



بسم الله الرحمن الرحيم

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# **Validity of Initial Chest CT Scan in Novel Coronavirus Disease-19 (COVID-19) Patients as a Diagnostic Indicator**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لسبحانك لا علم لنا  
إلا ما علمتنا إنك أنت  
العليم العظيم

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# List of Abbreviations

<b>Abb.</b>	<b>Full term</b>
ACE2 .....	Angiotensin-converting enzyme-2
CBC .....	Complete blood count
CDC .....	Centers for Disease Control and Prevention
COVID-19.....	Coronavirus disease 2019
CRP .....	C-reactive protein
CT .....	Computed Tomography
DAD .....	Diffuse alveolar damage
DR .....	Digital Radiography
FiO2.....	Fraction of inspired oxygen
GGO .....	Ground glass opacity
HA .....	Haemagglutinin
hMPV .....	Human metapneumovirus
HRCT .....	High-resolution CT
IQR .....	Interquartile range
IVC .....	Inferior vena cava
JAMA .....	Journal of the American Medical Association
LC .....	Leukocytic count
LLL .....	Left lower lobe
LUL .....	Left upper lobe
MERS-CoV .....	Middle East respiratory syndrome coronavirus
MOD .....	Multiple organ dysfunction
MODS .....	Multiple organ dysfunction syndromes
MOF .....	Multiple organ failure

# List of Abbreviations cont...

Abb.	Full term
MPR .....	Multipanar Images Reconstruction
NA .....	Neuraminidase
NCIP .....	Novel coronavirus-infected pneumonia
NEJM .....	New England Journal of Medicine
RLL .....	Right lower lobe
RML .....	Right middle lobe
RSNA .....	Radiological Society of North America
RUL .....	Right upper lobe
SARS CoV2 .....	Severe acute respiratory syndrome coronavirus-2
SD .....	Standard deviation
SpO2 .....	Blood oxygen saturation
SPSS .....	Statistical Package for Social Sciences
WHO .....	World Health Organization

## INTRODUCTION

Since December 2019, multiple cases of pneumonia of unknown cause have appeared in Wuhan, China. The disease caused by this virus was named coronavirus disease 2019 (COVID-19) by the World Health Organization.

On January, 2020, the WHO declared a global public health emergency against the outbreak of COVID-19. On February, 2020, several cases of COVID-19 had been confirmed in 24 other countries. Because of the strong infectivity of COVID-19, rapid and accurate diagnostic methods are urgently required to identify, isolate and treat the patients as soon as possible, which could reduce mortality rates and the risk of public contamination (*Huang et al., 2020*).

A novel coronavirus was isolated from human airway epithelial cells and termed severe acute respiratory syndrome coronavirus-2 (SARS CoV2), responsible for Coronavirus Disease (COVID)-19. COVID-19 is the 7th member of the coronavirus family which infects humans and can be spread through human-to-human contact (*Zhu et al., 2020*).

Researchers have been working hardly to develop therapeutic drugs or vaccines for the treatment and prevention of COVID-19. However, there is still a long way for any effective medicine (*Rothe et al., 2020*).