of ocular adverse events with inactivated COVID-19 vaccination in patients in Abu Dhabi. JAMA Ophthalmol 2021;139:1131-5.
- Pottegård A, Lund LC, Karlstad Ø, Dahl J, Andersen M, Hallas J, et al. Arterial events, venous thromboembolism, thrombocytopenia, and bleeding after vaccination with Oxford-AstraZeneca ChAdOx1-S in Denmark and Norway: Population based cohort study. BMJ 2021;373:n1114.

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