Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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1 Halperin SA, Ye L, Mackinnon-Cameron D, et al. Final efficacy analysis, interim safety analysis, and immunogenicity of a single dose of recombinant novel coronavirus vaccine (adenovirus type 5 vector) in adults 18 years and older: an international, multicentre, randomised, double-blinded, placebo-controlled phase 3 trial. *Lancet* 2021; **399:** 237–48.
2 Chagla Z, Pai M. COVID-19 boosters in rich nations will delay vaccines for all. *Nat Med* 2021; **27:** 1659–60.
3 Dyer O. COVID-19: countries are learning what others paid for vaccines. *BMJ* 2021; **372:** n281.
4 BBC News. COVID-19: Israel plans to give fourth dose of vaccine to over-60s. Dec 22, 2021. https://www.bbc.com/news/world-middle-east-59749967 (accessed Dec 25, 2021).

No point in travel bans if countries with poor surveillance are ignored

Marc Mendelson and colleagues[1] argue strongly against travel bans to contain newly recognised SARS-CoV-2 variants of concern. We would like to add another aspect: ignoring countries with poor surveillance systems.

South Africa has good epidemiological and genomic surveillance, but many other countries do not. Within 2 days of return to South Africa from Tanzania in January, 2021, a traveller developed clinical symptoms and tested positive for SARS-CoV-2 by PCR. Sequencing using published methods[2] identified the virus as the beta variant of concern,[3] highly likely to have been acquired in Tanzania during its second epidemic wave.[4]

This case highlights the potential for a variant of concern to be introduced from a country that had not reported its presence. Until Dec 23, 2021, Tanzania has not uploaded a single SARS-CoV-2 genetic sequence to GISAID. In fact, Tanzania had not been reporting COVID-19 case numbers at all between May, 2020, and July, 2021, linked to a denialist official stance.[4]

For more on **GISAID** see https://www.gisaid.org

Tanzania's second wave in early 2021 might have been linked to the beta variant with the traveller acting as a sentinel.[5] Although several countries in southern Africa were listed as so-called areas of variants of concern by Germany in early 2021, Tanzania remained a so-called risk area until being declared a high incidence area from mid-March, 2021.

Perceived as punishment for countries conducting genomic surveillance and reporting openly, the illogical application of travel bans could act as a deterrent to conducting genomic surveillance and, thus, foil their very objective.

We declare no competing interests.

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1 Mendelson M, Venter F, Moshabela M, et al. The political theatre of the UK's travel ban on South Africa. *Lancet* 2021; **398:** 2211–13.
2 Engelbrecht S, Delaney K, Kleinhans B, et al. Multiple early introductions of SARS-CoV-2 to Cape Town, South Africa. *Viruses* 2021; **13:** 526.
3 Tegally H, Wilkinson E, Giovanetti M, et al. Detection of a SARS-CoV-2 variant of concern in South Africa. *Nature* 2021; **592:** 438–43.
4 Buguzi S. Covid-19: counting the cost of denial in Tanzania. *BMJ* 2021; **373:** n1052.
5 Günther S, Emmerich P, Laue T, et al. Imported lassa fever in Germany: molecular characterization of a new lassa virus strain. *Emerg Infect Dis* 2000; **6:** 466–76.

Booster vaccines for COVID-19 vaccine breakthrough cases?

We read with interest the Viewpoint by Philip Krause and colleagues.[1]

Although considerations for boosting COVID-19 vaccine immune responses are surprisingly controversial, several existing non-COVID-19 vaccines have routine three-dose regimens to provide maximum efficacy. A recent study from Israel reinforces the value of a third vaccine dose in individuals aged 60 years or older[2] and the recent decision by the Food and Drug Administration to recommend an additional vaccination in those aged 65 years or older in the USA reflects the need to continue to protect the most vulnerable. Bar-On and colleagues show data supporting an additional dose,[2] but they do not cover efficacy of a third dose for someone who has had a breakthrough infection after full vaccination. These are individuals usually with no underlying known immunogenicity, who, nonetheless, for a variety of reasons (ie, higher exposure to viral inoculum, prolonged exposures to multiple infected people, or a previously undiagnosed mild immunodeficiency) become infected with SARS-CoV-2. Although there are many potential reasons for vaccine breakthroughs, including variants, it might be that a booster dose is most needed in those whose vaccine-induced immunity had already failed. Official data from Israel have shown that in those who receive a third dose, with or without breakthrough infection, there are potential side-effects, although similar to or better than after dose two of the primary series.[3] Careful monitoring is needed for vaccine breakthrough cases since they might be the most susceptible to additional re-infections and might be most in need of another dose of vaccine.

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1 Krause PR, Fleming TR, Peto R, et al. Considerations in boosting COVID-19 vaccine immune responses. *Lancet* 2021; **398:** 1377–80.
2 Bar-On YM, Goldberg Y, Mandel M, et al. Protection of BNT162b2 vaccine booster against Covid-19 in Israel. *N Eng J Med* 2021; **385:** 1393–400.
3 Israel Ministry of Health. Link to the lecture: The efficacy of the third dose, recovered individuals' protection and updates on the monitoring of side effects. Oct 10, 2021. https://www.gov.il/en/departments/news/08102021-01 (accessed Oct 10, 2021).