

Omicron: The Best Natural Vaccine for Stimulating HERV-K102 Trained Innate Immunity?

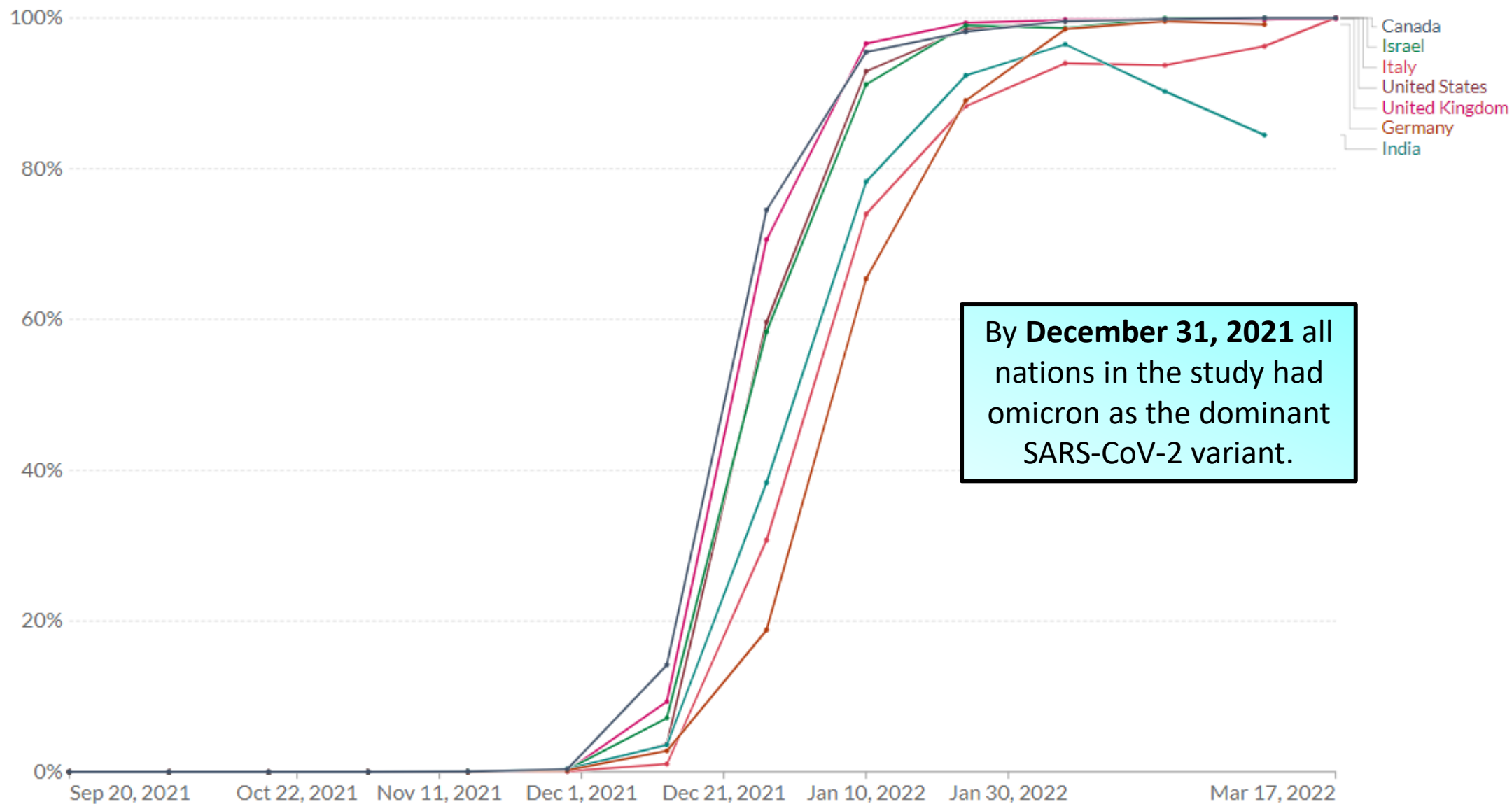
https://hervk102.substack.com/publish?utm_source=menu

March 18, 2022

Dr. Marian Laderoute

Share of SARS-CoV-2 sequences that are the omicron variant

Share of omicron variant in all analyzed sequences in the preceding two weeks.



By **December 31, 2021** all nations in the study had omicron as the dominant SARS-CoV-2 variant.

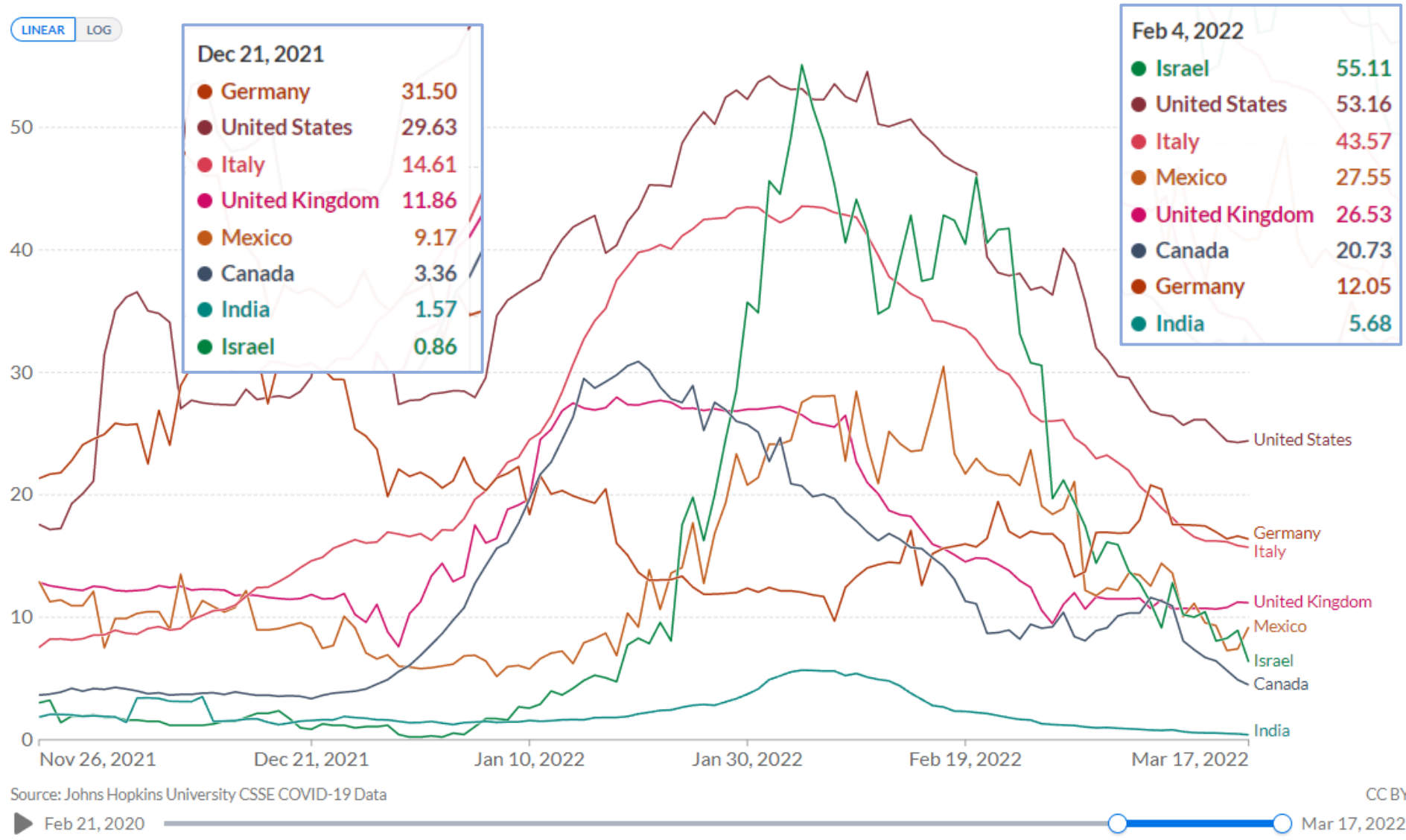
Source: GISAID, via CoVariants.org

Note: This share may not reflect the complete breakdown of cases, since only a fraction of all cases are sequenced. Recently-discovered or actively-monitored variants may be overrepresented, as suspected cases of these variants are likely to be sequenced preferentially or faster than other cases.

CC BY

Weekly confirmed COVID-19 deaths per million people

Weekly confirmed deaths refer to the cumulative number of confirmed deaths over the previous week. For some countries the number of confirmed deaths is much lower than the true number of deaths. This is because of limited testing and challenges in the attribution of the cause of death.



Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

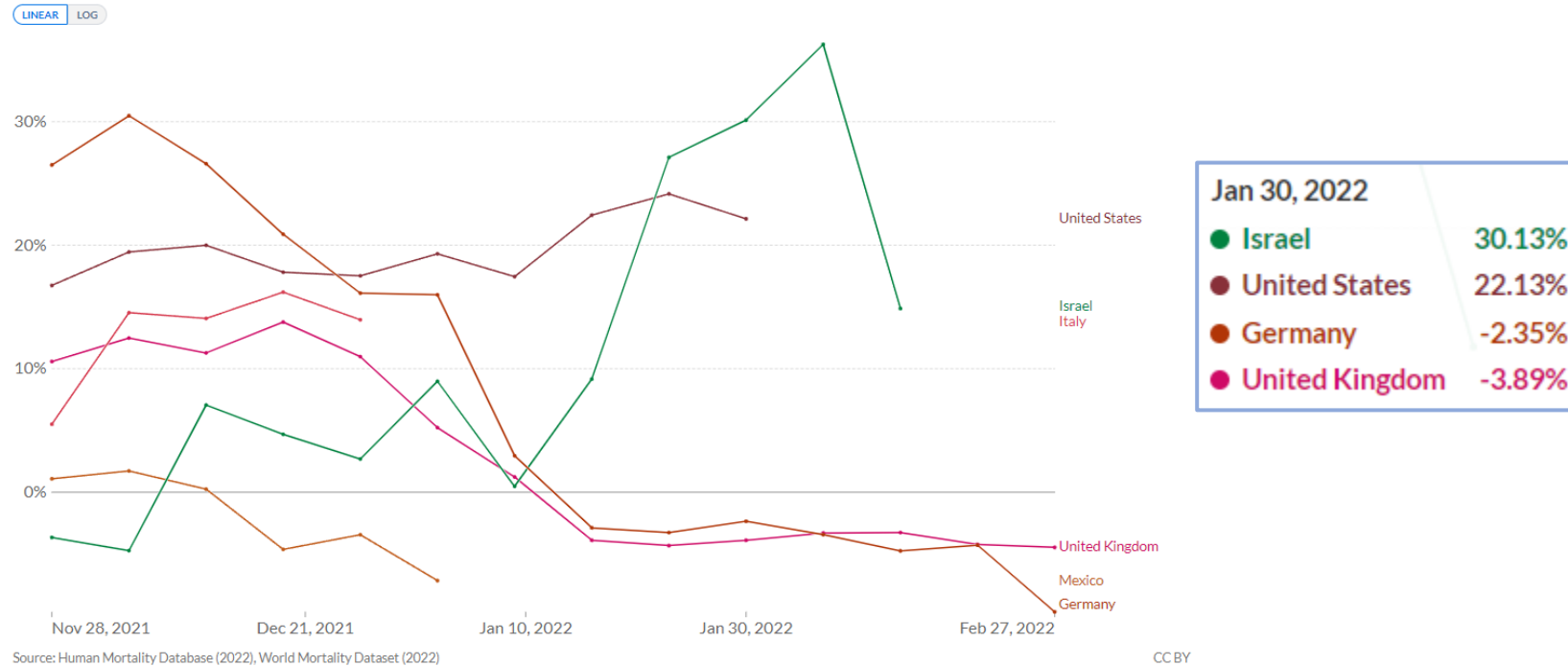
Feb 21, 2020 Mar 17, 2022

Around 10 days later (about January 10th, 2022) there was a rise in mortality rates associated with the omicron variant.

Excess mortality: Deaths from all causes compared to projection based on previous years

The percentage difference between the reported number of weekly or monthly deaths in 2020–2022 and the projected number of deaths for the same period based on previous years. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.

Our World
in Data



ALSO around **January 10th 2022**, excess all cause mortality (EACM) entered the negative realm for some nations (where the data were complete).

The exceptions were Israel and the USA (even if the background of 10% is subtracted, see later) and possibly Italy.

The negative EACM is consistent with the induction of trained innate immunity providing heterologous protection against all cause mortality through infection with omicron (potentially related to activation of the HERV-K102 protection system).

RELATIVE MORTALITY RATES (STANDARIZED TO WORLD AVERAGE) WERE LOWER FOR OMICRON IN THE LATE VACCINATING COUNTRIES Possibly DUE TO NATURAL IMMUNITY BY DELTA VARIANT EXPOSURES

Mortality	May 20, 2021 Delta Wave	Feb 7, 2022 Omicron Wave
	Ratio with World	Ratio with World
INDIA	1.9 X 5% vax	0.6 X 50% vax, 1% boosted
Lower Middle Income	1.0 X 2% vax	0.4 X 40% vax, 3% boosted
World	1.59/million 2% vax	1.36/million 54% vax, 15% boosted

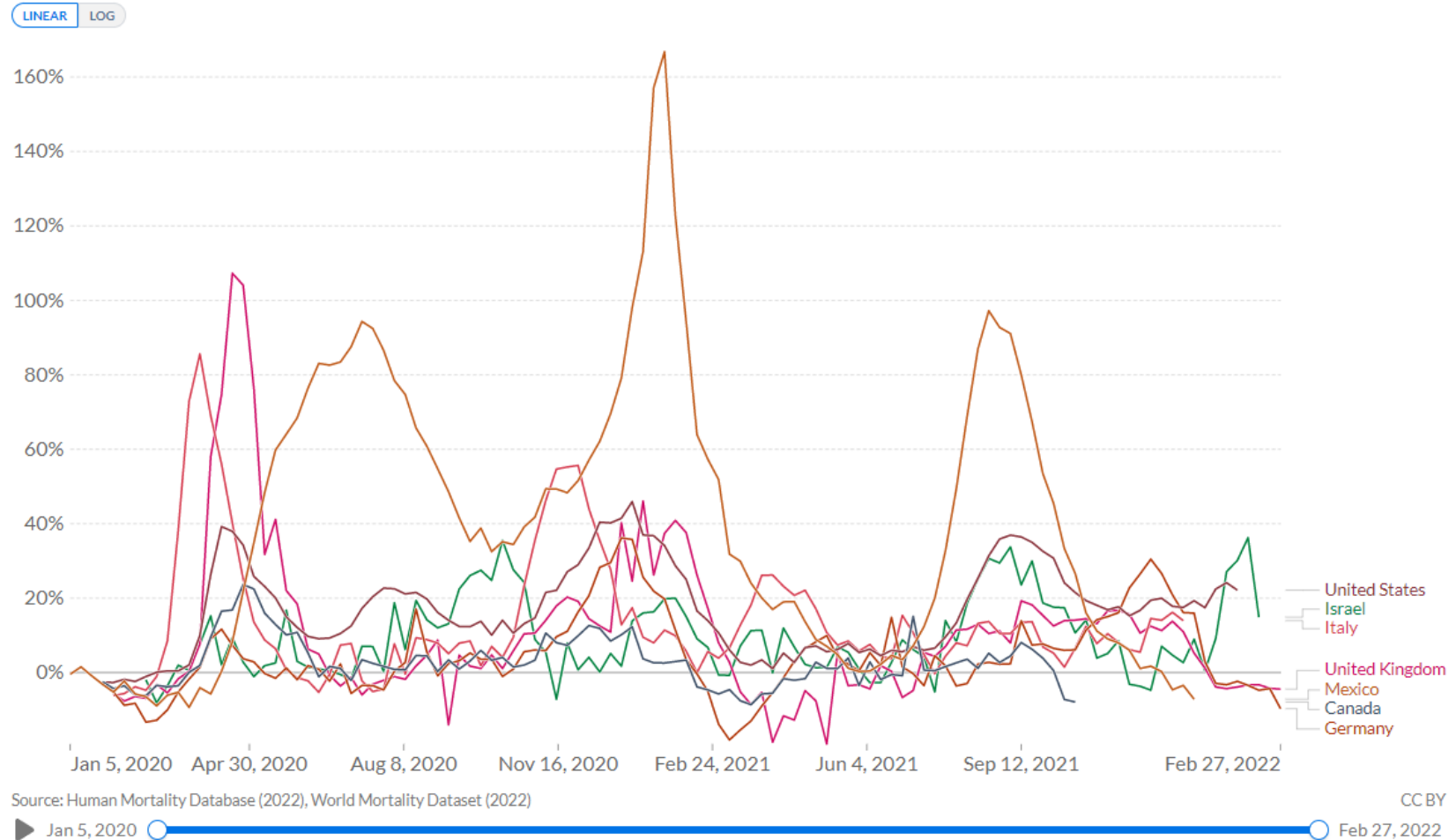
Canada was spared DELTA variant relative mortality due to delay of 2nd dose by NACI. This may have promoted higher protection by innate immunity.

Mortality	Sept 24, 2021 Delta Wave	Feb 5, 2022 Omicron Wave
	Ratio with World	Ratio with World
USA	5.9 X 55% vax	5.6 X 60% vax, 28% boosted
Canada	0.9 X 70% vax	2.8 X 80% vax, 45% boosted
UK	1.9 X 65% vax	2.4 X 70% vax, 55% boosted
Israel	1.7 X 60% vax	5.5 X 62% vax, 55% boosted
World	1.06/million 30% vax	1.34/million 53% vax, 13% boosted

The relative mortality rates (RMR) for omicron versus delta (standardized to the world rates) showed earlier vaccination precluded the benefits of natural and innate immunity protection generated by delta variant exposures.

Excess mortality: Deaths from all causes compared to projection based on previous years

The percentage difference between the reported number of weekly or monthly deaths in 2020-2022 and the projected number of deaths for the same period based on previous years. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.



Nations that did not exhibit a significant **negative** excess all cause mortality *during the time of selection for delta* were **Israel, Italy and Mexico**. [Note that in the USA there was about a 10-11% excess all cause mortality background (due to fearmongering, stress due to financial ruin, etc) which was subtracted and thus showed a good negative excess all cause mortality, see next slide].

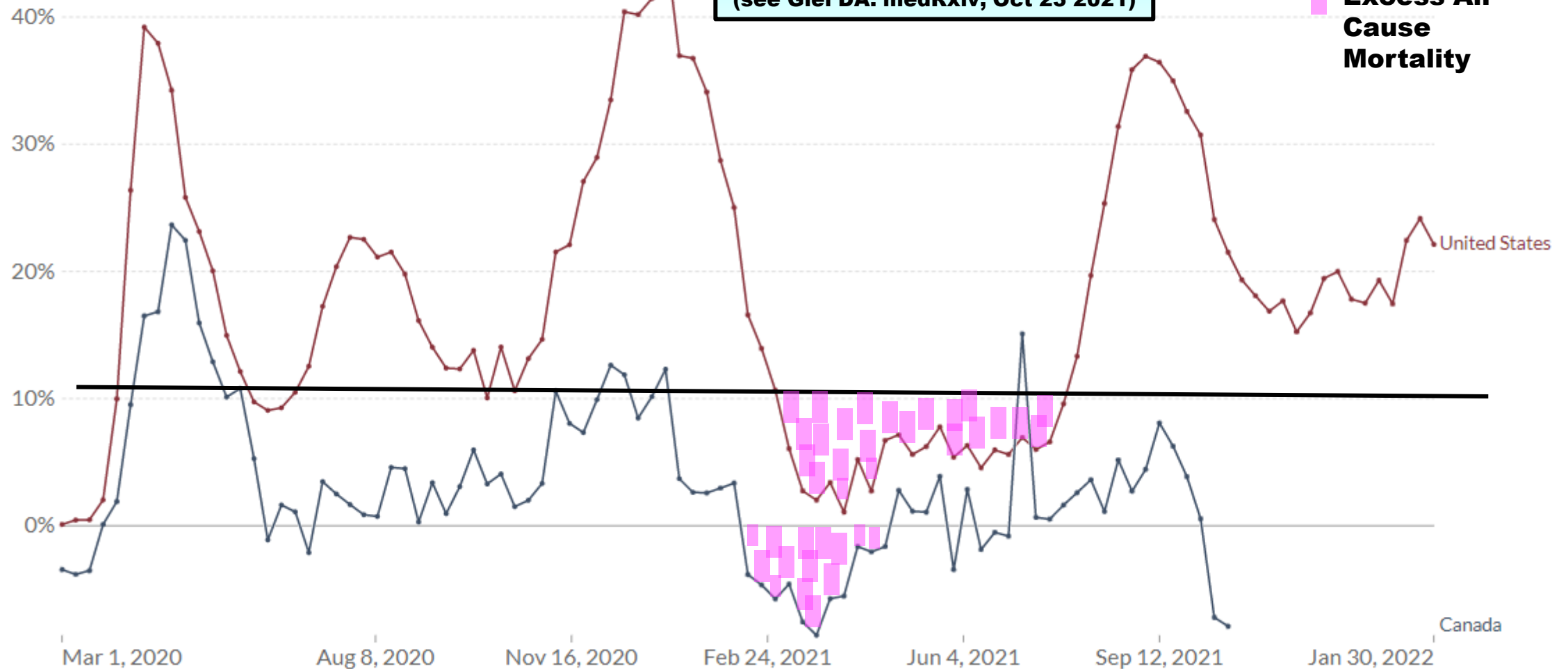
Excess mortality: Deaths from all causes compared to projection based on previous years

The percentage difference between the reported number of weekly or monthly deaths in 2020–2022 and the projected number of deaths for the same period based on previous years. The reported number might not count all deaths that occurred due to incomplete coverage and delays in reporting.

LINER LOG

Background of 10% for US
Excess All Cause Mortality
(see Gleit DA. medRxiv, Oct 23 2021)

Negative
Excess All
Cause
Mortality



AGE, Male Hypertension, and Insulin Resistance May be Risk Factors for Poor Omicron Induction of Trained Innate Immunity

Country #	Median Age ^a	Male Hypertension (2019 30-79 years of age)*	Female Hypertension (2019 30-79 years of age)*	Diabetes (2021 20-79 years of age) ^b	2016 Obesity ^c
Italy	46.5	39.1%	28.6%	6.4%	19.9%
Germany	47.8	34.4%	25.0%	6.9%	22.3%
United States	38.5	34.1%	29.0%	10.7%	36.2%
Israel	30.4	33.0%	25.3%	8.5%	26.1%
Mexico	29.3	32.8%	31.4%	16.9%	28.9%
India	28.7	31.6%	30.5%	9.6%	3.9%
United Kingdom	40.6	29.9%	23.0%	6.3%	27.8%
Canada	41.8	24.3%	19.9%	7.7%	29.4%

a) <https://www.worlddata.info/average-age.php>

* **Age adjusted prevalence.** NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. Lancet 2021; <http://dx.doi.org/10.1016/>

b) **Age adjusted prevalence.** https://diabetesatlas.org/atlas/tenthedition/?dlmodal=active&dlsrc=https%3A%2F%2Fdiabetesatlas.org%2Fidfawp%2Fresource-files%2F2021%2F07%2FIDF_Atlas_10th_Edition_2021.pdf

c) **Not age adjusted prevalence.** https://en.wikipedia.org/wiki/List_of_countries_by_obesity_rate

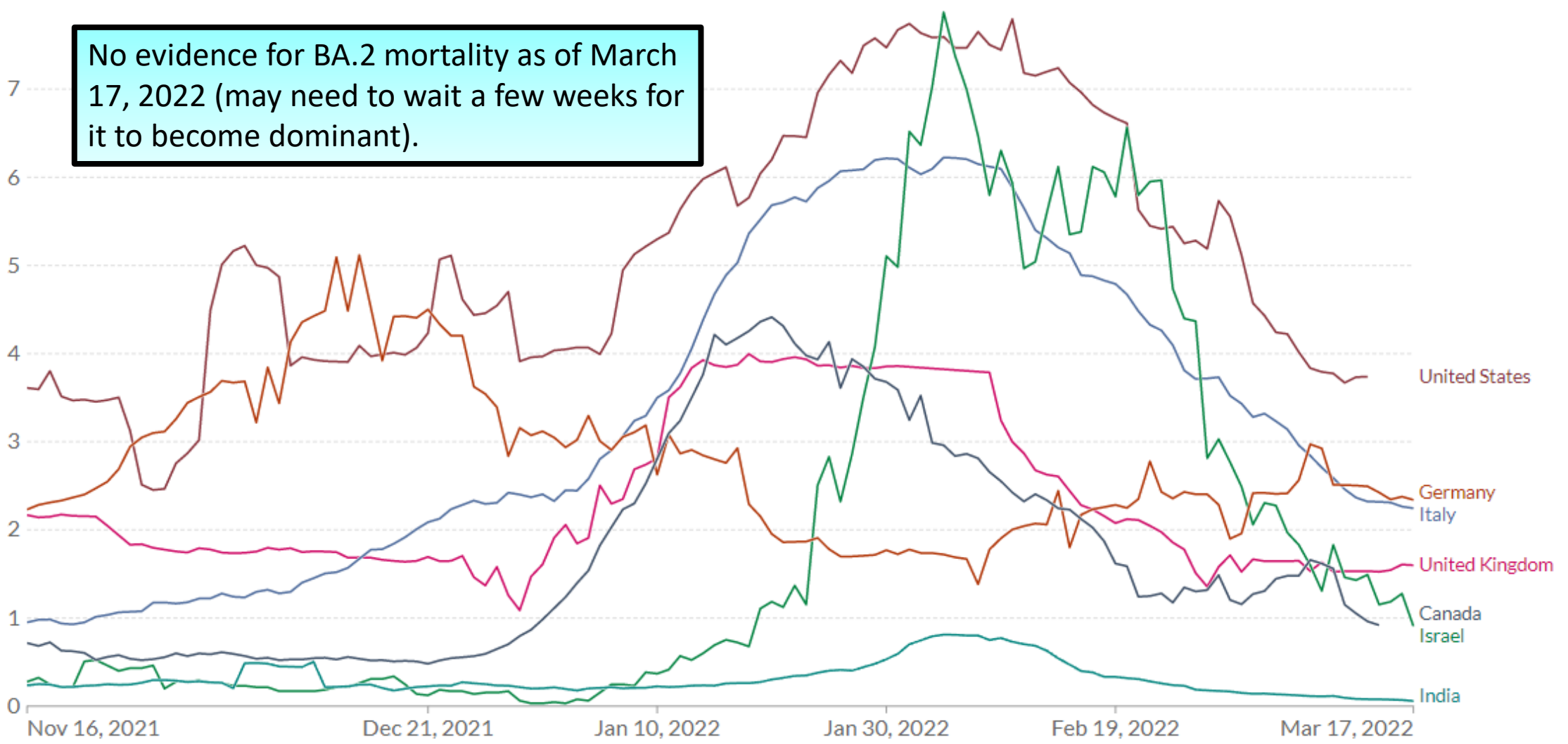
Nations without omicron associated negative EACM (Italy projected)
Nations with omicron associated negative EACM (Canada projected)

Daily new confirmed COVID-19 deaths per million people

7-day rolling average. For some countries the number of confirmed deaths is much lower than the true number of deaths. This is because of limited testing and challenges in the attribution of the cause of death.

LINEAR LOG

No evidence for BA.2 mortality as of March 17, 2022 (may need to wait a few weeks for it to become dominant).



Source: Johns Hopkins University CSSE COVID-19 Data

Daily new confirmed COVID-19 cases per million people

7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.

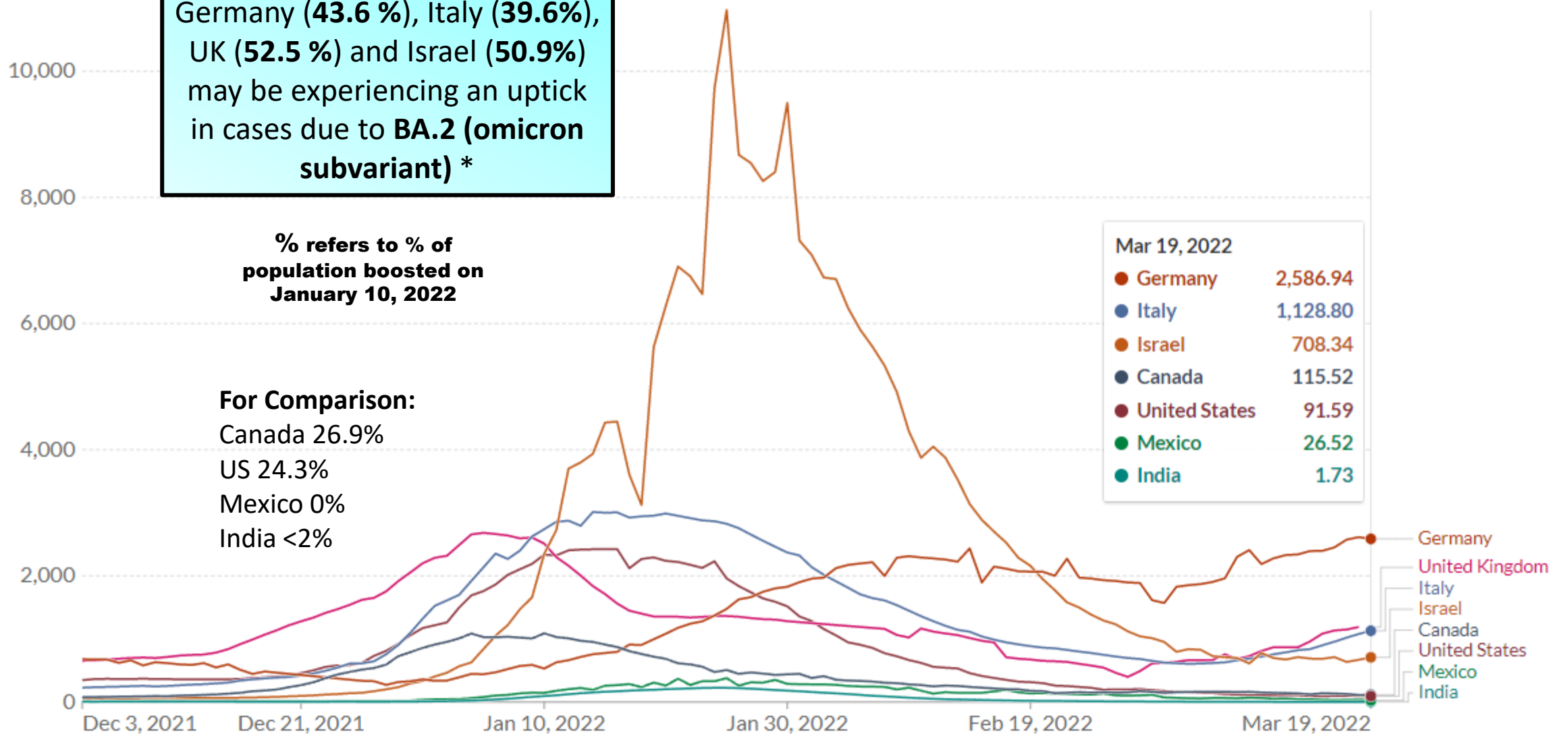
LINEAR LOG

Germany (43.6%), Italy (39.6%), UK (52.5%) and Israel (50.9%) may be experiencing an uptick in cases due to BA.2 (omicron subvariant) *

% refers to % of population boosted on January 10, 2022

For Comparison:

Canada 26.9%
US 24.3%
Mexico 0%
India <2%



Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

- On March 17, 2022, we are not seeing COVID-19 mortality associated with BA.2 (but it is too early).
- Although the number of cases is no longer accurate due to home kit testing and lack of reporting positive cases, there does seem to be an increase in cases for Germany, UK, Israel and Italy which will need follow-up.
- Natural immunization with omicron, may have protected the masses and appears to have regenerated *negative* excess all cause mortality (EACM) consistent with induction of the HERV-K102 trained innate immunity. However, this was not found for Israel or the USA (even if the 10-11% background is subtracted for the US).
- **The data on EACM for Canada, Mexico and Italy is incomplete and urgently needs to be updated.**

Negative EACM may be a good proxy for stimulation of heterologous protection by trained innate immunity
(a proxy for HERV-K102 activation).

- Age, hypertension, obesity and diabetes (insulin resistance & high blood sugar) appear to be risk factors for failed omicron generation of innate immunity heterologous protection ascribed to trained innate immunity. This is similar to that reported for COVID-19 severity and is known to reflect 'immunosenescence'. Zinc, vitamin D, flavonoids and ivermectin have been proven to reverse immunosenescence and improve outcomes.
- Interference in the generation of innate immunity heterologous protection could be ascribed to adaptive immunity (2 dose or more) vaccination while innate immunity vaccination (one dose only) appeared to promote trained innate immunity protection (slide 6 and see also <https://hervk102.substack.com/p/what-might-excess-mortality-rates?s=w>).
- **Public health authorities should provide strong recommendations to the public on how to naturally reduce hypertension and insulin resistance** (see The HERV-K Way to Keep Coronaviruses at Bay <https://hervk102.substack.com/p/the-herv-k-way-to-keep-coronavirus?s=w> and guidelines at Hypertension Canada; [https://guidelines.hypertension.ca/prevention-treatment/health-behaviour-management /](https://guidelines.hypertension.ca/prevention-treatment/health-behaviour-management/)). They should also **encourage daily use of zinc, vitamin D, flavonoids**; and for the at-risk group, **ivermectin**.

Adaptive immunity vaccination should be aborted as a strategy to contain the pandemic.
Vaccine mandates MUST be rescinded.