Twitter Thread by (((Howard Forman)))



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@thehowie

My thoughts on 1-dose vs 2-dose approach.

TL; DR

Wrong questions give you wrong answers.

We assuredly should want 2 doses, the only issue is the timing of 2nd dose. And a brief delay is a risk worth taking.

But let's prioritize >65 year old 2nd doses at same time.

1/9

> Great, in depth, thread explaining why we need to stop \u201creserving\u201d the second dose & double our immediate capacity to vaccinate widely. https://t.co/2QmfkK6oDF
>
> — (((Howard Forman))) (@thehowie) January 1, 2021

First, let's start with @VirusesImmunity brilliant thread:

We know enough to know that there is vast benefit from giving substantial immunity to as many as possible as quickly as possible. 2/9

https://t.co/QRHx198wkd

> My first tweet of 2021 is going to be about 1 dose vs. 2 dose vaccine. I have tweeted in the past of the immunological advantages of a 2 dose vaccine. However, given the enhanced transmission variants on the rise, we need a modified strategy. (1/n) https://t.co/si1bxgKqbf
>
> — Prof. Akiko Iwasaki (@VirusesImmunity) January 1, 2021

We also know that the timing of second dose was never set in stone. Pfizer chose to give second dose at 19-23 days; Moderna chose at 28-31 days. They tested at these levels and proved safety and efficacy. Safety is not at issue with delayed dosing. Efficacy probably is.

3/9

Most of medicine, as practiced, has not been subjected to rigorous clinical trials for various reasons. We weigh available evidence & act accordingly. We pivot when new evidence is available. We should want more RCTs, but they are often unethical or impossible to perform. 4/9

Ideally, Pfizer &/or Moderna would have already done a single dose arm. JNJ is testing both a single-dose & 2-dose regimen. We will have some data in a few weeks on the 1-dose regimen.

But we don't live in an ideal world. We live in the real world. 5/9

https://t.co/oEpNWM6k1p

"Reserving" the second dose undermines our ability to vaccinate the most vulnerable as quickly as possible. We know that many people won't even show up for their second dose (we want to avoid this, but we have seen this with other 2-dose regimens). 6/9 https://t.co/YdLdfhH45A

We don't have to be dogmatic. We can be evidence-based but also practical. We know that the elderly have a reduced immune response to a single dose compared with younger individuals. We can prioritize an earlier second dose for them (>65 year olds). 7/9 https://t.co/lX8bu7UPcX

Bear in mind JNJ vaccine may well get EUA in early February, doubling immediate vaccination capacity with single-dose regimen (hopefully!); AstraZeneca is also still a realistic option in near future.

We ABSOLUTELY should collect data (preferably RCT) on 1- versus 2-dose. 8/9

We seemingly gain a LOT from delaying (for some) the second shot by a short interval (perhaps just a few weeks). The risk to "reserving" vast numbers of doses, while rampant spread occurs seems HIGHER than the alternative.

Let's put logic & science ahead of dogma. 9/end