

International Journal of *Nanotechnology and Allied Sciences* 

# Mini-Review

### G Open Access Article Information

Received: February 20, 2021

Accepted: March 29, 2021

Published: May 31, 2021

#### Keywords

Coronavirus, COVID-19, MicroRNAs, Biomarkers, Therapeutic option.

#### Authors' Contribution

MNI and MIS designed the study. MNI and AA wrote and revised the paper.

#### How to cite

lqbal, M.N., Ashraf, A., Shahzad, M.I., 2021. The Diagnostic and Therapeutic role of microRNAs in COVID-19 Disease. Int. J. Nanotechnol. Allied Sci., 5(1): 1-6.

#### \*Correspondence

Muhammad Naeem Iqbal, PSM Editorial Office, Pakistan Science Mission (PSM), Narowal (Noor Kot 51770), Pakistan.

#### Email:

driqbalnaeem@hotmail.com

## Possible submissions





Scan QR code to visit this journal on your mobile device.



2021 | Volume 5 | Issue 1 | 1-6

# The Diagnostic and Therapeutic role of microRNAs in COVID-19 Disease

# Muhammad Naeem lqbal<sup>1,2\*</sup>, Asfa Ashraf<sup>2,3</sup>, Mirza Imran Shahzad<sup>4</sup>

<sup>1</sup>The School of Life Sciences, Fujian Agriculture and Forestry University, Fuzhou 350002, China.

<sup>2</sup>Pakistan Science Mission (PSM), Narowal (Noor Kot 51770), Pakistan.

 <sup>3</sup>The School of Life Sciences, Fujian Normal University, Fuzhou 350117, China.
<sup>4</sup>University College of Veterinary and Animal Sciences, The Islamia University of Bahawalpur, Bahawalpur 63100, Pakistan; Pakistan Science Mission (PSM), Noor Kot 51770, Pakistan.

## Abstract:

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is responsible for the coronavirus disease 2019 (COVID-19), a pandemic associated with substantial morbidity and mortality. MicroRNAs (miRNAs) refer to a class of small endogenous non-coding RNAs that serve as powerful tools in the regulation of gene expression. They have important role in the regulation of several biological processes. miRNAs are powerful and stable non-invasive biomarkers for the diagnosis and prognosis of many diseases. miRNAs may be promising option against the novel coronavirus. In this article, we reviewed the literature on the potential role of cellular miRNAs in the diagnosis of SARS-CoV-2 and as a therapeutic option in COVID-19 patients.



©2021 PSM. This work at International Journal of Nanotechnology and Allied Sciences; ISSN (Online): 2523-9252, is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-Non-commercial 4.0 International (CC BY-NC 4.0) licence. To view a copy of this licence, visit <u>https://creativecommons.org/licenses/by-nc/4.0/</u>.

1