

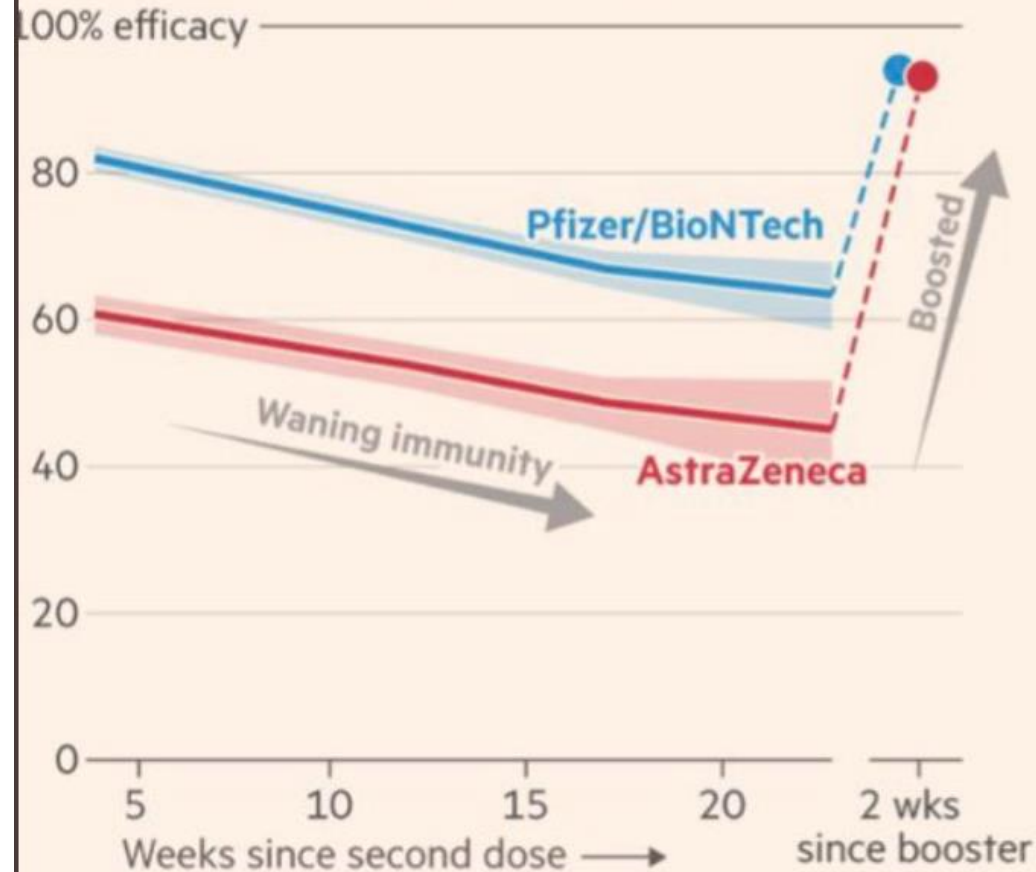
OMICRON

JOHAN NEYTS
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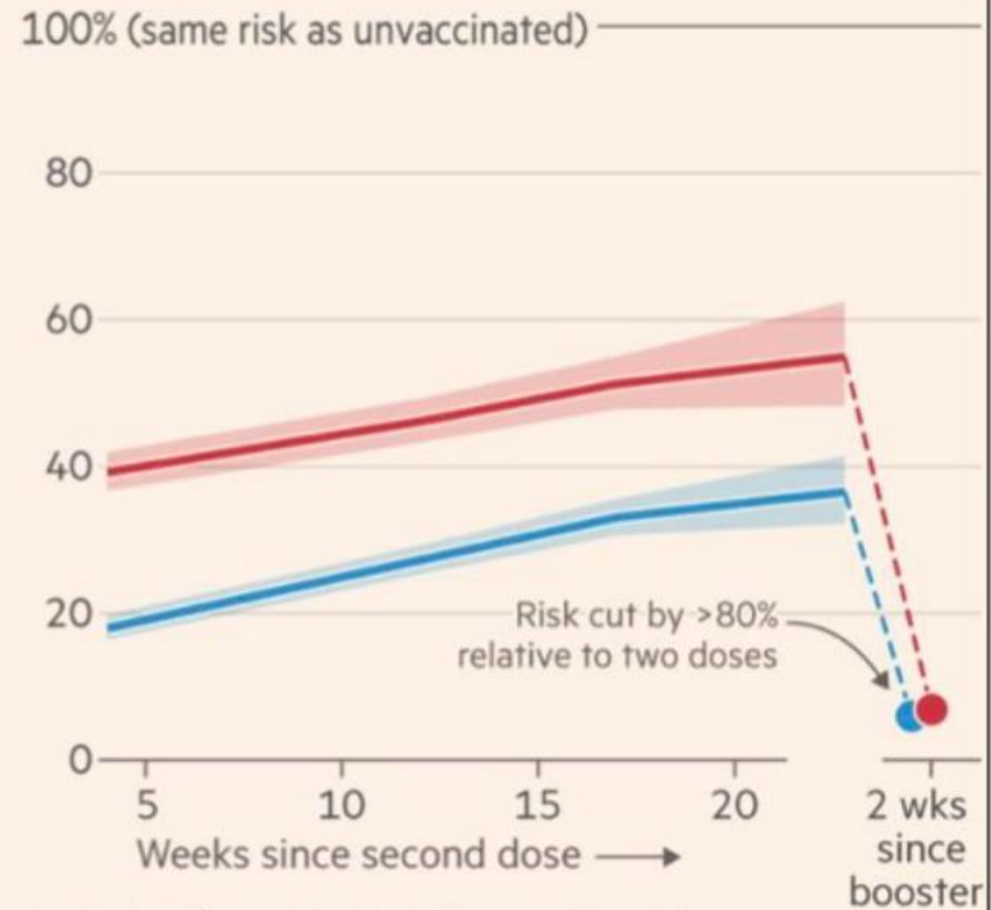
 @neyts_johan
www.antivirals.be

New data from England show boosters do not merely top up immunity, they elevate protection well above the peak level from two doses

Vaccine efficacy against symptomatic infection among people aged 50+*, by initial vaccine**



Relative risk of sympt. infection vs unvaccinated, among people aged 50+*, by initial vaccine**



Datapoints before booster are a weighted average of previously published PHE data for people aged 40-64 and aged 65+

*The booster dose is Pfizer/BioNTech in both instances

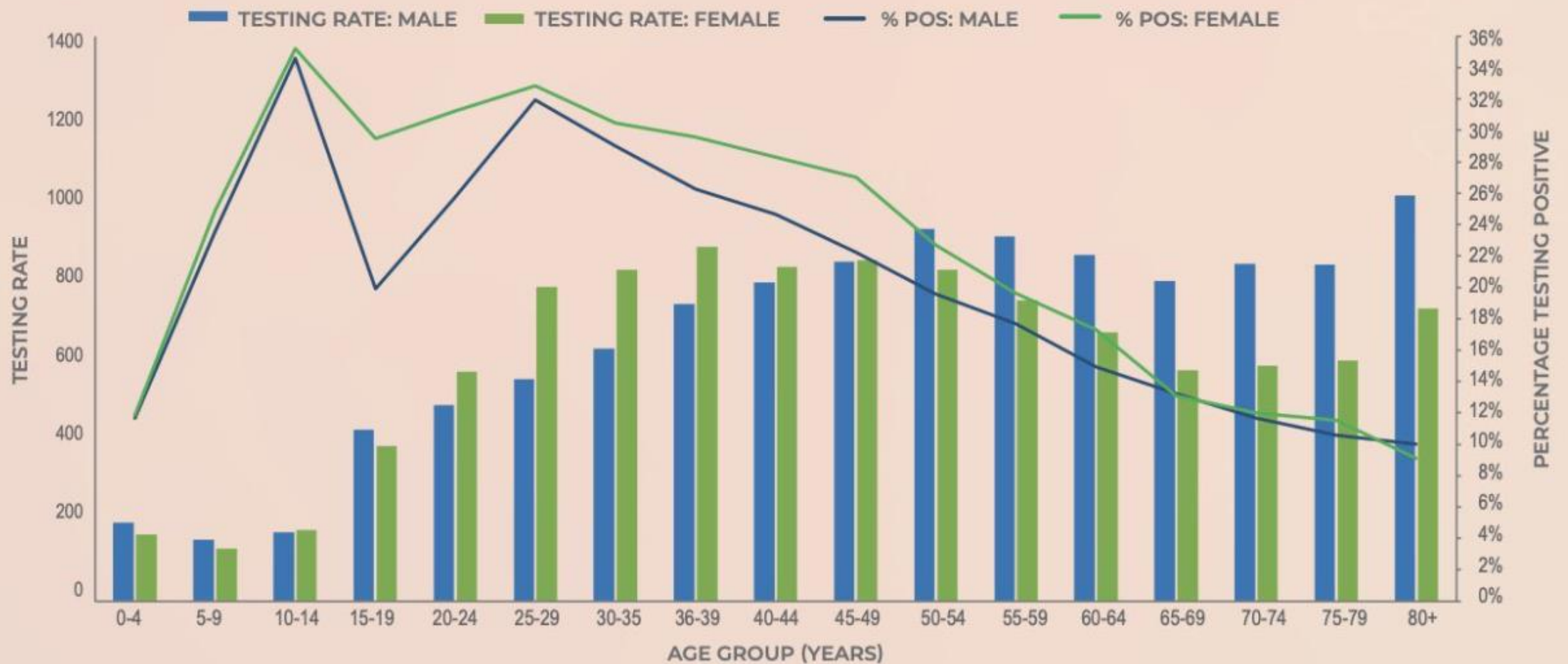


Figure 5. Testing rates per 100,000 persons and percentage testing positive by age group and sex, South Africa, week 48, 28 November – 4 December 2021

Omicron epidemie in Zuid-Afrika (maar ook in de UK) begint bij de jeugd.



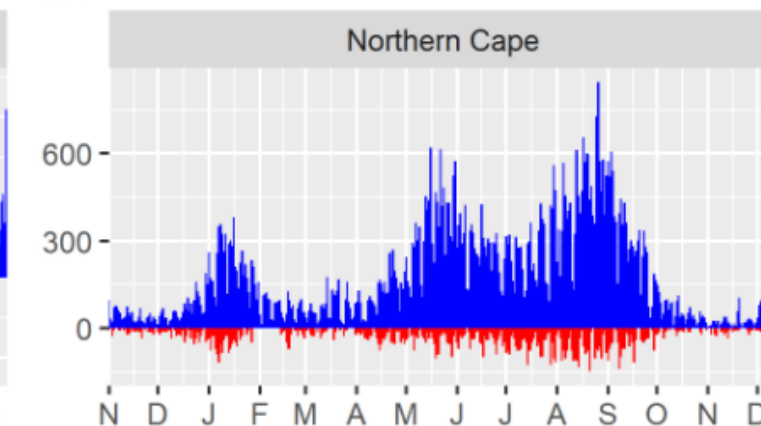
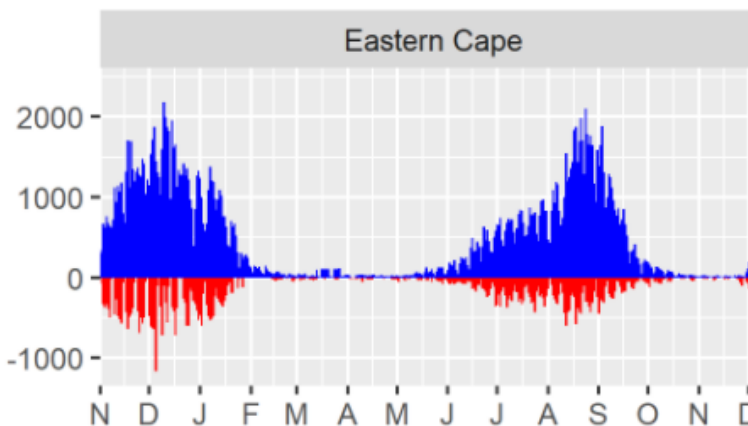
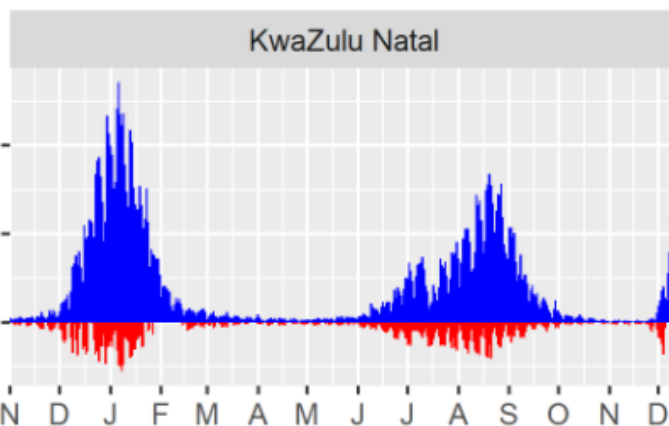
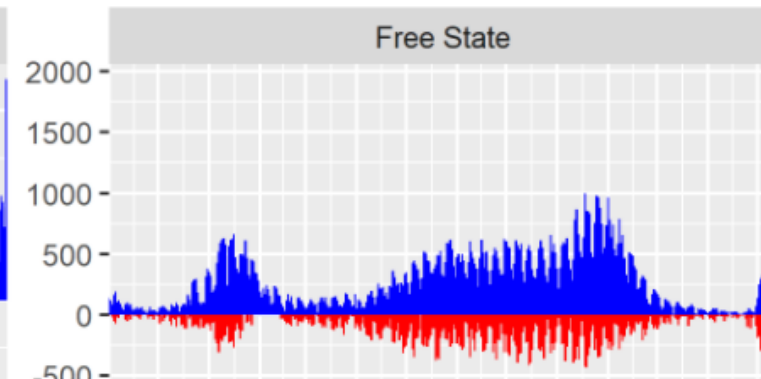
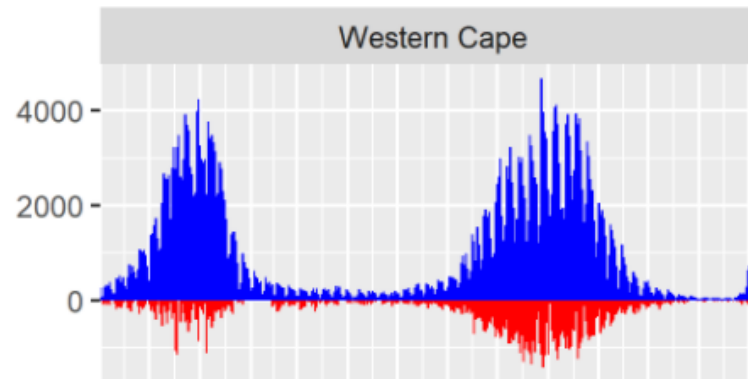
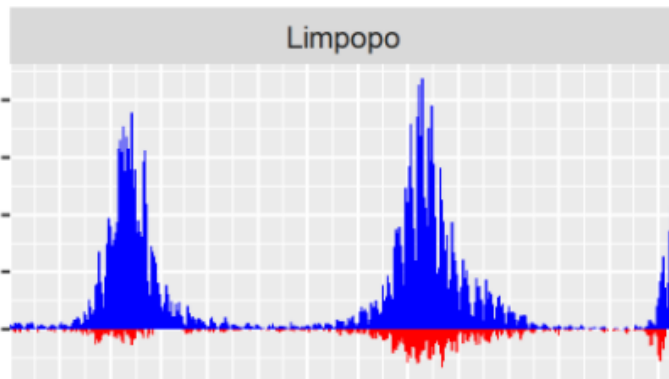
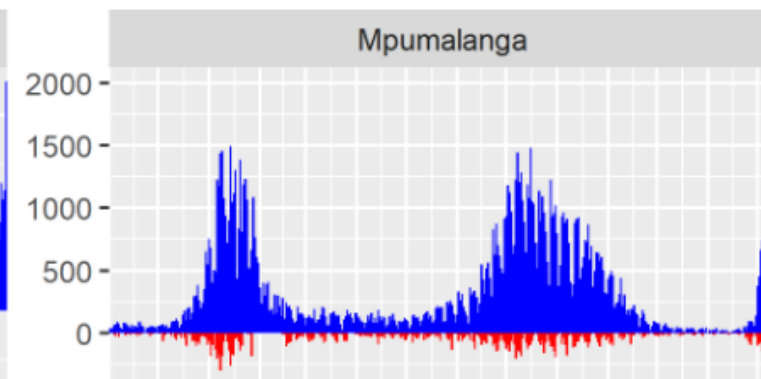
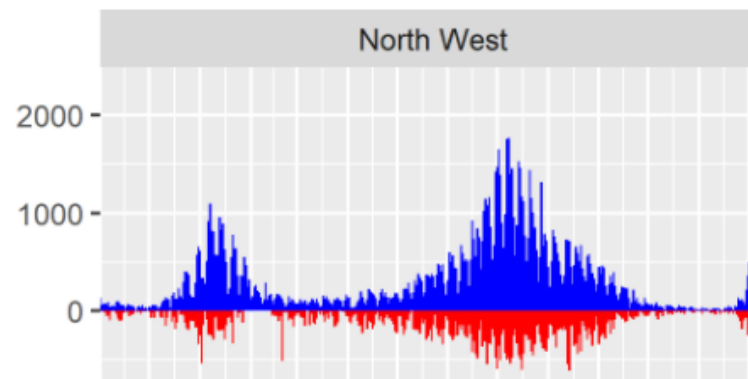
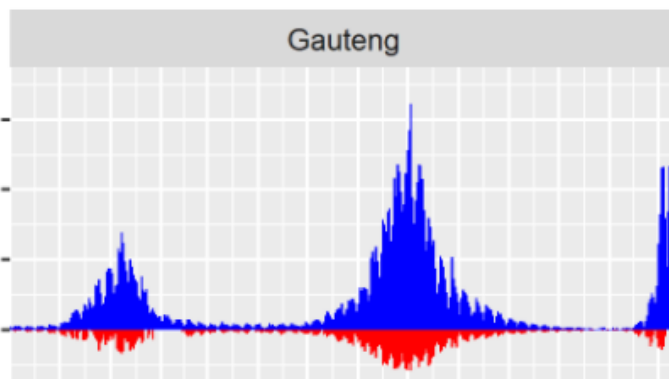
Confirmed Covid cases & hospitalisations in South Africa

New confirmed Covid cases per day (blue)

& hospitalised patients testing positive per week one week later (red), data NICD

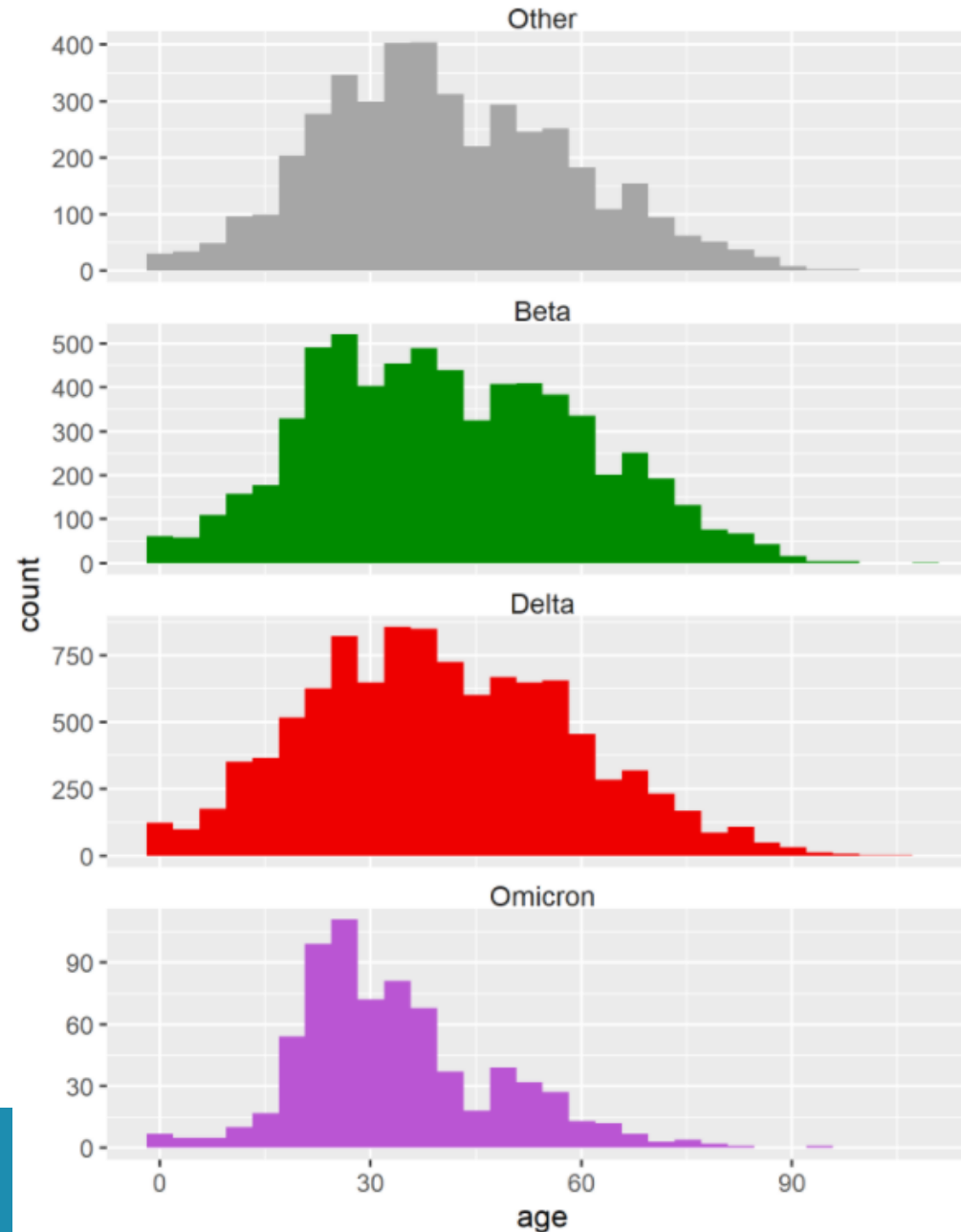


cases per day (top) & hospitalisations per week 7 days later (bottom)



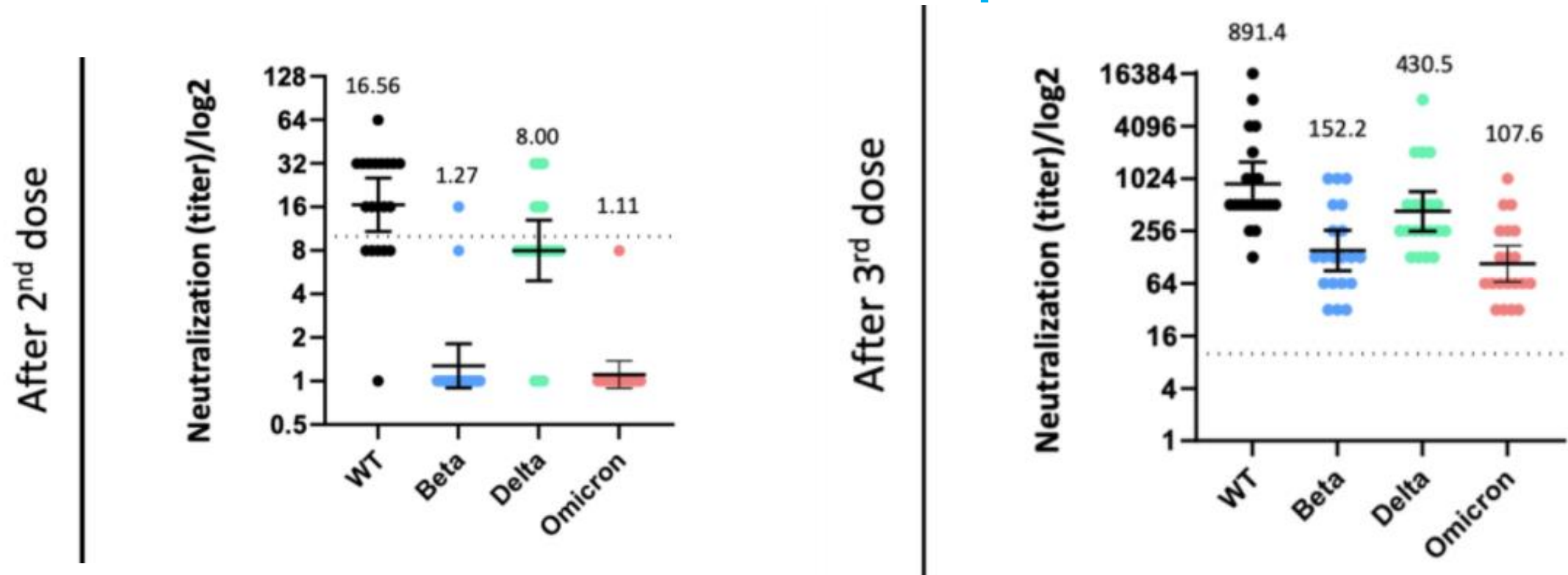
case reporting date

Age distribution of individuals with sequenced
infections of different variants in South Africa
(GISAID data)



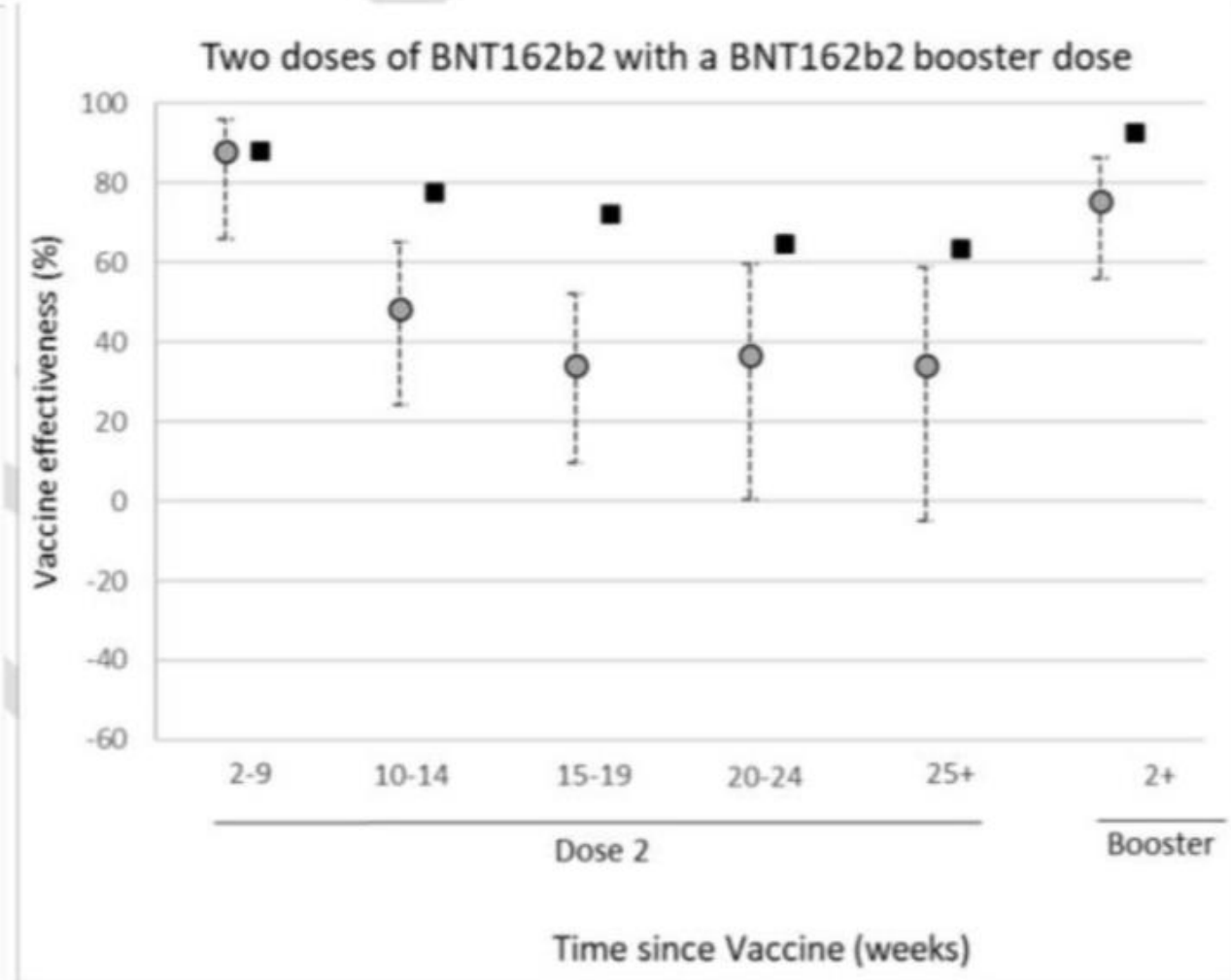
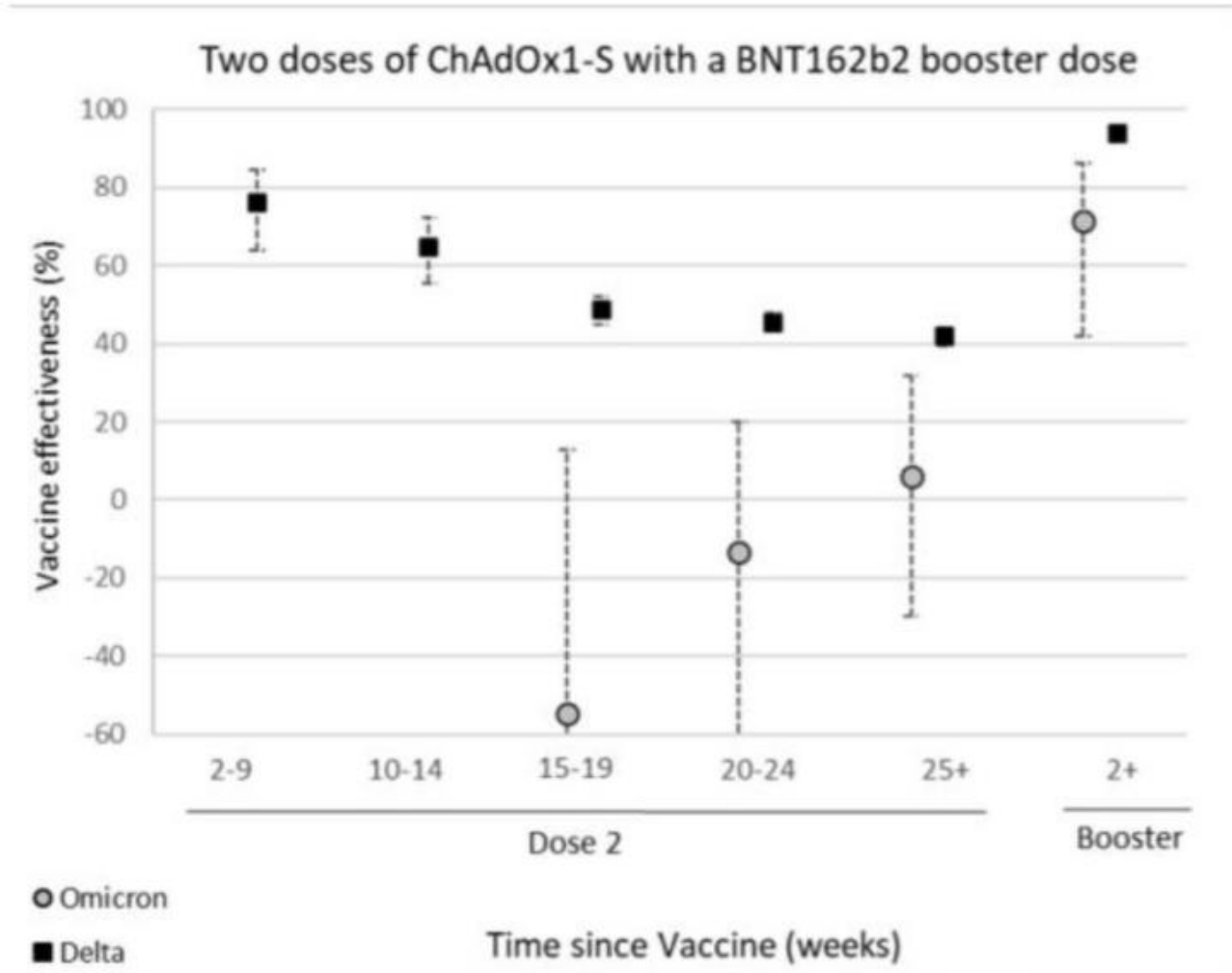
Omicron circuleert
voorlopig vooral
onder de jonge
bevolking; dus nog
geen conclusies te
maken over de ernst
van de symptomen.

Booster met Pfizer krikt niveau van neutraliserende antistoffen tegen omicron op



Nemet et al., MedRxiv doi.org/10.1101/2021.12.13.21267670

Figure 1: Vaccine effectiveness against symptomatic diseases by period after dose 1 and dose 2 for Delta (black squares) and Omicron (grey circles) for (A) recipients of 2 doses of Astrazeneca vaccine as the primary course and a Pfizer as a booster and (B) recipients of 2 doses of Pfizer vaccine as the primary course and a Pfizer as a booster*



Minimal cross-over between mutations associated with Omicron variant of SARS-CoV-2 and CD8+ T cell epitopes identified in COVID-19 convalescent individuals

Andrew D Redd, Alessandra Nardin, Hassen Kared, Evan M Bloch, Brian Abel,  Andrew Pekosz, Oliver Laeyendecker, Michael Fehlings, Thomas C Quinn, Aaron AR Tobian

doi: <https://doi.org/10.1101/2021.12.06.471446>

Data suggest that the T-cell immune response in previously infected, and most likely vaccinated individuals, should still be effective against Omicron.

Genomic surveillance of SARS-CoV-2 in Belgium
 Report of the National Reference Laboratory (UZ Leuven & KU Leuven)
 Situation update – 14 of December 2021; (report 2021_59)

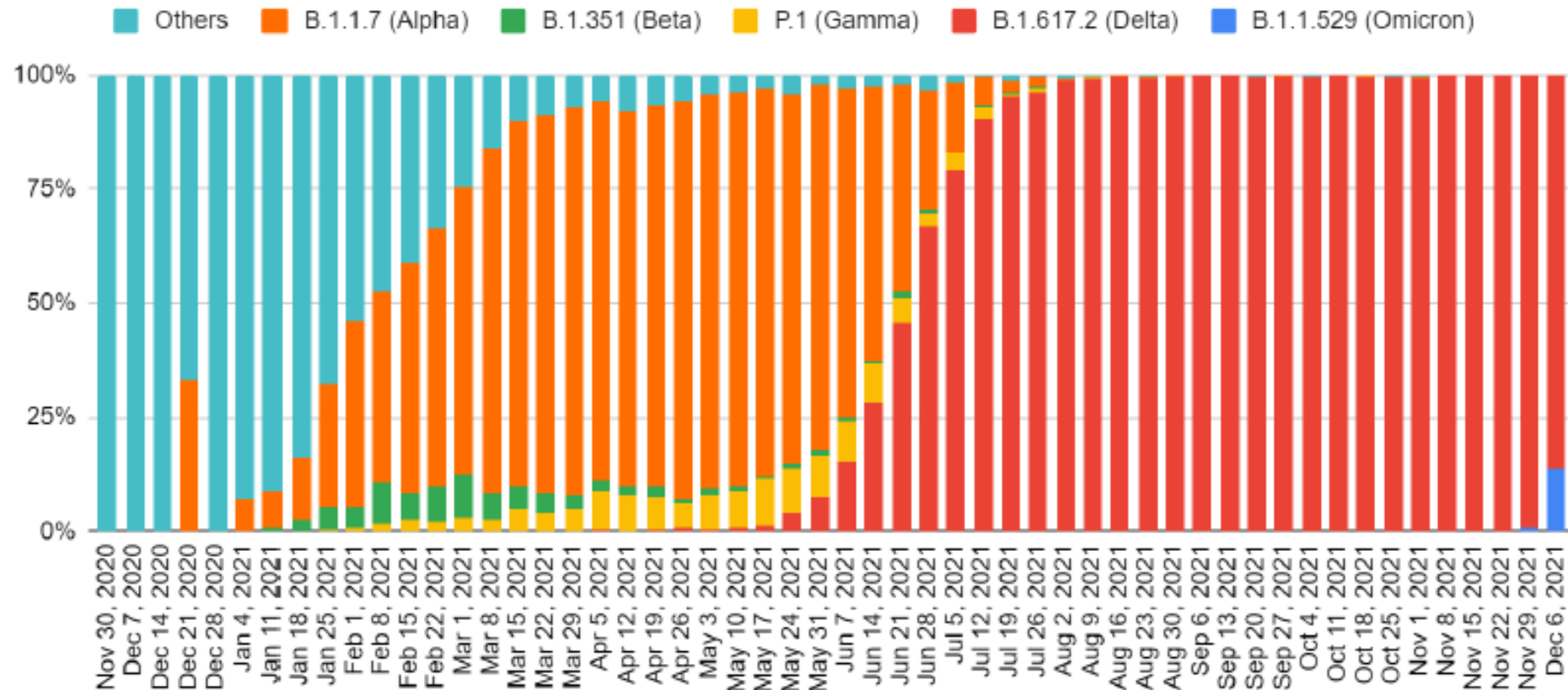


Figure 1: Weekly evolution of the frequency of variants of concern reported by the baseline surveillance network using a whole genome sequencing (WGS) approach.

Considering the very high level of infections foreseen during the coming weeks, we recommend:

To accelerate the booster vaccination rollout. This will importantly contribute to decreasing the number of patients requiring hospital care.

To reinforce infection-reduction measures as soon as possible, including with regard to masks and ventilation. Distribution of FFP2 masks is recommended.

To consider an emergency distribution of novel effective antiviral therapies

To prepare first line services (GPs, testing, tracing and distribution of self tests) to a very high level of activity starting in January. This preparation should include prioritization strategies as maximal capacities will very probably be reached.

To develop adapted strategies to contain the spread of infections during the multiple social & familial small scale events associated with this season of the year.

To prepare hospitals for a high level of activity starting end of January

Wat met -65 jarigen die Pfizer of Moderna kregen?

Momenteel : pas na 6 maanden booster (mogelijks krimpen naar 5 maanden)

EMA laat toe naar 3 maanden te boosten

Denemarken na 4,5 maand

VK en Nederland na 3 maanden

.

Belangrijk nieuws Coronapil

Coronapil van Pfizer voor bijna 90 procent effectief tegen zware gevolgen Covid-19



Beeld AFP

Volgens farmabedrijf Pfizer daalt het risico op hospitalisatie en overlijden bij een covidinfectie met 89 procent wanneer zijn coronapil binnen de drie dagen na de eerste symptomen wordt toegediend. Ook tegen de omikronvariant zou een behandeling met Paxlovid effectief blijven.

REDACTIE 14 december 2021, 13:21

Paxlovid High-Risk Trial

Full results in 2,246 patients mirrors interim analysis results in 1,219 patients
89% reduction of hospitalizations or deaths, the primary endpoint:

Placebo 66/1046 (6.3%) vs Paxlovid 8/1039 (0.8%)

12 vs 0 deaths, respectively

Relative benefit at 3 days similar as 5 days after symptom onset

94% reduction in people age 65+

10-fold reduction in viral load

Fewer adverse events in active vs placebo arms

Lab data shows potent anti-Omicron activity

Merck's COVID pill loses its lustre: what that means for the pandemic

Molnupiravir was initially heralded by public-health officials as a game-changer for COVID-19, but full clinical-trial data showed lower-than-expected efficacy.

[Max Kozlov](#)



Molnupiravir offers the possibility of treating people in areas where monoclonal antibodies cannot be easily administered. Credit: Mariusz Burcz/Alamy

Molnupiravir, one of two antiviral pills [that have caused excitement in the past few months](#) because preliminary clinical-trial results showed that they can significantly reduce hospitalizations and deaths from COVID-19, has yet to receive an emergency use authorization from the US Food and Drug Administration (FDA). An FDA advisory committee met on 30 November, and narrowly voted to recommend the drug candidate's emergency approval by 13 to 10.

11.520 behandelingen aangekocht

Antivirale middelen behouden werkzaamheid tegen Omicron

EC ₅₀ (μM)*	Gamma (B.1.1.28.1)	Delta (B.1.617.2)	Omicron (B.1.1.529)**
Remdesivir (GS-441524)	1.5 ± 0.3	1.0 ± 0.08	0.78
Paxlovid (PF-07321332)	0.21 ± 0.03	0.20 ± 0.01	0.13
Molnupiravir (EIDD-1931)	2.2 ± 0.12	3.5 ± 2.0	2.2

*Antiviral assay on VeroE6 cells (+ 0.5 μM CP-100356) with CPE read-out

** Single experiment

+ Achtergrond Gezondheid

Steeds meer niet-gevaccineerde zwangere vrouwen met covid op intensieve zorg. Met vaak grote gevolgen



Beeld Lorenzo Mattiucci

Motiveer zwangeren zich te laten vaccineren

Baby's die vroegtijdig geboren moeten worden of het niet halen: de gevolgen van een coronabesmetting tijdens de zwangerschap kunnen groot zijn. Ziekenhuizen zien het aantal zwangere patiënten die op intensieve zorg terechtkomen stijgen. En vrijwel allemaal zijn ze niet gevaccineerd. 'Hier gebeuren drama's.'



Adviseer de bevolking om
zelftest te doen enkele uren vooraleer samen te komen aan feesten
frequent te verluchten als er bezoek is (ook al koelt het dan binnen af)