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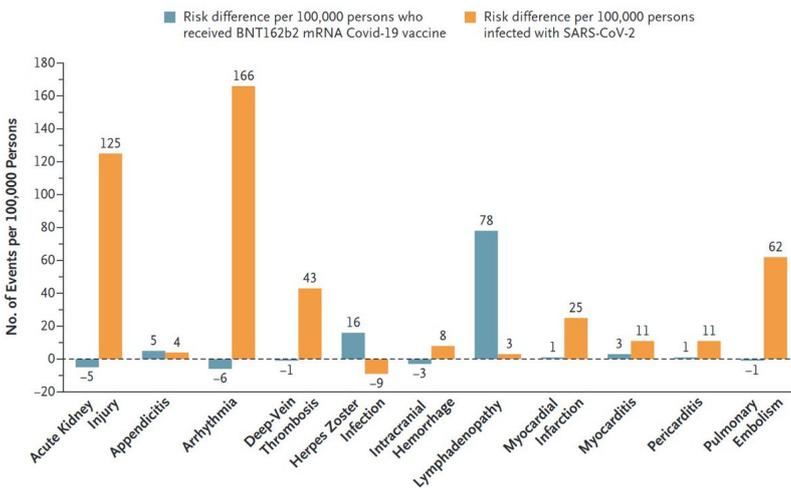
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Vaccine safety: We compared excess adverse events after #COVID19 vaccination (Pfizer-BioNTech) and after documented #SARSCoV2 infection.

<https://t.co/PNyCTqkq0t>

Take-home message: Low excess risk of adverse events after vaccination, higher after infection.

Some thoughts ■ <https://t.co/pbpJwCRd3D>



2/

Preferring #SARSCoV2 infection over vaccination has become even harder. (Remember: infection also increases the risk of severe disease/death)

This is a good illustration of how #randomized trials and #observational studies complement each other for better #causal inference...

3/

The original #randomized trial estimated vaccine effectiveness to prevent symptomatic infection, but was too small to quantify vaccine safety.

That's what #observational studies do.

Now a different sort of question: Why could we do this study in the first place?

2 reasons.

4/ First, we had DATA from millions of people.

We worked with high-quality data from @ClalitHealth, a health services organization that covers >50% of the Israeli population.

In contrast, looks like many countries aren't taking investment in healthcare databases seriously.

5/

Maintaining population health databases, available for immediate use in a public health crisis, is a matter of national security. How else can you make timely policy decisions?

Israel, UK ([@Opensafely](#)), and a few others are making great progress. How is everybody else doing?

6/

Countries/states with fragmented, unlinked, or not readily available databases will keep relying on others.

What happens if your questions are different? e.g., what's the safety of a different vaccine in a different population?

But good DATA weren't enough for our study...

7/

Second, we had health data EXPERTS

This study was led by a team of epidemiologists [@ClalitResearch](#), an institute specifically created to make Clalit's data useful.

Governments: This is a good model

(also used by non-governmental organizations like [@KPDOR](#) and [@KPWaResearch](#)).

8/

Governments: Together with your health data resource, create/support a research institute. Then encourage external collaborations.

For this study, Clalit's experts worked with external experts [@CAUSALab](#), [@CCDD_HSPH](#), [@Bos_CHIP](#), [@HarvardDBMI](#)

Everybody wins with collaboration