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to gather a consensus from several clinical trials and other studies on the titre required for protection.

Although the correlate of protection against SARS-2-CoV has not yet been unequivocally defined, antibodies are likely to be at least part of the protective response. The effect of new variants on the evaluation of antibodies is obvious and unequivocal comparisons are required. Reporting the immunological responses from vaccine clinical trials against the International Standard is essential for the evaluation of clinical data submitted to national regulatory authorities as well as to WHO for emergency use listing, especially as placebo-controlled efficacy studies become operationally unfeasible. There will be a substantial effect on the use of the International Standard if regulatory authorities worldwide request data in IU/mL or BAU/mL. We also encourage journal editors and peer reviewers to ensure that the international standard is used as the benchmark in publications and that data from serology assays are reported in International Standard units.

We declare no competing interests.

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- 1 Le TT, Cramer JP, Chen R, Mayhew S. Evolution of the COVID-19 vaccine development landscape. *Nat Rev Drug Discov* 2020; **19**: 667–68.
- 2 WHO. First WHO International Standard for anti-SARS-CoV-2 immunoglobulin. 2021. <https://www.who.int/groups/expert-committee-on-biological-standardization> (accessed March 8, 2021).
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See Online for appendix

For WHO data on COVID-19 cases see <https://covid19.who.int/WHO-COVID-19-global-table-data.csv>

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See Online for appendix



COVID-19 vaccines in high-risk ethnic groups

Black, Asian, and minority ethnic communities worldwide have a disproportionate risk of severe COVID-19. In the UK, as of May 19, 2020, 36% of critically ill patients with COVID-19 requiring intensive care were from Black, Asian, or minority ethnic groups.¹ According to Public Health England, the mortality risk from COVID-19, after accounting for sex, age, deprivation score, and geographical region, is double in Bangladeshi people and up to 50% higher in Black and south Asian people compared with White British people.¹ This finding contrasts with age-adjusted all-cause mortality from previous years, which was lower in Asian and Black people than in White British people.¹ These data imply that COVID-19 has more serious effects in Black and Asian people.

The ethnic groups most affected by COVID-19 are under-represented in the COVID-19 vaccine trial data published so far. Despite efforts to encourage participation from Black, Asian, and minority ethnic groups, of the 552 participants in the phase 2/3 Oxford–AstraZeneca trial (based in Southampton and Oxford, UK), only one participant was Black and 19 were Asian.² Large-scale trials also have a smaller proportion of minority groups compared with the populations sampled (appendix).^{3–5}

Black, Asian, and minority ethnic individuals are under-represented in research. However, the ongoing pandemic necessitates that access to trials and vaccinations shifts from being equal to being equitable. Study recruitment and participation designs should improve diversity in ethnic groups to maximise the validity of results to the populations concerned. Age and sex are routinely considered in recruitment design—the same should now apply to ethnicity.

In the context of a pandemic that has higher infection and mortality

risks in certain ethnic groups, it is important that these specific groups are adequately represented in vaccine trials to evaluate both immunogenicity and efficacy.

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New COVID-19 resurgence in the WHO Eastern Mediterranean region

After 7 weeks of falling numbers of COVID-19 cases, a global upsurge was reported during the week of Feb 22, 2021. This case resurgence was observed earlier in the WHO Eastern Mediterranean region, where, between Jan 30 and Feb 26, 2021, the number of weekly cases increased from 158 004 to 207 424 (31%; appendix).

Multiple factors might have contributed to the increase. These factors include changes in testing capacity or strategy, increased transmission associated with mass gatherings, easing of, or decreased