Twitter Thread by Jasnah Kholin - ACAB

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@wanderer_jasnah

***puts on hard hat, respirator, asbestos gloves* (hey i haven't used these in awhile!)**

okay. i'm seeing the same claims on my TL over & over that quite frankly, make no sense. & now they're starting to broken-telephone into each other so:

my thoughts on vaccine schedule.

first off, let me get one thing across to start: this is not 2 doses v. 1 dose, it's 2 spaced 3-4 weeks apart vs. 2 spaced several months apart.

anyway, to begin: if you are reluctant to modify vaccine dosing schedule from the 3-weeks-apart one that we had in the Pfizer/BioNTech PhaseIII, *that's fine*. that's a legitimate reason.

but say just that. we know this works, we don't know about other regimes.

but for the love of all that is holy, please do not try to imply that this is a hard requirement, or optimal (imho, it likely isn't), or even *chosen for any reason other than being the shortest interval we could use to complete the PhIII ASAP*. that's it.

i'll be honest, i'm amazed 3 weeks *works*. it's shorter than *the shortest MINIMUM interval* for any other vaccine as scheduled according to, say, the CDC: https://t.co/rdb6TIHWPl

like, the whole point of a boost dose in a prime-boost vaccine schedule is to generate a *secondary* immune response.

primary seroconversion takes about 2 weeks (that's why the attack rate in the trials was still high then, then fell off a cliff).

three weeks in you've barely formed proper germinal centers, you quite likely will still hit the primary response quite often then.

as an aside, a few things that i keep hearing that further make no sense:

the "95% efficacy" or "70% efficacy" figure is a *population* efficacy figure.

it means that if 100 of you sign up for Tai-Tai's Cluster Dancing Lessons (so fresh you're guaranteed to go viral!), only 5 (or 30) of you will contract #COVID■19 after attending.

it does *not* mean that *you yourself* have a 5% of contracting it, be it per exposure, or overall, or whatnot. there is no "partial immunity". you either seroconvert or you don't.

none of this is new, we've studied this extensively for MMR: https://t.co/zRf61T1qcO

we give a booster there (after *five years* typically!) not b/c one dose is "85% effective" for someone, it's b/c only about 85% of people seroconvert after one dose, & 97%+ after two.

fortunately we can easily check this for #COVID■19 w/a Spike ELISA after 3 weeks. negative? boost then. otherwise...

i stand by this claim, even more strongly than before: https://t.co/5YlJNPGmLO

> here's a hot take: a reason, & a very important one *FOR* running a 1 dose vs. 2 dose vaccine RCT is *because* some people will miss the second dose. it will happen.
>
> people forget.
>
> gov'ts fuck up, under-order, fuck up distribution.
>
> supply chains can break down.
>
> — Jasnah Kholin - ACAB (@wanderer_jasnah) December 18, 2020

while i wasn't expecting this to happen this early or this catastrophically, *IT WAS GOING TO HAPPEN*.

we can yell at each other over what is optimal until we are blue in the face & we all hate each other for no reason, or...

...we can accept that we are in an out-of-control pandemic where there is, on average right now one person dying of #COVID■19 somewhere in this world every *seven seconds*, realize that delaying doses is fundamentally not immunologically unsound, and therefore...

look, i get that clinical trials are hard. i really do. trust me on this. & i get that it's important to prioritize ones that are likely to produce results that are vitally important right now.

but i'd say when random world gov'ts are trying this sort of stuff w/o a trial, b/c the situation is so dire *the entire medical system is about to collapse in London right now*, your hand is a bit forced.

to say nothing of countries that can only afford 1 dose/person this year.

because guess what? immunologically it makes sense that it would work. in fact, it stands to reason (& it's interesting comparing the immunologists/vaccinologists on my TL to the virologists) that it will work *better*.

and if everyone's fears are realized & it doesn't? well here's some nice hard data to stop anyone else from trying this, from very early on in the world vaccination schedule, that's a heck of a lot more convincing if you need to stop someone like BoJo.

a few final asides: if you seroconvert & class-switch to IgG that means you've had a T_{FH}/B-cell germinal center response, which means that yes, you have developed memory B cells to that antigen. which survive decades.

i don't understand why i still keep hearing the whole "immunity fading" argument (and after TWELVE WEEKS?!? please show me an example of that in the literature, i tried really hard to find that the past two days w/no success).

i thought after @jbloom_lab demonstrated that reinfection to HCoVs was due to *antigenic drift* & not like when CoV-specific memory B cells inexplicably decide to take a vacation that year, i'd stop hearing that repeated so often...

...particularly when it does not work this way for any other of our vaccines that are currently on the market.

some references: https://t.co/muK3HQdgJ6 / https://t.co/muK3HQdgJ6 / https://t.co/4K4Bafimvm / https://t.co/RdckhYyksv / https://t.co/bV2We9NFN8

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