which emerged in Wuhan, China. Their study will contribute to the diagnosis and treatment of 2019 novel coronavirus disease (COVID-19). Meanwhile, the conclusions have caused a certain degree of social panic.

Huang and colleagues[1] only included 59 suspected cases with fever and dry cough, and 41 patients were confirmed to be infected with SARS-CoV-2. They concluded that SARS-CoV-2 infection was associated with a high rate of admission to intensive care units (13 [32%] of 41 patients) and mortality (six [15%] of 41 patients); however, we believe these conclusions were inaccurate and misleading.

Case fatality rate should not be confused with mortality rate. Case fatality rate is defined as the proportion of people who die of a certain disease; however, mortality rate usually reflects the death rate in an entire population.[2] The case fatality rate is therefore approximately 15% in the study population,[1] but this estimate is also inaccurate since case detection is highly biased towards the more severe cases in the early stages.[3] In fact, a large number of mild and asymptomatic patients might not receive timely diagnosis or health care, which can conceal the real incidence and allow disease progression.

Patients with SARS-CoV-2 infection are presenting with a wide range of symptoms. Most patients seem to have mild disease, and about 20% appear to progress to severe disease, including pneumonia, respiratory failure, and, in some cases, even death.[4] As of Feb 12, 2020, WHO[4] reports that 45 171 people have been diagnosed with SARS-CoV-2 worldwide, and 44 730 of these cases are in China.[4] Of the confirmed cases in China, 8204 (18%) cases were recorded as severe infections, and 1114 (2%) patients died, which is a lower case fatality rate than previously reported.[4,5] The case fatality rate for COVID-19 reported by Huang and colleagues[1] could be misunderstood, and detection bias should not be neglected.

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Authors' reply

Zhou Xu and colleagues point out that mortality, which should be referred correctly and more clearly as case fatality ratio, among the first 41 cases with laboratory-confirmed 2019 novel coronavirus disease (COVID-19; previously known as 2019-nCoV) was misleading in our Article.[1]

We definitely agree that the case fatality ratio among the first 41 cases cannot represent the case fatality ratio of the full disease spectrum during the outbreak of COVID-19. From the perspective of case detection, the reasons for the inconsistency between the case fatality ratio reported in our Article[1] and data that have become available since publication of our Article[1] were clearly clarified in advance in the Comment by Chen Wang and colleagues.[2] Patients with the most severe symptoms were paid attention to during the early stages of the outbreak because of limited resources to detect severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. From the perspective of treatment, even the most up-to-date case fatality ratio is expected to decrease as diagnosis and treatment procedure for patients with pneumonia who are infected with SARS-CoV-2 is improving,[3] potential drugs to treat COVID-19 are being evaluated for efficacy and safety in ongoing clinical trials,[4,5] and management is becoming more intense, not only for patients with severe infection but also for those with moderate, mild, or even asymptomatic infection.

Without denying the limitations of our study[1] at the time of publication, we still hope our results provided a useful depiction of clinical features of SARS-CoV-2 infection at the very early stage of the outbreak and during progression of disease. Intense and continuous efforts are indeed needed for medical workers and researchers all over the world to get the full picture of the spectrum of disease severity of COVID-19 and to overcome the huge health challenge.

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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 71 331 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.

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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

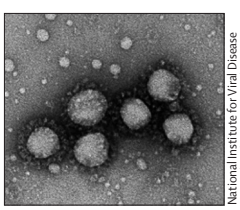
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Image of 2019-nCoV by electron microscopy

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