Development and validation of a prediction model for early prediction of ICU admission in COVID-19 patients
Abstract: In this study, we established a simple and practical tool for early identification of potentially high-risk individuals among elderly COVID-19 patients. Included were 2,106 laboratory-confirmed COVID-19 patients aged 60 years and above in 30 provinces of mainland China. Using discrimination (the area under the receiver-operator characteristic curve [AUC]) and calibration (Hosmer-Lemeshow goodness-of-fit test and calibration plots), a nomogram for predicting...
Author: Jue Liu, Liysuan Tao, Zhancheng Gao, ... Publish Year: 2020

Exploiting an early warning Nomogram for predicting the ...
Decision curve analysis revealed that the prediction nomogram was clinically useful. Conclusion: We established an early prediction model incorporating clinical characteristics that could be quickly obtained on hospital admission, even in community health centers. This model can be conveniently used to predict the individual risk for ICU admission of patients with COVID-19 and optimize the use of...
Cited by: 2 Author: Yiu Zhou, Yanqi Hu, Huan Yang, Ha Yu, ... Publish Year: 2020

New prognostic tool predicts the need for ICU among COVID ...
https://www.news-medical.net/news/20201217/New...
Dec 17, 2020 Researchers in the UK have developed a prognostic tool that accurately predicts whether patients with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) – the agent causes coronavirus...

Early prediction of level-of-care requirements in patients ...
Being able to predict which patients with COVID-19 will become severely ill could help hospitals around the world manage the huge influx of patients caused by the pandemic and save lives. Now, Hao, Sotudian, Wang, Xu et al. show that computer models using artificial intelligence technology can help predict which COVID-19 patients will be hospitalized, admitted to the ICU, or need mechanical...
Cited by: 4 Author: Boran Hao, Shahabeddin Sotudian, Taya...
Publish Year: 2020

Development and external validation of a prognostic tool ...
Development and validation of a prediction model for early ...  
This six-variable-based nomogram could potentially serve as a practical and reliable tool for early identification of elderly COVID-19 patients at high risk of becoming critically ill. Keywords: COVID-19; coronavirus disease; critically ill; elderly patients; prediction model.  
Author: Jun Liu, Liyuan Tao, Zhaoneng Gao, Ro...  
Publish Year: 2020

National early warning score to predict intensive care ...  
Jun 21, 2021 · Background: No risk stratification tool has been validated in hospitalised patients with coronavirus disease 2019 (COVID-19), despite a high rate of intensive care requirement and in-hospital mortality. We aimed to determine whether the National Early Warning Score (NEWS) at admission can accurately predict in-hospital mortality and ICU transfer.

CANPT Score: A Tool to Predict Severe COVID-19 on Admission  
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7930838  
Feb 18, 2021 · Liang et al. established a model based on 1,590 COVID-19 patients from 31 provinces in China and validated this model in another 710 patients with COVID-19; the model is available on a web page (http://118.726.104.170). The model showed good predictive ability for a poor prognosis of COVID-19 in both the development cohort and the external validation cohort (AUROC = 0.889).  
Author: Yuanyan Chen, Xiaolin Zhou, Huadong...  
Publish Year: 2021

Exploiting an early warning Nomogram for predicting the ...  
Decision curve analysis revealed that the prediction nomogram was clinically useful. Conclusion: We established an early prediction model incorporating clinical characteristics that could be quickly obtained on hospital admission, even in community health centers. This model can be conveniently used to predict the individual risk for ICU admission of patients with COVID-19 and optimize the use of limited resources.  
Cited by: 9  
Author: Yinxu Zhou, Yang He, Huaim Yang, He Yu, Ti...  
Publish Year: 2020

Early prediction of level-of-care requirements in patients
Observational Study

A validated tool for early prediction of ICU admission in covid-19 patients

Haochan Huang, Yong Liu, Jin-Xiu Li, Hui Deng, Shan Gao, ZhengYang Huang, ShouZhi Fu, Luyu Yang, Elzabeth Lo, Lianyou Xia, Song Cao, Yi Gao, XiaMia Yu

Haochan Huang, Shan Gao, ZhengYang Huang, Yi Gao, XiaXia Yu. School of Biomedical Engineering, Health Science Center, Shenzhen University, Shenzhen 51806,
Validated tool for early prediction of intensive care unit admission

**National early warning score to predict intensive care**
Jun 21, 2021 - Background: No risk stratification tool has been validated in hospitalised patients with coronavirus disease 2019 (COVID-19), despite a high rate of intensive care requirement and in-hospital mortality. We aimed to determine whether the National Early Warning Score (NEWS) at admission can accurately predict in-hospital mortality and ICU transfer.
Cited by: 1  Author: Mohammad Ryadh Pokherbo, Cécile M ...
Publish Year: 2021

**Predictors of Intensive Care Unit admission in patients**
Italy is currently experiencing an epidemic of coronavirus disease 2019 (Covid-19). Aim of our study is to identify the best predictors of Intensive Care Unit (ICU) admission in patients with Covid-19. We examined 28 patients admitted to the Emergency Department (ED) and subsequently confirmed as cases of Covid-19.
Cited by: 5  Author: Maria Viviana Carlino, Natja Valentini, Flav ...
Publish Year: 2020

**Predicting the Need for ICU Admission in COVID-19 Patients**
https://www.researchgate.net/publication/353830169 ...
Background: Over 5,488,000 cases of coronavirus disease-19 (COVID-19) have been reported since December 2019. We aim to explore risk factors associated with mortality in COVID-19 patients and ...

**Prediction model and risk scores of ICU admission and**
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0236618 ...
Jul 30, 2020 - Here we report a predictive model and a risk score system to predict intensive care unit (ICU) admission and in-hospital mortality in laboratory-confirmed COVID-19 patients. This model was developed and internally validated using data from the COVID-19 persons under investigation (PUI) registry of 4,997 patients from a major academic hospital in New York.
Cited by: 67  Author: Zirun Zhao, Anne Chen, Wei Hou, James ...
Publish Year: 2020  Estimated Reading Time: 10 mins