

**Joeri (Youri) Spitaels** Hi Joeri, Any pandemic will of course always spontaneously come to an end. But the higher the virulence of circulating strains and the lower the population's immunity, the higher the price you're going to pay. The extreme of this is letting the pandemic wipe out the human race. Then for sure, it will come to an end. Of course, there will always be people who manage to get (re-)infected without getting symptoms as their innate immunity will be strong enough, despite (momentarily) suppression thereof. Those who're not vaccinated will, indeed, only experience short-term suppression of their innate immunity whereas suppression will be long-lived in vaccine recipients (see my slides; if you leave me your email address I'll send you a simplified scientific explanation that we're in the process of editing as we speak). At some point, the virus will no longer be able to propagate since i) those surviving severe disease will have protective antibodies (unless we push immune escape to the extreme by continuing mass vaccinations and forcing the virus into resistance to Abs targeted at the virus RBD..) and ii) those who managed the infection w/o developing symptoms will end up with an even stronger innate immunity. So chances for the virus to transmit have now become slim. However, till we reach that point, many more cases of severe disease need to occur (in order to provide variant-specific Ab-based immunity). However, if the virus evolves to developing resistance to S-specific Abs, seroconversion won't help and only those whose innate (variant-nonspecific) immunity is strong enough (and hence, not suppressed over a long period of time due to long-lived vaccinal Abs) will survive as they manage to eliminate the virus rapidly and without getting the disease (thanks to natural Abs and NK cells). In summary: a pandemic will ALWAYS come to an end but the more you conserve people's natural immunity, the less the price you're going to pay. I don't think we can afford to have this pandemic end with only those surviving who preserved good innate immunity. For the reasons explained above, that type of 'end' is not an option; hence, why I am saying only NK cell-based vaccines can end the pandemic. Hope this clarifies but certainly a good point. Best, G