

To: (10)(2e) (10)(2e) [(10)(2e) @p-95.com]; (10)(2e) (10)(2e) [(10)(2e) @rivm.nl]
From: (10)(2e)
Sent: Fri 8/28/2020 11:44:53 AM
Subject: RE: [SPAM]RE: Naive question on COVID-19 vaccines
Received: Fri 8/28/2020 11:45:03 AM

Dear (10)(2e)

Many thanks for this! I've only just seen it: I have a new laptop, and it's been hiding some messages from me, which I have only just found now... I can see what you mean about concerns that a rapid introduction might backfire and lead to lower impact.

All the best

(10)(2e)

From: (10)(2e) (10)(2e) <(10)(2e) @p-95.com>
Sent: 14 August 2020 09:53
To: (10)(2e) (10)(2e) <(10)(2e) @rivm.nl>; (10)(2e) <(10)(2e) @open.ac.uk>
Subject: [SPAM]RE: Naive question on COVID-19 vaccines

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Hi (10)(2e)

I'm not sufficiently experienced as this is the first time I'm involved in the clinical development of a vaccine, and only from the side line as I'm mainly working on the risk management plan. But there are a couple of things I'm thinking off:

1. Many of the companies are aiming for conditional marketing authorization, meaning that the product will be approved based on more limited clinical data than usual. The products can then be easily suspended based on the more extensive dataset. This means that some of the companies are going for very large Phase 2 safety studies, show safety, immunogenicity and early signs of efficacy, get their conditional approval and afterwards continue collecting more robust data on efficacy

<https://www.ema.europa.eu/en/human-regulatory/marketing-authorisation/conditional-marketing-authorisation>

So I think they all start Phase 3 but will try to get conditional approval after the first interim analysis. They will likely get approval when safety is fine, immunogenicity is fine and efficacy is promising.

2. I have picked up that Oxford/Astrazenica is going for a human challenge trial. If that goes well, I assume many other companies will follow and that will beat all time records. I don't know much about it, and I'm not sure it is true as human challenge trials are typically considered unethical in the absence of a good treatment.
3. I think controlled introduction is a bit difficult as you have disease hotspots and rapid changes in disease over time and geographical area...the disease is a bit unpredictable as it is mainly driven by political decisions and human behaviour.
4. I'm also under the impression that many people are concerned about going too fast, especially because so many vaccines (> 100) are being under clinical development...some of them made in the kitchen as a matter of speaking (by smaller companies/universities not having developed vaccines before and at all places around the world)...so making people more nervous. If it goes really wrong somewhere (eg Russia), it might affect the willingness to get vaccinated across the globe.
5. I think it is interesting to think about benefit-risk. Typically, we only think about benefits in terms of the vaccine preventable disease, but in this case...we have acts of desperation, more violence, all sorts of collateral damage that is hard

to measure...so I think it is not right to think about 'benefit-risk' in the narrow sense as we are in the unique situation that the entire world stops functioning – I think the benefits should go beyond the vaccine preventable disease.

Groetjes,

(10)(2e)

Van: (10)(2e) (10)(2e) <(10)(2e)@rivm.nl>
Verzonden: Thursday, August 13, 2020 10:24 AM
Aan: (10)(2e) <(10)(2e)@open.ac.uk>; (10)(2e) (10)(2e) <(10)(2e)@p-95.com>
Onderwerp: RE: Naive question on COVID-19 vaccines

Hi (10)(2e)

I think it is a relevant question – I'm not so much involved (yet), but I gather the (10)(2a)
 (10)(2a)

As for the other vaccines, I think a factor is that there are about 5 or so candidates that are more or less equal with regard to the extent they are promising – and that they are not available in sufficient amounts for widespread controlled introduction – together with the perhaps more uncertain risk-benefit balance from an individual perspective, ebola being so much more severe than covid. I just hope that different standards as to the R/B balance for Africa compare to Western countries (in that sooner introduction of vaccines in Africa is more acceptable) do not play a role...

Best wishes,

(10)(2e)

From: (10)(2e) <(10)(2e)@open.ac.uk>
Sent: dinsdag 11 augustus 2020 16:12
To: (10)(2e) (10)(2e) <(10)(2e)@rivm.nl>; (10)(2e) (10)(2e) <(10)(2e)@p-95.com>
Subject: Naive question on COVID-19 vaccines

Hello (10)(2e)

I have a question, probably an utterly naïve one. Why is it that COVID-19 vaccines are being trialled via traditional Phase 3 trials, rather than in controlled phased introductions? After all, that was what was done (effectively) with the polio vaccine in the 1950s in the USA. And more recently with the Ebola vaccine. Given it's an ongoing epidemic, aren't we wasting time going through the standard trials procedure? I'm surprised no-one seems to be suggesting anything else...

All the best

(10)(2e)

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