



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

- 3 China National Health Commission. Notice on the issuance of diagnosis and treatment procedure for pneumonia patients infected with the 2019-nCoV (version 5). Feb 5, 2020. <http://www.nhc.gov.cn/yzygj/s7653p/202002/3b09b894ac9b4204a79db5b8912d4440.shtml> (accessed Feb 7, 2020).
- 4 US National Library of Medicine-ClinicalTrials.gov. Mild/Moderate 2019-nCoV Remdesivir RCT. Feb 5, 2020. <https://clinicaltrials.gov/ct2/show/NCT04252664?term=bin+cao&draw=2&rank=10> (accessed Feb 7, 2020).
- 5 US National Library of Medicine-ClinicalTrials.gov. Severe 2019-nCoV Remdesivir RCT. Feb 6, 2020. <https://clinicaltrials.gov/ct2/show/NCT04257656?term=bin+cao&draw=2&rank=4> (accessed Feb 7, 2020).

A distinct name is needed for the new coronavirus

An outbreak of unusual respiratory disease, initially dominated by pneumonia, in Wuhan, China, is caused by infection by a novel coronavirus. The new virus was initially named 2019-nCoV by WHO.¹⁻³

On Feb 11, 2020, WHO renamed the disease as coronavirus disease 2019 (COVID-19).⁴ That same day, the Coronavirus Study Group (CSG) of the International Committee on Virus Taxonomy posted a manuscript on *bioRxiv* in which they suggested designating 2019-nCoV as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) on the basis of a phylogenetic analysis of related coronaviruses.⁵ The CSG claimed that they did not intend to make any reference to SARS when introducing yet another virus name derived from the term SARS; however, SARS is a disease name, and to name the new virus SARS-CoV-2 actually implies that it causes SARS or similar, especially to scientists without much knowledge of virology and to citizens in the public domain. The new name is also not consistent with the disease name COVID-19. SARS-CoV-2, as a naturally occurring virus, is different from all other SARS-like or SARS-related coronaviruses, which are characterised mainly by their genome sequence.

As of Feb 17, 2020, 2019-nCoV has caused 71331 human infections and 1775 deaths in China and 24 other countries, and it is distinct from SARS-CoV in biological, epidemiological, and clinical features. Naming 2019-nCoV as SARS-CoV-2 is therefore truly misleading. For such an epidemic virus with apparent international concern, it deserves its own unique name.

2019-nCoV is still evolving, and it is too early to predict the outcome of the current outbreak. Some experts predicted that 2019-nCoV could evolve to a low pathogenic but highly transmissible coronavirus, which might return every winter, like the virus that causes seasonal influenza.⁶ If this is the case, the name SARS-CoV-2 might have adverse effects on the social stability and economic development in countries where the virus is causing an epidemic, perhaps even around the world. People develop panic at the thought of a re-occurrence of SARS. Travellers and investors might not want to visit a country with an ongoing epidemic or even sporadic cases of SARS. People may also believe that, like SARS-CoV, 2019-nCoV will not re-emerge once the current outbreak ends; therefore, they might not be prepared to prevent 2019-nCoV infection in the near future and could lose a sense of alert.

On the basis of special clinical, virological, and epidemiological characteristics and the uncertainty of the novel coronavirus, to avoid the misleadingness and confusion, and to help scientists and the public with better communication, we, a group of virologists in China, suggest renaming SARS-CoV-2 as human coronavirus 2019 (HCoV-19). Such a name distinguishes the virus from SARS-CoV and keeps it consistent with the WHO name of the disease it causes, COVID-19.

We declare no competing interests.

Shibo Jiang, Zhengli Shi, Yuelong Shu, Jingdong Song, George F Gao, Wenjie Tan, *Deyin Guo
guodeyin@mail.sysu.edu.cn

School of Basic Medical Sciences, Fudan University, Shanghai, China (SJ); Wuhan Institute of Virology, Chinese Academy of Sciences, Wuhan, China (ZS); School of Public Health (Shenzhen), Sun Yat-sen University, Shenzhen, China (YS); China Center for Disease Control and Prevention, Beijing, China (JS, GFG, WT); and School of Medicine, Sun Yat-sen University, Guangzhou 510080, China (DG)

- 1 Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. *N Engl J Med* 2020; published online Jan 24. DOI:10.1056/NEJMoa2001017.
- 2 Zhou P, Yang XL, Wang XG, et al. A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature* 2020; published online Feb 3. DOI:10.1038/s41586-020-2012-7.
- 3 Wu F, Zhao S, Yu B, et al. A new coronavirus associated with human respiratory disease in China. *Nature* 2020; published online Feb 3. DOI:10.1038/s41586-020-2008-3.
- 4 WHO. Coronavirus disease 2019. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019> (accessed Feb 18, 2020).
- 5 Gorbalenya AE, Baker SC, Baric RS, et al. Severe acute respiratory syndrome-related coronavirus: the species and its viruses—a statement of the Coronavirus Study Group. *bioRxiv* 2020; published online Feb 11. DOI:2020.02.07.937862 (preprint).
- 6 Alltucker K, O'Donnell J. When will the threat of coronavirus end? It might return every winter. Feb 6, 2020. <https://www.usatoday.com/story/news/health/2020/02/06/coronavirus-wuhan-china-recurring-winter-illness-flu/4665482002/> (accessed Feb 18, 2020).

SARS-CoV-2 is an appropriate name for the new coronavirus

We have read with great interest the Correspondence by Shibo Jiang and colleagues,¹ in which they propose a name change for the newly emerged coronavirus,² which was recently designated severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the Coronavirus Study Group of the International Committee on Taxonomy of Viruses.³ The authors argued that the use of SARS in the virus name could confuse the public about the disease that it causes; in addition, they noted that the name SARS-CoV-2 is not consistent with the disease name chosen by WHO, coronavirus disease 2019. The authors also indicated that scientifically, SARS-CoV-2 is naturally occurring and different from other SARS-like or SARS-related coronaviruses that are

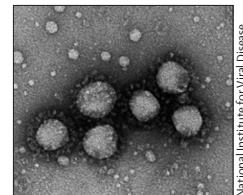


Image of 2019-nCoV by electron microscopy

Published Online
 February 18, 2020
[https://doi.org/10.1016/S0140-6736\(20\)30419-0](https://doi.org/10.1016/S0140-6736(20)30419-0)



Published Online
 March 5, 2020
[https://doi.org/10.1016/S0140-6736\(20\)30557-2](https://doi.org/10.1016/S0140-6736(20)30557-2)