



COVID-19'DA GÜNCEL DURUM

DR. ZEHRA KARACAER

SBU Ankara Gülhane Sağlık Uygulama ve Araştırma Merkezi

SUNUM PLANI

- EPİDEMİYOJİ
- KLİNİK
- TANI
- TEDAVİ
- AŞILAMA





17 Kasım 2019

- Vuhan'da salgın



11 Mart 2020

- Küresel salgın ilanı



5 Mayıs 2023

- Küresel acil durumu iptal edildi



**UZUN DÖNEM
İZLEM**

EPİDEMİYOLOJİ

KLİMİK 2025

Last 7 days

Last 28 days

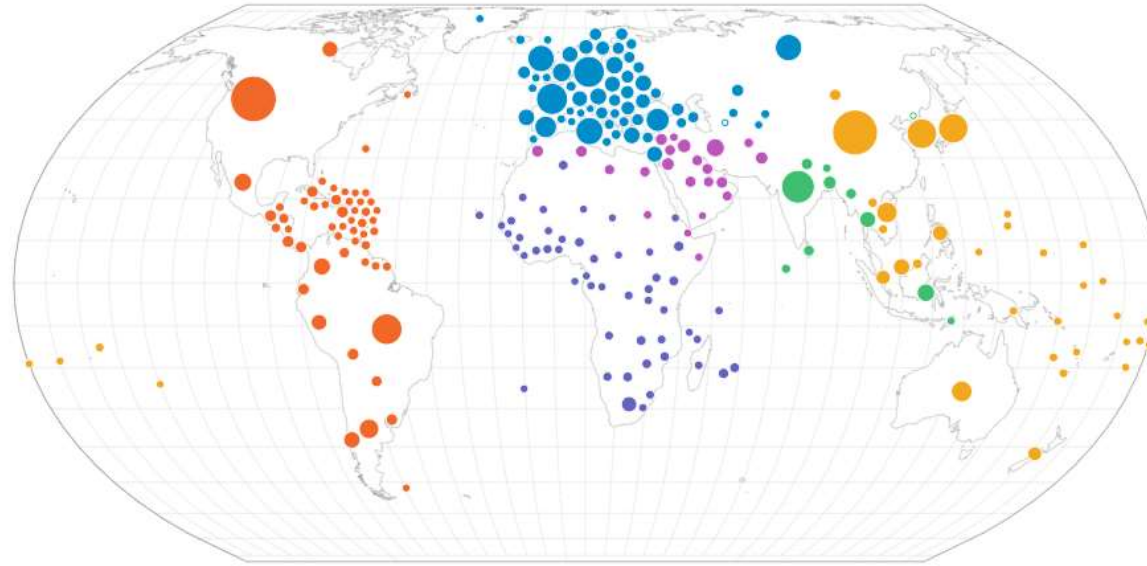
Total cumulative

Count

Rate per 100 000

Number of COVID-19 cases reported to WHO (cumulative total)

World



WHO Regions: ■ Africa ■ Americas ■ Eastern Mediterranean ■ Europe ■ South-East Asia ■ Western Pacific

777,684,506

+9,200

increase on previous 7 days

Reported COVID-19 cases

World, 7 days to 23 March 2025

Number of COVID-19 cases reported to WHO (cumulative total)

World

Country	Cases
World	778m
United States of America	103m
China	99.4m
India	45m
France	39m
Germany	38.4m

EPİDEMİYOLOJİ

KLİMİK 2025



Last 7 days

Last 28 days

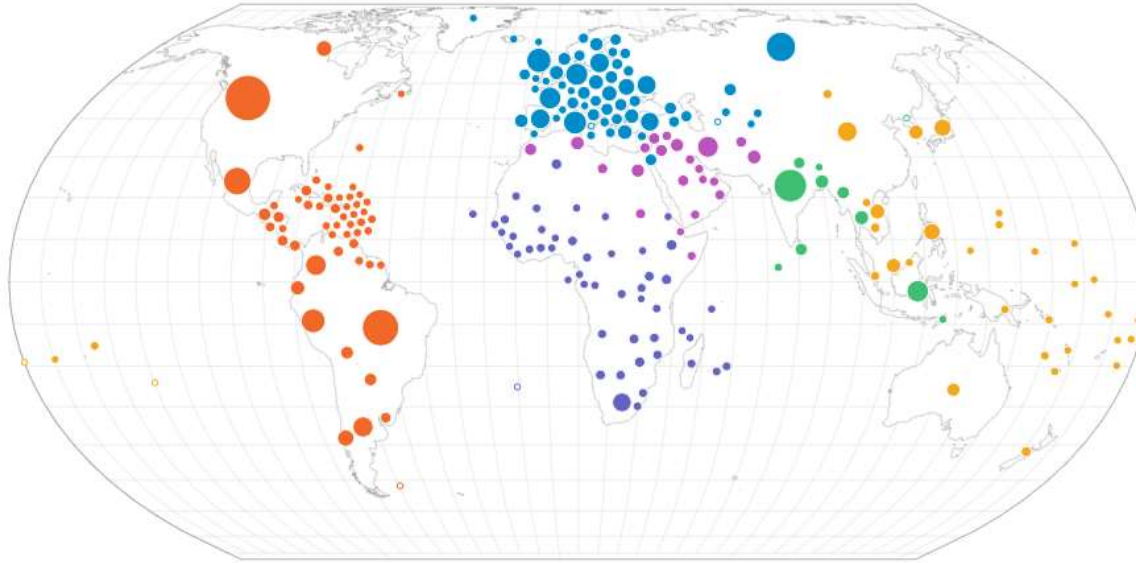
Total cumulative

Count

Rate per 100 000

Number of COVID-19 deaths reported to WHO (cumulative total)

World



WHO Regions Africa Americas Eastern Mediterranean Europe South-East Asia Western Pacific

7,092,720 **+380**
increase on previous 7 days

Reported COVID-19 deaths

World, 7 days to 23 March 2025

Number of COVID-19 deaths reported to WHO (cumulative total)

World

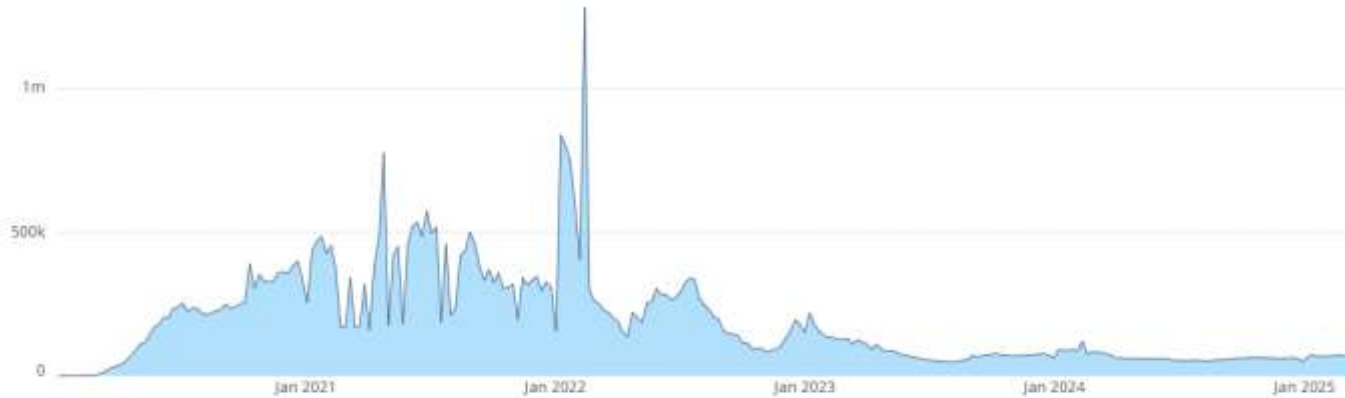
Country	Deaths
World	7.1m
United States of America	1.2m
Brazil	703k
India	534k
Russian Federation	404k
Mexico	335k

EPİDEMİYOLOJİ

SARS-CoV-2 sayısı ve pozitiflik yüzdesi

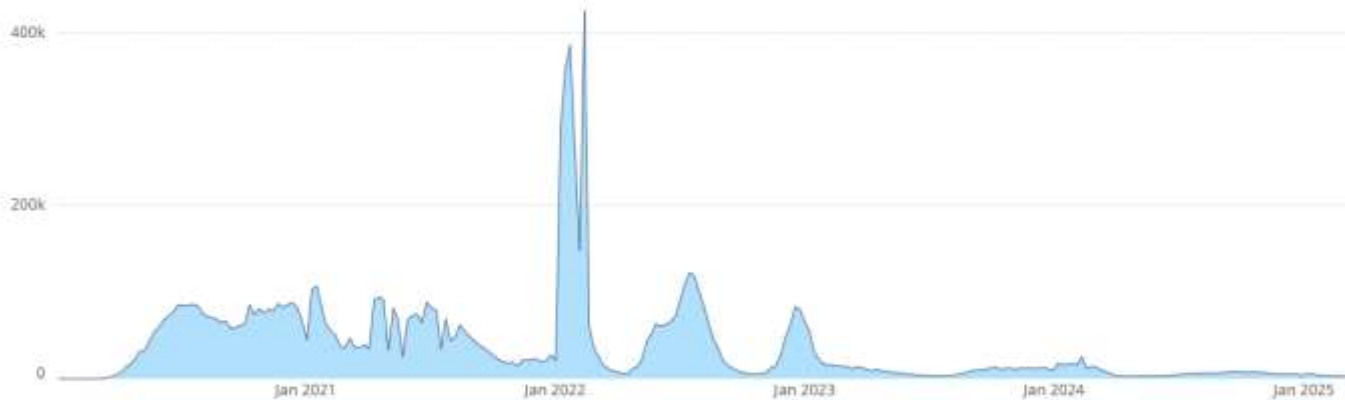
Number of specimens tested for SARS-CoV-2

World, Week 23 March 2025
52,979
Number of samples



Number of specimens tested "Positive" for SARS-CoV-2

World, Week 23 March 2025
1,412
Number of samples



EPİDEMİYOLOJİ



T.C. Sağlık Bakanlığı
COVID-19 Bilgilendirme Platformu



	Anasayfa	COVID-19	Yayınlar	Genel Koronavirüs Tablosu	SSS
Tarih	Vaka Sayısı	Vefat Sayısı	İyileşen Sayısı	Toplam Vaka Sayısı	Toplam Vefat Sayısı
4 - 10 Temmuz 2022	117.095	31	61.047	15.297.539	99.088
27 Haziran - 03 Temmuz 2022	57.113	25	30.478	15.180.444	99.057
20 Haziran - 26 Haziran 2022	26.635	17	11.256	15.123.331	99.032
13 Haziran - 19 Haziran 2022	10.954	19	7.653	15.096.696	99.015
06 Haziran -12 Haziran 2022	7.556	20	7.241	15.085.742	98.996
30 Mayıs - 05 Haziran 2022	7.322	19	7.843	15.078.186	98.976



EPİDEMİYOLOJİ

MART 2023

VAKA SAYISI

31.054

VEFAT SAYISI

85

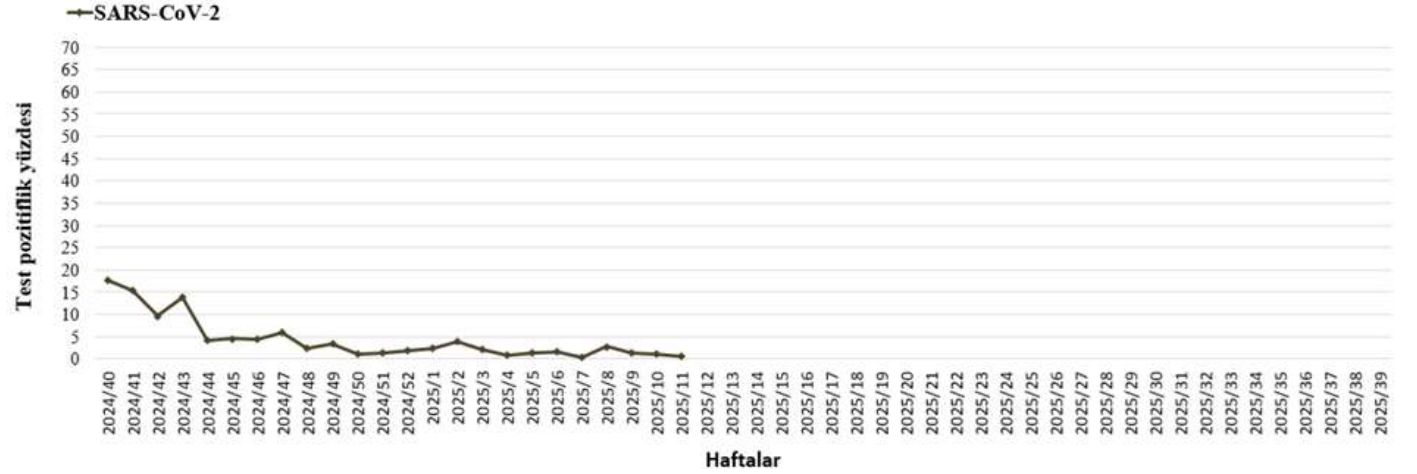
TOPLAM VAKA SAYISI

17.232.066

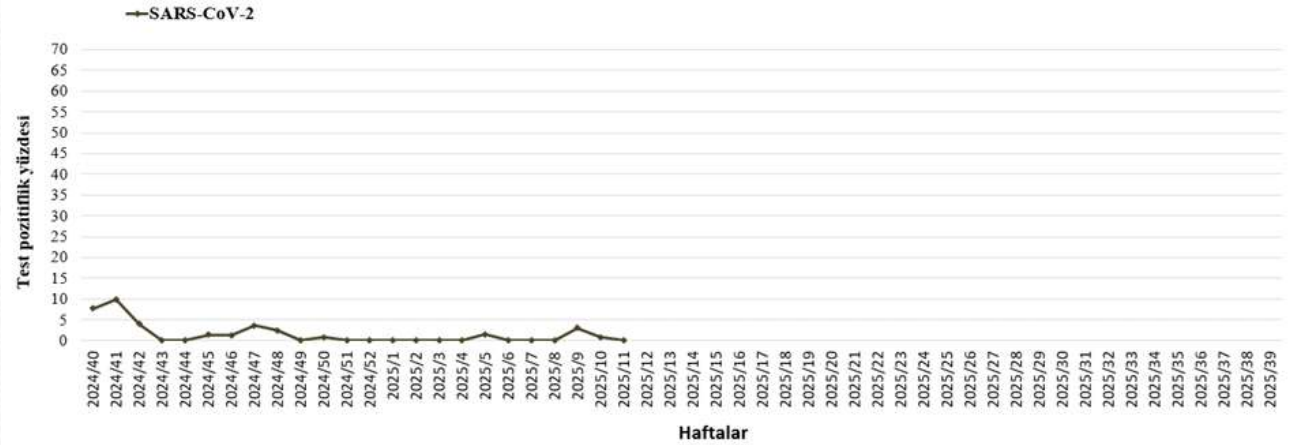
TOPLAM VEFAT SAYISI

102.174

İnfluenza benzeri hastalık nedeni ile aile hekimine ayaktan başvuran hastalardan alınan numunelerdeki SARS-CoV-2 pozitiflik yüzdesi, Sentinel ILI Sürveyansı, 2024-2025.



Ağır akut solunum yolu enfeksiyonu nedeni ile yatan hastalardan alınan numunelerdeki SARS-CoV-2 pozitiflik yüzdesi, Sentinel SARI Sürveyansı, 2024-2025.

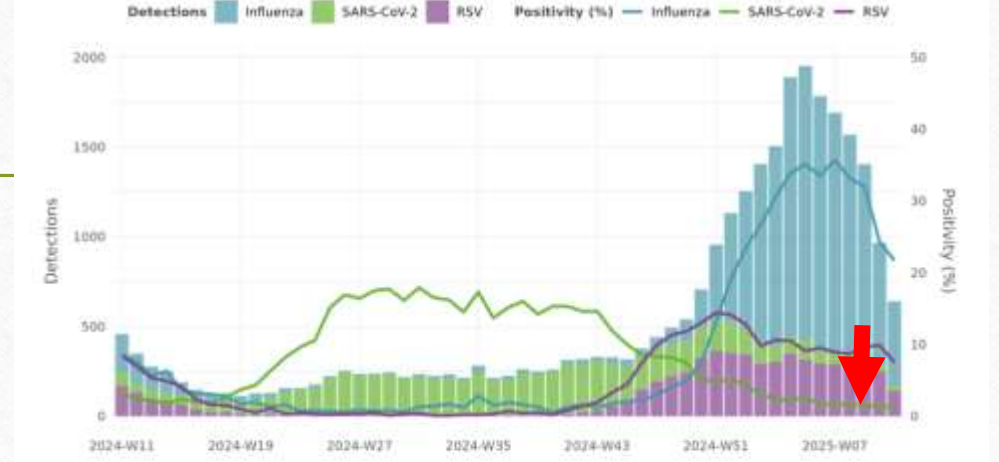


https://grip.saglik.gov.tr/depo/influenza-raporu/2025/Haftalik_Solunum_Yolu_Virusleri_Surveyans_Raporu_2025_11_Hafta.pdf



European Respiratory Virus Surveillance Summary, week 11/2025. Copenhagen: World Health Organization Regional Office for Europe; 2025. Licence: CC BYNC-SA 3.0 IGO.

Sentinel **birinci basamak numunelerinde** saptanan İnfluenza, SARS-CoV-2, RSV sayısı ve pozitiflik yüzdesi, Avrupa



European Respiratory Virus Surveillance Summary, week 11/2025. Copenhagen: World Health Organization Regional Office for Europe; 2025. Licence: CC BYNC-SA 3.0 IGO.

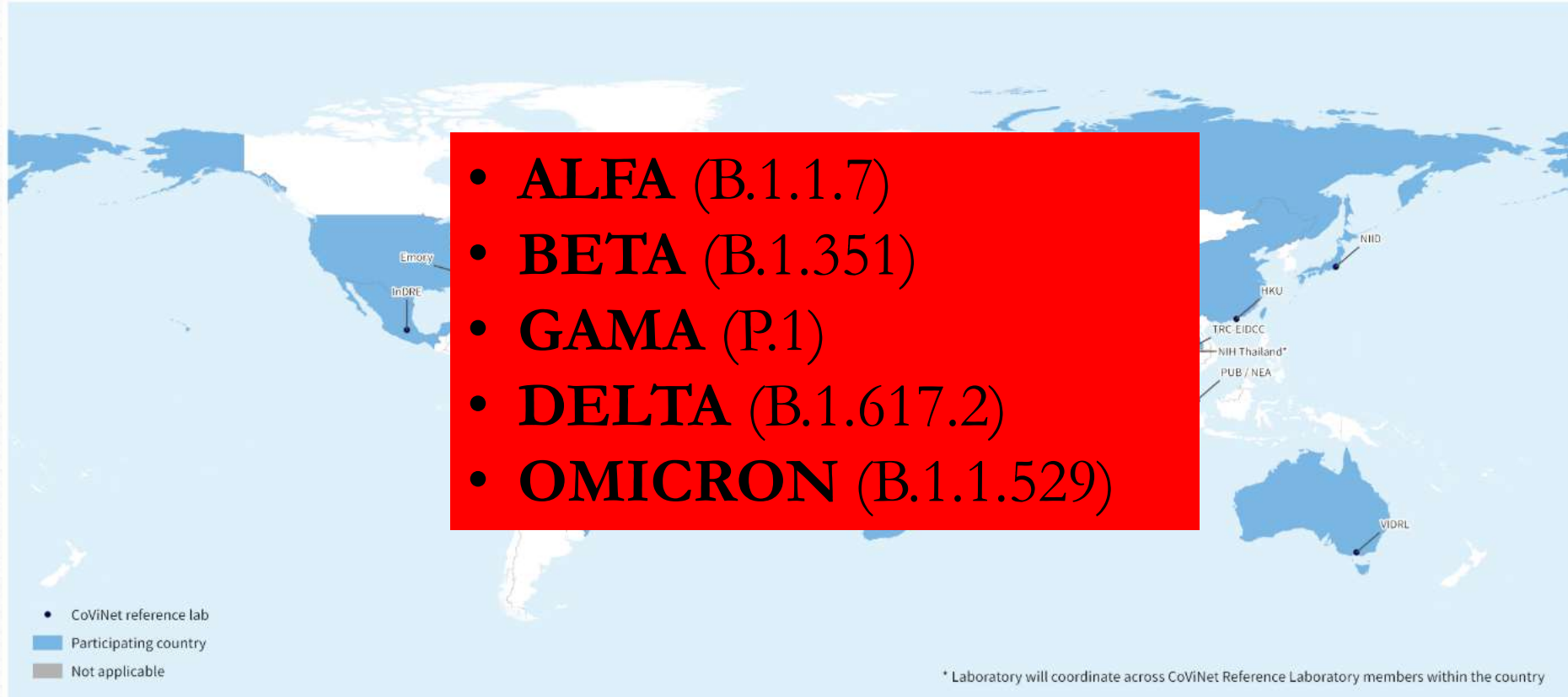
Hastanelerde Sentinel SARI numunelerinde saptanan İnfluenza, SARS-CoV-2, RSV sayısı ve pozitiflik yüzdesi, Avrupa

EPİDEMİYOLOJİ

KLİMİK 2025

VARYANTLAR

WHO Coronavirus Network (CoViNet) Reference Laboratories





EPİDEMİYOLOJİ

VUM: gözlem altında tutulan varyantlar

TANIM

- Virüsün özelliklerini etkileme şüphesi taşıyan genetik değişiklik saptanması
- Diğer varyantlara göre üreme avantajı oluşması

İZLEM

- Fenotipik ve epidemiyolojik değişikliklerin yeterince kesinleşmesi
- İki'den fazla ülkede 2-4 hf içerisinde toplum içi bulaş
- Çalışılan örnek sayısı az

RİSK

- Sağlık otoriteleri tarafından izlem sonuçlarının değerlendirilmesi
- Üst aşamaya geçiş kararı



EPİDEMİYOLOJİ

VOI: dikkate alınan varyantlar

TANIM

- Bulaşıcılığı, virulansı artmış
- Klinik tabloda değişikliğe yol açan

İZLEM

- Toplumda bulaşı gösterilen
- Vaka kümeleri oluşturan
- Başka ülkelerde saptanan

RİSK

- Sağlık otoriteleri tarafından izlem sonuçlarının değerlendirilmesi
- Üst aşamaya geçiş kararı

EPİDEMİYOLOJİ

KLİMİK 2025



VOC: endişe uyandıran varyantlar



Bulaşıcılık
Virulans
Klinik tablonun ağırlığı



Aşıların etkinliği
Antivirallerin etkinliği
Tanı testlerinin duyarlılığı

EPİDEMİYOLOJİ

KLİMİK 2025

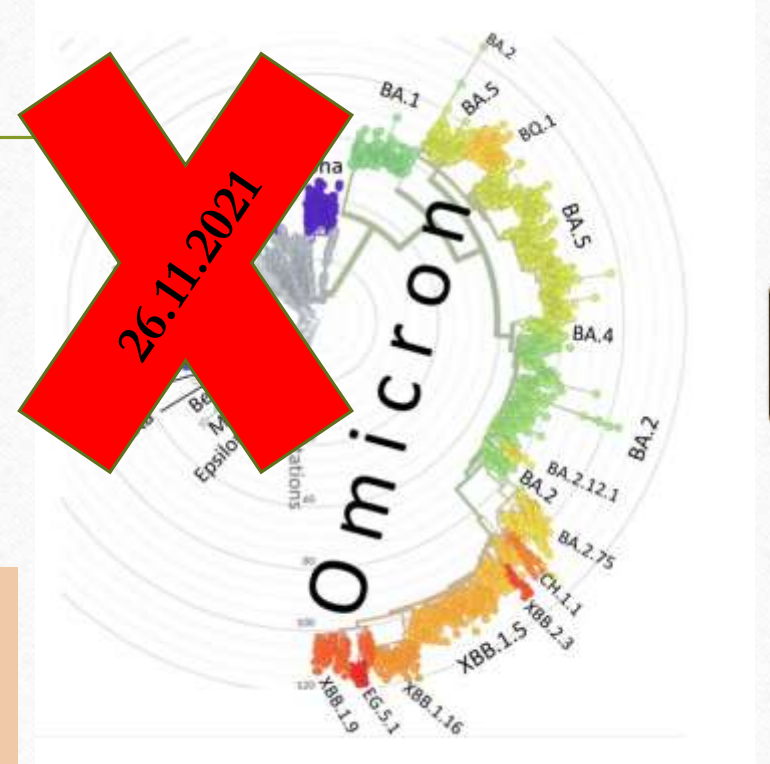


De-eskalasyon

- Varyant dolaşımında saptanmıyorsa
- Epidemiyolojik önemli bir etkisi olmadan uzun süredir dolaşımda ise
- Endişe verici bir özellikle ilişkilendiren bilimsel kanıt yoksa

2 Şubat 2025'de küresel verilere göre;

- ❖ VOC: **yok**
- ❖ VOI: JN.1
- ❖ VUM: JN.1.18, KP.2, KP.3, KP.3.1.1, LB.1, XEC, LP.8.1



<https://www.ecdc.europa.eu/en/covid-19/variants-concern>

<https://www.who.int/publications/m/item/covid-19-epidemiological-update-edition-177>, COVID-19 epidemiological update – 12 March 2025



EPİDEMİYOLOJİ

Ülkemizde saptanan varyantların dağılımı:

- ALFA (B.1.1.7): Haziran 2021 tarihine kadar baskın varyant (%12,37 – 88,1)
- BETA (B.1.351): Nadir saptanan varyant (%0,8-1,7)
- DELTA (B.1.617.2): Haziran 2021 sonrası hakim varyant (%0,02-25)
- OMICRON (B.1.1.529): Sağlık Bakanlığı tarafından ilk olgu 12 Aralık 2021'de bildirildi.

- .Aydoğan O.ve ark. COVID-19 Pozitif Hastalarda SARS-CoV-2 Varyantlarının Prevalansı. Klimik Derg. 2022;35(4):220-3
- Uyar Y.et al. The evaluation of SARS-CoV-2 mutations at the early stage of the pandemic in Istanbul population. Ann Clin Microbiol Antimicrob.(2024):23:93
- Deniz Toygar M.et al. Comparison of Prognosis Between SARS-CoV-2 Wild and Variant Lineages in Kocaeli Province, Turkey. Kocaeli Med J 2022;11(3):247-252
- Hatirnaz Ng O et al. Mutational landscape of SARS-CoV-2 genome in Turkey and impact of mutations on spike protein structure. PLoS ONE, 2021; 16(12): e0260438
- Erman Daloglu A.ve ark. Antalya, Türkiye'den elde edilen SARS CoV-2 izolatlarının sekans analizi. Mikrobiyol Bul 2024;58(4):433-447..

KLİNİK

KLİMİK 2025



Semptomlar açısından farklar

DELTA

- Anosmi (OR:3,76, $p<0,01$)
- Ateş (OR:1,78, $p<0,01$)
- Öksürük (OR:1,77, $p<0,01$)
- Nazal konjesyon (OR:1,26, $p=0,01$)

OMICRON

- Boğaz ağrısı (OR:1,36, $p<0,01$)

Ülkemizde en sık;

- Boğaz ağrısı
- Baş ağrısı

KLİNİK

KLİMİK 2025



Omicron varyantlarında seyir

BULAŞICILIK REENFEKSİYON ÜSYE



Hastaneye yatış

Antiviral kullanımı

Pnömoni

YBU yatış

MV ihtiyacı

Mortalite

- Skarbinski J et al. Risk of severe clinical outcomes in comparisons with SARS-CoV-2 infection with differing levels of vaccination during widespread Omicron (B.1.1.529) and Delta (B.1.617.2) variant circulation in Northern California: A retrospective cohort study. The Lancet Regional Health- Americas 2022;12: 100297
- Wahlström E et al. Severity outcomes of SARS-CoV-2 infection in the Omicron and pre- Omicron periods, in unvaccinated first-time test positive adults less than 65 years old without comorbidity, in Sweden. Journal of Infection and Public Health 17 (2024) 102502.



KLİNİK

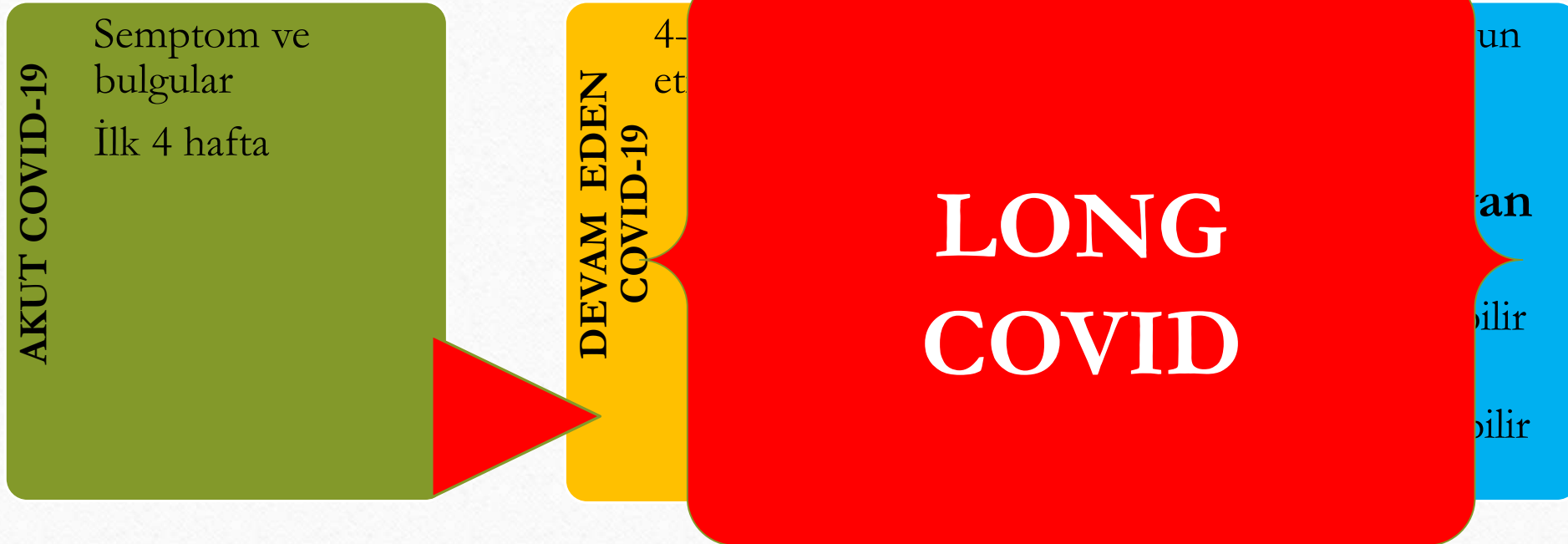
Omicron BA.1/BA.1.1 (n=12,756) ve BA.2 (n=1,905) subvaryantları arasında;

- Ciddi klinik seyir
- Hastanede yatış süresi

Açısından anlamlı fark saptanmadı.



LONG COVID



COVID-19 rapid guideline: managing the long-term effects of COVID-19.. NICE guideline Published: 18 December 2020 Last updated: 25 January 2024 .



LONG COVID PREVALANS

Küresel olarak %41,8
Asya'da %49,8
Avrupa'da %46,3
Amerika'da %46,3
Avustralya'da %42,4



LONG COVID RİSK FAKTÖRLERİ

- Kadın
- İleri yaş
- Kişinin dayanıklılık düzeyi
- Komorbidite sayısı
- Uzamış hastanede yatış süresi
- Akut fazın ciddiyeti
- Yüksek metabolizma hızı



LONG COVID SEMPTOMLARI

S

Kardiovasküler

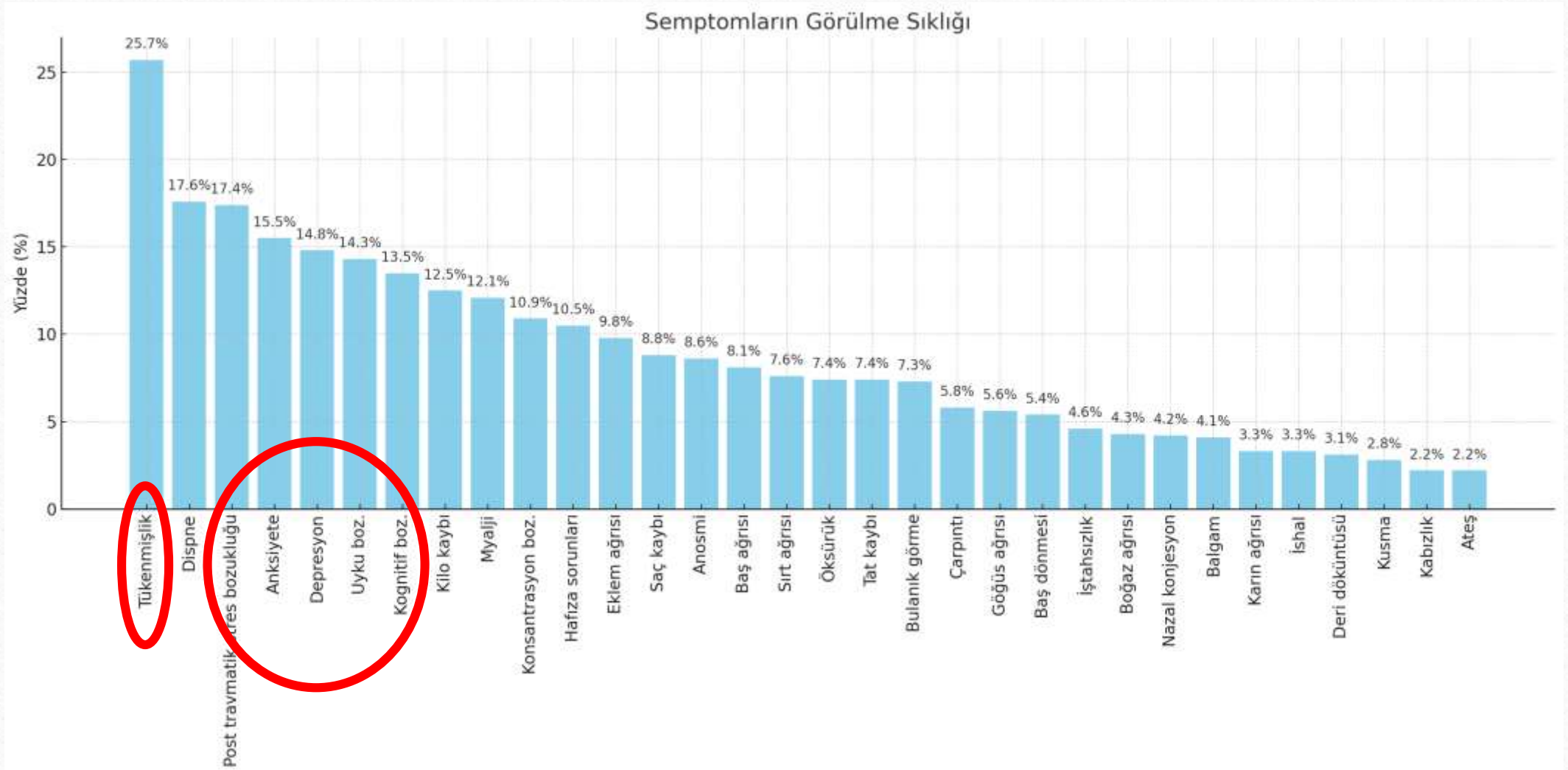
Çocuk ve genç yetişkinlerde daha nadir görülen semptomlar

Nefes darlığı
Persistan öksürük
Nefes alırken ağrı
Çarpıntı
Kalp hızında değişiklikler
Göğüs ağrısı

Nörolojik semptomlar

Kognitif bozukluklar (beyin sisi, konsantrasyon kaybı, hafıza kaybı)

Baş ağrısı
Uyku bozukluğu
Paresti (iğne batması, uyuşma)
Baş dönmesi
Halsizlik (özellikle yaşlılarda)
Hareket bozukluğu
Görme bozukluğu



- Luo D et al. Prevalence and risk factors for persistent symptoms after COVID-19: a systematic review and meta-analysis. Clinical Microbiology and Infection 30 (2024) 328e335



LONG COVID OLUŞMA ZAMANI



- Delta varyantı ile en fazla oluşur (PP=0.34, 95%CI=0.25–0.43)
- Omicron BA.1 varyantı ile sonrakilere göre daha fazla oluşur (PP=0.27, 95%CI=0.22–0.33, sonrakiler PP 0.11, 95%CI=0.08–0.15 ile 0.14, 95%CI=0.10–0.18 arası)



LONG COVID PATOGENEZİ

Güncel hipotezler:

- İmmün disregülasyon
- Pıhtılaşmaya yol açan etkiler
- Endotel disfonksiyonu
- Mikrosirkülasyon bozukluğu
- Spike protein persistansı
- Koinfeksiyon
- Reaktivasyon (HSV, EBV)
- Mikrobiomda bozulma
- Metabolik etkiler
- İnflamatuar etkiler



LONG COVID YÖNETİMİ

- Eğitim, iş veya günlük aktivitelerde performansta düşme
- Yaşlı bireylerde giderek kötüleşen demans, kırılganlık, yeme-içmeye ilgisizlik
- Semptomlar doğal seyrinden farklı olarak artabilir veya dalgalanmalar olabilir
- Multidisipliner değerlendirme yapılmalı
- Alternatif tanılar için gerekli tüm muayene ve tetkikler yapılmalı



LONG COVID TANISI

Ölçekler:

- Fransa «the long covid Symptom and Impact Tool»
- Birleşik Krallık «Post-Acute (Long) COVID 19 Quality of Life (PAC-19QoL) Instrument»
- Almanya «The Post-COVID-19 Functional Status scale»

Radyoloji »»»»»»»»»» etkilenen organa/sisteme uygun

Biyokimyasal analizler »»»»»»»»»» etkilenen organa/sisteme uygun



LONG COVID TEDAVİSİ

- Semptoma/sisteme uygun tedavi
- Metformin kullanmak (%41 azalma) ⁽²⁾

Önlemek için:

- Erken dönemde antiviral tedavi başlamak
- Aşılama...mRNA aşısı (BNT162b2), adenovirüs vektör (ChAdOx1) aşısından daha başarılı ⁽³⁾

1.Seo J-W et al. Updated Clinical Practice Guidelines for the Diagnosis and Management of Long COVID. Infect Chemother. 2024 Mar;56(1):122-157

2. Bramante, CT et al. Outpatient treatment of COVID-19 and incidence of post COVID-19 condition over 10 months (COVID-OUT): a multicentre, randomised, quadruple-blind, parallel-group, phase 3 trial. Lancet Infect Dis. 2023 October ; 23(10): 1119–1129

3.Catala M et al. The effectiveness of COVID-19 vaccines to prevent long COVID symptoms: staggered cohort study of data from the UK, Spain, and Estonia. Lancet Respir Med 2024; 12: 225–36



LONG COVID TEDAVİSİ

- Palmitoylethanolamide
- Nirmatrelvir/ritonavir (Paxlovid)
- Transdermal Glutathione–Cyclodextrin Complex
- Biosound terapi
- Fluvoxamine
- Çeşitli monoklonal antikorlar
- HBOT

1.

»»»»»»»»»»»»»» randomize-kontrollü olmayan birçok araştırma



TANI

- Nükleik Asid Amplifikasyon Testi (NAAT): **altın standart**
 - Multipleks PCR solunum yolu paneli
 - İzotermal nükleik asid amplifikasyon teknikleri ile
 - CRISPR-temelli test
- Serolojik testler
 - Antikor temelli
 - Antijen temelli



TEDAVİ

ANTİVİRAL TEDAVİLER

- Remdesevir
- Nirmatrelvir–Ritonavir
- Molnupiravir

İMMUNMODÜLATÖR TEDAVİLER

- Barisitinib
- Tofasitinib
- Tosilizumab
- Vilobelimab
- Sotrovimab

HÜCRE TEDAVİLERİ

- SARS-CoV-2 spesifik T hücre
- Kimerik antijen reseptör hücre
- Regulator T hücre
- Mezenkimal kök hücre

- Bartoletti M et al. ESCMID COVID-19 living guidelines: drug treatment and clinical management. Clinical Microbiology and Infection 28 (2022) 222e238
- Bhimraj A et al. Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19 . <https://www.idsociety.org/COVID19guidelines>. **Last updated**, 8/12/2024
- Drugs to prevent COVID-19: living guideline, 24 March 2023. Geneva: World Health Organization; 2023 (WHO/ 2019-nCoV/prophylaxes/2023.1).
- COVID-19 rapid guideline: managing COVID-19. NICE guideline. www.nice.org.uk/guidance/ng191. Last updated: 8 May 2024
- Chung Y-S et al. Comprehensive Review of COVID-19: Epidemiology, Pathogenesis, Advancement in Diagnostic and Detection Techniques, and Post-Pandemic Treatment Strategies. Int. J. Mol. Sci. 2024, 25, 8155
- Troseid M et al. Efficacy and safety of baricitinib in hospitalized adults with severe or critical COVID-19 (Bari-SolidAct): a randomised, double-blind, placebo-controlled phase 3 trial. Critical Care. 2023;27:9
- Sweeney DA et al. Choosing immunomodulating therapies for the treatment of COVID-19: recommendations based on placebo-controlled trial evidence. Clinical Microbiology and Infection 30 (2024) 611e618.



TEDAVİ

ÖNERİLMİYEN TEDAVİLER

- **Konvelesan plazma** (Sadece ayaktan hafif-orta şiddetli enfeksiyonu olan hastada progresyon risk varsa, başka tedavi kullanımı mümkün değilse, yüksek titreli konvelesan plazma kullanılabilir)
- **Nötralizan antikorlar** (tixagevimab/cilgavimab, bamlanivimab/etesevimab, casirivimab/imdevimab)
- **İvermektin**
- **Anakinra**
- **Multivitaminler** (Vitamin A, B, C, D)

- Bartoletti M et al. ESCMID COVID-19 living guidelines: drug treatment and clinical management. Clinical Microbiology and Infection 28 (2022) 222e238
- Bhimraj A et al. Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19 . <https://www.idsociety.org/COVID19guidelines>. **Last updated**, 8/12/2024
- Sinopoli A et al. The Efficacy of Multivitamin, Vitamin A, Vitamin B, Vitamin C, and Vitamin D Supplements in the Prevention and Management of COVID-19 and Long-COVID: An Updated Systematic Review and Meta-Analysis of Randomized Clinical Trials. Nutrients 2024, 16, 1345.
- Drugs to prevent COVID-19: living guideline, 24 March 2023. Geneva: World Health Organization; 2023 (WHO/ 2019-nCoV/prophylaxes/2023.1).
- COVID-19 rapid guideline: managing COVID-19. NICE guideline. www.nice.org.uk/guidance/ng191. Last updated: 8 May 2024

AŞILAMA

KLİMİK 2025

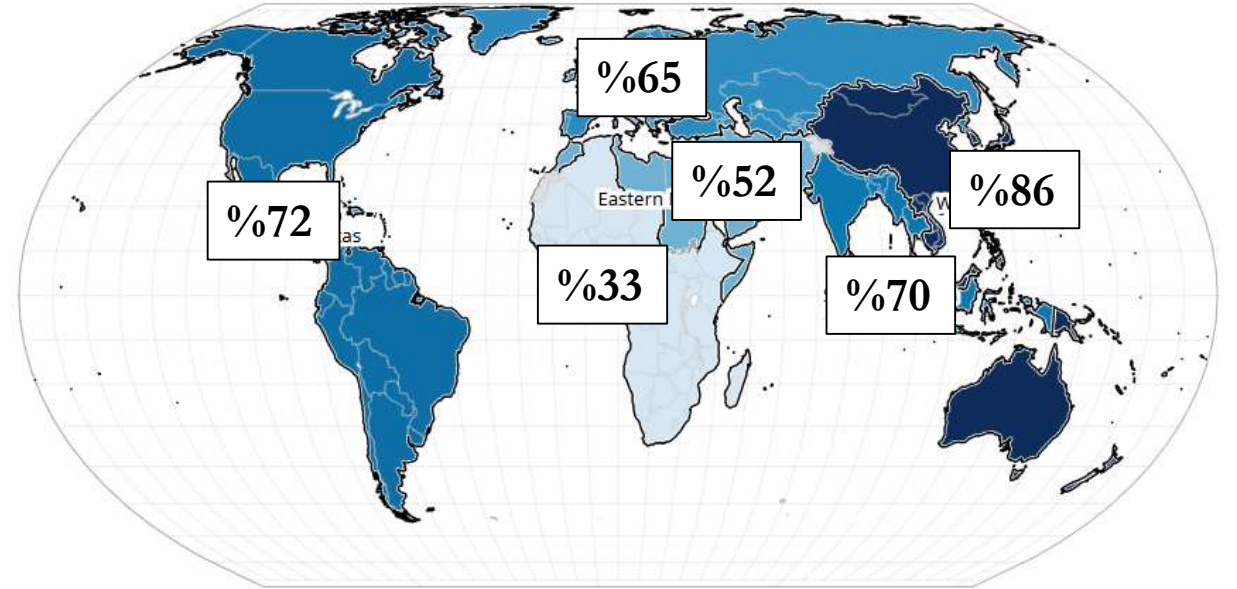
Primer serinin tamamlanma oranları

31 Aralık 2023:
Toplumun %10'dan az

- Madagaskar
- Senegal
- Papua Yeni Gine
- Haiti
- Yemen

Percentage of total population vaccinated with a complete primary series
of a COVID-19 vaccine

Africa, 31 December 2023



<https://data.who.int/dashboards/covid19/vaccines>



AŞILAMA

2. dozdan 7-14 gün sonra enfeksiyon oluşumuna karşı etkinlik (%);

	Pfizer-BioNTech (BNT162b2)	Moderna (mRNA-1273)	AstraZeneca-Oxford (ChAdOx1 nCoV-19)	Janssen/Johnson & Johnson (Ad26.COV2.S)	Sinovac	Sputnik V
DELTA	90	95	64-67	60	60	68-81
OMICRON	58	79,6	56	24	30*	74,2

* 3. doz sonrası etkinlik

- Firouzabadi N et al. Update on the effectiveness of COVID-19 vaccines on different variants of SARS-CoV-2. International Immunopharmacology 117(2023)109968
- Lau JJ et al. Real-world COVID-19 vaccine effectiveness against the Omicron BA.2 variant in a SARS-CoV-2 infection-naïve population. Nature Medicine. 2023;29:348-357
- Pratama NR et al. Effectiveness of COVID-19 Vaccines against SARS-CoV-2 Omicron Variant (B.1.1.529): A Systematic Review with Meta-Analysis and Meta-Regression. Vaccines 2022, 10, 2180.

AŞILAMA

Güncellenen aşılar

- Pfizer-BioNTech ve Moderna'nın **XBB.1.5**'e yönelik monovalan mRNA aşıları
- Pfizer-BioNTech ve Moderna'nın (2024-2025 Formülü) **KP.2**'e yönelik monovalan mRNA aşıları
- Moderna'nın **BA.2.86** yönelik aşısı EG.5 ve FL.1.5.1 varyantlarına da etkili
- Moderna (**Original/Omicron BA.1**) bivalan aşısı
- Pfizer-BioNTech (**Original/Omicron BA.4-5**) bivalan aşısı (rapel doz için)

- <https://www.fda.gov/vaccines-blood-biologics/coronavirus-covid-19-cber-regulated-biologics/pfizer-biontech-covid-19-vaccine>
- <https://www.fda.gov/vaccines-blood-biologics/coronavirus-covid-19-cber-regulated-biologics/moderna-covid-19-vaccine>
- <https://investors.modernatx.com/news/news-details/2023/Moderna-Clinical-Trial-Data-Confirm-Its-Updated-Covid-19-Vaccine-Generates-Strong-Immune-Response-in-Humans-Against-BA.2.86/default.aspx>
- <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-changes-simplify-use-bivalent-mrna-covid-19-vaccines>

Inter
of Se
XBB-

Spyros Chalk
Kai Wu,¹ Arsl
and Rituparna

Article
**Persi
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mRN**

M. Alejand
Nicholas F
¹Departmen
²Division of
³Howard Hu
⁴Lead conta

Short art
**XBB.1.4
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against**

Qian Wang,^{1,7} Y
Aubree Gordon
¹Aaron Diamond
²Division of Infecti
NY 10032, USA
³Department of Pa
⁴Department of Pa
⁵Department of Eg
⁶Department of Mi
⁷These authors co
⁸Lead contact

Cheng et al. Virology Journal (2024) 21:70
<https://doi.org/10.1186/s12985-024-02335-9>



Frontiers in Immunology

BRIEF

Cross
emer
of SA
indiv
BNT1
vacci

Samuel M.S
Karl C.K. Chi
Andrew Pek



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Jianping Xie,
Southwest Un

REVIEWED BY
Jiang Pi,
Guangdong N
Vivek P. Chav
L. M. College c

*CORRESPONDENCE
Biliang Zhang

Article

**Comp
SARS-
rando**

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SONUÇ OLARAK;

- Omicron varyantı ile Covid-19 ılımlı bir seyir gösteriyor
- Örnek alımı için başvuruların azalması sürveyans sonuçlarında şüpheyi yol açabilir
- Long covid bu dönemde de yaşam kalitesini bozmaya devam ediyor
- Antiviral tedavi ihtiyacının azalması yeni arayışların hızını kesmiş olabilir
- Ülkemizdeki covid aşılarının güncellenmeye ihtiyacı bulunmaktadır



TEŞEKKÜRLER.