Correction

APPLIED BIOLOGICAL SCIENCES

Correction for "BCG vaccine protection from severe coronavirus disease 2019 (COVID-19)," by Luis E. Escobar, Alvaro Molina-Cruz, and Carolina Barillas-Mury, which was first published July 9, 2020; 10.1073/pnas.2008410117 (*Proc. Natl. Acad. Sci. U.S.A.* **117**, 17720–17726).

The authors note, "Due to a query raised regarding historical BCG vaccination data from East and West Germany we have identified a few corrections necessary for our work. We were able to obtain detailed information on historical BCG vaccination in Germany from Alice Anne Zwerling, first author of the BCG World Atlas database manuscript (1). We compared these data with the information from the German Ministry of Health (2). When we integrated the information from both sources, the following changes to the text were necessary.

"On page 17721, right column, first full paragraph, the text that states 'In West Germany, infants were vaccinated between 1961 and 1998 (7). In East Germany, infants and 15-y-old teenagers with a negative skin test were vaccinated from 1951 to 1975 with at least one dose of BCG (7).' should instead read 'In West Germany, universal infant BCG vaccination was recommended from 1955 to 1975 (7). In East Germany, BCG vaccination of infants became compulsory in 1953. In 1961, BCG vaccination of 15-y-old teenagers with a negative skin test also became compulsory. BCG vaccination continued until the German unification in 1990 (7).'

"On page 17722, right column, first full paragraph, the text that states 'In West Germany, those 22 y to 59 y old today were vaccinated, while, in East Germany, those 45 y to 84 y old today received at least one dose of BCG (Fig. 3 *B* and *C*).' should instead read 'In West Germany, those 45 y to 65 y old today were vaccinated, while, in East Germany, those 30 y to 74 y old today received at least one dose of BCG (Fig. 3 *B* and *C*).'

"The conclusions of our analysis do not change. We thank Godmar Back for bringing these discrepancies in the data to our attention." Fig. 3*B* has been updated.

Additionally, the authors note that reference 15 appeared incorrectly. The reference should appear as follows. The article has been updated online.

1. A. Zwerling *et al*., The BCG World Atlas: A database of global BCG vaccination policies and practices. *PLoS Med*. **8**, e1001012 (2011).
2. S. Klein, I. Schöneberg, G. Krause, Vom zwang zur Pockenschutzimpfung zum nationalen impfplan [in German]. *Bundesgesundheitsbl*. **55**, 1512–1523 (2012).
15. P. K. Hegarty, J. P. Sfakianos, G. Giannarini, A. R. DiNardo, A. M. Kamat, COVID-19 and bacillus Calmette-Guérin: What is the link? *Eur. Urol. Oncol*. **3**, 259–261 (2020).

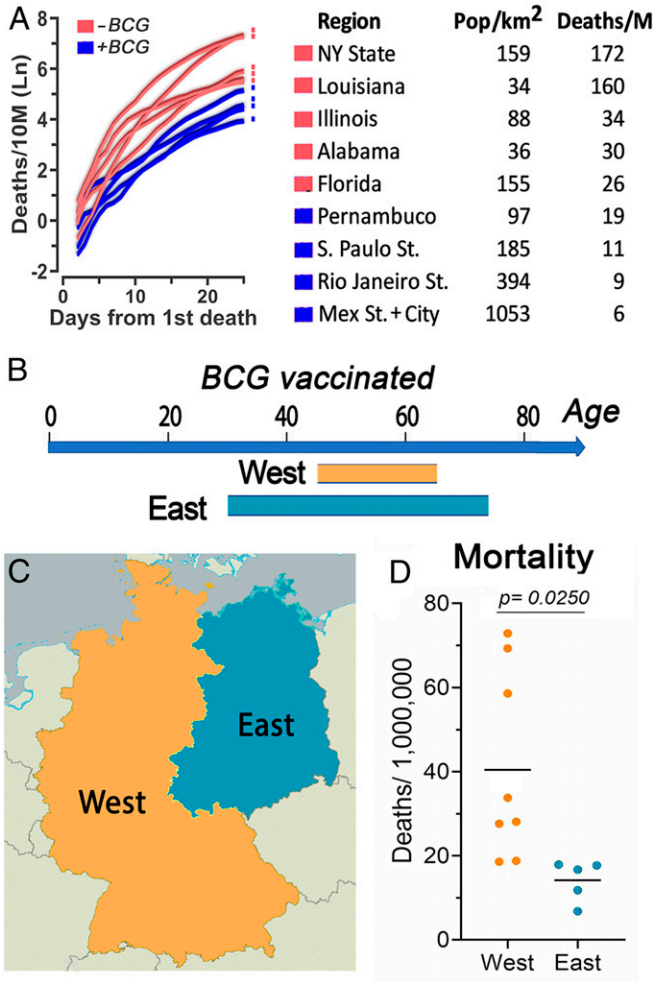

Fig. 3. COVID-19 mortality in comparable regions that have had different BCG vaccination policies. (*A*) COVID-19 mortality by time in populous North and South American States. (*Left*) COVID-19 mortality per 10 million inhabitants in a 3-d centered average. Time adjusted according to the day with the first death in each region as day 1, up to 25 d of the epidemic. (*Right*) Table shows population density and COVID-19 mortality by day 25 of the epidemic for each region. Regions that have had BCG vaccination (blue) had lower mortality than regions without BCG vaccination (red; $r^2 = 0.84$, $P < 0.001$; t [237] = 14.274, $P < 0.001$). (*B*) Estimated age range of people that received BCG vaccination in East and West Germany. (*C*) Map illustrating the regions of East and West Germany included in the analysis. (*D*) Mean COVID-19 mortality in East Germany was lower than mortality in West Germany (t [11] = −2.592, $P = 0.025$).

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