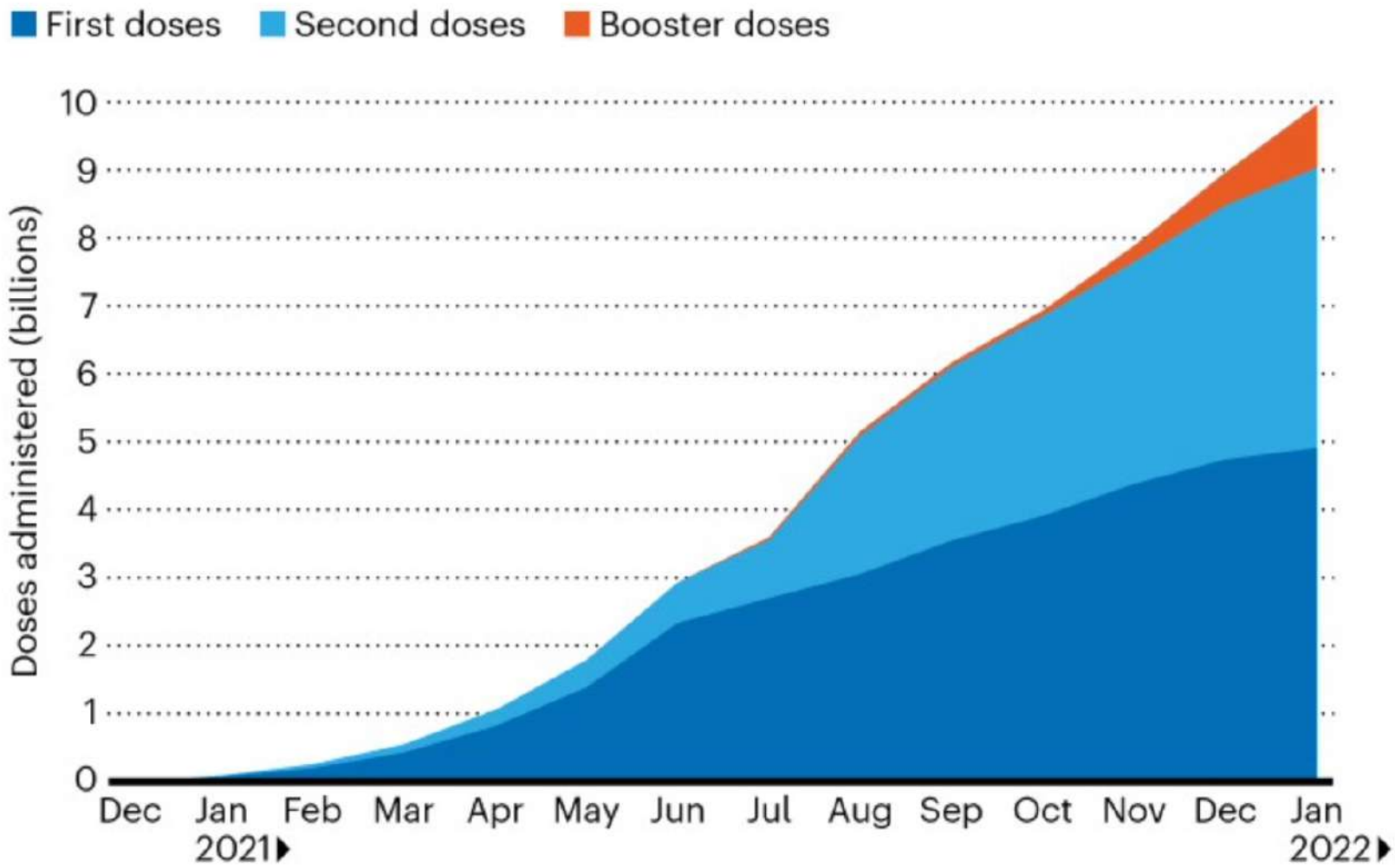
mRNA (BioNTech) Aşısı

Gerçek Yaşam Verileri

Dr. Alpay AZAP
Ankara Üniversitesi Tıp Fakültesi

THE PATH TO TEN BILLION

It took four months after COVID-19 vaccines began to be rolled out to reach one billion vaccinations, but only another nine months to reach ten billion. Almost one billion of these were boosters, raising questions about the inequity facing the large number of people globally who are yet to access even a single dose.



Dates are approximate.

ACCEPTED MANUSCRIPT

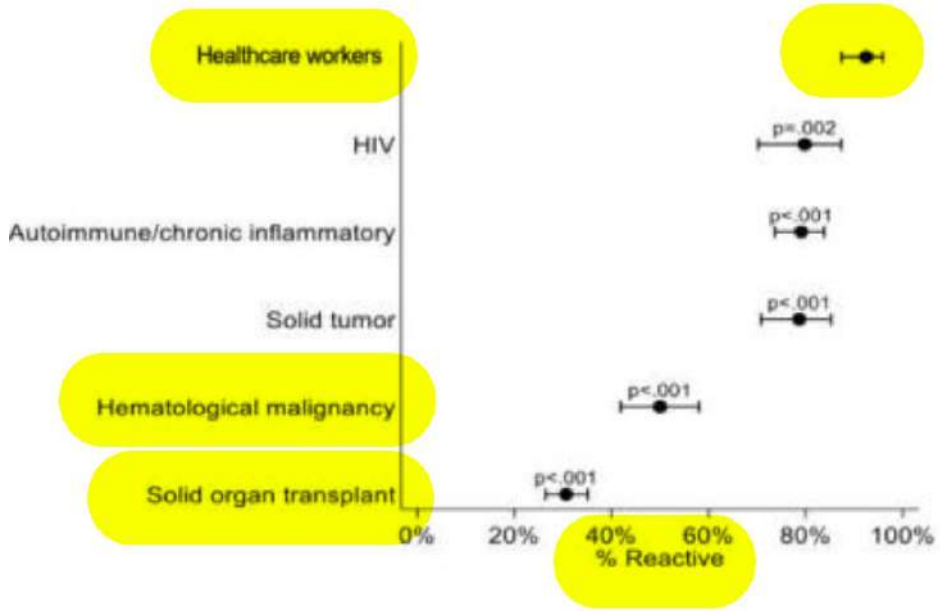
Prospective evaluation of COVID-19 vaccine responses across a broad spectrum of immunocompromising conditions: the COVICS study

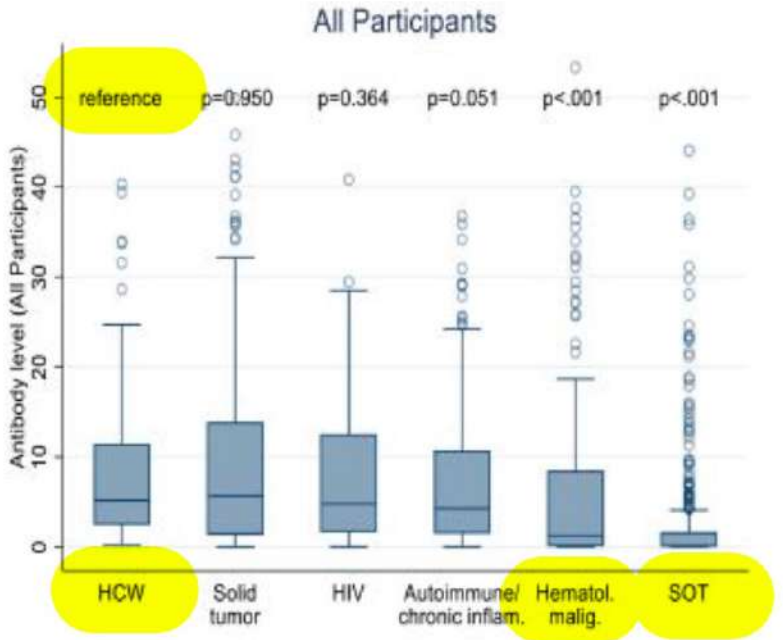
Clin Infect Dis, https://doi.org/10.1093/cid/ciac103 Published: 18 February 2022

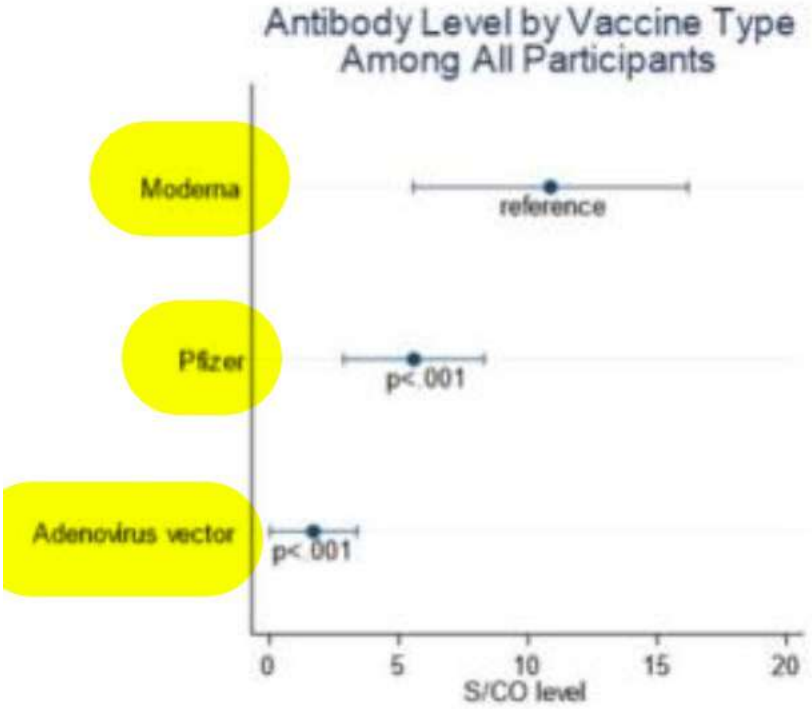
Ghady Haidar, MD ✉, Mounzer Agha, MD, Andrew Bilderback, MS, Amy Lukanski, DNP,

Pittsburg, ABD, Nisan-Temmuz 2021
1271 kişi; 1099 immünsüpresif, 172 kontrol (Sağlık çalışanı), daha önce COVID-19 geçirmemiş

İki doz BioNTech (644), Moderna (614), Adenovirüs (13) aşısından 14 gün sonradan itibaren
Anti- S protein RBD IgG, PvNT (100 hastadan) çalışılmış
Kontrol grubunda medyan 132,5 gün ay sonra, hasta grubunda 93 gün sonra







- ✓ Yaş
- ✓ Aşıdan sonra geçen zaman
- ✓ Aşı tipi

bağışıklık yanıtını etkiliyor

- O zamanki şema (2 doz) uygulanmış
- Hücresel bağışıklık değerlendirilmemiş,
- Kemoterapi ile aşılama arasındaki zaman değerlendirilmemiş
- Varyantlara özgü çalışma yapılmamış
- Sağlık çalışanları daha genç bir grup ve çoğu kadın

Clinical Microbiology and Infection 28 (2022) 163–177

Contents lists available at ScienceDirect

Clinical Microbiology and Infection

journal homepage: www.clinicalmicrobiologyandinfection.com

Systematic review

Immunological and clinical efficacy of COVID-19 vaccines in immunocompromised populations: a systematic review

Simon Galmiche [1], Liem Binh Luong Nguyen [1], Eric Tartour [2], Xavier de Lamballerie [3],

162 çalışma sonucu:

- SON alıcıları (%18-100)
- Hematolojik malignitesi olanlar (%14-61)
- Kanser Hastaları (%2-36)
- Diyaliz hastaları (%2-30)

Risk factors for non-response status often included older age, which is consistent with data provided by phase 1 and 2 studies of COVID-19 vaccines [191,192], as well as in other vaccines such as influenza, pneumococcal and hepatitis B vaccines [202–205].

Clinical Microbiology and Infection 28 (2022) 163e177

Strength and durability of antibody responses to BNT162b2 and CoronaVac

Benjamin J. Cowling, Irene O. L. Wong, Eunice Y. C. Shiu, Amber Y. T. Lai, Samuel M. S. Cheng, Sara Chaothai,

Posted February 15, 2022.

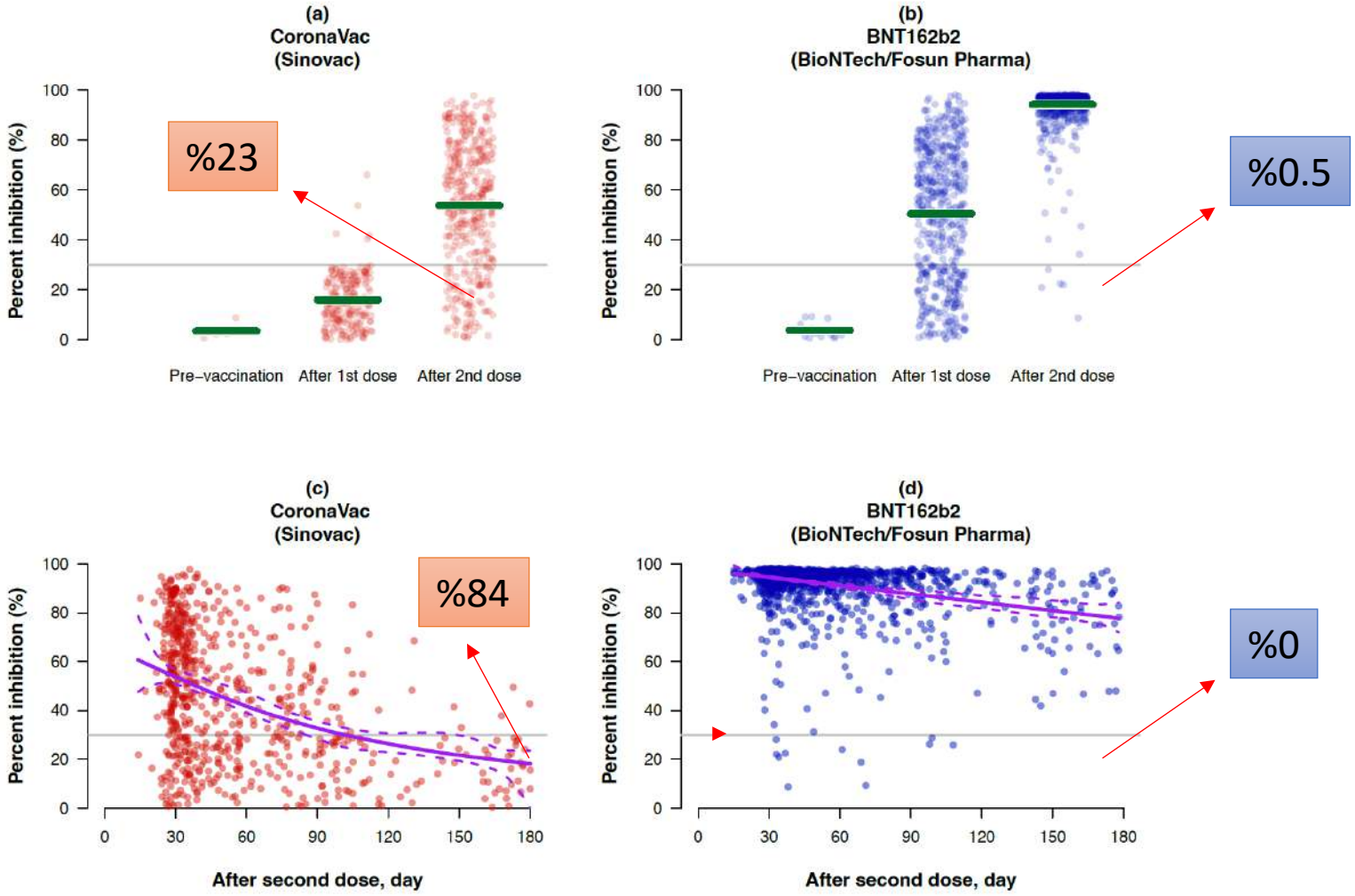
Hong-Kong,
11.7 milyon doz aşı (7.2 milyon BioNTech, 4.5 milyon CoronaVac) 11 Şubat 2022

2 doz aşı uygulanmış kişilerde antikor düzeylerinin 6 aylık seyri

Aşılananlardan belli aralıklarla serum örnekleri alınıp ELISA ve sVNT ile çalışılmış

CoronaVac uygulanan 799 kişiden (59.4 yaş, %46 erkek) 1528 örnek

BioNTech uygulanan 1981 kişiden (49.3 yaş, %44./ erkek) 3939 örnek çalışılmış.



Gençlerde ve kadınlarda antikor yanıtı daha iyi (her iki aşı için)

CoronaVac uygulanan >60 y kişilerin %51'inde antikorlar sınırın altında

Comparison of SARS-CoV-2 anti-spike receptor binding domain IgG antibody responses after CoronaVac, BNT162b2, ChAdOx1 COVID-19 vaccines, and a single booster dose: a prospective, longitudinal population-based study

Burc Barin, Ulus Kasap, Ferda Selçuk, Ender Volkan*, Özge Uluçkan*

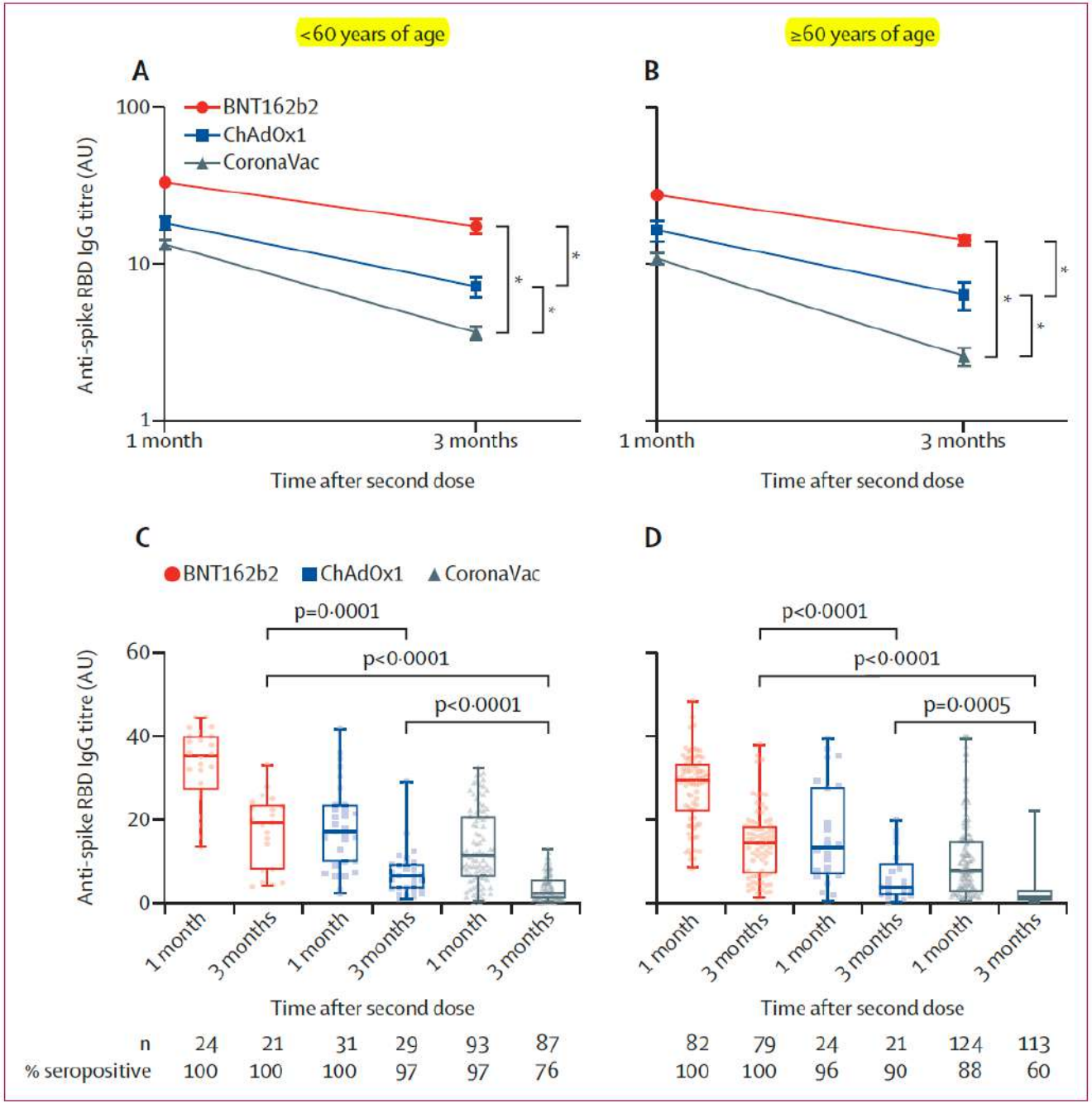
Lancet Microbe 2022

Published Online
February 9, 2022
https://doi.org/10.1016/
S2666-5247(21)00305-0

KKKTC, 1 Mart-30 Eylül 2021, antikor ölçtürmek üzere sağlık kuruluşlarına başvuranlar

	BNT162b2			ChAdOx1			CoronaVac		
	Age <60 years (n=24)	Age ≥60 years (n=82)	All (n=106)	Age <60 years (n=31)	Age ≥60 years (n=25)	All (n=56)	Age <60 years (n=95)	Age ≥60 years (n=127)	All (n=222)
Female	11 (45·8%)	43 (52·4%)	54 (50·9%)	19 (61·3%)	13 (52·0%)	32 (57·1%)	65 (68·4%)	79 (62·2%)	144 (64·9%)
Male	13 (54·2%)	39 (47·6%)	52 (49·1%)	12 (38·7%)	12 (48·0%)	24 (42·9%)	30 (31·6%)	48 (37·8%)	78 (35·1%)
Age, years	42·5 (39·0–48·5)	70·0 (66·0–74·0)	68·0 (62·0–73·0)	56·0 (50·0–57·0)	62·0 (61·0–63·0)	59·0 (55·0–62·0)	38·0 (30·0–46·0)	70·0 (65·0–75·0)	63·5 (41·0–71·0)
Body-mass index	24·5 (21·2–28·6)	27·3 (25·3–31·0)	26·8 (24·2–30·4)	27·3 (23·2–31·2)	26·7 (25·4–28·5)	27·0 (24·5–29·4)	24·8 (22·2–27·5)	27·7 (24·7–30·4)	26·4 (23·7–29·4)
Health-care worker	4 (16·7%)	2 (2·4%)	6 (5·7%)	0	0	0	72 (75·8%)	10 (7·9%)	82 (36·9%)

Anti-S RBD IgG



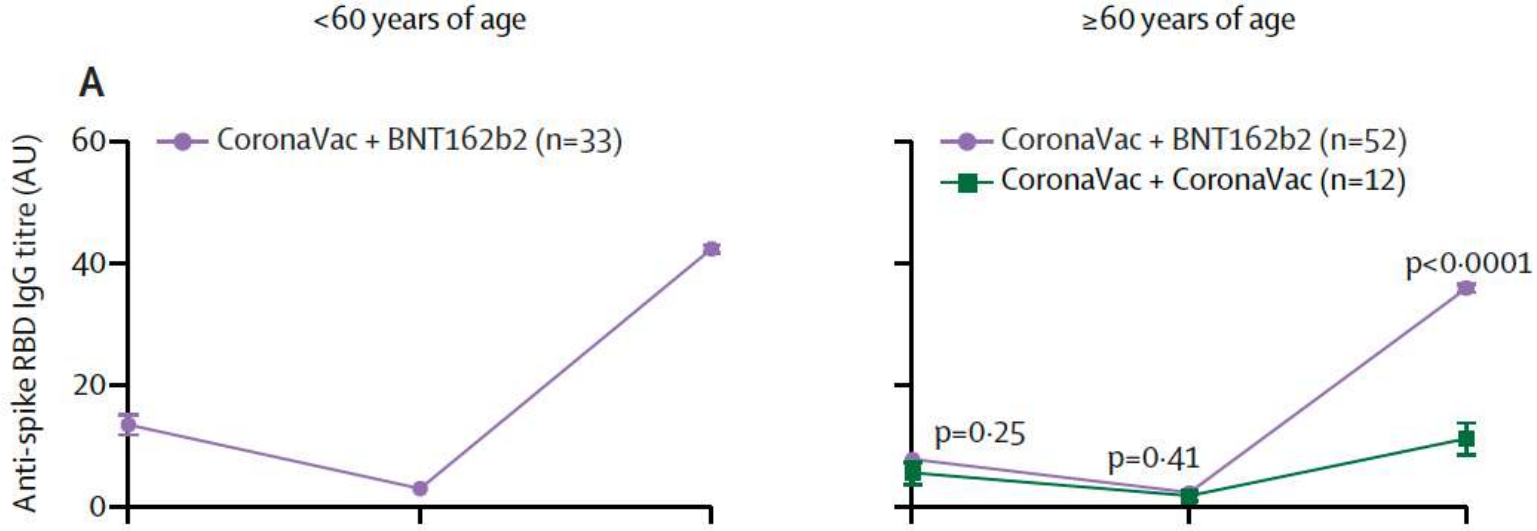
≥60 y, 3 ay sonunda

Seropozitiflik:

%100

%90

%60



6. Ayda farklı aşılarla yapılan rapel dozun etkisi

CoronaVac sonrasında BioNTech ile Ab titre artışı: 7·9 kat (CI 5·8–10·8)

CoronaVac sonrasında CoronaVac ile Ab titre artışı 2·8 (CI 1·6–5·0)

Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Relation of fever intensity and antipyretic use with specific antibody response after two doses of the BNT162b2 mRNA vaccine

Naoki Tani [a,*], Yong Chong [a], Yasuo Kurata [b], Kei Gondo [c], Ryo Oishi [d], Takeyuki Goto [a], Junya Minami [d], Kyoko Onozawa [d], Sukehisa Nagano [e], Nobuyuki Shimono [f], Hideyuki Ikematsu [g], Hiroyuki Kuwano [h]

Japonya, 335 sağlık çalışanı her dozdan sonra 5 gün süreyle takip edilmiş
2. Dozdan >14 gün sonra Ab düzeyi bakılmış

Kadınlarda, gençlerde ve 2. dozdan sonra ateşi çıkanlarda Ab yanıtı yüksek (p<0.05)

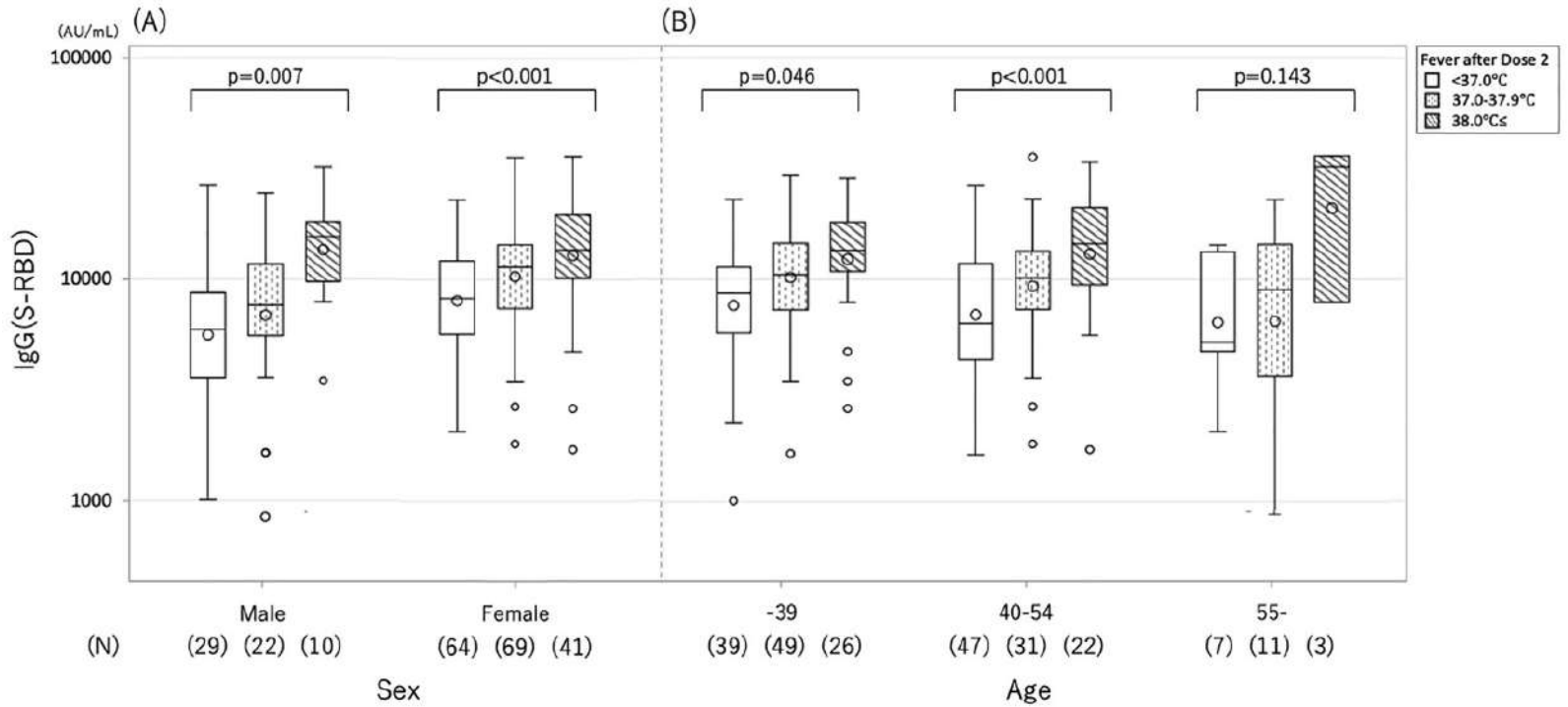


Table 4

Influence of antipyretic use on IgG(S-RBD) titer by fever grade after the second dose.

Fever	Use of Antipyretics after Dose 2	No. (%)	GMT (95 %CI)	p-value
<37.0 °C	No	70 (75.3)	7,405 (6,368–8,608)	0.427[a]
	Yes	23 (24.7)	6,561 (5,012–8,592)	
37.0–37.9 °C	No	50 (55.0)	9,253 (7,621–11,236)	0.839[a]
	Yes	41 (45.1)	9,524 (7,723–11,746)	
≥38.0 °C	No	10 (19.6)	15,045 (9,986–22,662)	0.402[a]
	Yes	41 (80.4)	12,586 (10,299–15,382)	

a: *t*-test.

GMT, geometric mean titer.

Antipiretik kullanımının antikor yanıtı üzerinde olumsuz etkisi yok.

nature COMMUNICATIONS

ARTICLE

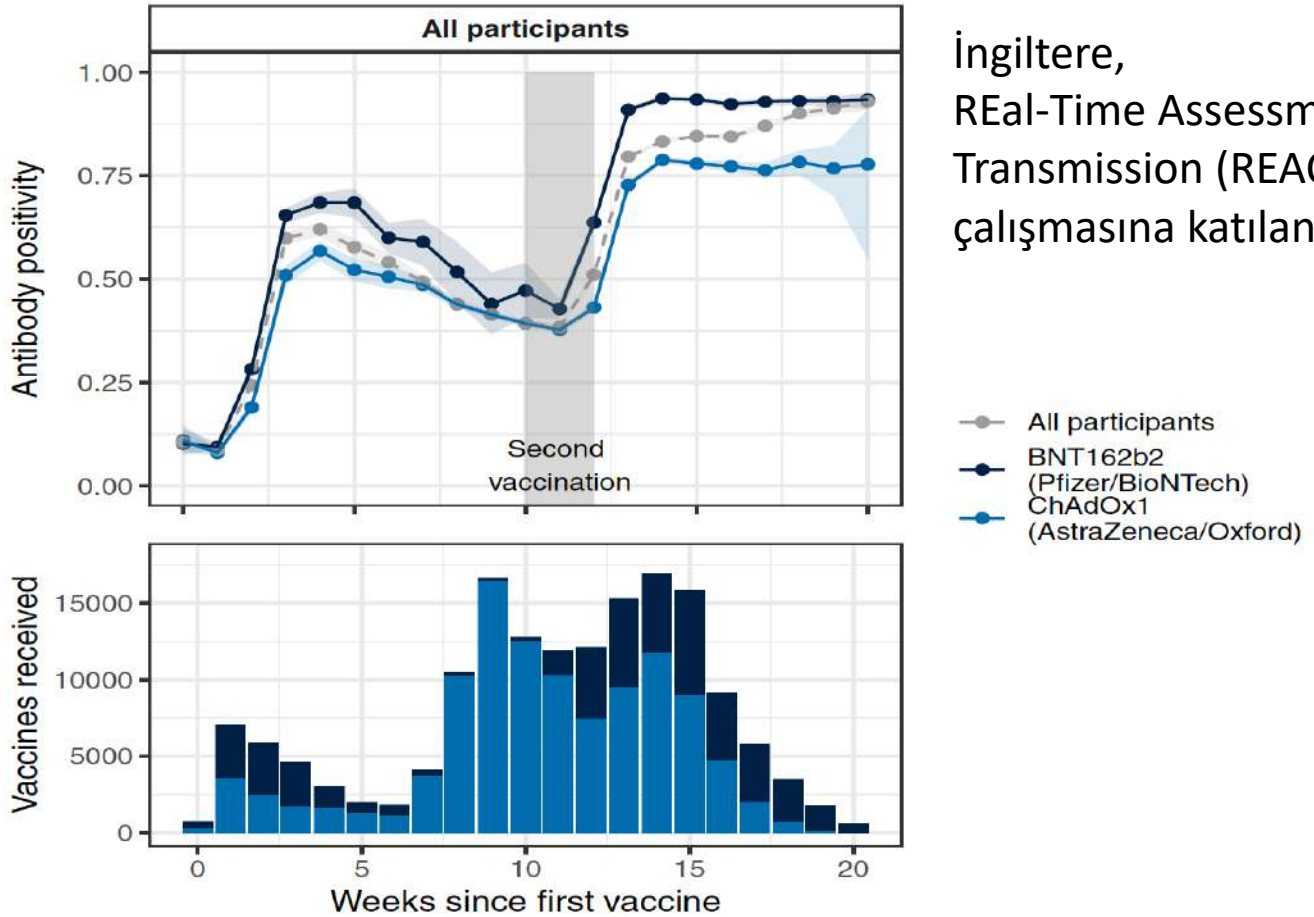
https://doi.org/10.1038/s41467-022-28527-x OPEN

Check for updates

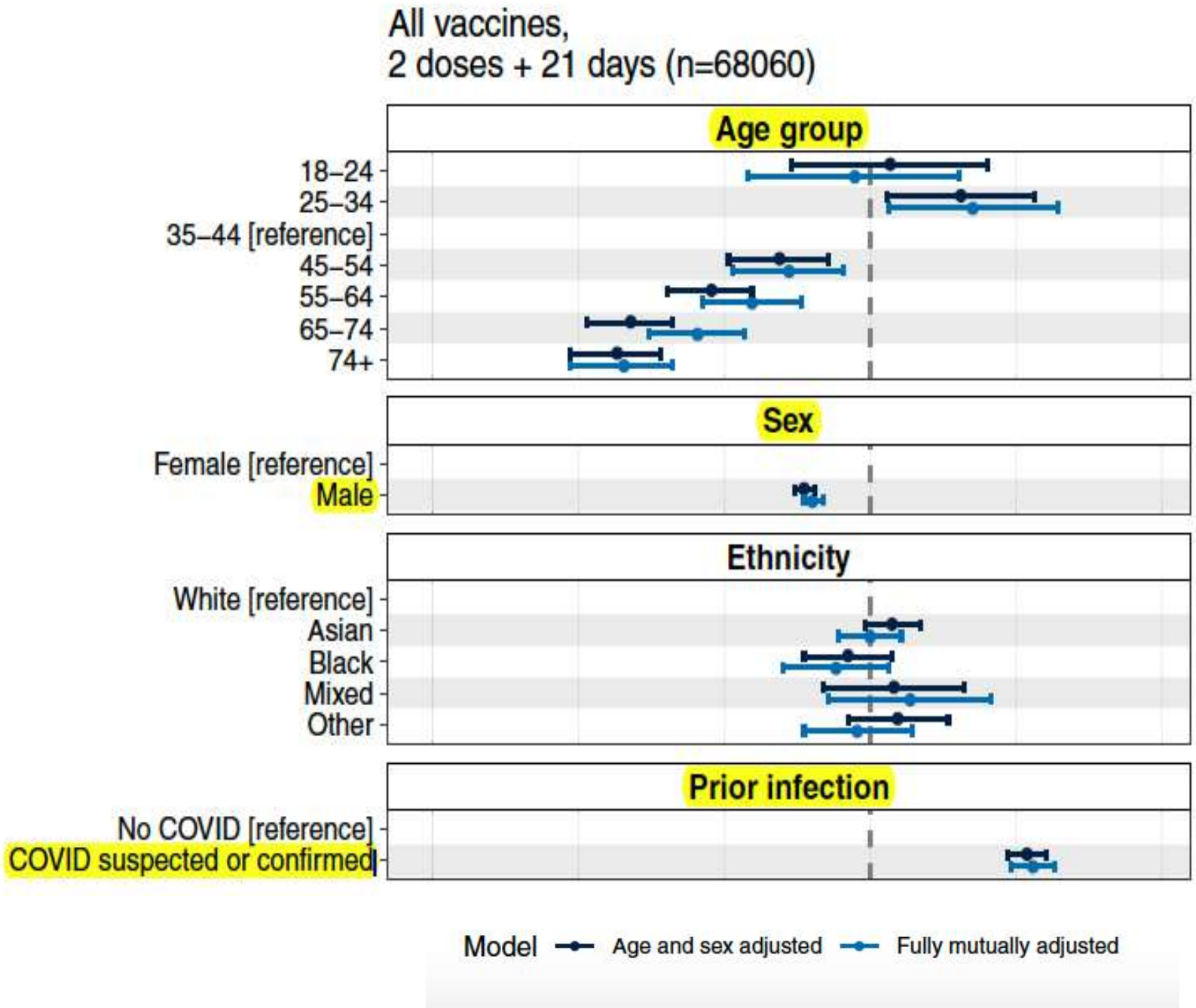
Population antibody responses following COVID-19 vaccination in 212,102 individuals

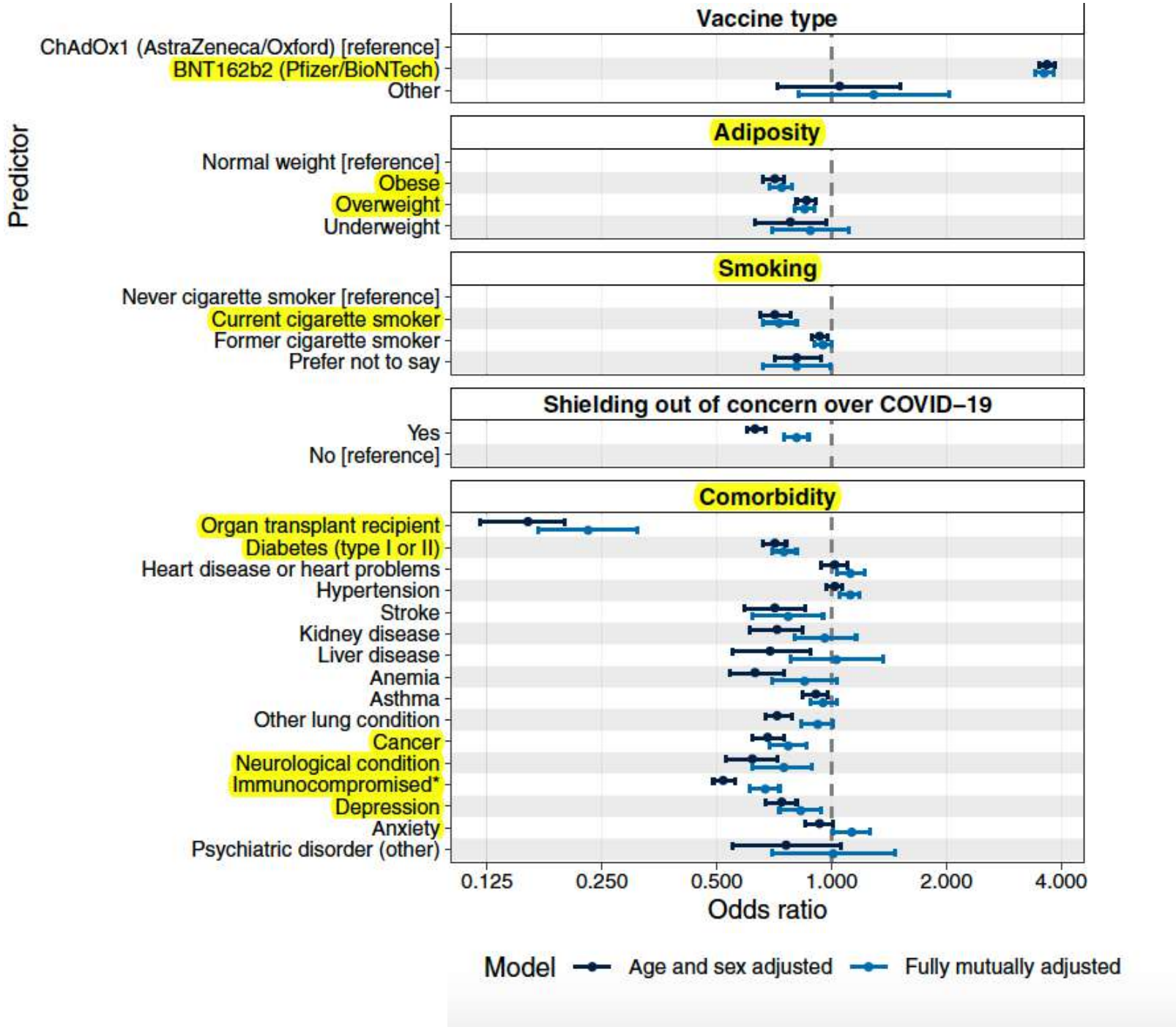
Helen Ward[1,2,3,4✉], Matthew Whitaker[1], Barnaby Flower[3,5], Sonja N. Tang[1], Christina Atchison[1],

NATURE COMMUNICATIONS | (2022) 13:907



İngiltere,
REal-Time Assessment for Community Transmission (REACT-2)
çalışmasına katılan 212 102 kişinin verileri


All vaccines,
2 doses + 21 days (n=68060)
Age group
18–24
25–34
35–44 [reference]
45–54
55–64
65–74
74+
Sex
Female [reference]
Male
Ethnicity
White [reference]
Asian
Black
Mixed
Other
Prior infection
No COVID [reference]
COVID suspected or confirmed
Model
Age and sex adjusted
Fully mutually adjusted


Vaccine type
ChAdOx1 (AstraZeneca/Oxford) [reference]
BNT162b2 (Pfizer/BioNTech)
Other
Predictor
Adiposity
Normal weight [reference]
Obese
Overweight
Underweight
Smoking
Never cigarette smoker [reference]
Current cigarette smoker
Former cigarette smoker
Prefer not to say
Shielding out of concern over COVID–19
Yes
No [reference]
Comorbidity
Organ transplant recipient
Diabetes (type I or II)
Heart disease or heart problems
Hypertension
Stroke
Kidney disease
Liver disease
Anemia
Asthma
Other lung condition
Cancer
Neurological condition
Immunocompromised*
Depression
Anxiety
Psychiatric disorder (other)
0.125
0.250
0.500
1.000
2.000
4.000
Odds ratio
Model
Age and sex adjusted
Fully mutually adjusted

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Effectiveness of the BNT162b2 Vaccine after Recovery from Covid-19

Ariel Hammerman, Ph.D., Ruslan Sergienko, M.A., Michael Friger, Ph.D.,

This article was published on February 16, 2022, at NEJM.org.

DOI: 10.1056/NEJMoa2119497

İsrail, retrospektif kohort çalışması,
1 Mart-26 Kasım 2021 döneminde COVID-19 tanısı almış 149 032 kişi
83 356 (%56) hastalık sonrasında BioNTech ile aşılanmış

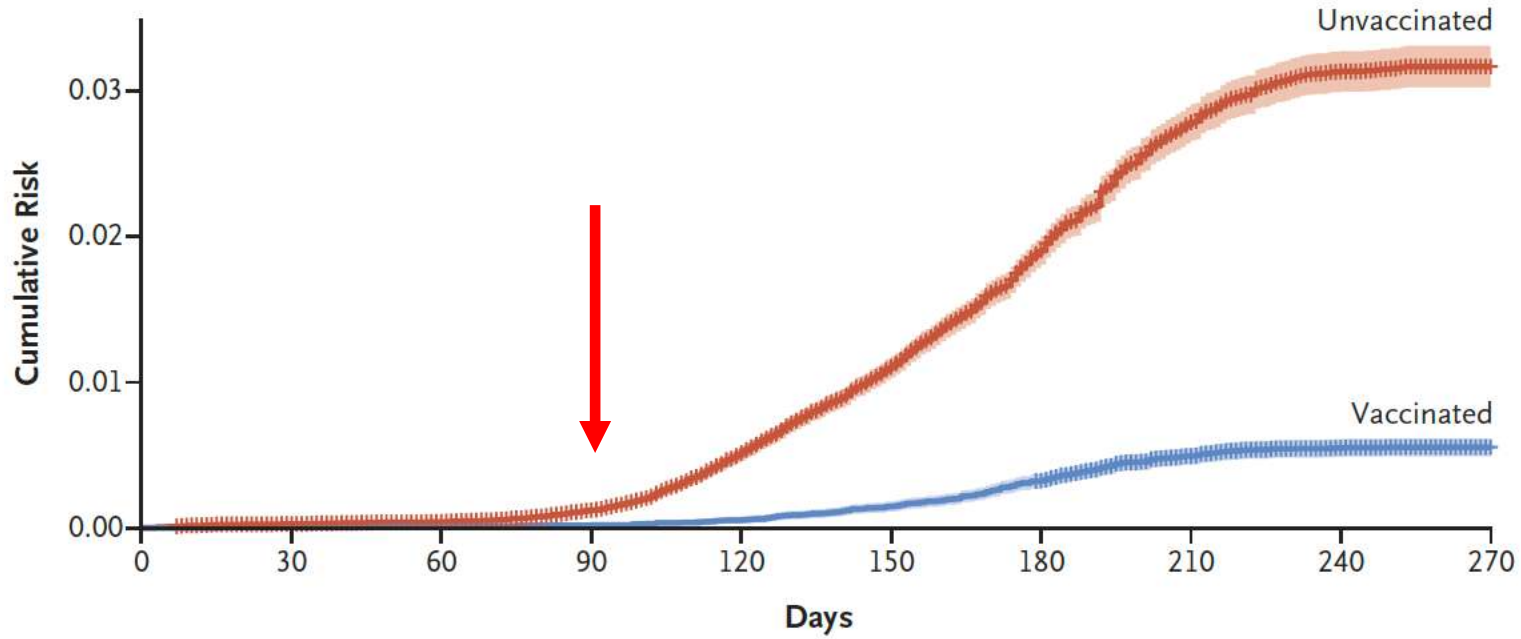
Table 3. Association between SARS-CoV-2 Reinfection and Demographic and Clinical Variables, According to Age Group.*

Variable	Hazard Ratio for Reinfection (95% CI)	
	16–64 Yr of Age (N = 134,849)	≥65 Yr of Age (N = 14,183)
Vaccination	0.18 (0.16–0.20)	0.40 (0.24–0.64)

years of age or older. No substantial difference was found in reinfection risk for two doses of vaccine as compared with one dose. The evidence that was gathered in this study during a

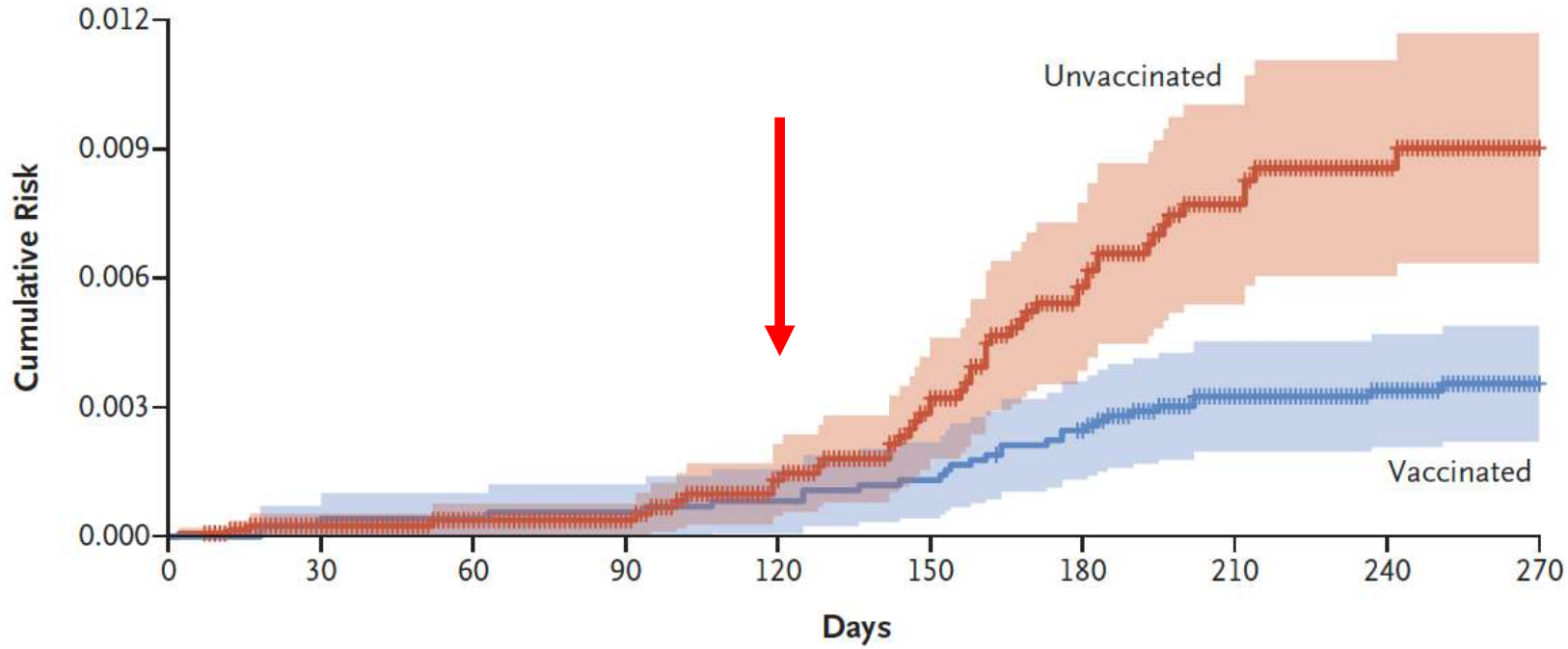
Bir doz vs İki doz: FARK YOK

A **16–64 Yr of Age**



No. at Risk										
Unvaccinated	134,849	104,620	95,520	88,252	82,172	75,178	68,564	43,962	24,140	18,146
Vaccinated	18,607	31,145	42,857	46,471	52,218	58,693	64,255	60,263	45,306	36,239
Cumulative No. of Events										
Unvaccinated	0	34	49	122	452	916	1,490	1,989	2,113	2,120
Vaccinated	0	1	4	7	24	76	185	292	324	326

B ≥65 Yr of Age



No. at Risk										
Unvaccinated	14,183	8,599	7,299	6,758	6,177	5,627	5,218	3,733	2,224	1,642
Vaccinated	4,146	5,580	6,955	7,504	8,056	8,552	8,882	8,725	7,015	5,432
Cumulative No. of Events										
Unvaccinated	0	3	4	4	10	21	35	44	47	48
Vaccinated	0	2	2	3	5	9	19	26	27	28

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Protection against SARS-CoV-2 after Covid-19 Vaccination and Previous Infection

V. Hall, S. Foulkes, F. Insalata, P. Kirwan, A. Saei, A. Atti, E. Wellington,

This article was published on February 16, 2022, at NEJM.org.

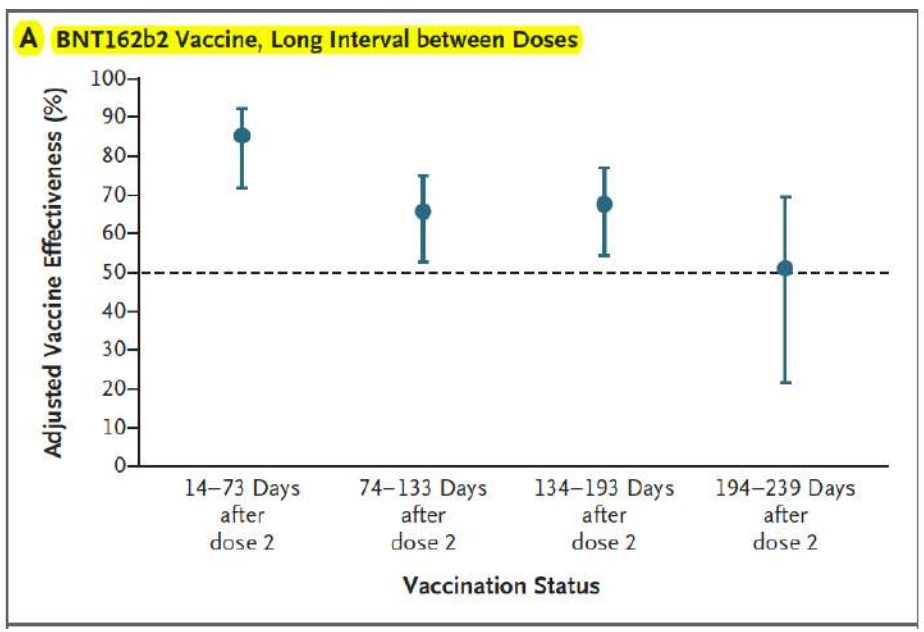
DOI: 10.1056/NEJMoa2118691

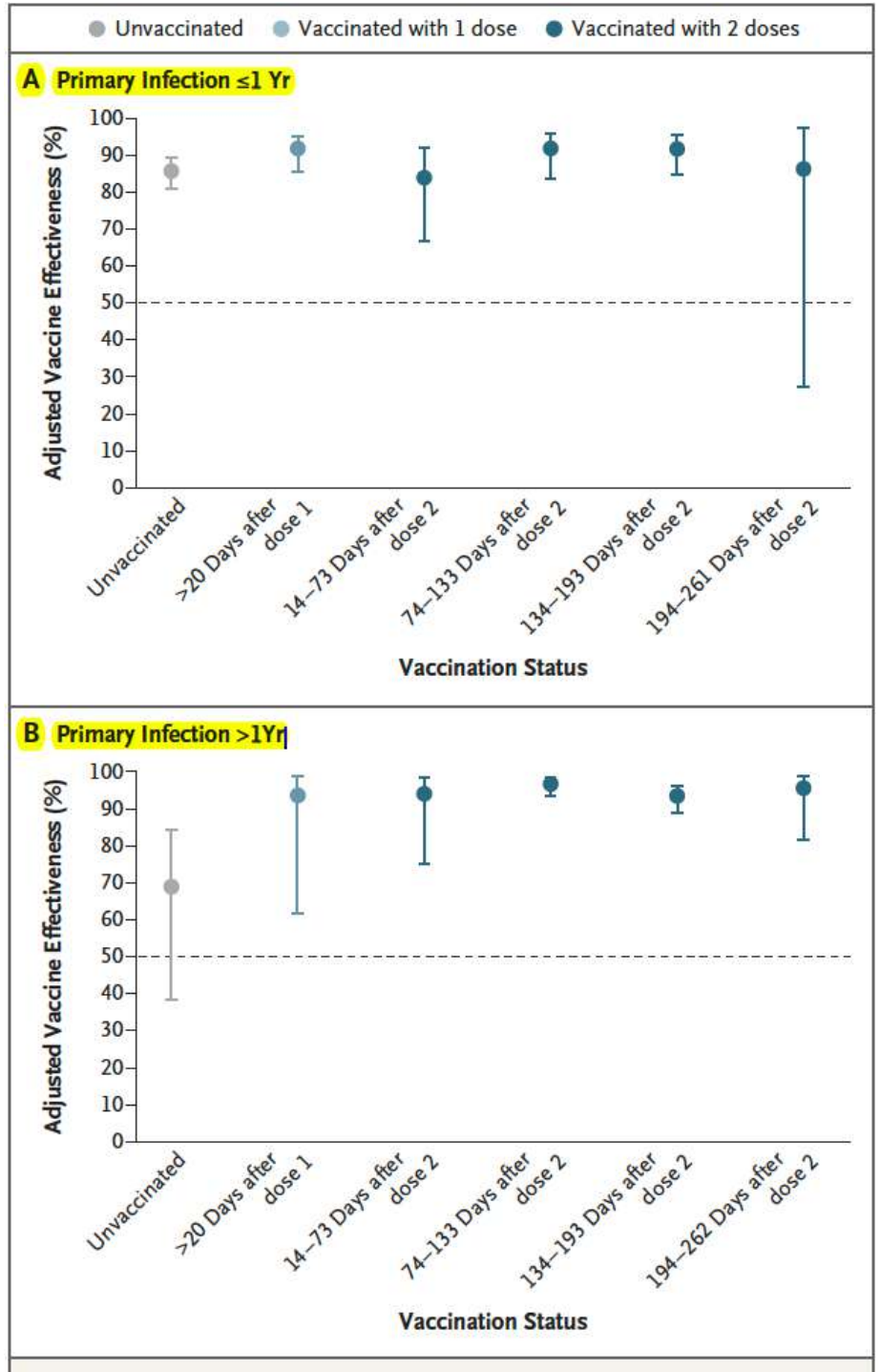
Sağlık çalışanları (PCR, LFD, Antikor ve anket ile takipli), prospektif kohort (SIREN study)

35 768 kişi, %97 iki doz aşılı (%87 BionTech, %8 Az-Ox), %84 kadın, Medyan yaş 46

7 Aralık 2020-21 Eylül 2021: 2747 primer, 210 re-infeksiyon

Delta varyantının hakim olduğu 6 aylık dönem




Unvaccinated
Vaccinated with 1 dose
Vaccinated with 2 doses
A Primary Infection ≤1 Yr
Adjusted Vaccine Effectiveness (%)
100
90
80
70
60
50
40
30
20
10
0
Unvaccinated
>20 Days after dose 1
14–73 Days after dose 2
74–133 Days after dose 2
134–193 Days after dose 2
194–261 Days after dose 2
Vaccination Status
B Primary Infection >1Yr
Adjusted Vaccine Effectiveness (%)
100
90
80
70
60
50
40
30
20
10
0
Unvaccinated
>20 Days after dose 1
14–73 Days after dose 2
74–133 Days after dose 2
134–193 Days after dose 2
194–262 Days after dose 2
Vaccination Status

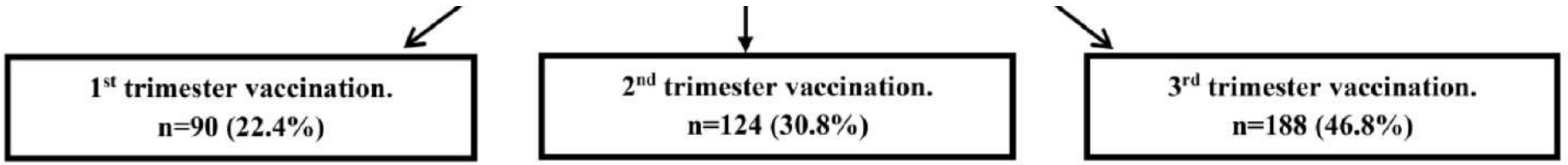
ACCEPTED MANUSCRIPT

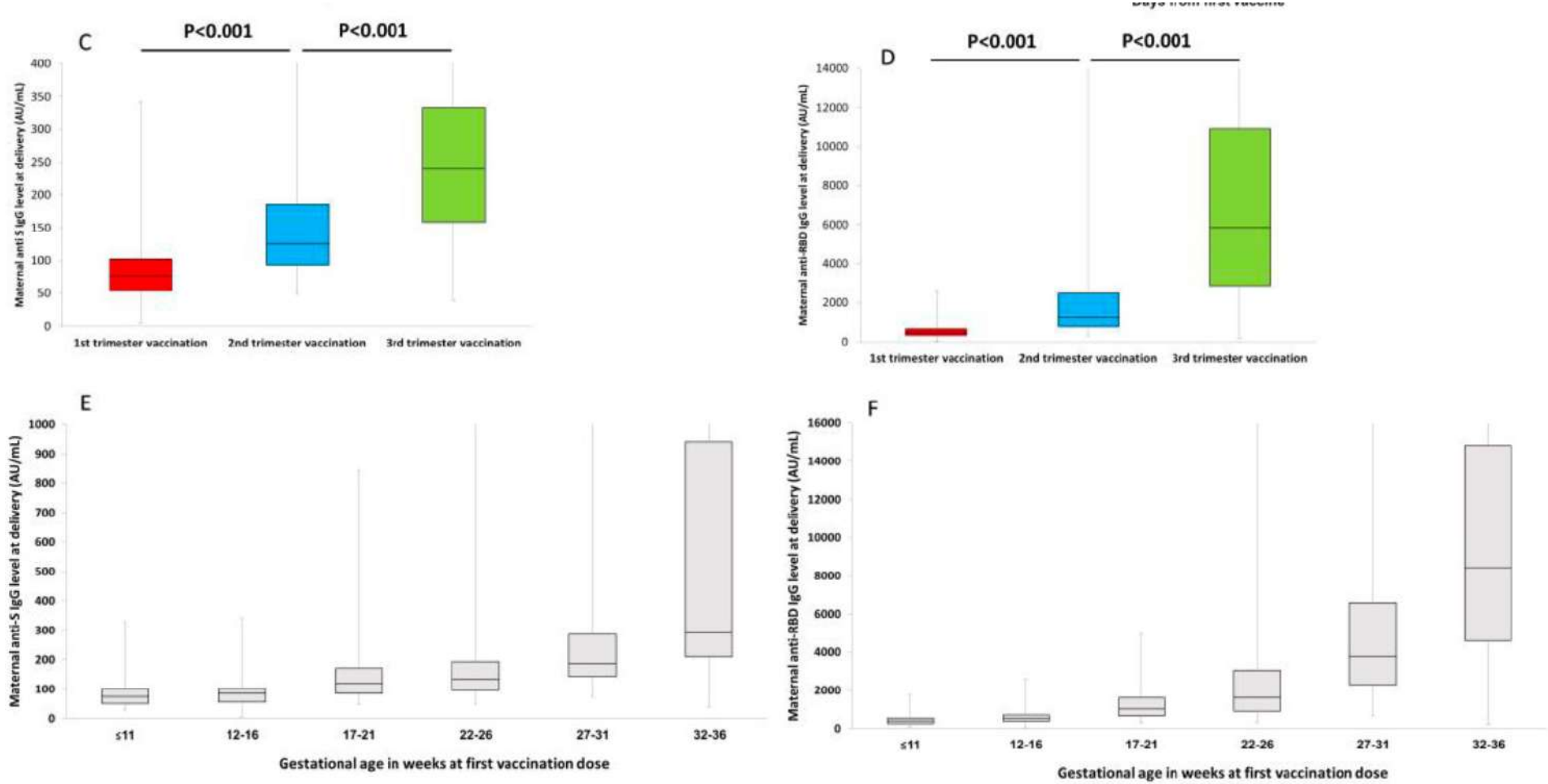
The effect of gestational age at BNT162b2 mRNA vaccination on maternal and neonatal SARS-CoV-2 antibody levels FREE

Amihai Rottenstreich, MD, Gila Zarbiv, MSN, CNM, Esther Oiknine-Djian, PhD, Olesya Vorontsov, MSc, Roy Zigron, MD, Geffen Kleinstern, PhD, Dana G Wolf, MD ✉, Shay Porat, MD

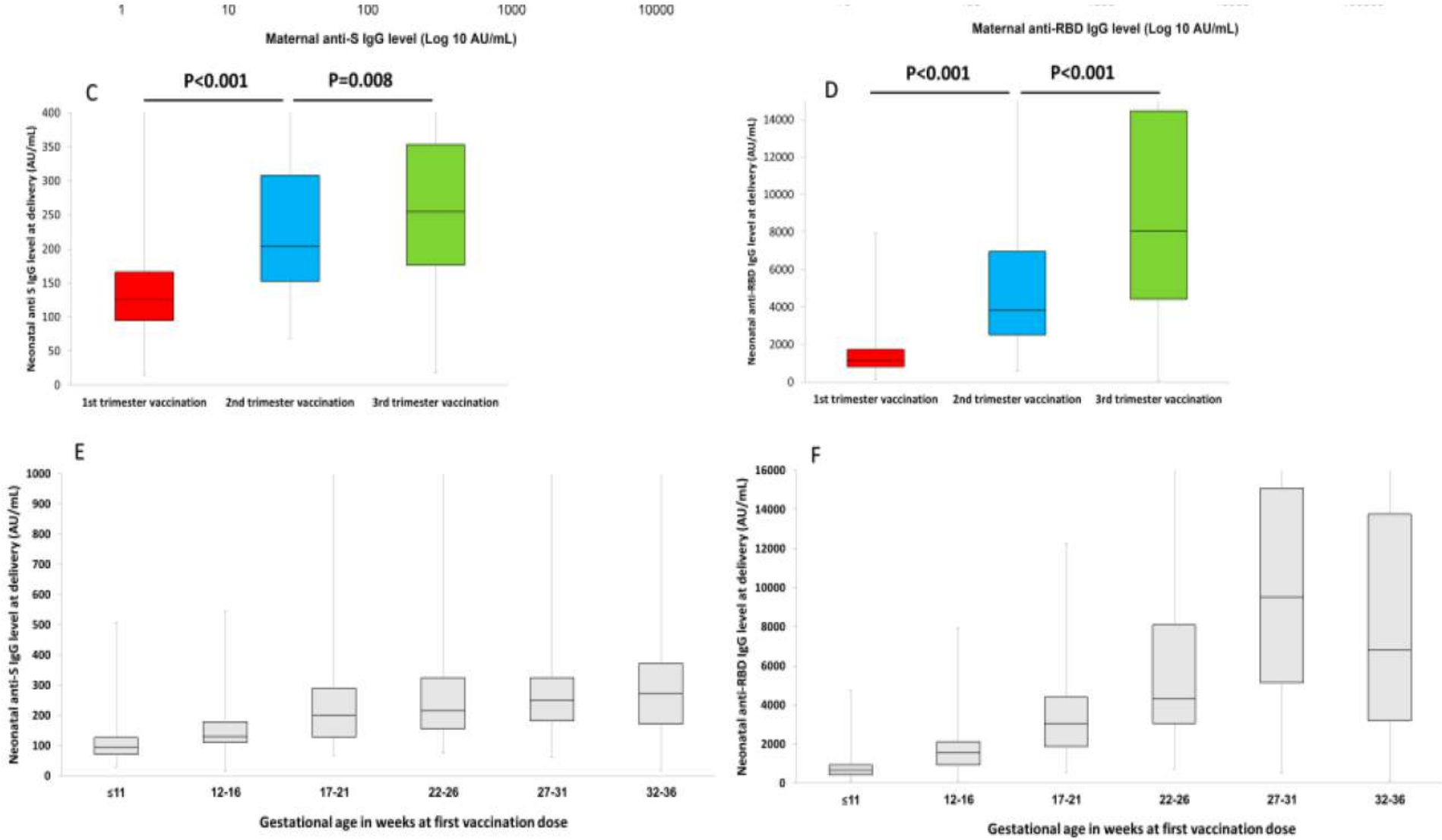
Clinical Infectious Diseases, ciac135, https://doi.org/10.1093/cid/ciac135
Published: 16 February 2022 **Article history** ▾

Termde doğum yapan 402 anne ve bebeklerinden serum örnekleri alınmış (Anti-S & RBD IgG)
Anneler antenatal dönemde iki doz BioNTech ile aşılı

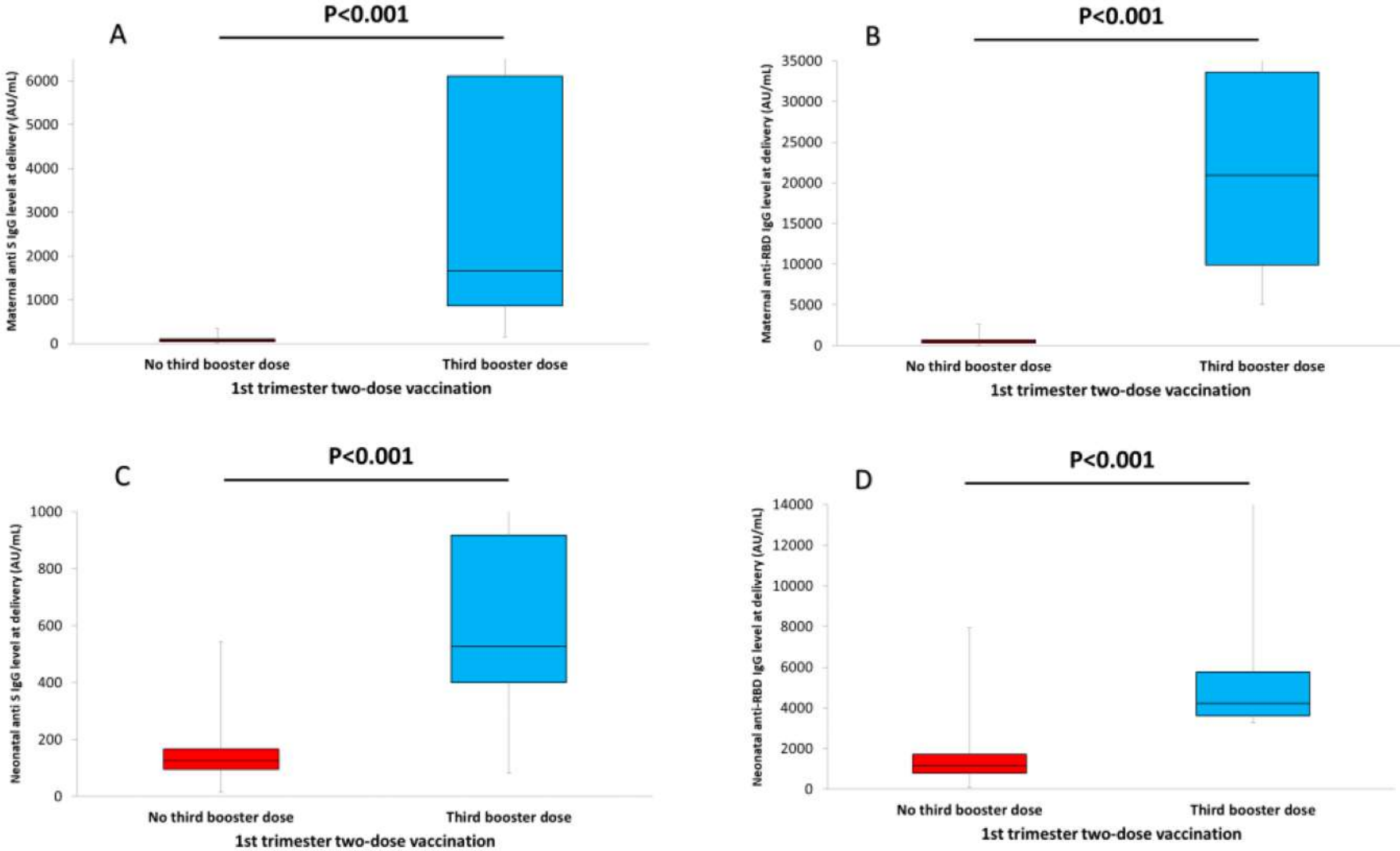




Maternal IgG



Neonatal Ig G



1. Trimesteerde aşılanıp 3. doz uygulananlar

Morbidity and Mortality Weekly Report

Effectiveness of Maternal Vaccination with mRNA COVID-19 Vaccine During Pregnancy Against COVID-19–Associated Hospitalization in Infants Aged <6 Months — 17 States, July 2021–January 2022

Natasha B. Halasa, MD[1,*]; Samantha M. Olson, MPH[2,*]; Mary A. Staat, MD[3]; Margaret M. Newhams, MPH[4];

ABD, 17 Eyalet, 20 Çocuk Hastanesi, 1 Temmuz-2021- 17 Ocak 2022 (Delta + Omikron)

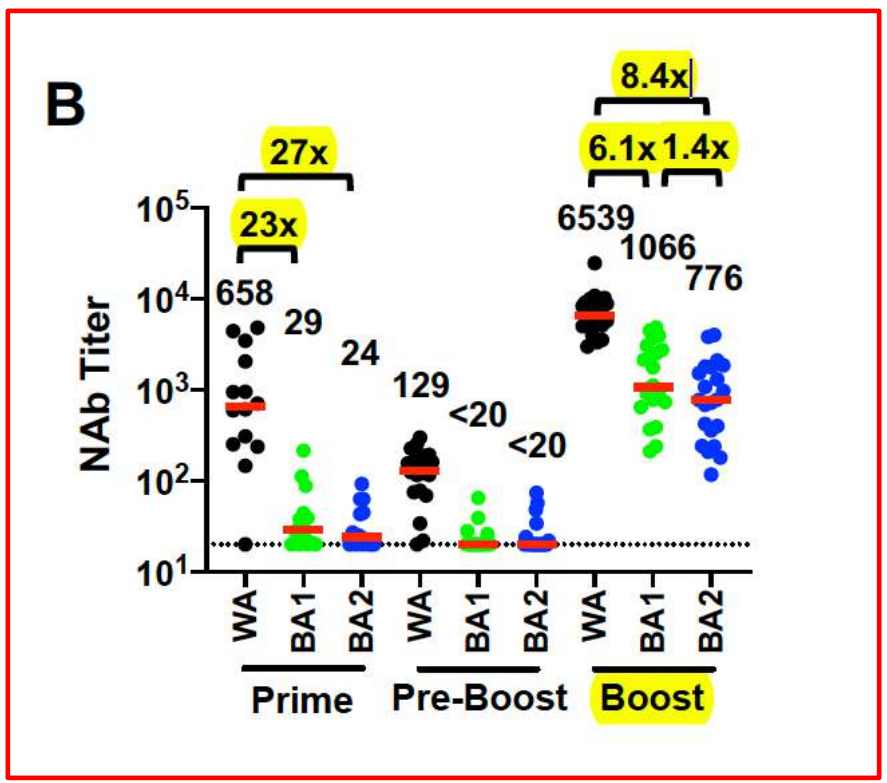
Hastaneye yatırılan 379 infant (<6ay): 176 'sı COVID-19 (vaka), 203 diğer nedenler (kontrol)
Medyan yaş: 2 ay
Doğumdan 2 hafta öncesinde 2 doz mRNA aşısı olmuş gebeler: Aşılı
Aşılanmamış gebeler: Aşılanmamış (eksik / diğer aşılılar dahil edilmemiş)

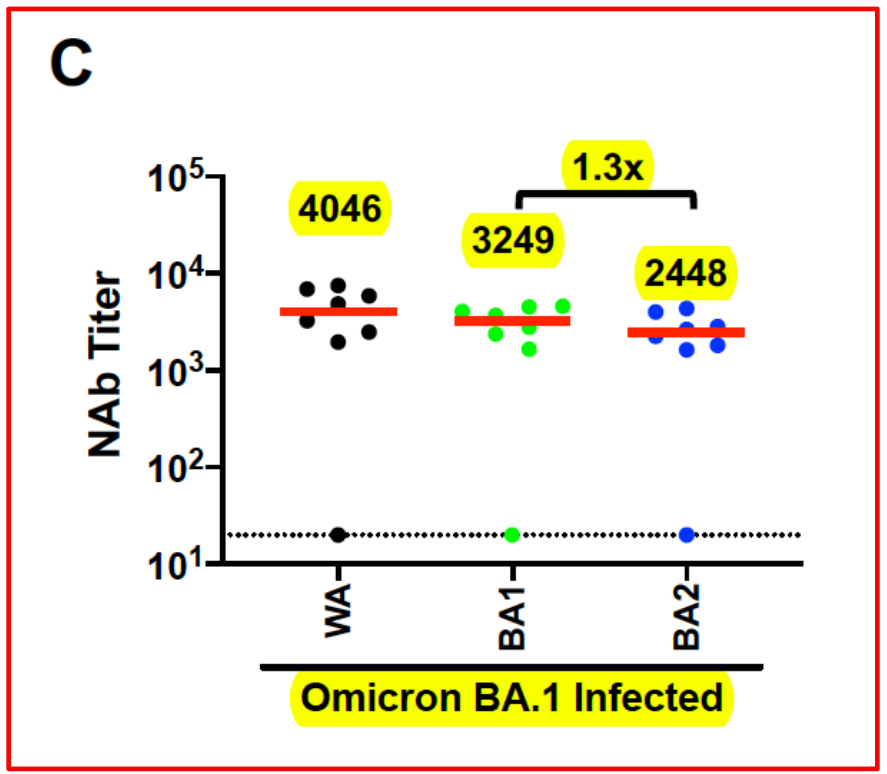
Timing of maternal vaccination during pregnancy†	No. vaccinated¶/Total (%)		Vaccine effectiveness,* % (95% CI)
	Case-infants	Control-infants	
Any time	28/176 (15.9)	65/203 (32.0)	61 (31 to 78)
Early (first 20 weeks)	17/165 (10.3)	26/164 (15.9)	32 (–43 to 68)
Late (21 weeks' gestation through 14 days before delivery)	9/157 (5.7)	38/176 (21.6)	80 (55 to 91)

Comparable Neutralization of the SARS-CoV-2 Omicron BA.1 and BA.2 Variants

Posted February 07, 2022.

24 aşılı kişi (B), Aşılı olup Omikron enf geçiren 8 kişi (C)



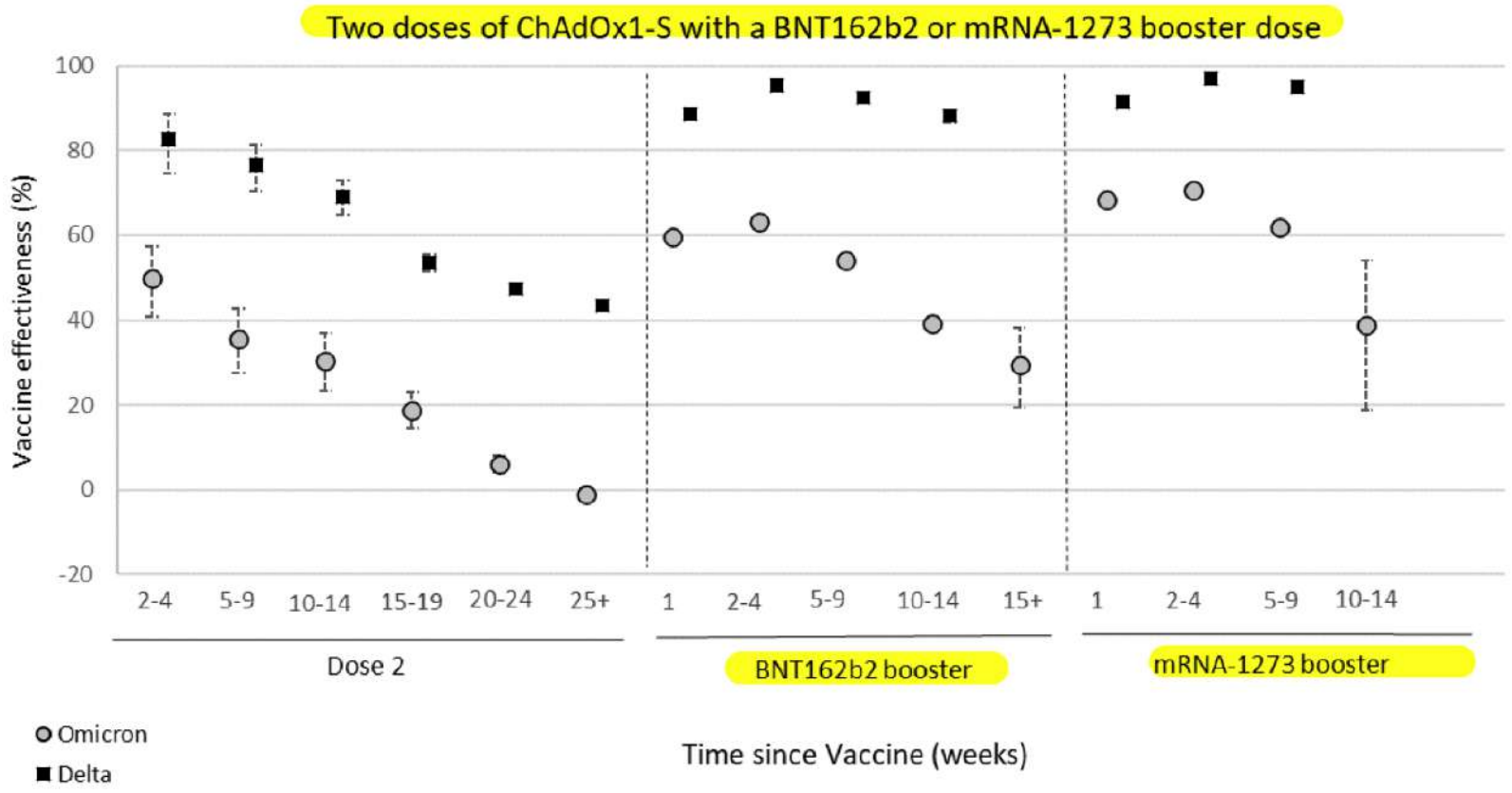


COVID-19 vaccine surveillance report

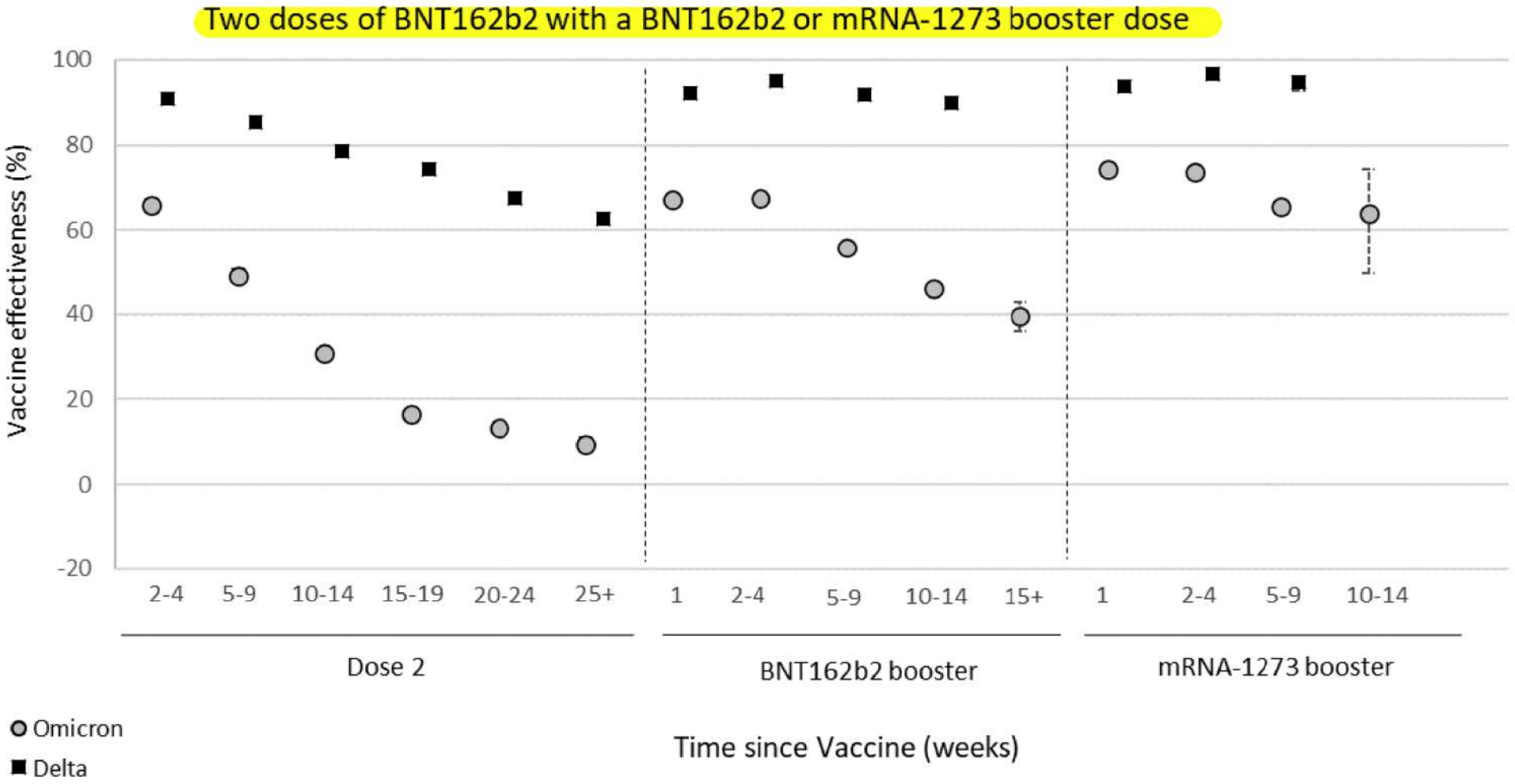
Week 7

17 February 2022

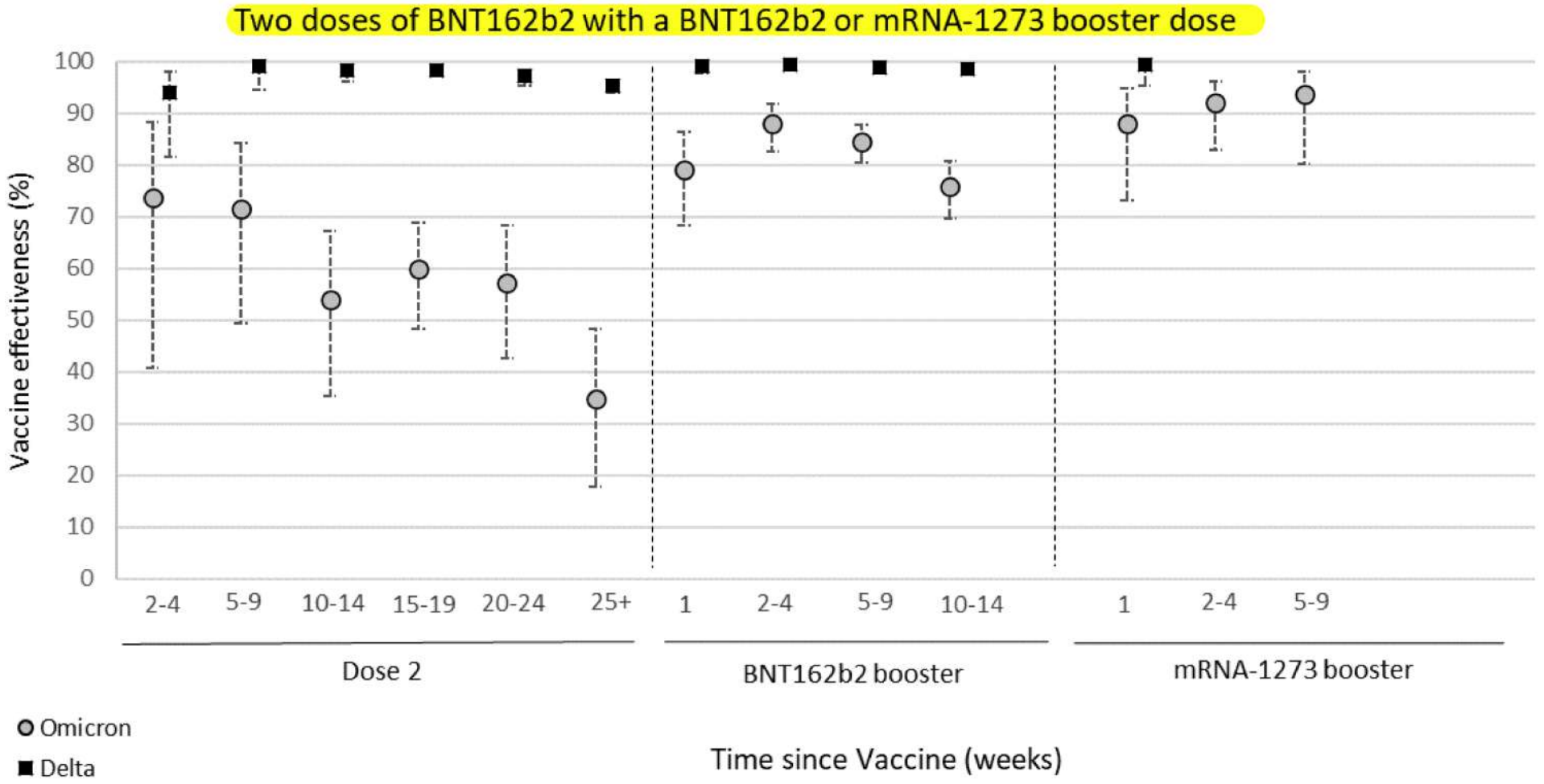
UK Health Security Agency



Enfeksiyon


Two doses of BNT162b2 with a BNT162b2 or mRNA-1273 booster dose
Vaccine effectiveness (%)
100
80
60
40
20
0
-20
2-4
5-9
10-14
15-19
20-24
25+
1
2-4
5-9
10-14
15+
1
2-4
5-9
10-14
Dose 2
BNT162b2 booster
mRNA-1273 booster
Omicron
Delta
Time since Vaccine (weeks)

Enfeksiyon



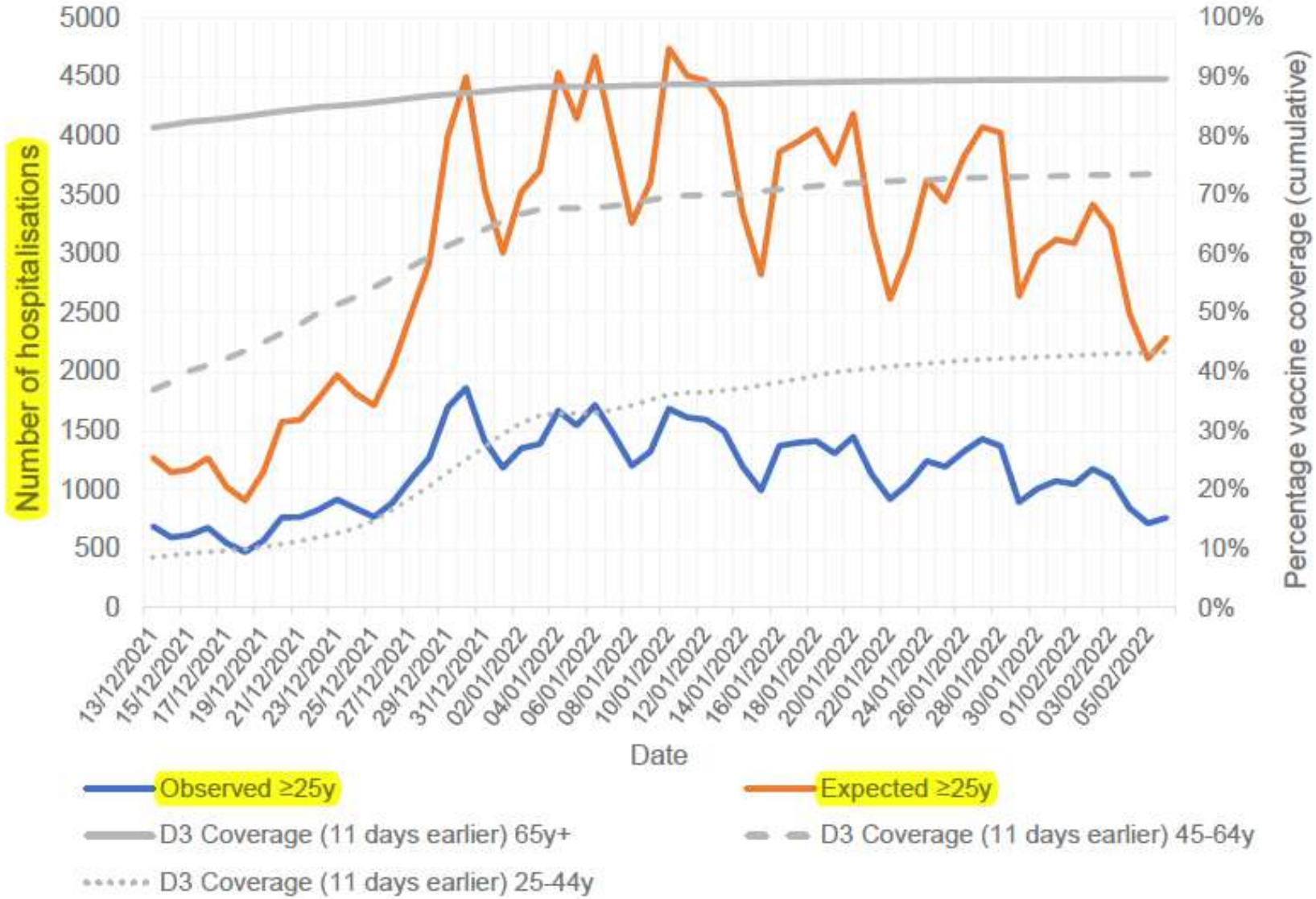
Hastaneye yatış

Table 3. Vaccine effectiveness against symptomatic disease (all vaccine brands combined) for BA.1 and BA.2. OR = odds ratio, VE = vaccine effectiveness.

Dose	Interval after dose	BA.1 (VE (95% CI))	BA.2 (VE (95% CI))
2	25 weeks and over	10% (9 to 11)	18% (5 to 29)
3	2 to 4 weeks	69% (68 to 69)	74% (69 to 77)
3	5 to 9 weeks	61% (61 to 62)	67% (62 to 71)
3	10+ weeks	49% (48 to 50)	46% (37 to 53)

BA-2 Tüm Aşılar

Figure 16. Estimated number of hospitalisations averted by booster vaccinations since 13 December 2021



Annals of Internal Medicine ORIGINAL RESEARCH

Carditis After COVID-19 Vaccination With a Messenger RNA Vaccine and an Inactivated Virus Vaccine

A Case-Control Study

Ann Intern Med. doi:10.7326/M21-3700, 25 Jan 2022

Francisco Tsz Tsun Lai, PhD*; Xue Li, PhD*; Kuan Peng, MHS; Lei Huang, MSc; Patrick Ip, MPH; Xinning Tong, PhD; Celine Sze Ling Chui, PhD; Eric Yuk Fai Wan, PhD; Carlos King Ho Wong, PhD; Esther Wai Yin Chan, PhD; David Chung Wah Siu, MD; and Ian Chi Kei Wong, PhD

Hong-Kong, 23 Şubat- 2 Ağustos 2021, >12y kişiler,

Vaka (kardit nedeniyle yatanlar)-Kontrol (başka nedenlerle yatanlar)

1:10 eşleştirme (yaş, cinsiyet, yatış günü) → 160 :1533

Vaka tanımları klinik bulgular ve troponin test sonucuna göre yapılmış

3 469 629 doz BioNTech, 2 291 444 doz CoronaVac uygulanmış (Ağustos 2021)

Figure 2. Onset distribution of carditis after BNT162b2 ($n = 20$) and CoronaVac (Sinovac) ($n = 7$) COVID-19 vaccination (the most recent dose).

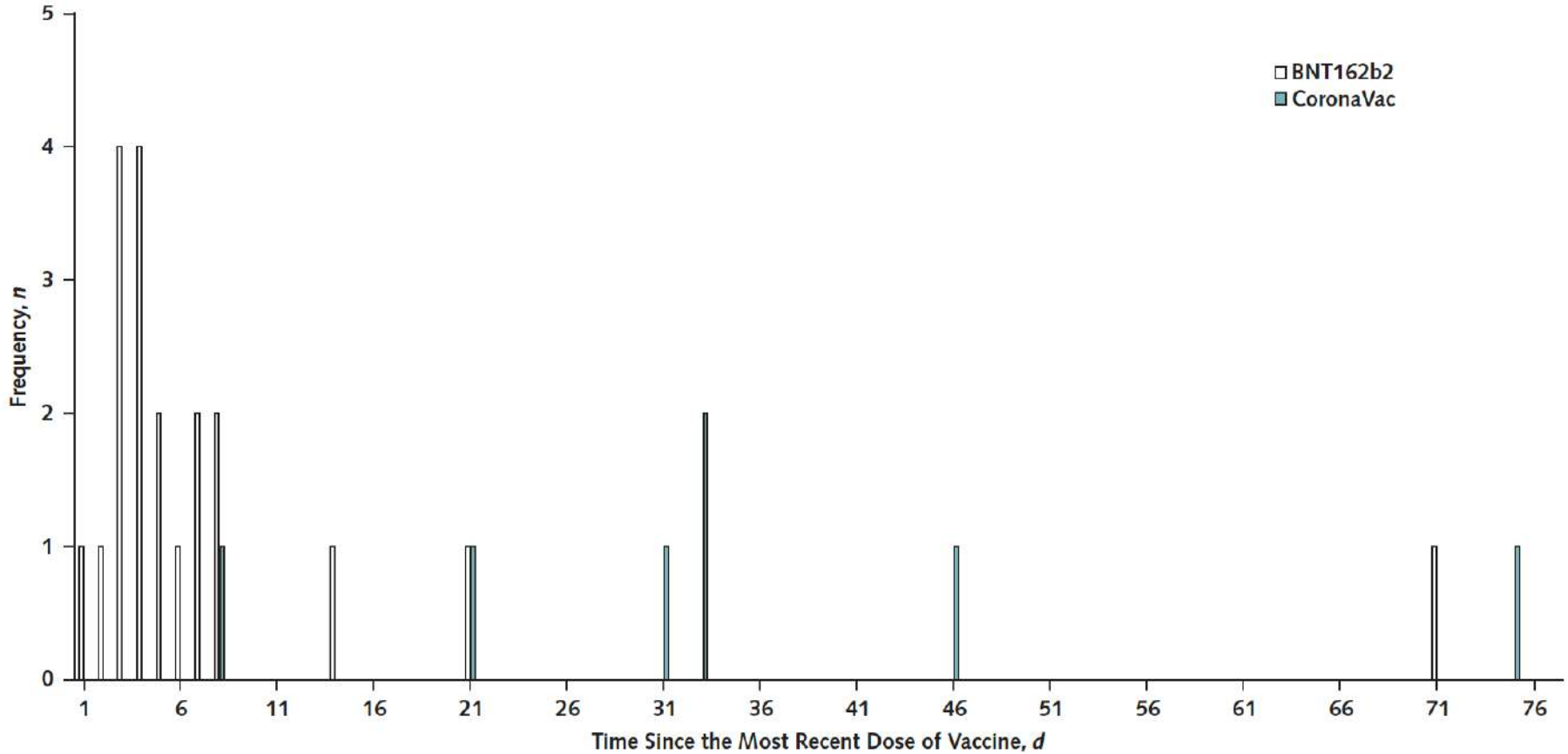


Table 3. Odds Ratios of Carditis Among Vaccinated Patients Compared With Unvaccinated Patients

Vaccination Status	Control Participants, *n* (%)	Case Patients, *n* (%)	Crude Odds Ratio (95% CI)	Adjusted Odds Ratio (95% CI)*
Overall				
Unvaccinated	1408 (91.8)	133 (83.1)	1 (reference)	1 (reference)
CoronaVac†	60 (3.9)	7 (4.4)	1.29 (0.57–2.91)	1.21 (0.53–2.75)
BNT162b2	65 (4.2)	20 (12.5)	3.66 (1.99–6.75)	3.57 (1.93–6.60)
Male				
Unvaccinated	859 (91.0)	78 (78.0)	1 (reference)	1 (reference)
CoronaVac	36 (3.8)	5 (5.0)	1.58 (0.59–4.23)	1.44 (0.53–3.92)
BNT162b2	49 (5.2)	17 (17.0)	4.51 (2.22–9.18)	4.68 (2.25–9.71)
Female				
Unvaccinated	549 (93.2)	55 (91.7)	1 (reference)	1 (reference)
CoronaVac	24 (4.1)	2 (3.3)	0.85 (0.19–3.75)	0.88 (0.19–3.99)
BNT162b2	16 (2.7)	3 (5.0)	1.94 (0.52–7.29)	2.22 (0.57–8.69)
Adults aged ≥18 y				
Unvaccinated	1312 (92.2)	128 (87.1)	1 (reference)	1 (reference)
CoronaVac	60 (4.2)	7 (4.8)	1.23 (0.54–2.79)	1.15 (0.51–2.63)
BNT162b2	51 (3.6)	12 (8.2)	2.52 (1.25–5.11)	2.41 (1.18–4.90)
Adolescents aged 12–17 y				
Unvaccinated	96 (87.3)	5 (38.5)	1 (reference)	1 (reference)
BNT162b2	14 (12.7)	8 (61.5)	14.43 (2.83–135.03)‡	13.79 (2.86–110.38)§

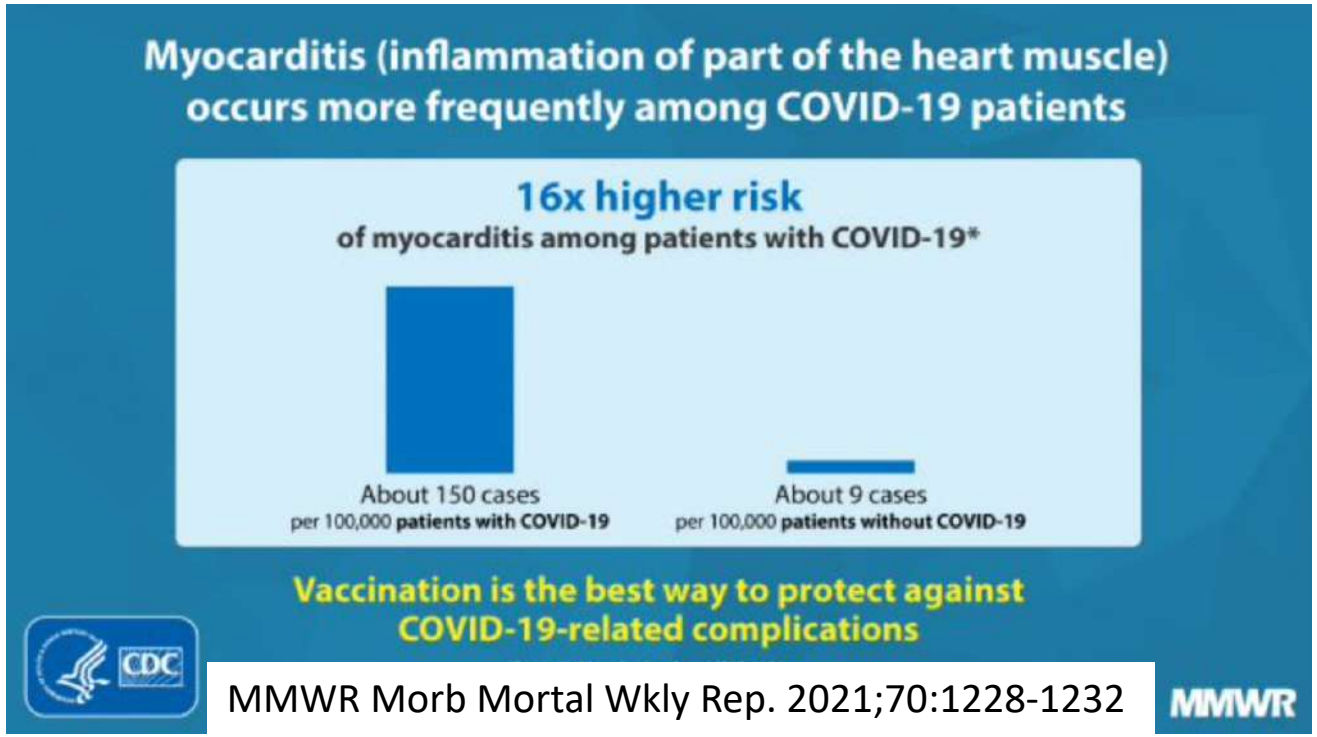
* Adjusted variables include clinical history of diabetes, hypertension, coronary heart disease, stroke, heart failure, myositis, encephalitis, and cardiovascular medications prescribed within the past year before admission.

aOR: BioNTech 1. doz için 2.23 (CI: 0.80 - 6.26) ikinci doz için 4.41 (CI: 2.22 - 8.75)

Mutlak Risk 100 000 dozda; BioNTech: 0.57 CoronaVac :0.31
CoronaVac referans kabul edilirse BioNTech mutlak risk artışı: 0.26 (1. doz 0.17, 2. doz 0.4)

Özetle;
BioNTech uygulaması sonrası ilk 1 ay içinde,
Genç erkeklerde (OR: 4.68), İkinci dozdan sonra (OR:4.41) artmış kardit riski var

BioNTech sonrası gelişen 20 olgunun hiç biri YBÜ'de yatmamış, hepsi taburcu
Aşılanmamış 133 kardit hastasının 14'ü YBÜ'de izlenmiş, 12 ölüm var



MMWR Morb Mortal Wkly Rep. 2021;70:1228-1232

ABD, Mart 2020-Ocak 2021, 36 milyon kişi, COVID-19 nedenli miyokardit aOR: 15.7 (14.1-17.2)

Morbidity and Mortality Weekly Report

MMWR Morb Mortal Wkly Rep 2022 Feb 18;71(7):249-254.

Safety Monitoring of COVID-19 Vaccine Booster Doses Among Adults — United States, September 22, 2021–February 6, 2022

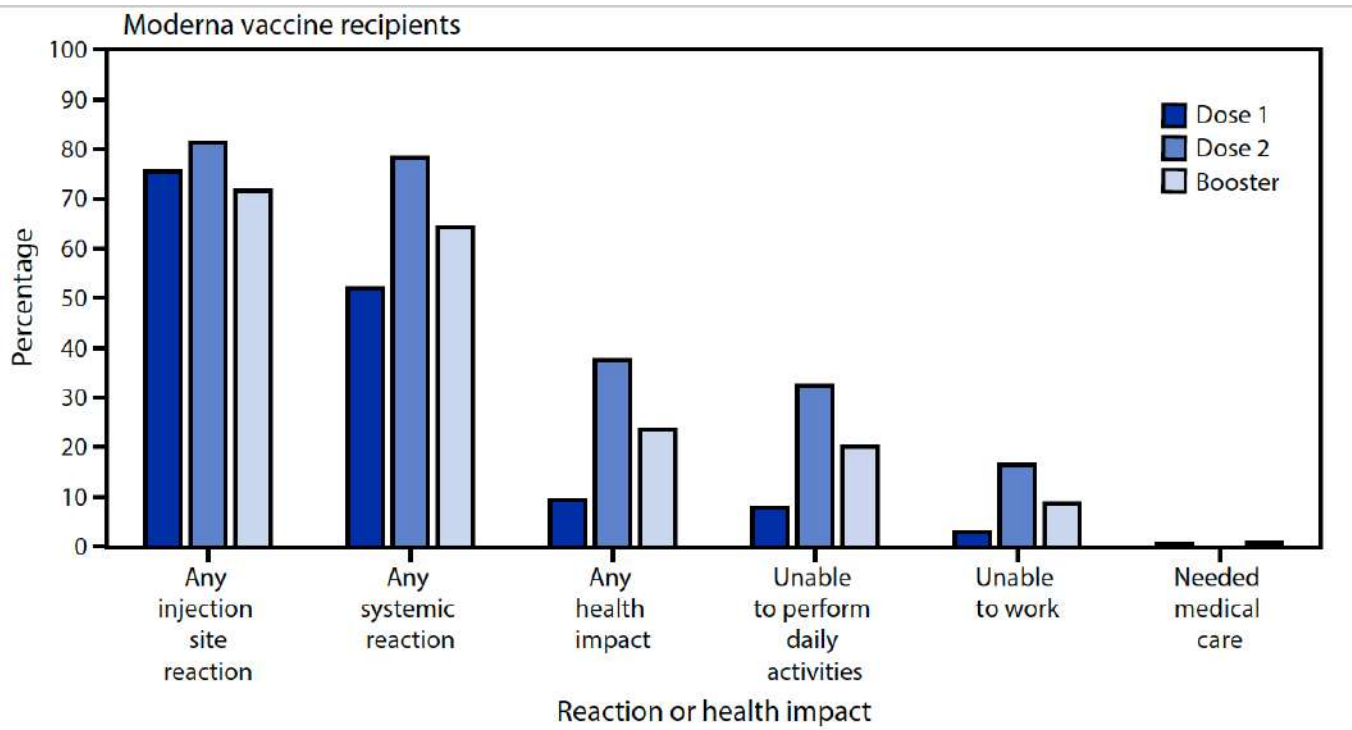
Anne M. Hause, PhD[1]; James Baggs, PhD[1]; Paige Marquez, MSPH[1]; Tanya R. Myers, PhD[1]; John R. Su, MD[1]; Phillip G. Blanc, MD[2];

22 Eylül 2021- 6 Şubat 2022 arasında 82.6 milyon hatırlatma dozu (≥18y) uygulanmış

V-SAFE isimli akıllı telefon uygulaması ve VAERS sisteminden yan etkiler toplanmış
V-Safe'e kayıtlı 721 562 ≥18y kişi hatırlatma dozu olmuş (%88.8'i homolog şema)

VAERS'e hatırlatma dozu ile ilgili 39 286 bildirim (%92.4 ciddi olmayan, %7.6 ciddi*) ulaşmış
*:hastaneye yatış, uzamış yatış, konjenital anomali, hayatı tehdit eden durum, ölüm

mRNA aşısı üzerine Vektör aşısı ile hatırlatma yapılan 467 kişi dışarıda tutulmuş


Moderna vaccine recipients
Percentage
100
90
80
70
60
50
40
30
20
10
0
Dose 1
Dose 2
Booster
Any injection site reaction
Any systemic reaction
Any health impact
Unable to perform daily activities
Unable to work
Needed medical care
Reaction or health impact

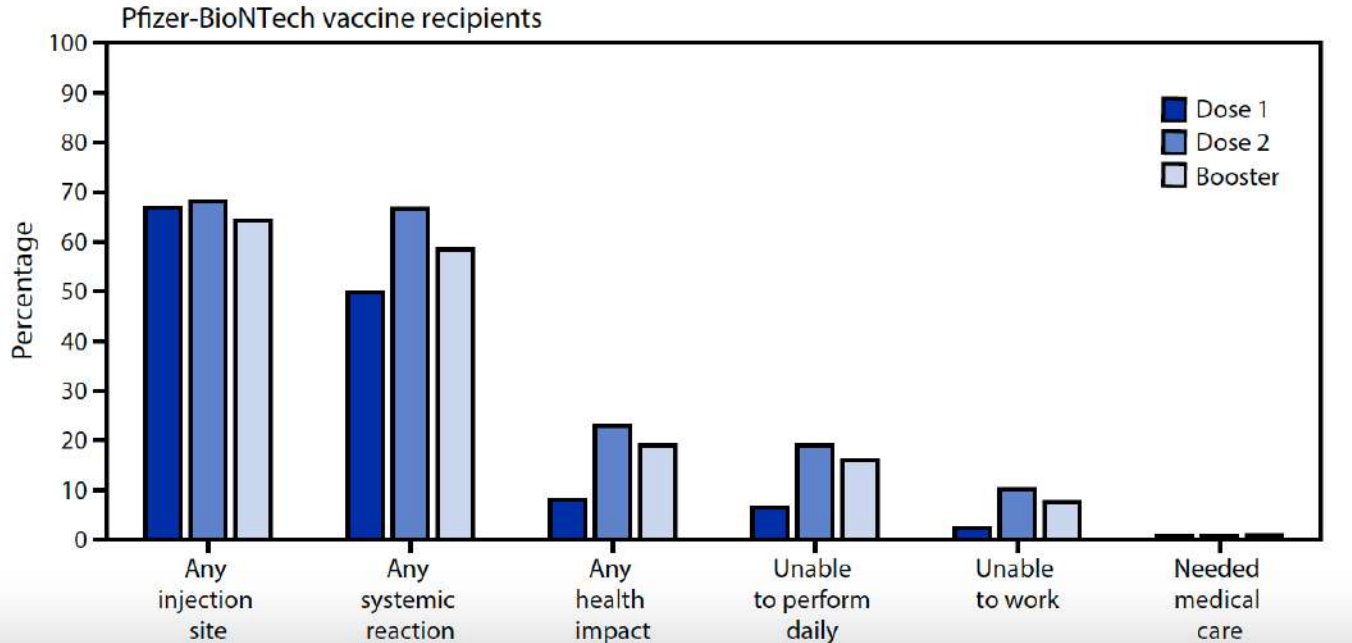

Pfizer-BioNTech vaccine recipients
Percentage
100
90
80
70
60
50
40
30
20
10
0
Dose 1
Dose 2
Booster
Any injection site
Any systemic reaction
Any health impact
Unable to perform daily
Unable to work
Needed medical care

TABLE 2. Cases and rates* of myocarditis reported to the Vaccine Adverse Event Reporting System† following receipt of an mRNA COVID-19 booster dose among adults aged ≥18 years (N = 37), by age, sex, and vaccine product received — United States, September 22, 2021–February 6, 2022

	No. of cases (rates)*,§			
	Pfizer-BioNTech (n = 18)		Moderna (n = 18)	
Age group, yrs	Men (n = 16)	Women (n<5)	Men (n = 10)	Women (n = 8)
18–24	5 (4.1)	<5 (<1.0)	6 (8.7)	<5 (1.1)
25–29	<5 (1.1)	0 (—)	<5 (3.2)	<5 (1.2)
30–39	<5 (1.7)	<5 (<1.0)	<5 (<1.0)	<5 (1.5)
40–49	0 (—)	0 (—)	0 (—)	<5 (<1.0)
50–64	<5 (<1.0)	0 (—)	0 (—)	<5 (<1.0)
≥65¶	5 (<1.0)	0 (—)	<5 (<1.0)	0 (—)

Abbreviations: MedDRA = Medical Dictionary for Regulatory Activities; VAERS = Vaccine Adverse Event Reporting System.
* Cases per 1 million doses administered.

81.2 milyon hatırlatma dozunda 37 miyokardit olgusu bildirilmiş

En yüksek: 18-24 y grubunda Moderna uygulananlar → 1 milyon dozda 8.7
(2. Doz sonrasında bu oran 1 milyonda 56.3 idi)

BJCP British Journal of Clinical Pharmacology

SHORT COMMUNICATION | Free Access

Association study between herpes zoster reporting and mRNA COVID-19 vaccines (BNT162b2 and mRNA-1273)

Laure-Hélène Préta, Adrien Contejean, Francesco Salvo, Jean-Marc Treluyer, Caroline Charlier, Laurent Chouchana

First published: 16 February 2022 | https://doi.org/10.1111/bcp.15280

DSÖ ‘nün Global Farmakovijilans sistemi (VigiBase) verileri
İstatistik yöntem: Vaka/vaka olmayan (yuvalanmış vaka kontrol) çalışması
HZ vs Diğer tüm yan etkiler

30 Haziran 2021’e kadar 716 928 mRNA aşı uygulaması → 7 728 Herpes Zoster olgusu

- 5 931 BioNTech, 1 797 Moderna
- %66.4’ü Kadın, Medyan Yaş: 60 (46-72),
- Medyan Süre 7 gün (2-15), Hastaneye yatış: %2.3
- İlk doz sonrası: %14.4 İkinci doz sonrası: %8.5
- MSS tutulumu: %0.3, Medyan süre: 17.5 gün (12.5-29 gün)
- Ölüm: Ø

Table 2. Herpes zoster reporting and Reporting Odds Ratios for mRNA COVID-19 vaccines within the WHO global safety database

	Cases	Non-cases	ROR [95% CI]
First analysis - compare to influenza vaccines			
Both mRNA COVID-19 vaccine recipients	1449	228,489	1.9 [1.8-2.1]
BNT162b2 recipients	1292	196,365	2.0 [1.8-2.2]
mRNA-1273 recipients	157	32,124	1.5 [1.2-1.8]
Influenza vaccine recipients	665	201,452	ref
Second analysis - according to age			
≤ 40 years mRNA COVID-19 vaccine recipients	1262	233,937	0.39 [0.36-0.41]
> 40 years mRNA COVID-19 vaccine recipients	5964	431,063	ref

Abbreviations: ROR: Reporting Odds-Ratio, 95% CI: 95% confidence interval.

Sonuç:
mRNA aşıları öz. 40y üzerinde daha fazla olmak üzere hafif seyirli HZ ile ilişkili

Received: 8 October 2021 | Accepted: 22 December 2021

DOI: 10.1111/imm.13443

immunology
Insights into immunity in health and disease

REVIEW

New-onset autoimmune phenomena post-COVID-19 vaccination

Yue Chen[1,2] | Zhiwei Xu[3] | Peng Wang[4] | Xiao-Mei Li[5] | Zong-Wen Shuai[6] |

TABLE 2 Different new-onset autoimmune phenomena following diverse COVID-19 vaccines

Autoimmune phenomena	Vaccine type
Vaccine-induced immune thrombotic thrombocytopenia	Adenovirus vector vaccine and mRNA vaccine
Immune thrombocytopenic purpura	mRNA vaccine
Autoimmune liver diseases	mRNA vaccine and Adenovirus vector vaccine
Guillain–Barré syndrome	mRNA vaccine and Adenovirus vector vaccine
IgA nephropathy	mRNA vaccine
Autoimmune polyarthritis	mRNA vaccine
Rheumatoid arthritis	mRNA vaccine and Adenovirus vector vaccine
Graves' disease	mRNA vaccine
Type 1 diabetes mellitus	mRNA vaccine
Systemic lupus erythematosus	Adenovirus vector vaccine

Internal Medicine
The Japanese Society of Internal Medicine
doi: 10.2169/internalmedicine.8310-21
Intern Med 61: 81-86, 2022
http://internmed.jp

CASE REPORT]

COVID-19 mRNA Vaccine-induced Pneumonitis

Shinichi Matsuzaki[1], Hiroyuki Kamiya[1], Ichiro Inoshima[1], Yasutaka Hirasawa[2],

Journal of Clinical Immunology
https://doi.org/10.1007/s10875-022-01228-2

LETTER TO EDITOR

First Identified Case of Fatal Fulminant Eosinophilic Myocarditis Following the Initial Dose of the Pfizer-BioNTech mRNA COVID-19 Vaccine (BNT162b2, Comirnaty): an Extremely Rare Idiosyncratic Necrotizing Hypersensitivity Reaction Different to Hypersensitivity or Drug-Induced Myocarditis

Nicholas G. Kounis[1] · Ioanna Koniari[2] · Virginia Mplani[3] ·

INTERESTING IMAGES

COVID-19 Vaccine–Induced Multisystem Inflammatory Syndrome With Polyserositis Detected by FDG PET/CT

17 February 2022 : Case report

Myocarditis, Pulmonary Hemorrhage, and Extensive Myositis with Rhabdomyolysis 12 Days After First Dose of Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine: A Case Report

Unusual clinical course, Challenging differential diagnosis, Diagnostic / therapeutic accidents, Management of emergency care, Unexpected drug reaction , Educational Purpose (only if useful for a systematic review or synthesis)

Sara Al-Rasbi[12ABEF], *Juhaina Salim Al-Maqbali*[3ABEFG*], *Rajaa Al-Farsi*[2BE], *Moza Ali Al Shukaili*[4BE], *Maryam H. Al-*

PEDIATRICS INTERNATIONAL
Official Journal of the Japan Pediatric Society

Clinical Notes | Open Access

Bacillus Calmette-Guérin Scar erythema in a 14-year-old girl post-BNT162b2 vaccination

Timothy Keith Hung, Daniel Leung, Jaime S Rosa Duque, Yu Lung Lau

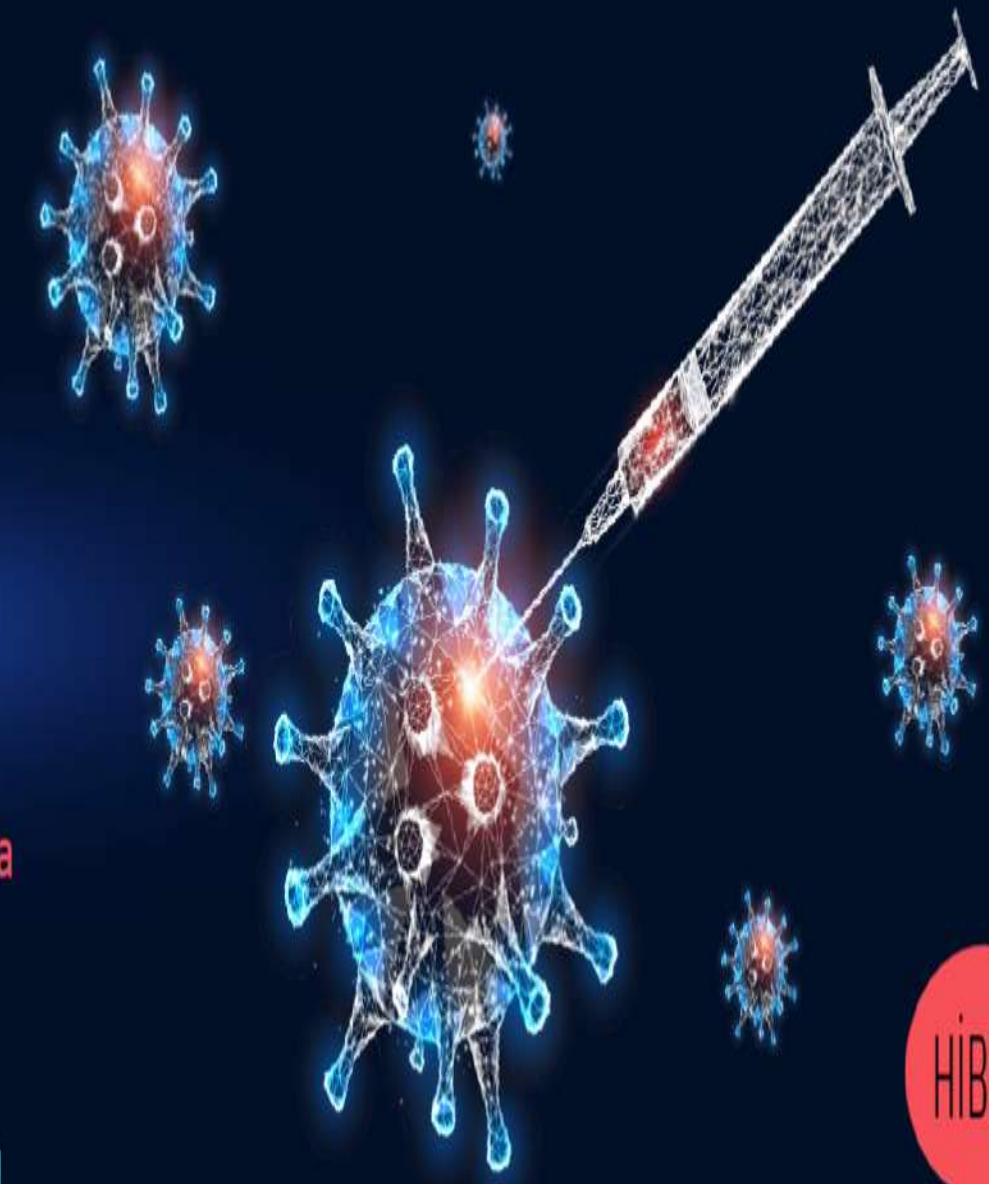
Circulation Journal
doi:10.1253/circj.CJ-21-1055

Deep Vein Thrombosis and Pulmonary Thrombosis After BNT162b2 mRNA SARS-CoV2 Vaccination

Chisato Sawatari, MD; Nobutake Kurebayashi, MD; Shuji Morikawa, MD; Satoru Iwashima, PhD

7.

ULUSAL ERİŞKİN BAĞIŞIKLAMASI SİMPOZYUMU



18-19 ŞUBAT 2022 / The Ankara Hotel, Ankara

HİBRİT

EBÇG KLİMİK DERNEĞİ ERİŞKİN BAĞIŞIKLAMASI ÇALIŞMA GRUBU