No evidence that BCG vaccination can protect against SARS-CoV-2 infection.

A research letter published in JAMA network showed that BCG vaccination in childhood had no protective effect against SARS-CoV-2 infection in adulthood. The authors report on a cohort of Israeli adults aged 35 to 41 years who received BCG vaccination in childhood compared with no vaccination and then tested for SARS-CoV-2. There was no statistically significant difference in the proportion of positive test results in the BCG-vaccinated group vs the unvaccinated group. There was 1 case of severe COVID-19 in each group, although there no deaths reported.

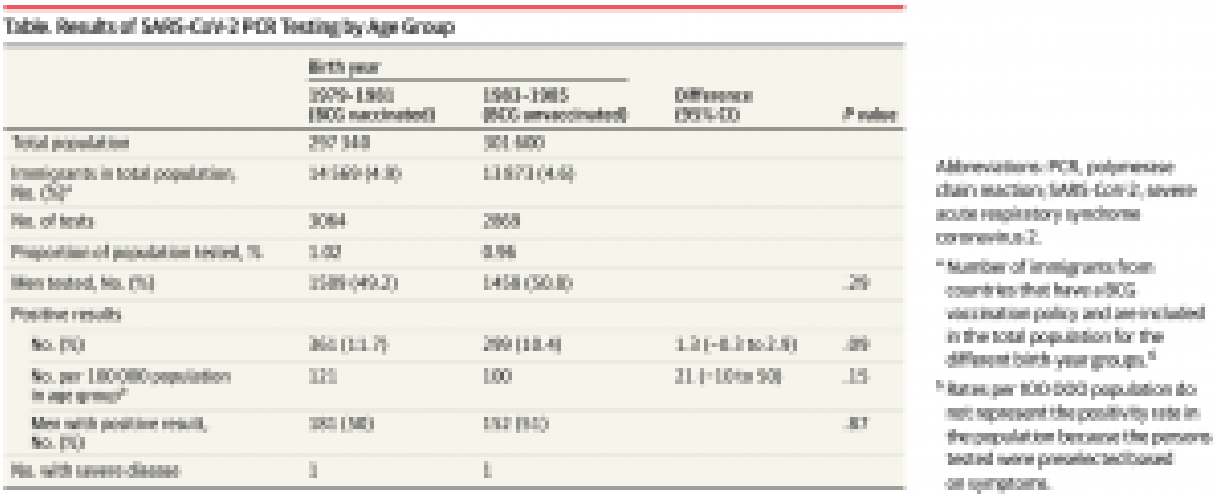

Table. Results of SARS-CoV-2 PCR Testing by Age Group

	Birth year			
	1979-1980 (BCG vaccinated)	1981-1985 (BCG unvaccinated)	Difference (95% CI)	P value
Total population	257 343	301 600		
Immigrants in total population, No. (%)[a]	34 669 (4.8)	13 873 (4.6)		
No. of tests	3084	2858		
Proportion of population tested, %	1.02	0.96		
Men tested, No. (%)	1589 (49.2)	1458 (50.8)		.29
Positive results				
No. (%)	360 (11.7)	299 (10.4)	1.2 (−0.3 to 2.8)	.09
No. per 1 800 000 population in age group[b]	121	100	21.1 (−1.0 to 50)	.15
Men with positive result, No. (%)	193 (54)	152 (51)		.87
No. with severe disease	1	1		

Abbreviations: PCR, polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

[a] Number of immigrants from countries that have a BCG vaccination policy and are included in the total population for the different birth-year groups.[b]

[b] Rates per 100 000 population do not represent the positivity rate in the population because the persons tested were preselected based on symptoms.

Source: Hamiel et al., 2020 JAMA Network

Journal Article: Hamiel et al., 2020. SARS-CoV-2 Rates in BCG-Vaccinated and Unvaccinated Young Adults. JAMA Network

Summary by Clive Gray