



“European Digital Covid Certificate: assessment and prospects”

Wednesday 20 April, 2022 - 1.00 pm - 3.00 pm

Assessment of the implementation of the EU Digital COVID Certificate

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Conflict of interests: none, verify us!

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From 1 February 2022, new rules in the European Union establish a **binding acceptance period of 9 months for vaccination certificates** for travel within the EU.

Member States must accept vaccination certificates for 9 months from the the last dose of the primary vaccination.

Are these rules able to prevent or drastically reduce a SARS-CoV-2 infection (and transmission to *others*)?

The Italian Law obliges health care and school workers, other professional categories and over-50s to receive vaccines and boosters “**for the prevention of SARS-CoV-2 infection**”.

Unfortunately, there is strong scientific evidence that **this prevention is impossible with current vaccines.**

Indeed, **in the medium term such vaccinations not only lose any protective effect, but involve even greater infection risks.**

Time allows me only to focus on this problem, not on some useful alternatives.

Effectiveness of mRNA vaccines and waning of protection against SARS-CoV-2 infection and severe covid-19 during predominant circulation of the delta variant in Italy: *BMJ 2022;376:e069052*

with **Delta**

Massimo Fabiani,¹ Maria Puopolo,¹ Cristina Morciano,¹ Matteo Spuri,¹ Stefania Spila Alegiani,¹ ...
 Silvio Brusaferrò,¹ Giovanni Rezza,² Francesca Menniti Ippolito,¹ Patrizio Pezzotti,¹ on behalf

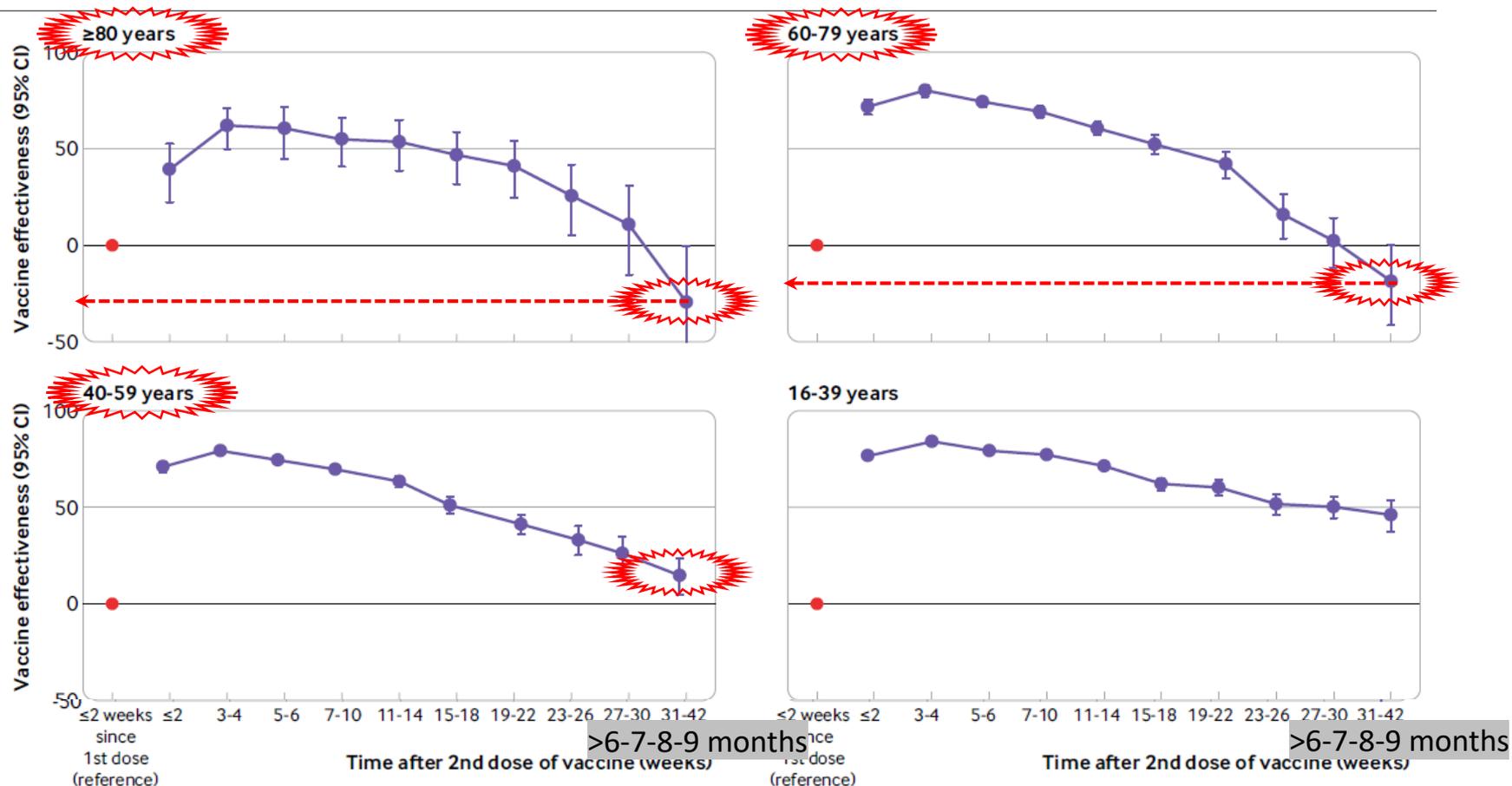


Fig 3 | Effectiveness of mRNA vaccines against SARS-CoV-2 infection during the delta phase by age group and priority risk category, Italy, 19 July to 7 November 2021. Vaccine effectiveness calculated as $(1-IRR) \times 100$, where IRR =incidence rate ratio. *Including people with comorbidities, immunocompromised people, and residents of long term care facilities

Including people with comorbidities, residents of long term care facilities, Immunocompromised people...

The ISS knew this since 2021...!

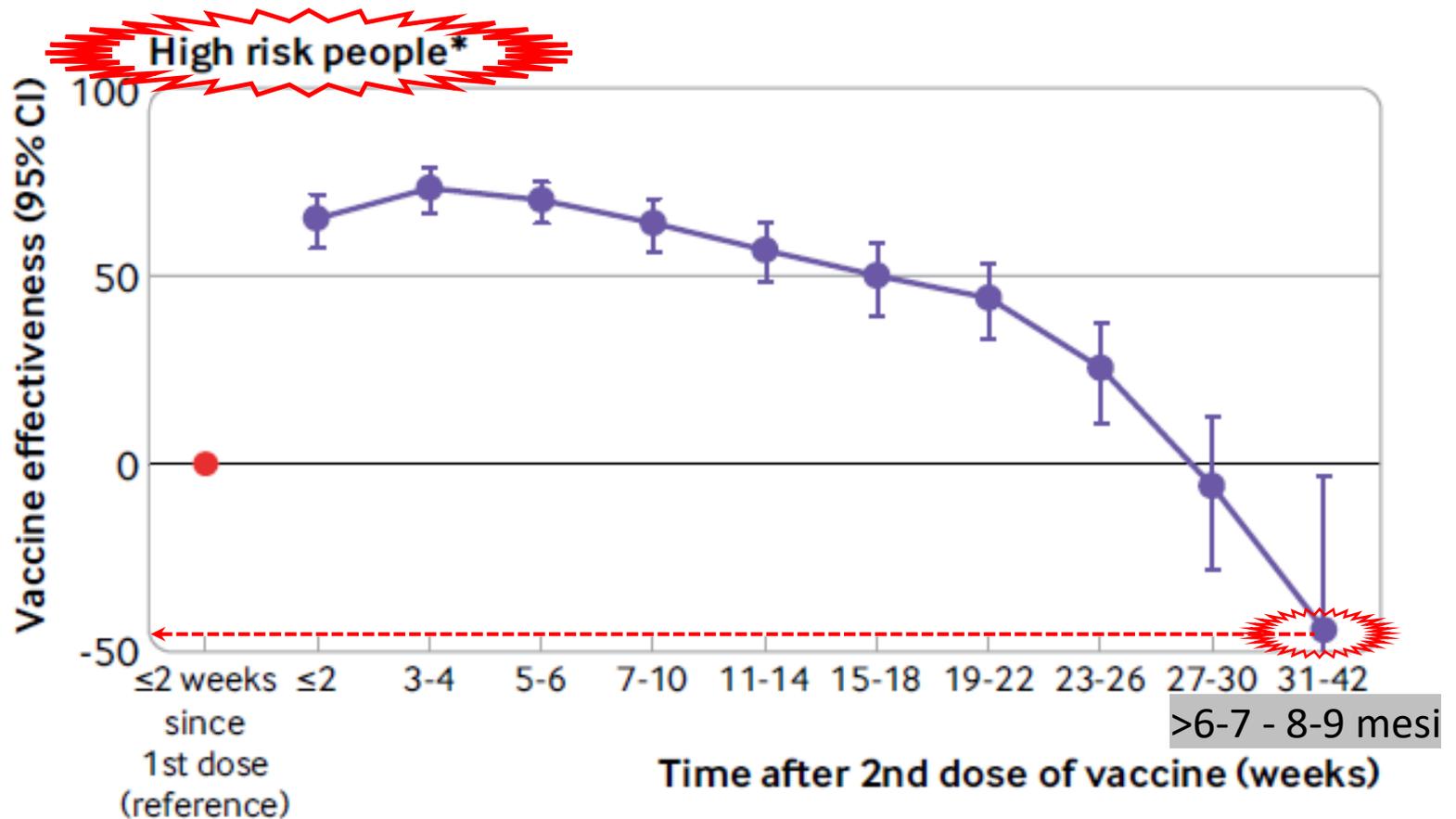


Fig 3 | Effectiveness of mRNA vaccines against SARS-CoV-2 infection during the delta phase by age group and priority risk category, Italy, 19 July to 7 November 2021. Vaccine effectiveness calculated as $(1-IRR) \times 100$, where IRR =incidence rate ratio. *Including people with comorbidities, immunocompromised people, and residents of long term care facilities

... This phenomenon is evident in subsequent publications of the [Covid-19 vaccine surveillance report, Week 36](#) **Week 36:**

UK Health
Security
Agency

COVID-19 vaccine surveillance report Week 36

COVID-19 vaccine surveillance report - week 36

Table 4. COVID-19 cases by vaccination status between week 32 and week 35 2021

Cases reported by week of specimen date between week 32 and week 35 2021	Total	Unlinked*	Not vaccinated	Received one dose (1-20 days before specimen date)	Received one dose, ≥21 days before specimen date	Second dose ≥14 days before specimen date	Rates among persons vaccinated with 2 doses (per 100,000)	Rates among persons not vaccinated (per 100,000)
Under 18	167,832	15,901	141,676	8,132	1,366	757	476.0	1,192.9
18-29	176,392	19,529	53,187	4,598	66,545	32,533	711.1	1,520.8
30-39	113,373	12,452	33,986	1,497	22,434	43,004	782.2	1,143.9
40-49	97,881	8,930	15,106	496	6,000	67,349	1,116.2	880.4
50-59	84,488	6,868	7,552	168	2,248	67,652	962.0	729.7
60-69	45,252	3,657	2,650	54	772	38,111	672.3	487.5
70-79	25,499	2,034	910	12	273	22,270	480.5	367.5
80+	12,011	1,124	545	9	246	10,087	391.1	427.4

+766

cases in vaccinated still -17,2%

From week 36 (and subsequent), in age classes 40-49 to 70-79 years, rates of COVID-19 cases among persons vaccinated (per 100.000) were greater than rates among persons not vaccinated: **+766 cases**. But, comparing the entire columns, the vaccinated rates remained lower...

Table 5. Unadjusted rates of COVID-19 infection, hospitalisation and death in vaccinated and unvaccinated populations.

	Cases reported by specimen date between week 39 and week 42 2021		Cases presenting to emergency care (within 28 days of a positive test) resulting in overnight inpatient admission, by specimen date between week 39 and week 42 2021		Death within 28 days of positive COVID-19 test by date of death between week 39 and week 42 2021		Death within 60 days of positive COVID-19 test by date of death between week 39 and week 42 2021	
	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ^{1,2}	Unadjusted rates among persons not vaccinated (per 100,000) ^{1,2}	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ²	Unadjusted rates among persons not vaccinated (per 100,000) ²	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ²	Unadjusted rates among persons not vaccinated (per 100,000) ²	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ²	Unadjusted rates among persons not vaccinated (per 100,000) ²
Under 18	586.2	3,149.6	0.7	5.3	0.0	0.0	0.0	0.0
18-29	532.9	674.0	1.3					
30-39	1,071.8	817.7	3.4					
40-49	1,936.2	834.9	7.1					
50-59	1,248.7	586.1	8.9					
60-69	837	591.2	14.0					
70-79	635	312.2	29.8					
≥80	432.5	333.8	56.8	120.8	44.9	110.0	55.5	128.5

It's the **week of the turning point**: summing all the age columns, the **cases among vaccinated with 2 doses exceed** those of the not vaccinated!

+2,885

Tot. cases: **7,280** 7,100
 (cases in **vaccinated +180**, i.e. **+2.5%**)

The trend continues consistently in the subsequent weeks, and...

Week 2 - 2022

Table 12. Unadjusted rates of COVID-19 infection, hospitalisation and death in vaccinated and unvaccinated populations.
Please note that the following table should be read in conjunction with pages 35 to 38 of this report, and the footnotes provided on page 43.

	Cases reported by specimen date between week 50 2021 and week 1 2022		Cases presenting to emergency care (within 28 days of a positive test) resulting in overnight inpatient admission, by specimen date between week 50 2021 and week 1 2022		Death within 28 days of positive COVID-19 test by date of death between week 50 2021 and week 1 2022	
	[see information on population bases and unadjusted rates in footnotes 1 and 2 below this table]					
	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ^{1,2}	Unadjusted rates among persons not vaccinated (per 100,000) ^{1,2}	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ²	Unadjusted rates among persons not vaccinated (per 100,000) ²	Unadjusted rates among persons vaccinated with 2 doses (per 100,000) ²	Unadjusted rates among persons not vaccinated (per 100,000) ²
Under 18	2,356.6	3,376.1	1.8	10.9	0.0	0.1
18 to 29	8,926.0	4,058.9	10.5	16.9	0.1	0.5
30 to 39	7,618.8	3,268.8	10.2	21.1	0.4	1.3
40 to 49	6,330.1	2,585.9	11.3	32.9	0.6	4.2
50 to 59	4,796.2	2,117.0	13.6	61.5	1.8	11.6
60 to 69	3,099.9	1,477.9	17.8	100.4	4.9	34.0
70 to 79	1,926.2	1,059.6	32.1	170.5	10.1	81.3
80 or over	1,657.7	1,262.9	88.7	330.8	42.4	246.7

+18,524

Tot. cases: **36,712** 19.207
(cases in vaccinated **+17,504**, i.e. **+91%**)

The vaccinated show **many more** infections than not vaccinated.

The **excess of total cases in the vaccinated column** started **from week 43/2021** and it **exploded in a few months!**

Week 3 - 2022

COVID-19 vaccine surveillance report - week 3

Table 12. Unadjusted rates of COVID-19 infection, hospitalisation and death in vaccinated and unvaccinated populations.
Please note that the following table should be read in conjunction with pages 30 to 33 of this report, and the footnotes provided on page 38.

	Cases reported by specimen date between week 51 2021 (w/e 26/12/21) and week 02 2022 (w/e 16/01/22)		Cases presenting to emergency care (within 28 days of a positive test) resulting in overnight inpatient admission, by specimen date between week 51 2021 (w/e 26/12/21) and week 02 2022 (w/e 16/01/22)		Death within 28 days of positive COVID-19 test by date of death between week 51 2021 (w/e 26/12/21) and week 02 2022 (w/e 16/01/22)	
	[see information on population bases and unadjusted rates in footnotes 1 and 2 below this table]					
	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ^{1,2}	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ²	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ²
Under 18	2,295.7	3,990.1	10.0	12.7	0.0	0.1
18-29	3,480.5	3,853.3	4.3	17.0	0.0	0.5
30-39	3,857.1	3,251.7	5.2	20.8	0.1	1.4
40-49	4,012.4	2,573.9	5.5	28.3	0.2	3.2
50-59	3,995.9	2,133.3	8.2	52.7	0.5	12.3
60-69	3,070.0	1,499.8	12.8	92.7	2.1	37.2
70-79	2,062.8	1,129.7	28.9	180.1	5.9	90.4
≥80	1,842.6	1,374.8	85.5	347.2	33.2	293.3

Casi tot.: **24,597** 19.807
(casi in **trivaccinati +4,790**, cioè **+24%**)

From week 3, the UK Security Agency decided to **compare** with unvaccinated **only** **subjects with 3 doses** (or more). Despite this change, the **vaccinated persons** **continue to have more infections** than unvaccinated.

Week 13 - 2022

Table 14. Unadjusted rates of COVID-19 infection, hospitalisation and death in vaccinated and unvaccinated populations.
 Please note that the following table should be read in conjunction with pages 38 to 41 of this report, and the footnotes provided on page 46.

	Cases reported by specimen date between week 9 2022 (w/e 6 March 2022) and week 12 2022 (w/e 27 March 2022)		Cases presenting to emergency care (within 28 days of a positive test) resulting in overnight inpatient admission, by specimen date between week 9 2022 (w/e 6 March 2022) and week 12 2022 (w/e 27 March 2022)		Death within 28 days of positive COVID-19 test by date of death between week 9 2022 (w/e 6 March 2022) and week 12 2022 (w/e 27 March 2022)	
	[see information on population bases and unadjusted rates in footnotes 1 and 2 below this table]					
	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ^{1,2}	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ²	Unadjusted rates among persons vaccinated with at least 3 doses (per 100,000)	Unadjusted rates among persons not vaccinated (per 100,000) ²
Under 18	1,454.0	1,711.7	3.1	9.6	0.0	0.0
18 to 29	3,118.8	941.6	5.4	8.2	0.1	0.0
30 to 39	4,324.7	1,085.6	6.8	7.4	0.2	0.3
40 to 49	3,957.8	955.3	6.0	7.7	0.2	0.3
50 to 59	3,303.4	779.8	9.0	12.9	0.5	1.6
60 to 69	2,814.9	572.8	14.3	22.1	1.5	5.9
70 to 79	2,161.5	532.1	36.6	58.8	6.8	20.2
80 or over	2,023.7	775.6	117.9	123.5	44.6	87.4

Cases + 3.15 times more!

Casi tot.: **21,705** 7.355
 (casi in **vaccinati con almeno 3 dosi +15,804**, cioè **+215%** vs non vaccinati !)

The positive cases among vaccinated (vs not vaccinated) have continued to grow, with no slowdowns, from 23 weeks. It is really clear that even with ≥3 doses the vaccinated people are more likely to become infected in the medium term.

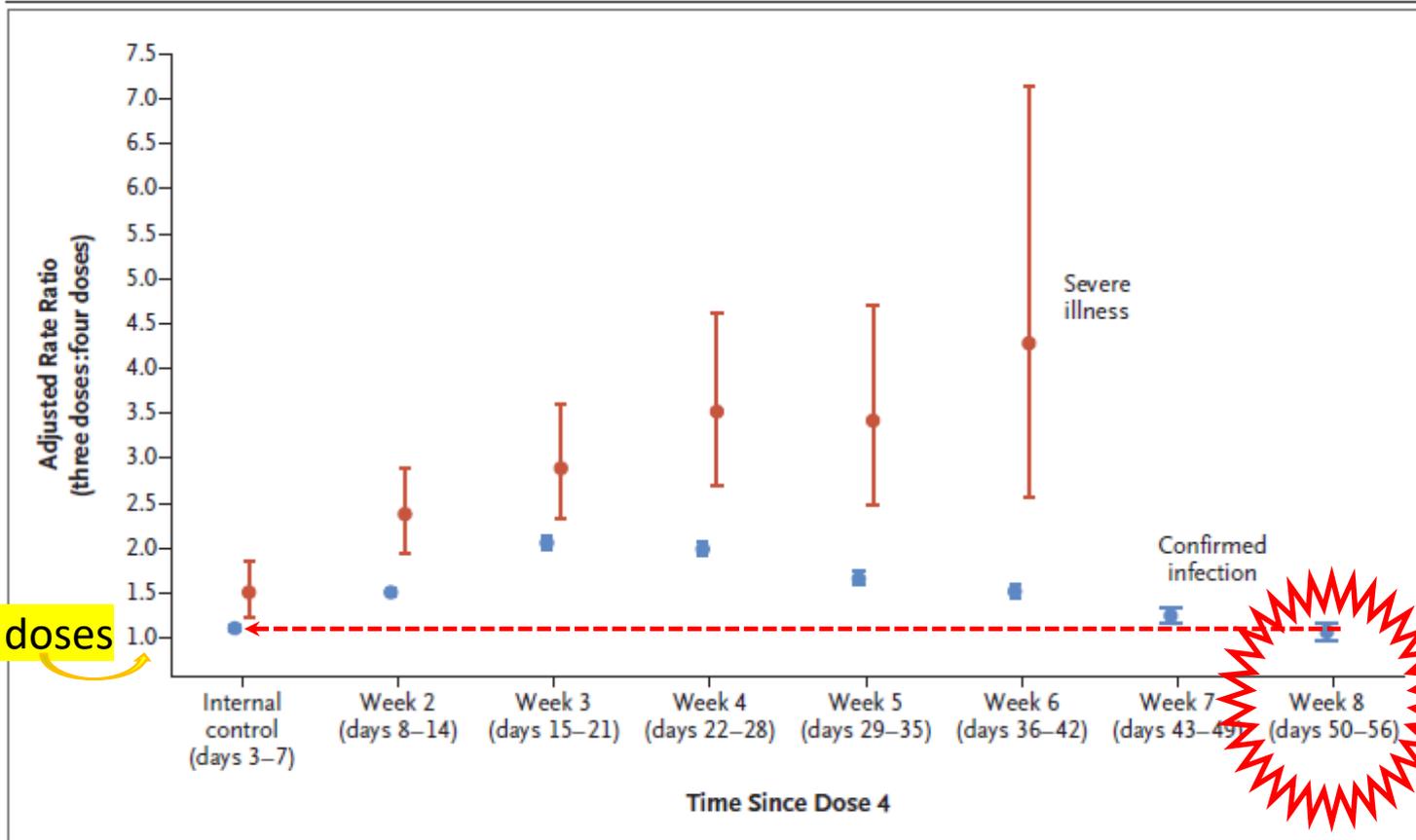
Does the 4th dose restore protection? This is the answer!

ORIGINAL ARTICLE

Protection by a Fourth Dose of BNT162b2 against Omicron in Israel

This article was published on April 5, 2022, at NEJM.org.

Yinon M. Bar-On, M.Sc., Yair Goldberg, Ph.D., Micha Mandel, Ph.D.,

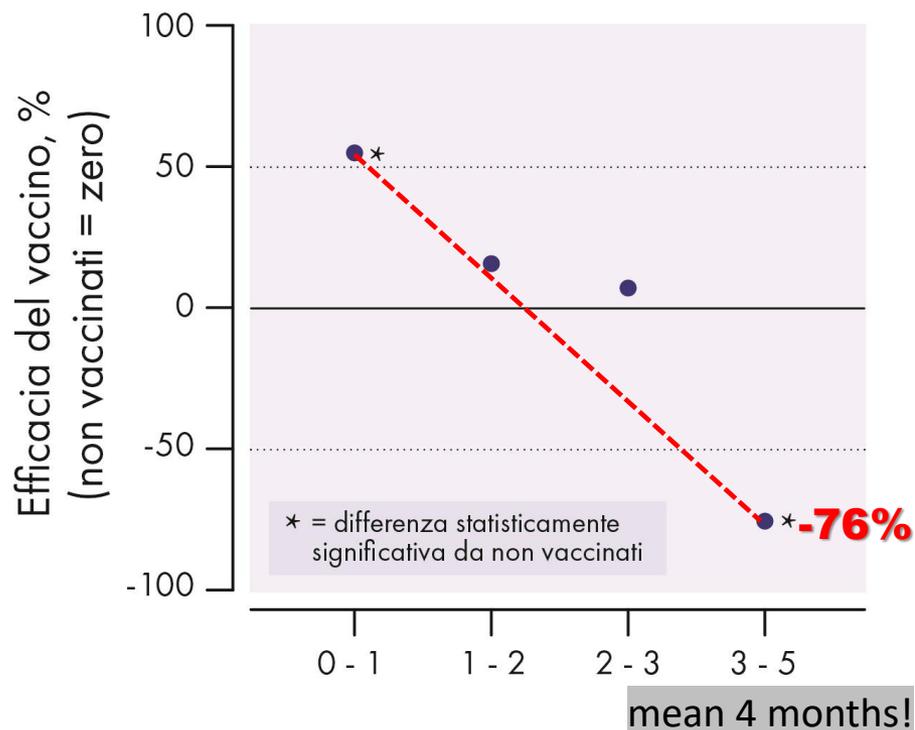


In less than 2 months one returns to the starting square in the game of the goose



Figure 2. Adjusted Rate Ratios for Confirmed Infection and Severe Illness.

Vaccino Pfizer



Tempo (mesi) da 14 giorni dopo la 2ª dose (considerata la "protezione completa")

In 4 months the Pfizer vaccine mean protection against Omicron is nearly zero (and its trend is to get worse!)

Accordingly, if we vaccinate children, they will **infect the grandparents after a few months, or should be boosted for life!**

Moreover, is it logical to demand **an antigenic test every two days to give a guarantee comparable to a vaccination?!?**

No! Even a weekly test would be better than zero guarantee!

Efficacia dei vaccini Pfizer e Moderna contro l'infezione da SARS-CoV-2 con variante Omicron (adattata da Hansen¹ et al., medRxiv preprint 2021.12.20.21267966) **Danmark**

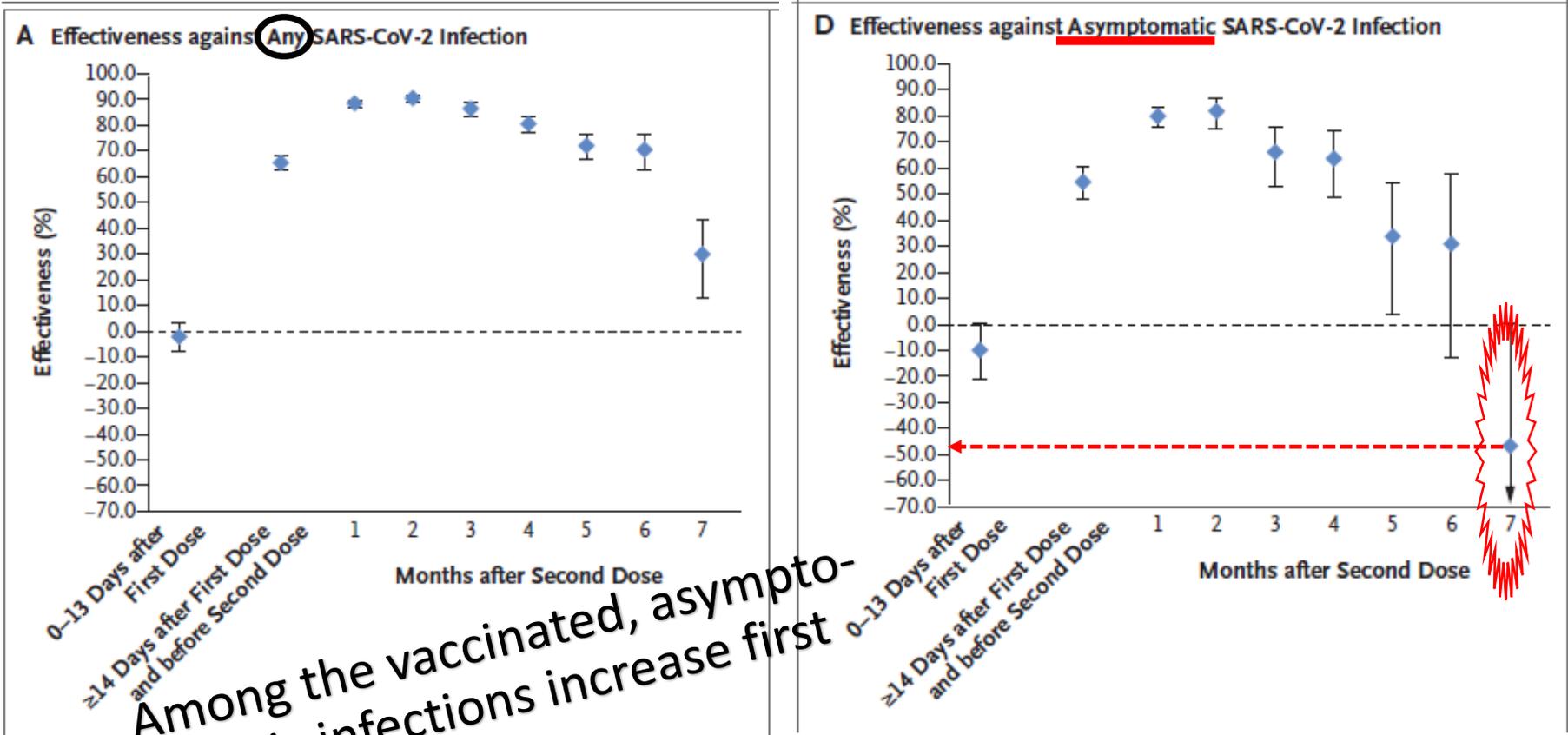
¹ Department of Infectious Disease Epidemiology and Prevention, Statens Serum Institut, Copenhagen, DK

CORRESPONDENCE

letter was published on January 26, 2022, at NEJM.org.

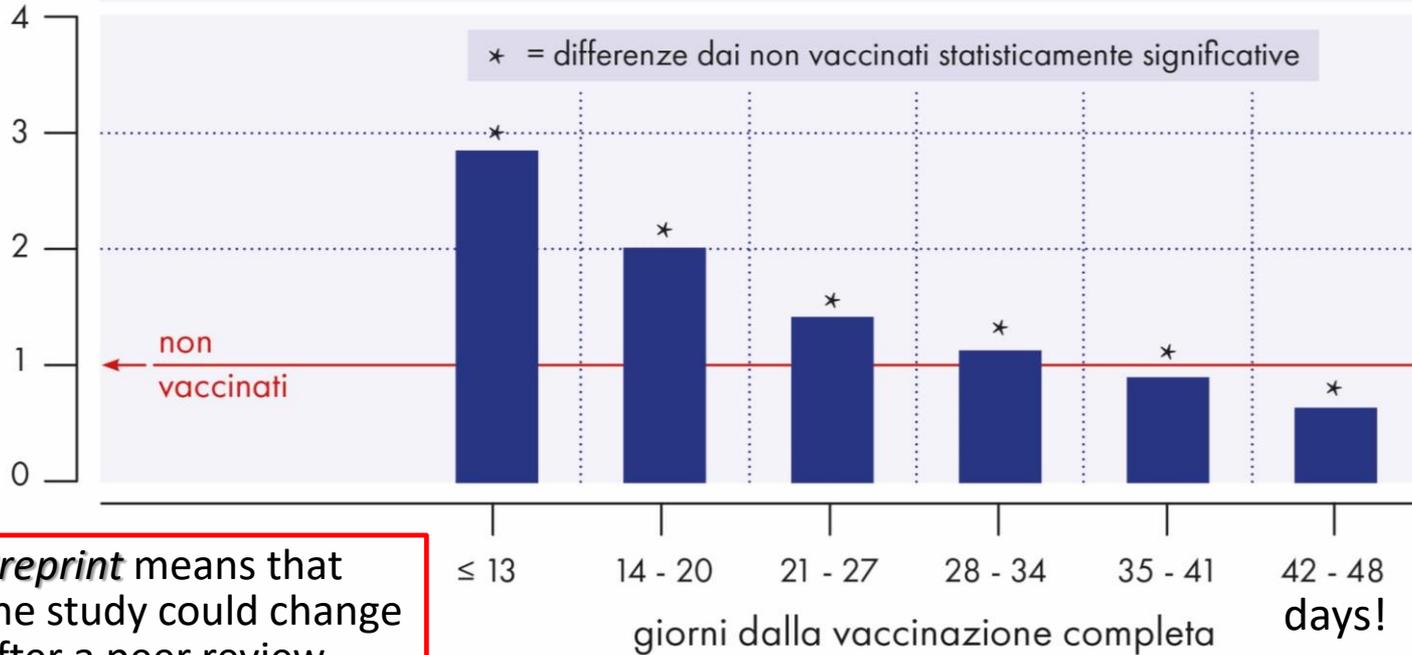
Waning mRNA-1273 Vaccine Effectiveness against SARS-CoV-2 Infection in Qatar

Laith J. Abu-Raddad, Ph.D.
Hiam Chemaitelly, Ph.D.



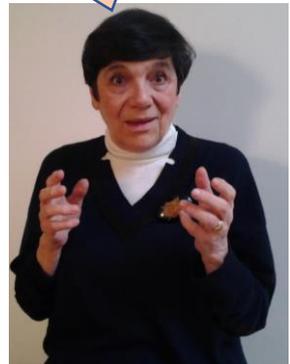
Effectiveness of the BNT162b2 vaccine among children 5-11 and 12-17 years in New York after the Emergence of the Omicron Variant

	Stime					
Rapporto di incidenza $\frac{\text{tasso non vaccinati}}{\text{tasso vaccinati}}$	2,7	2,0	1,4	1,1	0,9	0,7
Efficacia del vaccino $1 - \left(\frac{1}{\text{rapp. di incidenza}} \right)$	65%	51%	29%	12%	-10%	-41%



Preprint means that the study could change after a peer review

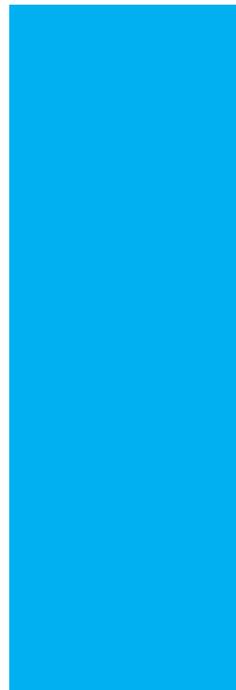
It means that after 1.5 months from the primary cycle the child could get infected (and infect me) even more?!



Incidence rate ratios, comparing cases for unvaccinated versus children newly fully vaccinated 5-11 years (Dec 13, 2021-Jan 2, 2022), by time since vaccination (adattata da Dorabawila et al., medRxiv preprint 2022.02.25.22271454)

Percentage of COVID-19 cases in vaccinated vs unvaccinated Italian children 5-11 years (processing based on ISS data – Report of March 16, 2022)
[Epidemia COVID-19 \(iss.it\)](https://www.iss.it/epidemia-covid-19)

4.582 %



unvaccinated

4.159 % *

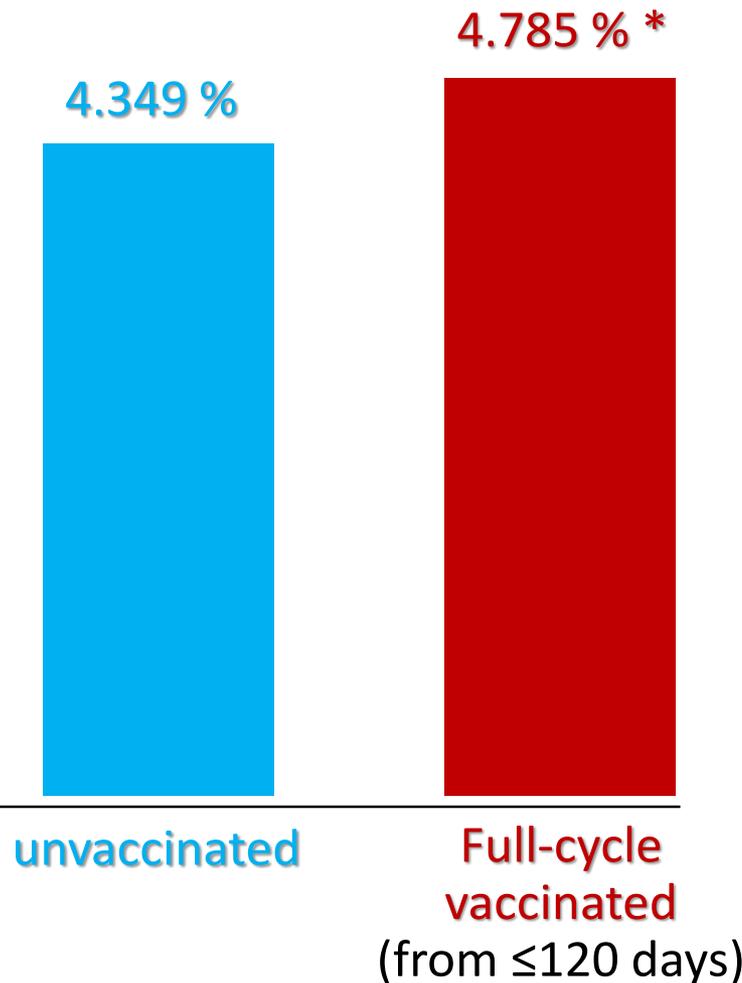
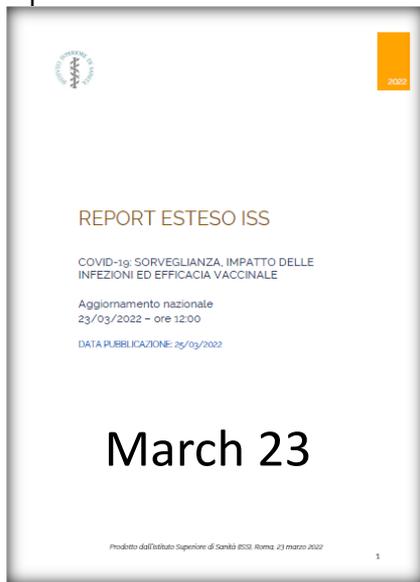


Full-cycle
vaccinated
(from ≤ 120 days)

* In March the difference in cases⁺ between full-cycle vaccinated and unvaccinated was statistically highly significant favoring vaccinated
RR = 0.91
P < 0.0001

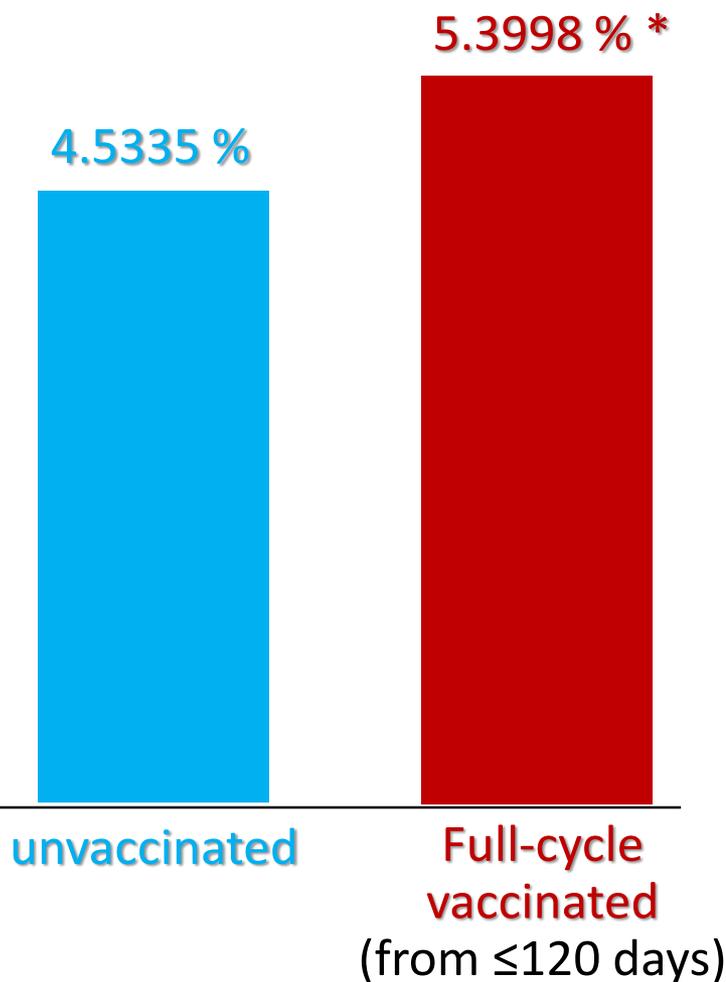
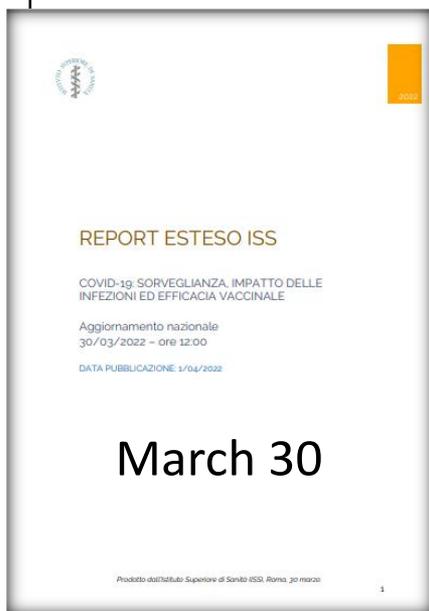


Percentage of COVID-19 cases in vaccinated vs unvaccinated Italian children 5-11 years (processing based on ISS data – Report of March 23, 2022)
[Epidemia COVID-19 \(iss.it\)](https://www.iss.it)



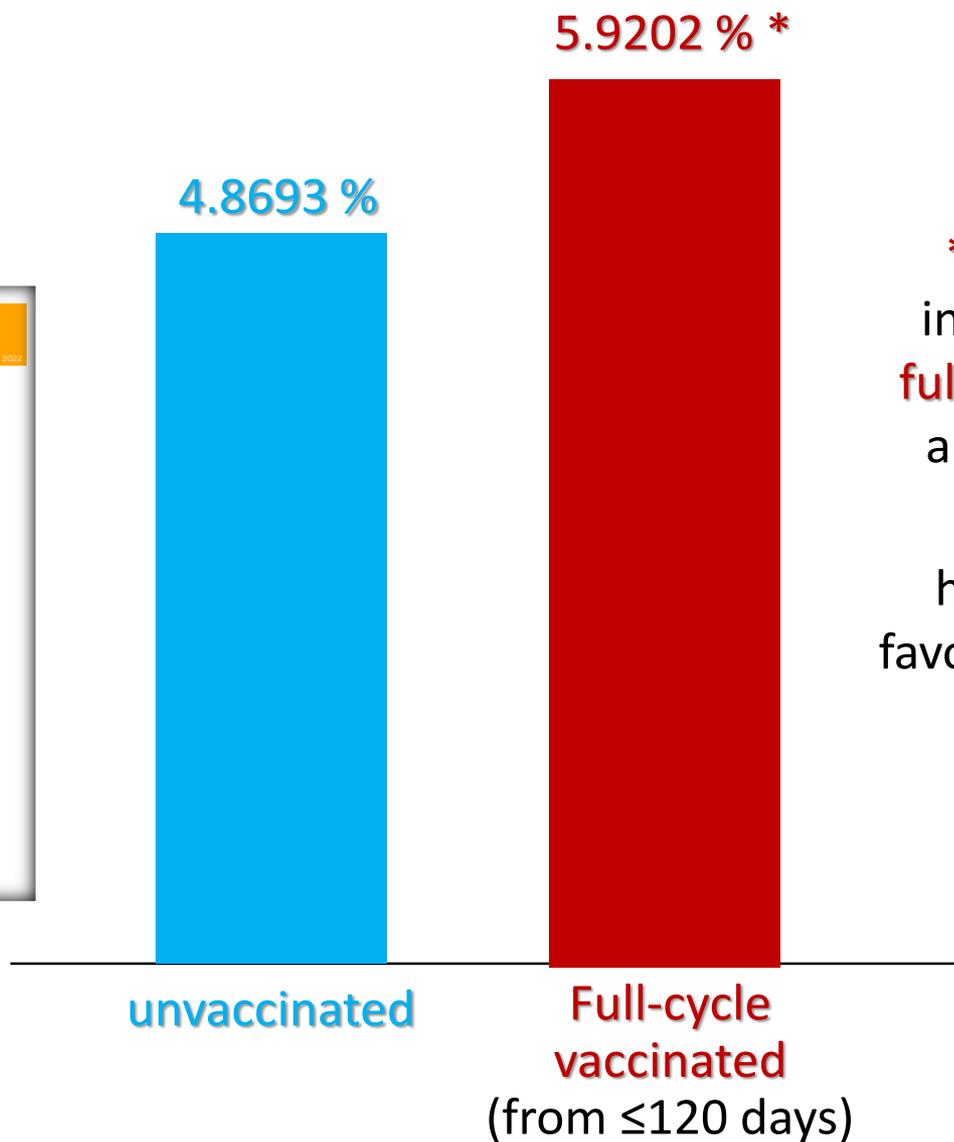
* but a week later the difference in cases⁺ between full-cycle vaccinated and unvaccinated was statistically highly significant favoring unvaccinated
RR = 1.100
P < 0.0001

Percentage of COVID-19 cases in vaccinated vs unvaccinated Italian children 5-11 years (processing based on ISS data – Report of March 30, 2022)
[Epidemia COVID-19 \(iss.it\)](https://www.iss.it/epidemia)

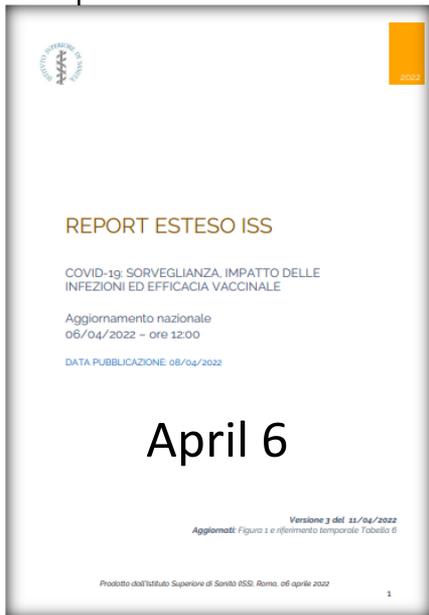


* ... a week later
the difference
in cases⁺ between
full-cycle vaccinated
and unvaccinated,
always statistically
highly significant,
favors even more
unvaccinated
RR = 1.1911
P < 0.0001

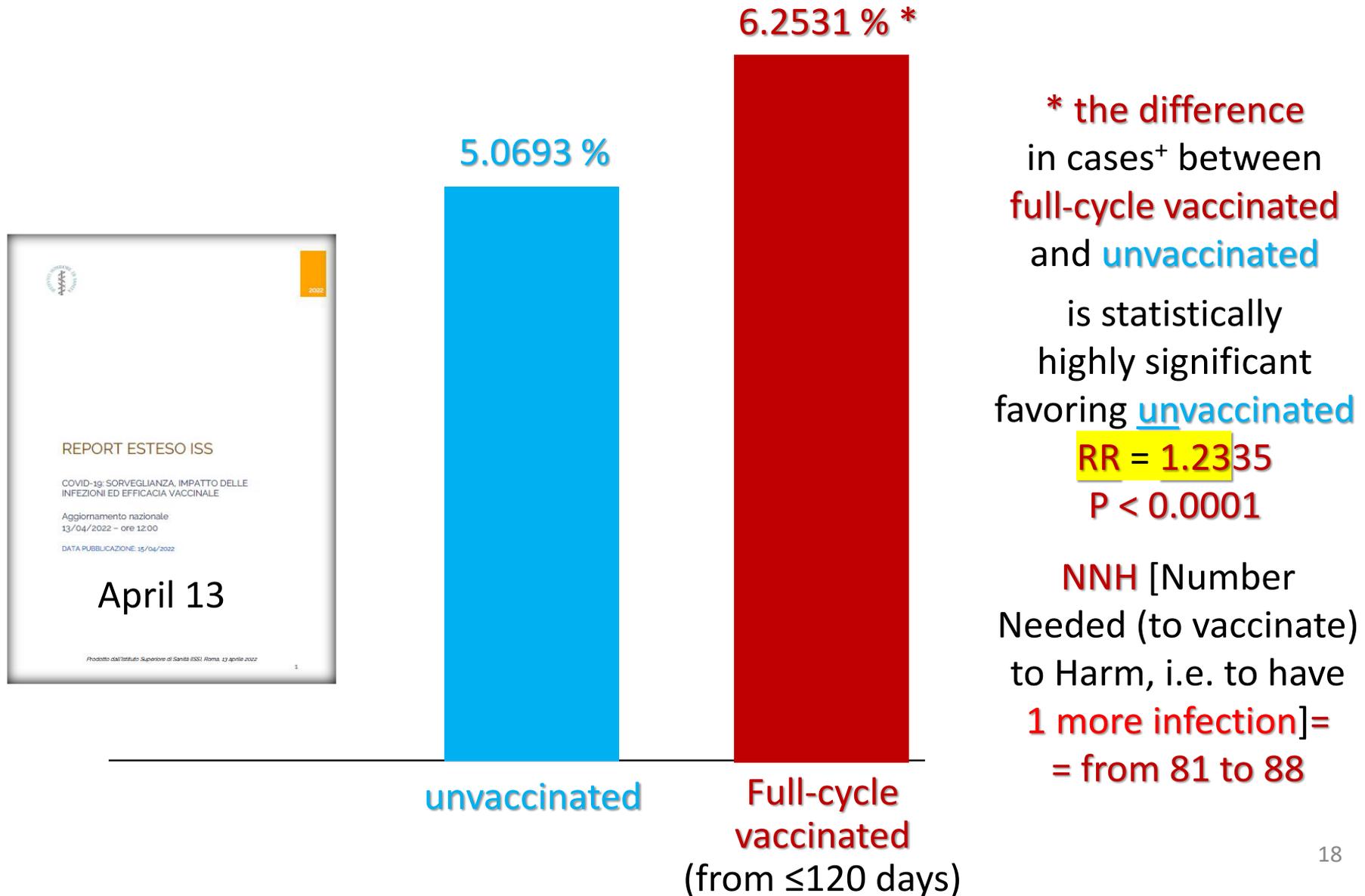
Percentage of COVID-19 cases in vaccinated vs unvaccinated Italian children 5-11 years (processing based on ISS data – Report of **April 6**, 2022) [Epidemia COVID-19 \(iss.it\)](https://www.iss.it/epidemia-covid-19)



* the difference in cases⁺ between full-cycle vaccinated and unvaccinated is statistically highly significant favoring unvaccinated
RR = 1.2158
P < 0.0001



Percentage of COVID-19 cases in vaccinated vs unvaccinated Italian children 5-11 years (processing based on ISS data – Report of **April 13**, 2022)
[Epidemia COVID-19 \(iss.it\)](https://www.epidemiologia.it/epidemia-covid-19)



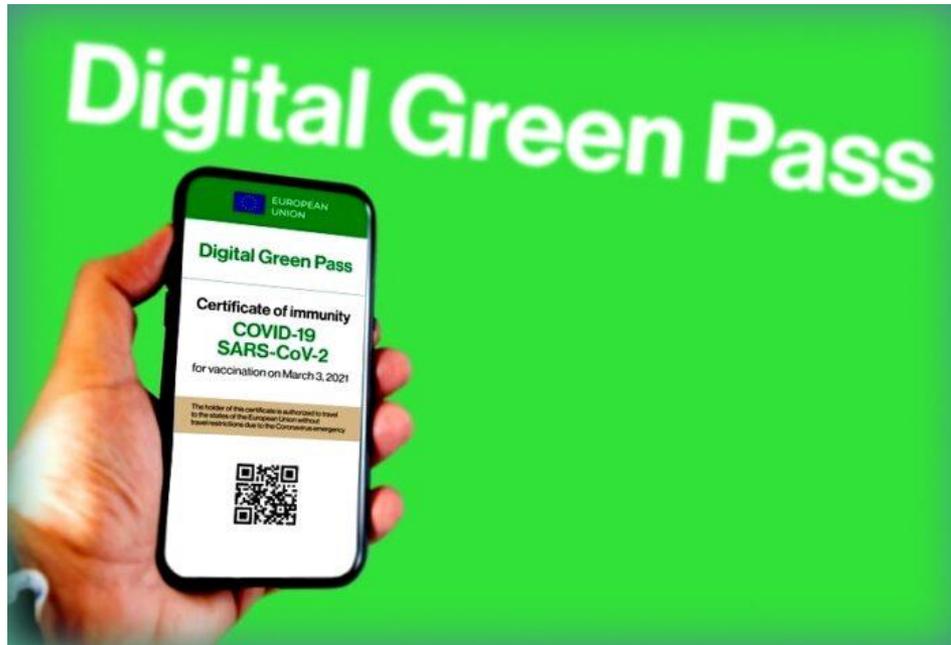
How long is the Green Pass issued to children valid?

Once they receive the **second dose**, they will get a **nine-month certificate**, just like adults.



Conclusion

If the EU Digital COVID-19 Certificate is aimed to protect the European Community from SARS-CoV-2 infections it does not have the claimed scientific support (and **may even be hazardous in the medium term for public health), therefore it could be safely dismissed, (with several effective alternatives)**



**THANK YOU FOR
YOUR ATTENTION!**