



Letter to the Editor

Possible treatment of “Omicron” in Western and Chinese medicines

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Dear Editor

Recently, there is a COVID-19 mutated variant, B.1.1.529 discovered in South Africa and called “Omicron” according to the World Health organization's suggestion [1]. This is not yet clear whether omicron is more transmissible from person to person. It causes the infection by the presence of spike protein which facilitates a virus' entry into the host cell [2]. Is vaccination suitable for this variant? Up to the present, we have received very little information about the omicron which mainly depends on previous experiences in other COVID-19 variants. Thus, some possible treatments of omicron have been proposed in Western and Chinese medicines.

In western medicine, COVID-19 antibody-drug such as “Sotrovimab” is still effective to fight against the omicron variant [3]. Sotrovimab is a SARS-CoV-2 neutralizing

antibody that targets the angiotensin-converting enzyme 2 (ACE2) binding domain (RBD) and locks the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) spike protein for mediating the spike-ACE2 interaction [4]. Anti-viral drugs such as “Remdesivir” are also thought to be effective for the omicron variant [3]. Remdesivir is an inhibitor of the RNA-dependent RNA polymerase which reduces and suppresses the virus replication [5].

Based on the traditional Chinese medicine principles derived from “*Huangdi Neijing*”, COVID-19 belongs to the epidemic, e.g., damp toxins. It consists of external and internal factors regarding the evil of human infectious diseases and lacks the human body's righteousness [6]. Wu et al. reported some Chinese herbal medicines such as “*Realgar*”, “*Cyrtomium Fortunei J. Sm*”, “*Astragali Radix*”, “*Glycyrrhizae Radix*” expel damp toxins and restore vital (internal) energy to enhance an immune system [7]. These Chinese herbal medicines' functions are to alleviate symptoms of COVID-19, reduce the inflammatory process, and prevent deterioration [8].

All of the preliminary information demonstrates that omicron might be treated either with Western or Chinese medicines. However, more works need to be done as well as a clinical trial from stage I to IV in the human body for further investigation.

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References

1-**World Health Organization.** Update on Omicron, 28 Nov 2021.

Available at:

<https://www.who.int/news/item/28-11-2021-update-on-omicron>. Accessed on 9 Dec 2021.

2-**New Delhi.** Omicron variant reportedly has over 30 mutations in spike protein, may bypass vaccines: AIIMS chief, 28 Nov 2021.

Available at:

<https://www.indiatoday.in/coronavirus-outbreak/story/omicron-variant-reportedly-has-30-mutations-in-spike-protein-may-bypass-vaccines-aiims-chief-randeep-guelria-1881833-2021-11-28>. Accessed Dec 9, 2021.

3-**Carolyn Crist.** COVID-19 Antibody Drug Likely Works Against Omicron, Companies Say, 2 Dec 2021.

Available at:

<https://www.webmd.com/lung/news/20211202/covid-antibody-drug-likely-works-against-omicron-companies>. Accessed Dec 9, 2021.

4-**Barnes CO, Jette CA, Abernathy ME, Dam KA, Esswein SR, Gristick HB, et al.** SARS-CoV-2 neutralizing antibody structures inform therapeutic strategies. *Nature* 2020;588(7839): 682-687.

5-**Beigel JH, Tomashek KM, Dodd LE, Mehta AK, Zingman BS, Kalil AC, et al.** Remdesivir for the Treatment of Covid-19 - Final Report. *N Engl J Med* 2020;383(19): 1813-1826.

6-**Nathan S, Loewe M, Huang Ti Nei Chin.** In: Loewe M. (ed.). *Early Chinese texts: a*

bibliographical guide. Berkeley and Los Angeles 1993:196-215.

7-**Wu XQ, Zhang WN, Hao MZ, Liu XP, Xiao J, Wang TF, et al.** How Chinese Herbal Medicine Prevents Epidemics: From Ancient Pestilences to COVID-19 Pandemic. *Am J Chin Med* 2021;49(5):1017-1044.

8-**An X, Zhang Y, Duan L, Jin D, Zhao S, Zhou R, et al.** The direct evidence and mechanism of traditional Chinese medicine treatment of COVID-19. *Biomed Pharmacother* 2021;137:111267.