

Toplum Kökenli Pnömoni: COVID-19'la Bozulan Ezberler

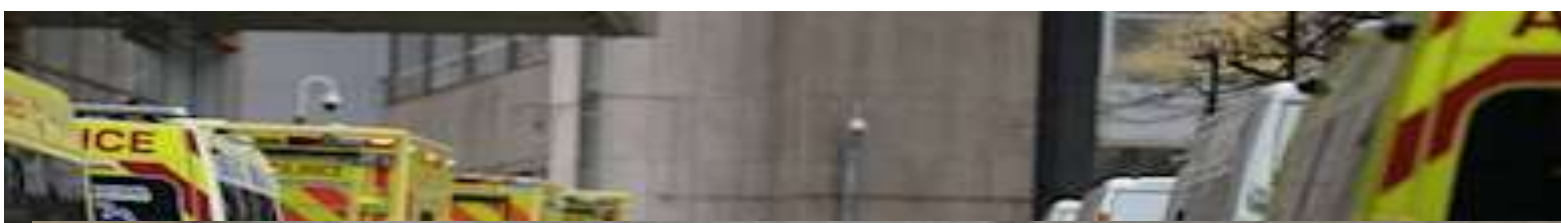
# Toplum kökenli pnömoni ağırlığını belirlemede hangi skorlamayı kullanmalıyız?

Sibel BOLUKÇU

SBÜ Fatih Sultan Mehmet Eğitim ve Araştırma Hastanesi  
İnfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Kliniği

## Sunum planım

- COVID-19 pnömonisinde kötü prognostik faktörler
- Zaten bildiğimiz ve kullandığımız toplum kökenli pnömoni mortalite tahmin skorları ve COVID-19 uyarlamaları
- COVID-19 da yeni geliştirilen mortalite tahmin skorları



[JAMA Intern Med.](#) 2020 Jul; 180(7): 1–11.

PMCID: PMC7070509

Published online 2020 Mar 13. doi: [10.1001/jamainternmed.2020.0994](https://doi.org/10.1001/jamainternmed.2020.0994)

PMID: [32167524](https://pubmed.ncbi.nlm.nih.gov/32167524/)

## Risk Factors Associated With Acute Respiratory Distress Syndrome and Death in Patients With Coronavirus Disease 2019 Pneumonia in Wuhan, China

[Chaomin Wu](#), MD,<sup>1,2,3</sup> [Xiaoyan Chen](#), MD,<sup>3</sup> [Yanping Cai](#), MD,<sup>2</sup> [Jia'an Xia](#), MD,<sup>4</sup> [Xing Zhou](#), MD,<sup>2</sup> [Sha Xu](#), MD,<sup>2</sup> [Hanping Huang](#), MD,<sup>4</sup> [Li Zhang](#), MD,<sup>4</sup> [Xia Zhou](#), MD,<sup>4</sup> [Chunling Du](#), MD,<sup>1</sup> [Yuye Zhang](#), BD,<sup>3</sup> [Juan Song](#), BD,<sup>3</sup> [Sijiao Wang](#), BD,<sup>3</sup> [Yencheng Chao](#), MD,<sup>3</sup> [Zeyong Yang](#), MD,<sup>5</sup> [Jie Xu](#), MD,<sup>6</sup> [Xin Zhou](#), MD,<sup>7</sup> [Dechang Chen](#), MD,<sup>8</sup> [Weining Xiong](#), MD,<sup>9</sup> [Lei Xu](#), MD,<sup>10</sup> [Feng Zhou](#), MD,<sup>1</sup> [Jinjun Jiang](#), MD,<sup>3</sup> [Chunxue Bai](#), MD,<sup>3,11</sup> [Junhua Zheng](#), MD,<sup>12</sup> and [Yuanlin Song](#), MD<sup>1,3,11,13</sup>

İleri yaş

Oksijen desteği alıyor olmak

Lenfopeni varlığı

LDH ↑

IL-6 ↑

D-dimer ↑



Mortaliteyle ilişkili

## Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: a retrospective cohort study

[Fei Zhou](#), MD,<sup>a,†</sup> [Ting Yu](#), MD,<sup>b,†</sup> [Ronghui Du](#), MD,<sup>e,†</sup> [Guohui Fan](#), MS,<sup>a,g,†</sup> [Ying Liu](#), MD,<sup>b,†</sup> [Zhibo Liu](#), MD,<sup>a,†</sup> [Jie Xiang](#), MS,<sup>c,†</sup> [Yeming Wang](#), MD,<sup>a,h</sup> [Bin Song](#), MS,<sup>b</sup> [Xiaoying Gu](#), PhD,<sup>a,g</sup> [Lulu Guan](#), MD,<sup>e</sup> [Yuan Wei](#), MS,<sup>b</sup> [Hui Li](#), MD,<sup>a</sup> [Xudong Wu](#), MS,<sup>d</sup> [Jiuyang Xu](#), MD,<sup>i</sup> [Shengjin Tu](#), MD,<sup>b</sup> [Yi Zhang](#), MD,<sup>a</sup> [Hua Chen](#), Prof, MD,<sup>b,\*\*</sup> and [Bin Cao](#), Prof, MD<sup>a,f,h,i,\*</sup>

### Tek deęişkenli analizlerde:

- Yaş
- Komorbidite HT\*\*, DM, KAH\*\*, KOAH, KBY
- Görüntüleme de buzlu cam görünümü ve konsolidasyon varlığı

### Çok deęişkenli analizlerde:

- Yaş
- D-dimer deęerinin >1 µg/mL olması  
mortalite açısından risk faktörleri olarak görülmüş

[Biomark Insights](#). 2021; 16: 11772719211013363.

PMCID: PMC8150444

Published online 2021 May 24. doi: [10.1177/11772719211013363](https://doi.org/10.1177/11772719211013363)

PMID: [34103886](https://pubmed.ncbi.nlm.nih.gov/34103886/)

## IL-6 and Other Biomarkers associated with Poor Prognosis in a Cohort of Hospitalized Patients with COVID-19 in Madrid

[Encarnación Donoso-Navarro](#),<sup>1</sup> [Ignacio Arribas Gómez](#),<sup>2</sup> and [Francisco A Bernabeu-Andreu](#)<sup>1</sup>

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- **Tek deęişkenli analizlerde:** Yaş, ALT ↑, kreatinin ↑, LDH ↑, NT-ProBNP ↑, IL-6 ↑, D-dimer ↑, lenfopeni varlığı
- **Çok deęişkenli analizlerde:** Yaş, LDH ↑, IL-6 ↑, lenfopeni varlığı

## Predictors of COVID-19 Mortality in Critically Ill ICU Patients: A Multicenter Retrospective Observational Study

Monitoring Editor: Alexander Muacevic and John R Adler

[Chukwuemeka Umeh](#),<sup>✉1</sup> [Laura Tuscher](#),<sup>1</sup> [Sobiga Ranchithan](#),<sup>1</sup> [Kimberly Watanabe](#),<sup>1</sup> and [Rahul Gupta](#)<sup>1</sup>

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YBÜ'ye kabul edilen 238 olgu analiz edilmiş ve YBÜ'de mortalite riskinin değerlendirilmesi amaçlanmıştır

- Yaş
- c-RP ↑
- D-dimer ↑
- Taşikardi varlığı
- ABY gelişmesi

risk faktörü olarak belirlenmiştir

# PSI (Pneumonia Severity Index) -PORT

Demographics	Score	Comorbidities	Score	Examination Finding	Score	Laboratory and radiological findings	Score
Age of the patient	1 point/year	Neoplastic	30	Altered mental status	20	Arterial pH < 7.35	30
Sex	Male = 0, Female = -10						
Nursing home resident	10						

☰

MD  
CALC

### PSI/PORT Score: Pneumonia Severity Index for CAP ☆

Estimates mortality for adult patients with community-acquired pneumonia.

**IMPORTANT**  
Tips for COVID-19: Use after diagnosis to determine dispo. Inputs line up better with known COVID-19 risk factors; adjust for elderly.

When to Use ▾
Pearls/Pitfalls ▾
Why Use ▾

Age	Norm: 0 - 0	years
Sex	Female -10	Male 0
Nursing home resident	No 0	Yes +10
Neoplastic disease	No 0	Yes +30
Liver disease history	No 0	Yes +20
CHF history	No 0	Yes +10
Psychiatric disease history	No 0	Yes +10

**About the Creator**  
Dr. Michael J. Fine  
[Are you Dr. Michael J. Fine?](#)

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**Related Calcs**

- SMART-COP Score
- CURB-65 Score
- Shorr Score

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**Partner Content**  
[Calculated Decisions: PSI/PORT Score](#)  
Emergency Medicine Practice

**Content Contributors**

- Sagar Patel, MD

https://www.mdcalc.com/calc/33/psi-port-score-pneumonia-severity-index-cap#evidence



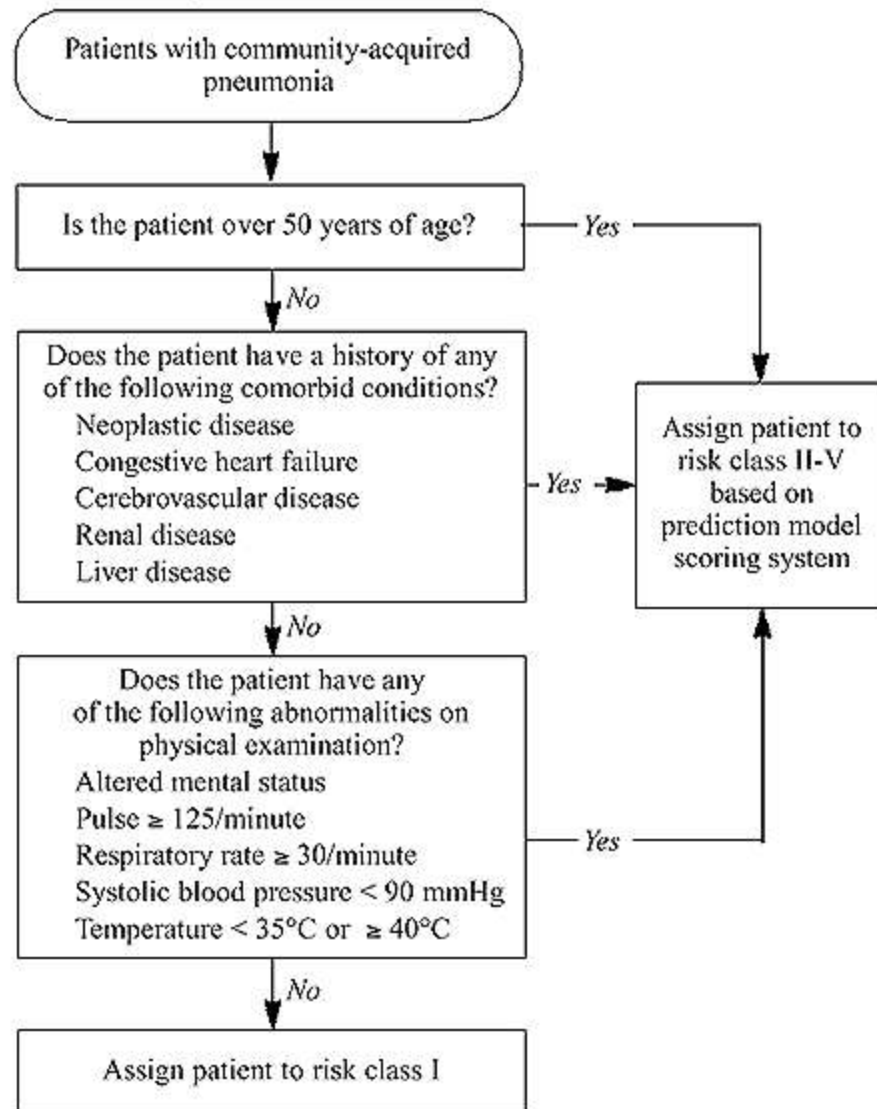
# PSI-PORT risk düzeyinin sınıflandırılması

- Sınıf I (düşük risk): Ek hastalığı, fizik muayene bulgusu veya laboratuvar bulgusu yok
- Sınıf II (düşük risk):  $\leq 70$  puan
- Sınıf III (düşük risk): 71–90 puan
- Sınıf IV (orta risk): 91–130 puan
- Sınıf V (yüksek risk):  $>130$  toplam puan

# PSI-PORT skorlarının yorumlanması

- Skoru  $\leq 70$  olan hastalar ayaktan tedavi edilir
- Skoru 71 ile 90 arasında olan bir hasta ayakta tedavi edilebilir veya gözlem için yatarak takip edilebilir
- Skoru  $>90$  olan tüm hastalar uygun tedavi için yatırılmalı
- Skoru  $>130$  olan hastalar YBÜ de takip ve tedavi edilmelidir

## Algorithm for Prediction Model



# Severe Community-Acquired Pneumonia (SCAP) Skoru

Major criteria	Minor criteria
Arterial pH < 7.3	13
Systolic pressure < 90 mm Hg	11
	Confusion
	BUN > 30 mg/dl
	Respiratory Rate > 30/min
	X-ray multilobar bilateral
	PaO <sub>2</sub> < 54 mm Hg or PaO <sub>2</sub> /FiO <sub>2</sub> < 250 mm Hg
	Age ≥ 80 years

SCAP Score*	Risk of SCAP**
0	0.27-3.43%
1-9	0.66-3.25%
10-19	9.23-11.24%
20-29	36.62-41.82%
≥30	50%

≥ 10 skoru olanlar ciddi toplum kökenli pnömoni olarak kabul edilir, yakın klinik izlem önerilir

# CURB-65 skoru

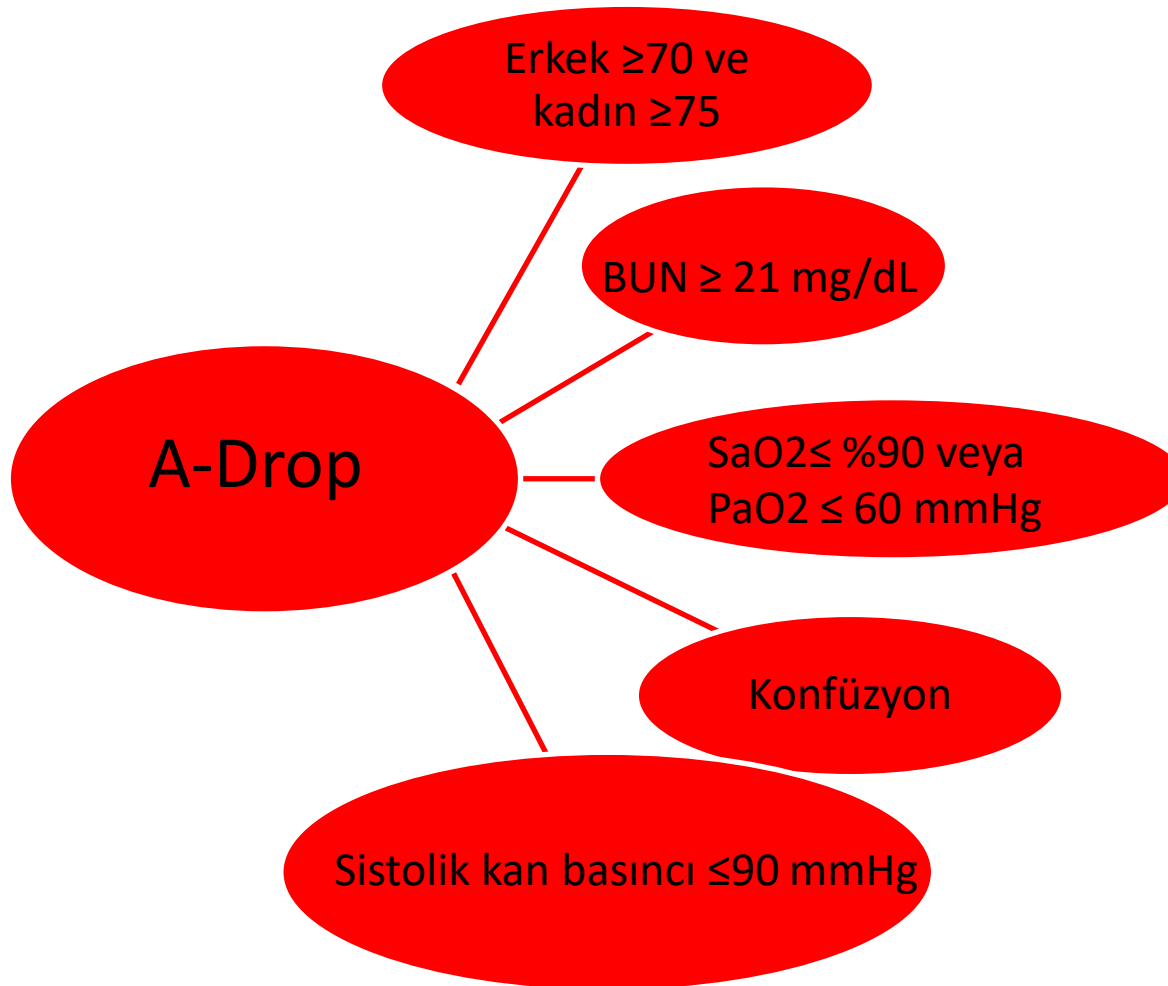
Confusion	<input checked="" type="radio"/> No 0	<input type="radio"/> Yes +1
BUN >19 mg/dL (>7 mmol/L urea)	<input checked="" type="radio"/> No 0	<input type="radio"/> Yes +1
Respiratory Rate $\geq 30$	<input checked="" type="radio"/> No 0	<input type="radio"/> Yes +1
Systolic BP <90 mmHg or Diastolic BP $\leq 60$ mmHg	<input checked="" type="radio"/> No 0	<input type="radio"/> Yes +1
Age $\geq 65$	<input checked="" type="radio"/> No 0	<input type="radio"/> Yes +1

<https://www.mdcalc.com/calc/324/curb-65-score-pneumonia-severity#next-steps>

# CURB-65 skorlarının yorumlanması

CURB-65 skoru	Mortalite riski	Yaklaşım önerisi
0	% 0,6	Düşük risk, ayaktan tedavi
1	% 2,7	Düşük risk, ayaktan tedavi
2	% 6,8	Kısa süreli hastanede yatarak veya yakından gözetim altında ayakta tedavi
3	% 14	Şiddetli pnömoni, hastaneye yatırın ve YBÜ almayı düşünün
4/5	% 27,8	Şiddetli pnömoni, hastaneye yatırın ve YBÜ almayı düşünün

# A-Drop → CURB-65



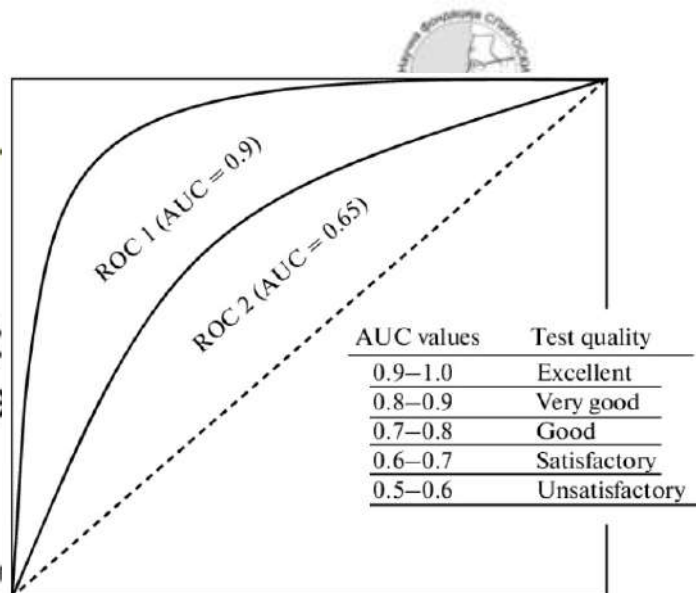


## A-DROP Scoring System in Predicting Mort Hospitalization in Community-acquired Pne Adam Malik General Hospital Medan

Fransisco Sentosa Pakpahan<sup>1\*</sup>, Syamsul Bihar<sup>1</sup>, Fajrinur Syarani<sup>1</sup>, Putri Eya

<sup>1</sup>Department of Pulmonology and Respiratory Medicine, Faculty of Medicine, Univ

<sup>2</sup>Department of Community and Preventive Medicine, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia



“Area Under the ROC Curve (AUC)”

- ✓ Endonezya Adam Malik Hastanesi Acil Servisi’ne başvuran 76 toplum kökenli pnömoni olgusu dahil edilmiş
- ✓ AUC 0,772 ( %95 CI 0.666-0.878, p<0.001)
- ✓ PSI ve CURB-65 skora sistemi ile benzer şekilde A-DROP skora sistemi toplum kökenli pnömoni olgularında 30 günlük mortaliteyi tahminde iyi bir seçenek olabileceği gösterilmiş





OPEN

## Expanded A-DROP Score: A New Scoring System for the Prediction of Mortality in Hospitalized Patients with Community-acquired Pneumonia

Received: 20 February 2018

Accepted: 30 August 2018

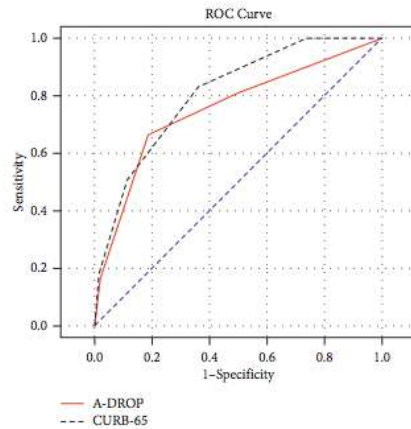
Published online: 01 October 2018

June Hong

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The Pneumo  
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1.68–5.08], a  
1.53–4.38], a  
3.95] as prog  
assembled a  
of 28-day mo  
0.833, indica  
and effective

- n=1031, retrospektif olarak analiz edilmiş
- PSI, CURB-65 ve A-DROP skorları karşılaştırılmış ve genişletilmiş A-DROP skora eklenen beş parametre: malignite varlığı, taşikardi, hipalbuminemi, artmış kan laktat seviyesi, artmış NT-ProBNP seviyesi
- Genişletilmiş A-DROP skorunun AUC 0,834
- Genişletilmiş A-DROP skoruna eklenen beş parametre: malignite varlığı, taşikardi, hipalbuminemi, artmış kan laktat seviyesi, artmış NT-ProBNP seviyesi
- Daha basit ve daha güçlü tahmin gücü elde edildiği yeni bir öngörme sistemi geliştirildiği söylenmiş

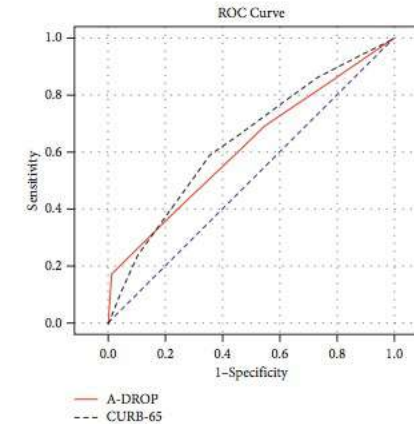
## Comparison between the Severity Scoring Systems A-DROP and CURB-65 for Predicting Safe Discharge from the Emergency Department in Patients with



Area under the curve

Test result variable(s)	Area	95% confidence interval	P-value
A-DROP score	0.756	0.526 - 0.987	0.011
CURB-65 score	0.808	0.647 - 0.970	0.003

FIGURE 2: Receiver operating characteristic (ROC) curves for (—) A-DROP score and (---) CURB-65 score to predict the 30-day mortality rate in patients with community-acquired pneumonia. (...) Reference line.



Area under the curve

Test result variable(s)	Area	95% confidence interval	P-value
A-DROP score	0.617	0.507 - 0.728	0.013
CURB-65 score	0.639	0.536 - 0.743	0.004

FIGURE 3: Receiver operating characteristic (ROC) curves for (—) A-DROP score and (---) CURB-65 score to predict hospital revisit rate within 72 hours after discharge from the emergency department in patients with community-acquired pneumonia. (...) Reference line.

- Immunosuprese hastalar, HIV ile infekte bireyler, SBI pnömonisi, KI/steroid tedavisi alanlar, COVID-19 pnömonisi olanlar dışlamış
- Her iki skora sisteminin acil servis taburculuğu sonrası 30 günlük mortalite ve tekrar başvuru açısından istatistiksel bir farkı gözlenmemiş
- >65 yaş olguların %72'si tekrar başvuru yapmış (yazarlar bu grupta yer alan hastaların kısa süreli gözlenmesi ya da serviste yatarak takibini önermiş)

## **PSI-PORT,**

- ✓ 20 deęişkenin
- ✓ Acil servis koşullarında uygulamanın zor
- ❖ Tahmin gücü yüksek

## **A-DROP skoru,**

- CURB-65 skortlama sisteminden uyarlanmış
- Tahmin gücü PSI-PORT'a göre düşük



## Comparison of severity scores for COVID-19 patients with pneumonia: a retrospective study

Variable	AUC (95% CI)	p-value	Cut-off value	Sensitivity (95% CI)	Specificity (95% CI)	PPV (95% CI)	NPV (95% CI)	NRI	IDI
<b>A-DROP</b>	<b>0.87</b> (0.84–0.90)	Ref	2	0.80 (0.73–0.87)	0.86 (0.83–0.89)	0.60 (0.52–0.67)	0.94 (0.92–0.96)	Ref	Ref
<b>CURB-65</b>	0.85 (0.81–0.89)	0.2259	2	0.63 (0.55–0.71)	0.91 (0.89–0.93)	0.65 (0.56–0.73)	0.91 (0.88–0.93)	0.12	0.06
<b>PSI</b>	0.85 (0.81–0.88)	0.1876	3	0.77 (0.70–0.84)	0.81 (0.78–0.84)	0.50 (0.44–0.57)	0.93 (0.91–0.96)	0.08	0.07
<b>SMART-COP</b>	0.84 (0.80–0.88)	0.0405	2	0.83 (0.77–0.89)	0.76 (0.72–0.80)	0.46 (0.40–0.53)	0.94 (0.92–0.97)	0.08	0.11
<b>NEWS2</b>	0.81 (0.77–0.85)	0.0045	5	0.79 (0.72–0.86)	0.69 (0.65–0.73)	0.40 (0.34–0.46)	0.93 (0.90–0.95)	0.17	0.16
<b>CRB-65</b>	0.80 (0.76–0.84)	0.0001	1	0.83 (0.77–0.89)	0.69 (0.65–0.73)	0.40 (0.34–0.46)	0.94 (0.92–0.96)	0.15	0.15
<b>qSOFA</b>	0.73 (0.69–0.78)	<0.0001	1	0.82 (0.75–0.89)	0.57 (0.53–0.61)	0.33 (0.28–0.38)	0.93 (0.90–0.95)	0.27	0.24

AUC: area under the curve; PPV: positive predictive value; NPV: negative predictive value; NRI: net reclassification improvement; IDI: integrated discrimination improvement; C(U)RB-65: confusion, (urea  $>7$  mmol·L<sup>-1</sup>), respiratory rate  $\geq 30$  breaths·min<sup>-1</sup>, blood pressure  $<90$  mmHg (systolic)  $\leq 60$  mmHg (diastolic), age  $\geq 65$  years; PSI: pneumonia severity index; NEWS2: national early warning score 2; qSOFA: quick sequential organ failure assessment.

ORIGINAL ARTICLE

## Validation of PSI/PORT, CURB-65 and SCAP scoring system in COVID-19 pneumonia for prediction of disease severity and 14-day mortality

Aditya Anurag ✉ Mukul Preetam

First published: 08 January 2021 | <https://doi.org/10.1111/crj.13326> | Citations: 11

Aditya Anurag and Mukul Preetam have contributed equally in this research work.

- ❖ Hindistan, tek merkez, gözlemsel, retrospektif
  - ❖ 15 Temmuz-10 Ağustos 2020, n=122
  - ❖ PSI, CURB-65, SCAP skorlarıyla 14 günlük mortalite tahminleri yapılmış
- SCAP skoru AUC **0,963**  
PSI skoru AUC 0,953  
CURB-65 skoru AUC 0,950

## Assessment of risk scores in Covid-19

Marta María García Clemente <sup>1</sup>, Julia Herrero Huertas <sup>1</sup>, Alejandro Fernández Fernández <sup>1</sup>, Covadonga De La Escosura Muñoz <sup>1</sup>, Ana Isabel Enríquez Rodríguez <sup>1</sup>, Liliana Pérez Martínez <sup>1</sup>, Santiago Gómez Mañas <sup>1</sup>, Marta Iscar Urrutia <sup>1</sup>, Francisco Julián López González <sup>1</sup>, Claudia Janeth Madrid Carbajal <sup>1</sup>, Pedro Bedate Díaz <sup>1</sup>, Miguel Arias Guillén <sup>1</sup>, Cristina Bailón Cuadrado <sup>1</sup>, Tamara Hermida Valverde <sup>1</sup>

Affiliations + expand

PMID: 32931634 DOI: 10.1111/ijcp.13705

-İspanya'dan yapılan prospektif kohort çalışması

-1 Mart-31 Mart 2020

-COVID-19 pnömonisi (radyolojik bulgular mevcut ve SARS-CoV-2 PCR pozitif)

-HIV ile infekte kişiler, SOT ve KİT alıcıları, immünsüpresif tedavi alanlar ve aktif KT alan kanser hastaları dışlanmış

-Mortalite ve YBÜ gereksinimini tahmin etmek için PSI, CURB-65, SMART-COP ve MULBSTA skorları kullanılmış

**SONUÇ:** Mortaliteyi tahmin etmek için PSI ve CURB-65 en iyi tahmin gücüne sahipken YBÜ kabulünü tahmin etmede SMART-COP ve MULBSTA skorları en iyi seçenek



Original Article

## Assessment of the pneumonia severity score in community-acquired and nursing and healthcare-associated pneumonia due to COVID-19

Naoyuki Miyashita<sup>a,\*</sup>, Yasushi Nakamori<sup>b</sup>  
Yoshihisa Ishiura<sup>c</sup>

In conclusion, the present study demonstrated that the mortality rate and mechanical ventilation rate in patients with COVID-19 pneumonia increased depending on the severity classified according to the A-DROP scoring system. **The results of this study suggest that the A-DROP scoring system can be adapted for the assessment of severity of COVID-19 CAP and NHCAP.**



- ✓ Kansai Üniversitesi, Japonya, A-DROP skorum sisteminin 30 günlük mortalite ve MV gereksinimini tahmin oranları değerlendirilmiş
- ✓ Şubat 2020-Aralık 2021 tarihleri arasında başvuran 1141 hasta dahil edilmiş
- ✓ Tamamı SARS-CoV-2 PCR pozitif (çoklu etken olanlar dışlanmış)
- ✓ 5 dalga ayrı ayrı incelenmiş (1-3. dalgalar n=502, 4.dalga (alfa variantı) n= 338, 5.dalga (delta variantı n= 301)
- ✓ Toplum kökenli ve SBI pnömoniler dahil edilmiş
- ✓ COVID-19 pnömonisinde mortalite ve MV gereksinim oranlarının A-DROP skorum sisteminde göre sınıflandırılan ciddiyete bağlı olarak arttığı gösterilmiş

# Practical Risk Scoring System for Predicting Severity of COVID-19 Disease

Jeffrey Petersen<sup>1,2</sup>  and Darshana Jhala<sup>1,2</sup>

<sup>1</sup>Corporal Michael J Crescenz Veteran Affairs Medical Center (CMCVAMC), Philadelphia, PA, USA. <sup>2</sup>University of Pennsylvania, Philadelphia, PA, USA.

Clinical Pathology  
Volume 15: 1–6  
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DOI: 10.1177/2632010X211068427



## ABSTRACT

**OBJECTIVES:** Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of COVID-19 disease, has become an international pandemic with numerous casualties. It had been noted that the severity of the COVID-19 disease course depends on several clinical, laboratory, and radiological factors. This has led to risk scoring systems in various populations such as in China, but similar risk scoring systems based on the American veteran population are sparse, particularly with the vulnerable Veteran population. As a simple risk scoring system would be very useful, we propose a simple Jhala Risk Scoring System (JRSS) to assess the severity of disease risk.

**METHODS:** A retrospective review of all SARS-CoV-2 reverse transcriptase-polymerase chain reaction (RT-PCR) tests collected and performed at the regional Veterans Administration Medical Center (VAMC) serving the Philadelphia and surrounding areas from March 17th, 2020 to May 20th, 2020. Data was collected and analyzed in the same year. These tests were reviewed within the computerized medical record system for demographic, medical history, laboratory test history, and clinical course. Information from the medical records were then scored based on the criteria of the Jhala Risk Scoring System (JRSS).

**RESULTS:** The JRSS, based on age, ethnicity, presence of any lung disease, and diabetes history with laboratory parameters correlated and predicted (V).

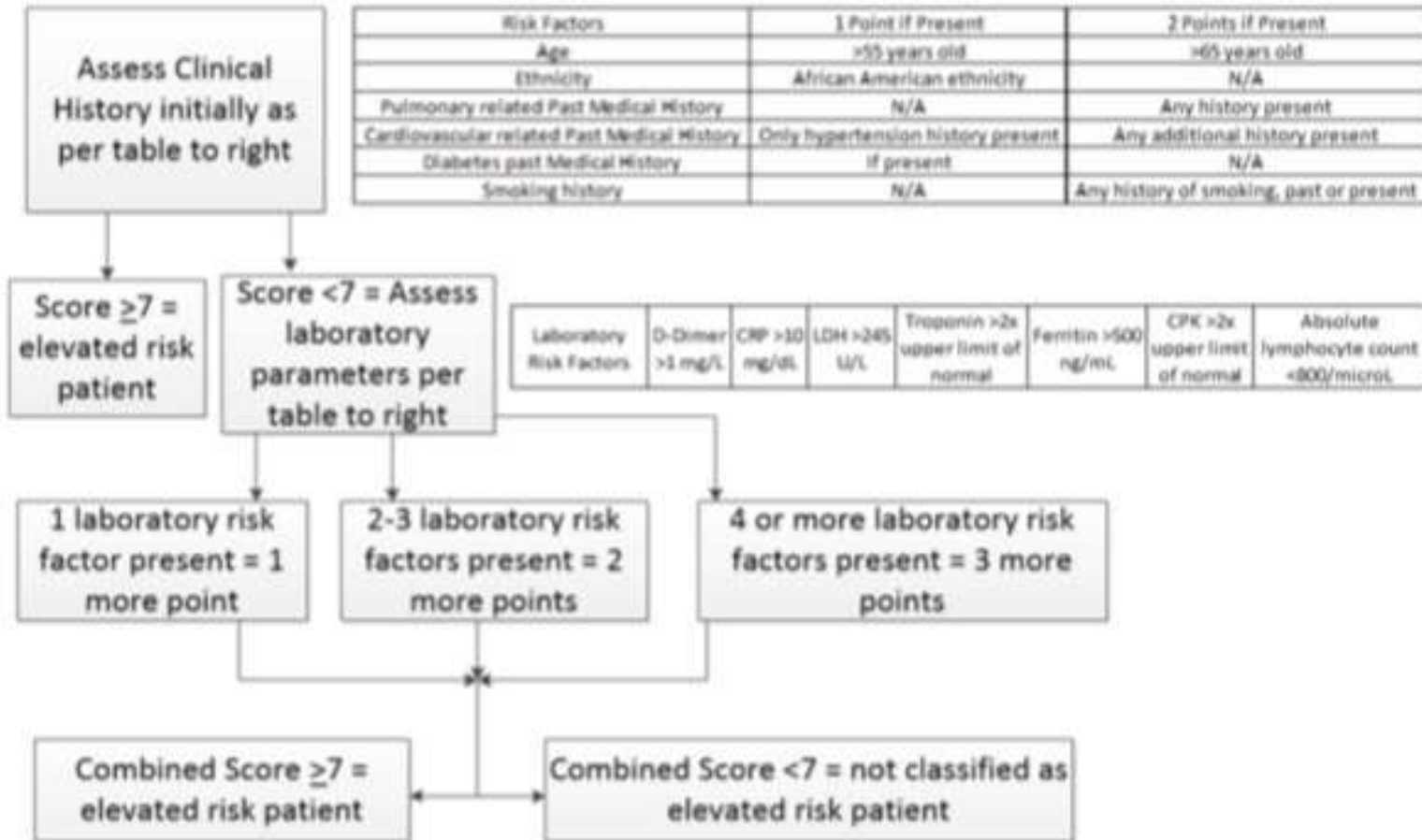
**CONCLUSION:** The JRSS may play a role in informing which COVID-19 patients require hospitalization and ICU admission for stratification.

**KEYWORDS:** Clinical Prognosis, SARS-CoV-2, evidence-based medical pathophysiology

- 17 Mart- 20 Mayıs 2020
- Philadelphia'da hizmet veren Gaziler İdaresi Tıp Merkezi
- N=187, SARS-CoV-2 RT-PCR+
- Jhala Risk Skorlama Sistemi (JRSS) geliştirilmiş
- Testin sınır değeri (cut-off) 7
- JRSS laboratuvar verilerinin de dahil olduğu mortaliteyi tahmin etme duyarlılığı %70 iken laboratuvar verilerinin dahil edilmediği bir modelde duyarlılık %39'a düşüyor



# JRSSS



# Prediction for Progression Risk in Patients With COVID-19 Pneumonia: The CALL Score

Dong Ji,<sup>1,a,•</sup> Dawei Zhang,<sup>1,a</sup> Jing Xu,<sup>2,a</sup> Zhu Chen,<sup>1,a</sup> Tieniu Yang,<sup>3</sup> Peng Zhao,<sup>1</sup> Guofeng Chen,<sup>1</sup> Gregory Cheng,<sup>4</sup> Yudong Wang,<sup>4</sup> Jingfeng Bi,<sup>1</sup> Lin Tan,<sup>2</sup> George Lau,<sup>1,4,b</sup> and Enqiang Qin<sup>1,b</sup>

**Table 2. Univariate and Multivariate Cox Proportional Hazards Regression Analysis of Progression of Illness in the Study Cohort**

	Univariate Cox Analysis		Multivariate Cox Analysis	
	HR (95% CI)	P	HR (95% CI)	P
D-dimer				
<0.55 mg/L	1		1	
>0.55 mg/L	2.8 (1.5–5.2)	.002	1.0 (1.5–2.1)	.983
Comorbidity				
Without	1		1	
With	7.8 (4.1–14.8)	<.001	3.9 (1.9–7.9)	<.001
Age				
≤60 years	1		1	
>60 years	6.4 (3.4–12.0)	<.001	3.0 (1.4–6.0)	.006
Lymphocyte				
>1.0 × 10 <sup>9</sup> /L	1		1	
≤1.0 × 10 <sup>9</sup> /L	5.8 (2.8–11.9)	<.001	3.7 (1.8–7.8)	.001
LDH				
<250 U/L	1		1	
250–500 U/L	4.2 (2.1–8.5)	<.001	2.5 (1.2–5.2)	.014
>500 U/L	13.6 (4.3–42.9)	<.001	9.8 (2.8–33.8)	<.001

Department, Fuyang Second People's Hospital, Anhui,  
Humanity and Health Medical Group, Hong Kong

❖ 20 Ocak-22 Şubat 2020 n=208  
❖ 18 Mart 2020 tarihine kadar  
-Klinik kötüleşme  
-Mortalite  
-Hastanede kalış süreleri takip edilmiş

4-6 puan <%10 progresyon riski-düşük risk (Sınıf A)  
7-9 puan %10-40 progresyon riski-orta risk (Sınıf B)  
10-13 puan >%50 progresyon riski-yüksek risk (Sınıf C)

COVID-19 pnömonisi olgularının progresyonunu öngörmeye kolay kullanıma sahip  
!!! Büyük örnek büyüklüğüne sahip çalışmalarla valide edilmesi gerekiyor

# CALL (Comorbidity, Age, Lymphocyte, LDH) Skoru



INTRO EQUATIONS CRITERIA DECISION CONVERT SPECIALTIES REFS SEARCH NEW FHIR APP CONTACT

COVID-19 CALL Score

**Input**

Comorbidity  No (1)  
 Yes (4)

Age  yr

Absolute Lymphocyte Count   $\times 10^9/L$

LDH  U/L

**Result**

CALL Score  points

**Print**

Include literature references: Yes  No

CALL Score Interpretation

4 to 6 points: Low risk of disease progression  
7 to 13 points: High risk of disease progression

- ✓ Komorbidite + → 4 puan
- ✓ >60 yaş → 3 puan
- ✓ LDH > 500 U/L → 3 puan  
LDH ≥ 250 U/L → 2 puan
- ✓ Lenfosit sayısı  $\leq 1 \times 10^9/L$  → 3 puan



## RESEARCH ARTICLE

# Derivation and validation of a clinical severity score for acutely ill adults with suspected COVID-19: The PRIEST observational cohort study

Steve Goodacre<sup>1\*</sup>, Ben Thomas<sup>1</sup>, Laura Sutton<sup>1</sup>, Matthew Burnsall<sup>1</sup>, Elen Lee<sup>1</sup>, Mike Bradburn<sup>1</sup>, Amanda Loban<sup>1</sup>, Simon Waterhouse<sup>1</sup>, Richard Simmonds<sup>1</sup>, Katie Biggs<sup>1</sup>, Carl Marincowitz<sup>1</sup>, Jose Schutter<sup>1</sup>, Sarah Connelly<sup>1</sup>, Elena Sheldon<sup>1</sup>, Jamie Hall<sup>1</sup>, Emma Young<sup>1</sup>, Andrew Bentley<sup>2</sup>, Kirsty Challen<sup>3</sup>, Chris Fitzsimmons<sup>4</sup>, Tim Harris<sup>5</sup>, Fiona Lecky<sup>1</sup>, Andrew Lee<sup>1</sup>, Ian Maconochie<sup>6</sup>, Darren Walter<sup>7</sup>

**1** School of Health and Related Research (SchHARR), University of Sheffield, Sheffield, United Kingdom, **2** Intensive Care, Manchester University NHS Foundation Trust, Wythenshawe Hospital, Manchester, United Kingdom, **3** Emergency Department, Lancashire Teaching Hospitals NHS Foundation Trust, Preston, United Kingdom, **4** Emergency Department, Sheffield Children's NHS Foundation Trust, Sheffield, United Kingdom, **5** Emergency Department, Barts Health NHS Trust, London, United Kingdom, **6** Emergency Department, Imperial College Healthcare NHS Trust, London, United Kingdom, **7** Emergency Department, Manchester University NHS Foundation Trust, Wythenshawe Hospital, Manchester, United Kingdom



- ✓ Birleşik Krallık'tan yapılan çalışmaya 70 acil servis ünitesi dahil olmuş
- ✓ Prospektif ve retrospektif gözlemsel kohort çalışması
- ✓ 26 Mart-28 Mayıs 2020, n=22445
- ✓ 30 günlük mortaliteyi tahmin etmek için geliştirilmiş (PRIEST) skora sistemi
- ✓ AUC 0,8

# Pandemic Respiratory Infection Emergency System Triage (PRIEST)

2009 yılında H1N1 influenza pandemisinde geliştirilen PAINTED skoru Ocak 2020'de COVID-19 pnömonisi de dahil olmak üzere herhangi pandemik solunum yolu infeksiyonu için geliştirilmiş

Variable	Range	Score
Respiratory rate (per minute)	12-20	0
	9-11	1
	21-24	2
	<9 or >24	3
Oxygen saturation (%)	>95	0
	94-95	1
	92-93	2
	<92	3
Heart rate (per minute)	51-90	0
	41-50 or 91-110	1
	111-130	2
	<41 or >130	3
Systolic BP (mmHg)	111-219	0
	101-110	1
	91-100	2
	<91 or >219	3
Temperature (°C)	36.1-38.0	0
	35.1-36.0 or 38.1-39.0	1
	>39.0	2
	<35.1	3
Alertness	Alert	0
	Confused or not alert	3
Inspired oxygen	Air	0
	Supplemental oxygen	2
Sex	Female	0
	Male	1
Age (years)	16-49	0
	50-65	2
	66-80	3
	>80	4
Performance status	Unrestricted normal activity	0
	Limited strenuous activity, can do light activity	1
	Limited activity, can self-care	2
	Limited self-care	3
	Bed/chair bound, no self-care	4

# RAS (Respiratory Assessment Scoring)

## Ağırlık derecesi

Sınıf A(düşük risk): 3-6 puan  
<%15 klinik kötüleşme

Sınıf B(orta risk): 6-8 puan  
%15-50 klinik kötüleşme

Sınıf C(yüksek risk): 9-10  
puan >%70 klinik kötüleşme

# RAS

## RAS calculator.

RAS, respiratory assessment scoring; b/m, breaths/minute; A-a Gradient, alveolar-arterial oxygen gradient.

	Points
<b>Respiratory rate (b/m)</b>	
≤20	1
21-25	2
26-30	3
>30	4
<b>Resting oxygen saturation (%)</b>	
≥95	1
90-94	2
<90	3
<b>A-a Gradient</b>	
Normal	1
Elevated	3

## A-a O<sub>2</sub> Gradient ☆

Assesses for degree of shunting and V/Q mismatch.

	When to Use ▾	Why Use ▾
Atmospheric pressure Use 760 mm Hg (101.33 kPa) at sea level	760	mm Hg ⇄
PaO <sub>2</sub>	Norm: 10 - 13,3	kPa ⇄
FiO <sub>2</sub> Use 21% for room air	21	%
PaCO <sub>2</sub>	Norm: 5,054 - 5,586	kPa ⇄
Age (for expected A-a gradient)	Norm: 0 - 0	years

## CALL Score and RAS Score as Predictive Models for Coronavirus Disease 2019

Sultan M. Kamran <sup>1</sup>, Zill-e-Humayun Mirza <sup>1</sup>, Hussain Abdul Moeed <sup>2</sup>, Arshad Naseem <sup>3</sup>, Maryam Hussain <sup>1</sup>, Imran Fazal Sr. <sup>4</sup>, Farrukh Saeed <sup>5</sup>, Wasim Alamgir <sup>6</sup>, Salman Saleem <sup>7</sup>, Sidra Riaz <sup>4</sup>

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Corresponding author: Sultan M. Kamran, sultanmajoka79@hotmail.com

Klinik kötüleşme PPD %76 (68-83)  
NPD %80 (73-87)

Mortalite PPD %55 (43-67)  
NPD %95 (91-98)

- ✓ Pakistan'da 1 Nisan-31 Ağustos 2020 tarihleri arasında, n=252
- Tüm olgular SARS-CoV-2 PCR + ve komorbiditesi var
- ❖ Asemptomatik ve hafif kliniğe sahip olgular dışlanmış

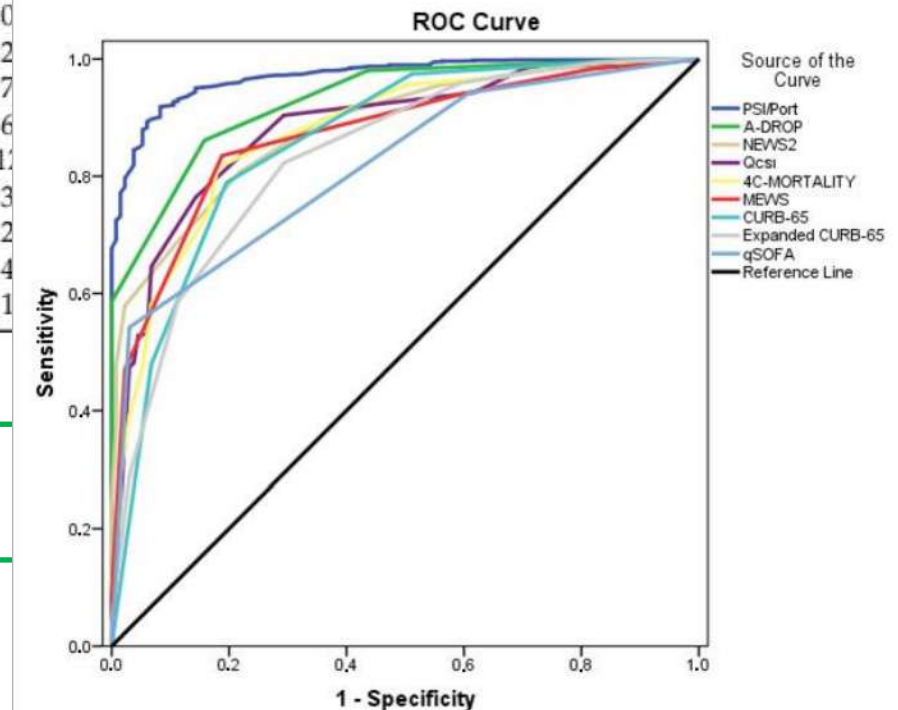


Article

# Comparison of Pneumonia Severity Indices, qCSI, 4C-Mortality Score and qSOFA in Predicting Mortality in Hospitalized Patients with COVID-19 Pneumonia

Isil Kibar Akilli <sup>1,\*</sup>, Muge Bilge <sup>2</sup>, Arife Uslu Guz <sup>3</sup>, Ramazan Korkusuz <sup>4</sup>, Esra Canbolat Unlu <sup>4</sup> and Kadriye Kart Yasar <sup>4</sup>

Scores	AUROC (95% CI)	Std. Error	Cutoff	Se (%)	Sp (%)	PPV	NPV	<i>p</i>
<b>PSI/PORT</b>	<b>0.971</b> (0.961–0.981)	0.005	≥10					
<b>A-DROP</b>	<b>0.929</b> (0.911–0.948)	0.009	≥2					
NEWS2	0.885 (0.860–0.909)	0.012	≥7					
qCSI	0.882 (0.853–0.911)	0.015	≥6					
4C-MORTALITY	0.875 (0.845–0.906)	0.016	≥1					
MEWS	0.870 (0.842–0.898)	0.014	≥3					
CURB-65	0.859 (0.823–0.896)	0.019	≥2					
EXPANDED CURB-65	0.836 (0.800–0.873)	0.018	≥4					
qSOFA	0.818 (0.786–0.850)	0.016	≥1					








- Retrospektif ve gözlemsel bir çalışma
- n=1511, yaşlarının ortalaması 60,1 ±14,7



Research Article

J Exp Clin Med  
2021; 38(4): 434-439  
doi: 10.52142/omujecm.38.4.6

## Comparison of the efficacy of PSI, CURB-65, CALL and BCRSS in predicting prognosis and mortality in COVID-19 patients

Hatice Şeyma AKÇA<sup>1,\*</sup> , Abdullah ALGIN<sup>1</sup> , Serdar ÖZDEMİR<sup>1</sup> , Habib SEVİMLİ<sup>1</sup> , Kamil KOKULU<sup>1</sup> ,  
Serkan Emre EROĞLU<sup>1</sup> 

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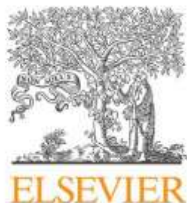
Received: 16.02.2021

Accepted/Published Online: 27.02.2021

Final Version: 30.08.2021

### Abstract

This study aimed to determine whether the PSI, CURB-65, CALL and BCRSS had any superiority over each other as a prognostic determinant in patients with COVID-19. This prospective cohort study included patients over 18 years of age that presented to the emergency department between May 12 and August 12, 2020 and had a positive COVID-19 polymerase chain reaction (PCR) test. The PSI, CURB-65, CALL and BCRS scores were calculated. SPSS version 22 was used for all statistical analyses. A total of 213 patients with a positive COVID-19 PCR result were included in the study. The total 30-day mortality rate was determined as 14.08%. PSI, CURB-65, CALL and BCRSS had a statistically significant relationship with mortality (p<0.001). The best parameter in predicting mortality was determined as PSI (area under the curve: 0.900; 95% CI: 0.972-0.828). A positive correlation was found between each scoring system, both with the length of hospital stay (PSI, CURB-65, CALL and BCRSS: r=0.696, p=0; r=0.621, p=0; r=0.75, p=0; and r=0.666, p=0, respectively). Scoring systems, which include comorbidity, vital signs as well as laboratory, imaging findings, will be more effective than other scoring systems in determining the mortality in patients with covid-19.



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Original article

## Pneumonia severity indices predict prognosis in coronavirus disease-2019



E.S. Ucan<sup>a</sup>, A. Ozgen Alpaydin<sup>a,\*</sup>, S.S. Ozuygur<sup>a</sup>, S. Ercan<sup>a</sup>, B. Unal<sup>b</sup>, A.A. Sayiner<sup>c</sup>,  
 B. Ergan<sup>a</sup>, N. Gokmen<sup>d</sup>, Y. Savran<sup>e</sup>, O. Kilinc<sup>a</sup>, V. Avkan Oguz<sup>f</sup>, DEU COVID Study Group<sup>1</sup>

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- ✓ Retrospektif kohort çalışması, 18 Mart-20 Mayıs 2020
- ✓ N=298 (n=192 PCR + ve/veya serolojik tanısı var) 61,85±20
- ✓ CURB-65, A-DROP, PSI, CALL, COVID-GRAM

Prediction of overall mortality ( $n = 40/240$ ) and progression to severe COVID-19 ( $n = 23/230$ ) risk of the study population according to CAP pneumonia severity and specific COVID-19 indices.

Severity indices	Overall mortality		Progression to severe COVID-19	
	AUC	95% CI	AUC	95% CI
PSI <sup>a</sup>	0.873	0.820–0.925	0.697	0.602–0.793
CURB-65 <sup>b</sup>	0.859	0.804–0.914	<b>0.739</b>	0.639–0.839
A-DROP <sup>c</sup>	<b>0.875</b>	0.822–0.937	0.660	0.554–0.767
CALL score <sup>d</sup>	0.828	0.773–0.882	0.711	0.616–0.806
COVID-GRAM score <sup>e</sup>	0.855	0.801–0.909	0.673	0.572–0.774



# New Scoring System for Predicting Mortality in Patients with COVID-19

Sohyun Bae, Yoonjung Kim, Soyoon Hwang, Ki Tae Kwon, Hyun-Ha Chang, and Shin-W

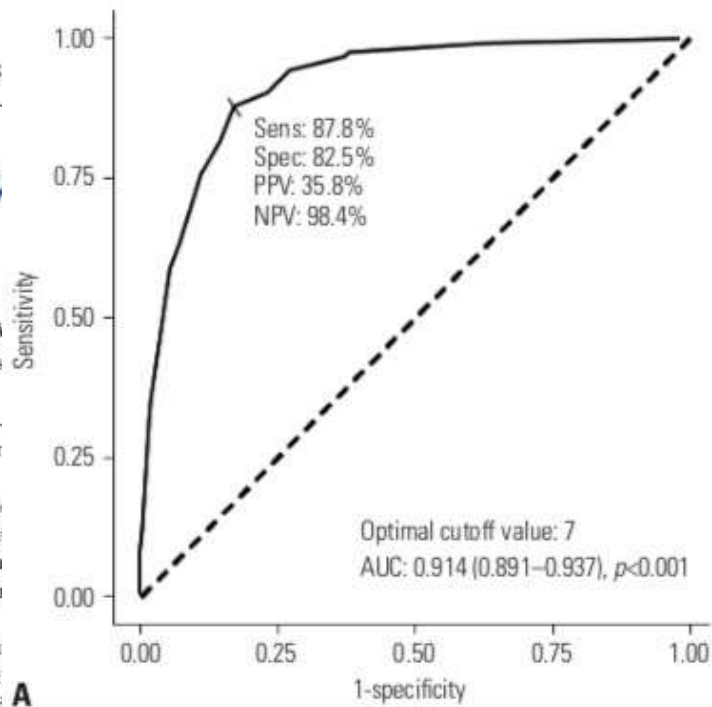
Division of Infectious Diseases, Department of Internal Medicine, School of Medicine, Kyungpook National Univer

**Purpose:** We aimed to develop a novel mortality scoring system for inpatients with COVID-19 based on clinical factors and laboratory findings.

**Materials and Methods:** We reviewed and analyzed data from patients who were admitted and diagnosed with COVID-19 in hospitals in Daegu, South Korea, between January and July 2020. We randomized and assigned patients into development and validation groups at a 70% to 30% ratio. Each point scored for selected risk factors helped build a new mortality scoring system using Cox regression analysis. We evaluated the accuracy of the new scoring system in the development and validation groups by calculating the area under the curve.

**Results:** The development group included 1232 patients, whereas the validation group included 528 patients. Predictors for the new scoring system as selected by Cox proportional hazards model were age  $\geq 70$  years, kidney disease, dementia, C-reactive protein levels  $>4$  mg/dL, infiltration on chest X-rays at the initial chest X-ray, and need for oxygen support on admission. The areas under the curve for the development and validation groups were 0.914 [95% confidence interval (CI) 0.891–0.937] and 0.898 (95% CI 0.854–0.941), respectively. According to our scoring system, COVID-19 mortality was 0.4% for the low-risk group (score 0–3) and 53.7% for the very high-risk group (score  $\geq 11$ ).

**Conclusion:** We developed a new scoring system for quickly and easily predicting COVID-19 mortality using simple predictors. This scoring system can help physicians provide the proper therapy and strategy for each patient.




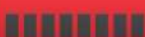


A

Variable	Development group		Validation group		Mortality score
	OR (95% CI)	p value	HR (95% CI)	p value	
Sex, Female	2.299 (1.604–3.295)	<0.001	1.331 (0.092–1.963)	0.149	
Age $\geq 70$ yr	7.779 (5.041–12.002)	<0.001	2.490 (1.546–4.007)	<0.001	2
Need for oxygen supply on admission	8.610 (5.911–12.543)	<0.001	2.538 (1.661–3.878)	<0.001	3
Diabetes	3.577 (2.506–5.106)	<0.001	2.116 (1.462–3.065)	<0.001	2
Heart failure	4.345 (2.274–8.304)	<0.001	1.814 (0.938–3.508)	0.077	
Chronic kidney disease	5.029 (2.705–9.350)	<0.001	2.348 (1.245–4.426)	0.008	2
Malignancy	2.373 (1.269–4.440)	0.068	1.653 (0.870–3.143)	0.125	
Dementia	4.718 (3.243–6.864)	<0.001	3.060 (2.024–4.627)	<0.001	3
C-reactive protein $>4$ mg/dL	10.982 (7.160–16.844)	<0.001	3.893 (2.407–6.296)	<0.001	4
Infiltration on initial chest X-ray	2.875 (1.921–4.302)	<0.001	1.561 (1.023–2.381)	0.039	2

# COVID-19 Severity Index (CSI)

NEWS-2 skorundan modifiye edilmiştir

PARAMETERS	SCORE	CLINICAL RISK	ALERT LEVEL	NURSING SURVEILLANCE	RESPONSE	SOLUTION
Age (years)	0-2	Low 	Green	Every 12 hours	Standard nursing surveillance	General ward
Male gender						
Heart failure						
COPD						
Diabetes with end - organ damage	3-5	Moderate 	Yellow	Every 6 hours	Frequent nursing surveillance	General ward
Chest X - Ray*						
Respiratory rate (breaths per minute)						
SpO <sub>2</sub> (%)						
SpO <sub>2</sub> (%) in COPD	6-7	High 	Orange	Every 2 to 3 hours	Intensive nursing surveillance and physician notification	Evaluate intensive care admission
Supplemental O <sub>2</sub>						
Systolic BP (mmHg)						
Pulse (Beats per minute)						
Temperature (°C)	8 or more	Critical 	Red	Continuous monitoring	Immediate physician notification	Intensive care unit
Dyspnoea						
D-Dimer** (ng/ml)						
Lymphocytes* (per mm <sup>3</sup> )						
Platelets* (per mm <sup>3</sup> )						

# Quick COVID-19 Severity Index (qCSI)

Respiratory rate, breaths/min

≤22 0

23-28 +1

>28 +2

Pulse oximetry

Lowest value recorded during the first four hours of the patient encounter

>92% 0

89-92% +2

≤88% +5

O<sub>2</sub> flow rate, L/min

≤2 0

3-4 +4

5-6 +5

qCSI Score	Risk level	Risk of critical illness* at 24 hrs
≤3	Low	4%
4-6	Low-intermediate	30%
7-9	High-intermediate	44%
10-12	High	57%

[Ann Emerg Med.](#) 2020 Oct; 76(4): 442–453.

PMCID: PMC7373004

Published online 2020 Jul 21. doi: [10.1016/j.annemergmed.2020.07.022](https://doi.org/10.1016/j.annemergmed.2020.07.022)

PMID: [33012378](https://pubmed.ncbi.nlm.nih.gov/33012378/)

## Development and Validation of the Quick COVID-19 Severity Index: A Prognostic Tool for Early Clinical Decompensation

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[Francis P. Wilson](#), MD, MSCE,<sup>c,d</sup> [David van Dijk](#), PhD,<sup>b,g</sup> [Wade L. Schulz](#), MD, PhD,<sup>e,f,h</sup> and [R. Andrew Taylor](#), MD,  
MHS<sup>a,e,\*</sup>

Model	AU-ROC	Accuracy	Sensitivity	Specificity	AU-PRC	Brier score	F1	Average Precision
CURB-65	0.66 (0.58,0.78)	0.79 (0.56,0.94)	0.67 (0.29,1.00)	0.62 (0.27,0.93)	0.26 (0.09,0.44)	0.10 (0.06,0.15)	0.20 (0.00,0.36)	0.20 (0.10,0.33)
qSOFA	0.76 (0.69,0.86)	<b>0.88 (0.82,0.95)</b>	0.79 (0.62,1.00)	0.70 (0.60,0.80)	0.35 (0.09,0.62)	0.09 (0.05,0.14)	0.21 (0.00,0.46)	0.26 (0.13,0.42)
Elixhauser	0.70 (0.62,0.80)	0.71 (0.40,0.86)	0.73 (0.47,1.00)	0.67 (0.33, 0.88)	0.20 (0.09, 0.36)	0.10 (0.06, 0.15)	0.30 (0.15,0.43)	0.22 (0.11, 0.36)
qCSI	0.90 (0.85,0.96)	0.84 (0.72,0.94)	0.90 (0.70,1.00)	0.79 (0.59,0.94)	0.54 (0.27,0.76)	<b>0.07 (0.04,0.11)</b>	0.49 (0.30,0.67)	0.52 (0.30,0.72)
CSI	<b>0.91 (0.86,0.97)</b>	0.83 (0.70,0.94)	<b>0.94 (0.77,1.00)</b>	<b>0.82 (0.67,0.95)</b>	<b>0.56 (0.25,0.80)</b>	0.25 (0.25,0.28)	<b>0.51 (0.29,0.70)</b>	<b>0.58 (0.31,0.81)</b>

# Risk stratification of patients admitted to hospital with covid-19 using the ISARIC WHO Clinical Characterisation Protocol: development and validation of the 4C Mortality Score

Stephen R Knight<sup>1</sup>, Antonia Ho<sup>2 3</sup>, Riinu Pius<sup>1</sup>, Iain Buchan<sup>4</sup>, Gail Carson<sup>5</sup>, Thomas M Drake<sup>1</sup>, Jake Dunning<sup>6 7</sup>, Cameron J Fairfield<sup>1</sup>, Carrol Gamble<sup>8</sup>, Christopher A Green<sup>9</sup>, Rishi Gupta<sup>10</sup>, Sophie Halpin<sup>8</sup>, Hayley E Hardwick<sup>11</sup>, Karl A Holden<sup>11</sup>, Peter W Horby<sup>5</sup>, Clare Jackson<sup>8</sup>, Kenneth A Mclean<sup>1</sup>, Laura Merson<sup>5</sup>, Jonathan S Nguyen-Van-Tam<sup>12</sup>, Lisa Norman<sup>1</sup>, Mahdad Noursadeghi<sup>13</sup>, Piero L Olliaro<sup>14</sup>, Mark G Pritchard<sup>14</sup>, Clark D Russell<sup>15</sup>, Catherine A Shaw<sup>1</sup>, Aziz Sheikh<sup>1</sup>, Tom Solomon<sup>11 16</sup>, Cathie Sudlow<sup>17</sup>, Olivia V Swann<sup>18</sup>, Lance Cw Turtle<sup>11 19</sup>, Peter Jm Openshaw<sup>7</sup>, J Kenneth Baillie<sup>20 21</sup>, Malcolm G Semple<sup>22 23</sup>, Annemarie B Docherty<sup>1 21</sup>, Ewen M Harrison<sup>1 24</sup>; ISARIC4C investigators

- İngiltere, Galler ve İskoçya'dan 260 hastane dahil edilmiş
- 35463 derivasyon kohortu (6 Şubat-20 Mayıs 2020)
- 22361 validasyonkohortu (21 Mayıs-29 Haziran 2020)
- 8 parametre elde edilmiş (0-21 puan)
- AUC % 0,786
- Mortalite oranı %1 → düşük risk-ayaktan tedavi
- Mortalite oranı %10-22 → orta risk-serviste yatarak takip-tedavi
- Mortalite oranı ~%40 → yüksek risk- steroid başlanması ve kritik bakım açısından değerlendirilmeli



# The International Severe Acute Respiratory and emerging Infections Consortium (ISARIC)-4C

## Input

Age

Sex  Female (0)

Male (1)

Comorbidities

Respiratory Rate

O<sub>2</sub>Sat

Glasgow Coma Scale

Urea

CRP

<b>0 to 3 points:</b> Low risk (1.2 to 1.7% mortality)
<b>4 to 8 points:</b> Intermediate risk (9.1 to 9.9% mortality)
<b>9 to 14 points:</b> High risk (31.4 to 34.9% mortality)
<b>15 to 21 points:</b> Very High risk (61.5 to 66.2% mortality)

## Result

C4 Score

# Machine-Learning Model for Mortality Prediction in Patients With Community-Acquired Pneumonia Development and Validation Study



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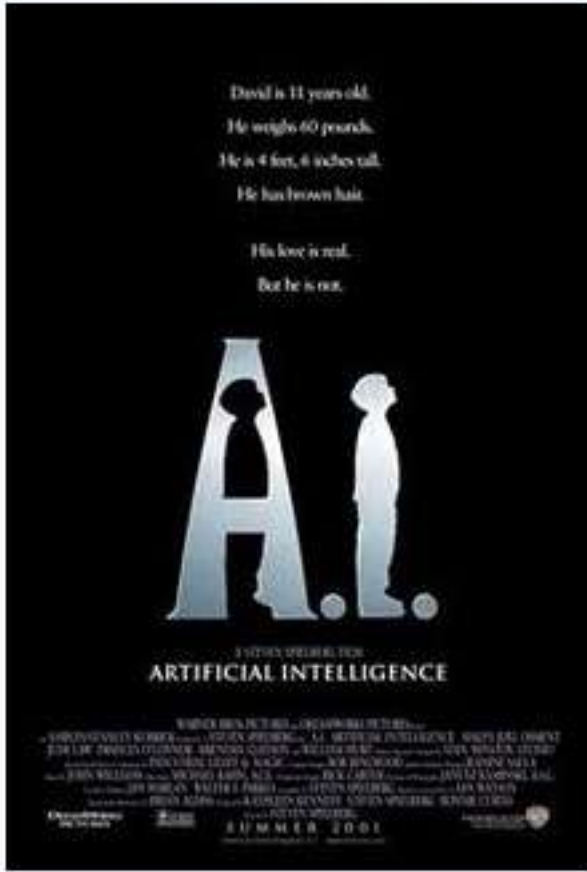
**BACKGROUND:** Artificial intelligence tools and techniques such as machine learning (ML) are increasingly seen as a suitable manner in which to increase the prediction capacity of currently available clinical tools, including prognostic scores. However, studies evaluating the efficacy of ML methods in enhancing the predictive capacity of existing scores for community-acquired pneumonia (CAP) are limited. We aimed to apply and validate a causal probabilistic network (CPN) model to predict mortality in patients with CAP.

- İspanya'dan 2 merkez katılmış
- TKP olan hastalarda mortaliteyi tahmin etmek için bir nedensel olasılık ağı modeli uygulanmış
- Mevcut klinik skorlama testlerinin toplum kökenli pnömoniye öngörme kapasitesi yapay zeka kullanılarak makine öğrenimi ile geliştirilmesi amaçlanmıştır
- Ward ve ark. İsrail'de uyguladıkları "SepsisFinder (SeF)" nedensel olasılık ağı toplum kökenli pnömoni için uyarlanmış olan SeF-ML test edilmiştir

Model/Score	Availability (%)	AUC (95% CI)	P Value (vs SeF-ML)
SeF-ML	100	0.826 (0.753-0.899)	...
PSI (raw score)	100	0.830 (0.753-0.90)	.92
CURB-65	100	0.764 (0.694-0.834)	.03
SOFA	23.1	0.728 (0.588-0.869)	.85 <sup>a</sup>
SOFA-imputed <sup>b</sup>	100	0.771 (0.706-0.836)	.14
qSOFA	98.3	0.729 (0.653-0.804)	.005 <sup>a</sup>

Çalışma sonucunda SeF-ML 30 günlük mortaliteyi CURB-65 ve qSOFA dan anlamlı olarak yüksek tahmin gücüne sahipken PSI ve SOFA AUC değerleri yüksek olmakla birlikte anlamlı değildi

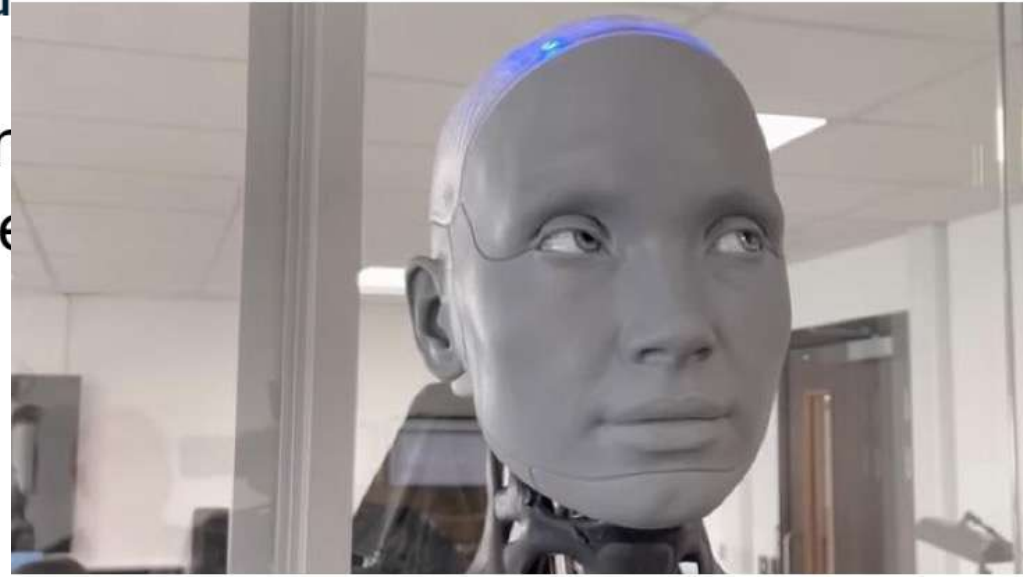
## A.I. Artificial Intelligence



## atGPT görev

üruma Birleşik Krallık merkezli İng  
urur, C zeka dil modeli GPT-3 ve GP  
uyurdu dilde iyi performans sergiledi

iş in  
birle



Sonuç olarak;

- PSI-PORT skorelama sisteminin COVID-19 döneminde de tahmin gücü yüksekti fakat....
- A-DROP skorelama sistemi ???
- Tahmin gücü yüksek ve yoğun hasta kabulünün yapıldığı merkezlerde uygulanabilir skorelama sistemlerine ihtiyaç var

