



Letter to the editor RE: Lake et al., 2022 comment on Fulford et al., 2021 'A point-of-care lateral flow assay for neutralizing antibodies against SARS-CoV-2'

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In our recent eBioMedicine publication¹ we included the statement in “Evidence before this study” that PubMed literature searches, including MedRxiv pre-print servers as well as manual searches in relevant papers up to 11 October 2021, did not reveal prior reports of “deployable, visual point of care test for measuring levels of protective levels of SARS-CoV-2 protection”.

Lake et al. have asserted that this statement was incorrect because of their lateral flow test as described in a MedRxiv pre-print posted in December 2020² (reference 18 in our publication). We believe that our statement of “Evidence before this study” was factually correct with regard to the December 2020 pre-print by Lake et al.² and a second version posted in March 2021, which did not include evidence for detection of neutralising antibodies in authentic whole blood samples, instead using contrived whole blood samples prepared via the addition of neutralising monoclonal antibodies.

However, we acknowledge and regret that we had overlooked the posting of a third version pre-print on 25 May 2021³ which did include the relevant data using authentic whole blood samples, which we consider as a key criteria for a “deployable” test. A similar oversight appears to have occurred in the recent publication from Lake et al.,⁴ as we note that these authors did not cite our own pre-print of our lateral flow assay that was published on MedRxiv on 12th April 2021,⁵ and updated on MedRxiv in June 2021.

We agree with Lake and colleagues, that point of care tests for neutralising antibodies as described by Lake et al and our own test are likely to be important tools in

managing the ongoing SARS-CoV-2 pandemic, especially with regard to emerging variants of concern such as Omicron.

Contributors

DA and DG wrote and edited this article.

Declaration of interests

DAA and DIG report a patent Australian Provisional Patent Application 2021901011 (filed 7 April 2021) “Point of care lateral flow test for COVID19 detection” and grants from the Government of the State of Victoria, during the conduct of the study.

References

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- 2 Lake DF, Roeder AJ, Kaleta E, et al. Development of a rapid point-of-care test that measures neutralizing antibodies to SARS-CoV-2. <https://www.medrxiv.org/content/10.1101/2020.12.15.20248264v1?versioned=true>.
- 3 Lake DF, Roeder AJ, Kaleta E, et al. Development of a rapid point-of-care test that measures neutralizing antibodies to SARS-CoV-2. <https://www.medrxiv.org/content/10.1101/2020.12.15.20248264v3?versioned=true>.
- 4 Lake DF, Roeder AJ, Kaleta E, et al. Development of a rapid point-of-care test that measures neutralizing antibodies to SARS-CoV-2. *J Clin Virol*. 2021;145:105024. <https://doi.org/10.1016/j.jcv.2021.105024>.
- 5 Fulford TS, Van H, Gherardin NA, et al. A point-of-care lateral flow assay for neutralising antibodies against SARS-CoV-2. medRxiv 2021.04.12.21253368; 10.1101/2021.04.12.21253368.

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