The coronavirus disease (COVID-19) is caused by a virus officially named SARS-CoV-2, short for severe acute respiratory syndrome coronavirus 2. Although related and somewhat similar to, SARS-Cov-2 is different from the 2003 SARS outbreak. For the general public, the term COVID-19 virus is often used for all-purpose communication. The incubation period ranges from 1-14 days, 5 days average.

The most common symptoms of COVID-19 are flu-like symptoms such as: feeling tired, fever, dry cough, rarely diarrhea. Some infected people are asymptomatic but contagious. Roughly, eighty percent (80%) of infected people recover from the disease without specialized interventions. According to the WHO (World Health Organization) about 1 out of 6 infected individuals becomes seriously ill and develops respiratory compromise. Those are generally older, have diabetes, hypertension, heart disease and other chronic medical illnesses. The epidemiologic profile in the US is shaping up and suggests a different picture for the young with nearly 53% becoming seriously ill and admitted to the ICU.

The disease is highly contagious. Based on current knowledge, it is spread through person-to-person contact via respiratory droplets, hard surfaces, and rarely through feco-oral route. It is important to practice social distancing and stay at least six (6) feet away from an individual and consistently practice good personal hygiene.

Although under development, there are no vaccines, antivirals to prevent or treat COVID-19; for those who necessitate interventions, supportive care is warranted. Antibiotics are for bacterial infections, therefore not recommended. A non-compromised immune system is critical to fight the infection.

According to the CDC (Center for Disease Control and Prevention), the case-fatality risk or mortality rate of COVID-19 is evolving and varies from country to country and special situations. For example, it is estimated to be 3.5 % in China excluding Hubei Province (0.8%); 82 countries, territories, and areas (4.2 %); and on a cruise ship (0.6%). The true rate may lie between 0.25-3.0 %.

Infection prevention and control considerations for the pregnant patient is the same for the non-pregnant patient. Specifically, for patient under investigation (UDI) and confirmed positive, the widely published guidelines by the public health authorities are to be adhered to. Obstetric healthcare settings including triage, labor and delivery, recovery and postpartum units should assess their configurations, staffing, readiness and needs.

As the pandemic unfolds and new evidence are being gathered and published, we will select relevant articles to be posted. Below are links to some of them:

<https://nccih.nih.gov/health/in-the-news-in-the-news-coronavirus-and-alternative-treatments>

<https://www.sciencedirect.com/science/article/pii/S0166354220301145?via%3Dihub>

Biosci Trends. 2020 Mar 16;14(1):72-73. doi: 10.5582/bst.2020.01047. Epub 2020 Feb 19.PMID: 32074550

|  |  |
| --- | --- |
| 1. | J Med Virol. 2020 Mar 21. doi: 10.1002/jmv.25783. [Epub ahead of print][**Clinical Features and Treatment of COVID-19 Patients in Northeast Chongqing.**](https://www.ncbi.nlm.nih.gov/pubmed/32198776)[Wan S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wan%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Xiang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xiang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1,2, [Fang W](https://www.ncbi.nlm.nih.gov/pubmed/?term=Fang%20W%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Zheng Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zheng%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)3, [Li B](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20B%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Hu Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hu%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Lang C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lang%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1,4, [Huang D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20D%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Sun Q](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sun%20Q%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Xiong Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xiong%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1,5, [Huang X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1,6, [Lv J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lv%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1,7, [Luo Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Luo%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)8, [Shen L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shen%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Yang H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yang%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Huang G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20G%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1, [Yang R](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yang%20R%5BAuthor%5D&cauthor=true&cauthor_uid=32198776)1.Author information: 1. Pharmaceutical Department of Chongqing Three Gorges Central Hospital, Chongqing University Three Gorges Hospital, Chongqing, 404100, China.2. Liver center, Yu An Branch of Chongqing Three Gorges Central Hospital.3. Pharmacy College, Chengdu University of Traditional Chinese Medicine, Key Laboratory of Standardization of Chinese Herbal Medicine, Ministry of Education, Key Laboratory of Systematic Research, Development and Utilization of Chinese Medicine Resources in Sichuan Province, Key Laboratory Breeding Base of Co-founded by Sichuan Province and Ministry of Science and Technology, Chengdu, 611137, China.4. Office of Research Affairs, Chongqing Three Gorges Central Hospital, Chongqing, 404100.5. Department of Chinese Internal Medicine, Chongqing Three Gorges Central Hospital, Chongqing, 404100.6. Critical Care Medicine, Chongqing Three Gorges Central Hospital, Chongqing, 404100.7. Department of Hematology, Chongqing Three Gorges Central Hospital, Chongqing, 404100, China.8. Department of Mathematics, College of Medical Information, Chongqing Medical University.**Abstract****BACKGROUND:**The outbreak of the novel coronavirus in China (SARS CoV-2) that began in December 2019 presents a significant and urgent threat to global health. This study was conducted to provide the international community with a deeper understanding of this new infectious disease.**METHODS:**Epidemiological, clinical features, laboratory findings, radiological characteristics, treatment, and clinical outcomes of 135 patients in northeast Chongqing were collected and analyzed in this study.**RESULTS:**A total of 135 hospitalized patients with COVID-19 were enrolled. The median age was 47 years (IQR 36-55), and there was no significant gender difference (53.3% men). The majority of patients had contact with people from the Wuhan area. Forty-three (31.9%) patients had underlying disease, primarily hypertension (13 [9.6%]), diabetes (12 [8.9%]), cardiovascular disease (7 [5.2%]), and malignancy (4 [3.0%]). Common symptoms included fever (120 [88.9%]), cough (102 [76.5%]), and fatigue (44 [32.5%]). Chest CT scans showed bilateral patchy shadows or ground glass opacity in the lungs of all of the patients. All of the patients received antiviral therapy (135 [100%] (Kaletra and interferon were both used), antibacterial therapy (59 [43.7%]), and corticosteroids (36 [26.7%]). In addition, many patients received traditional Chinese medicine (124 [91.8%]). It is suggested that patients should receive Kaletra early and should be treated by a combination of western and Chinese medicine. Compared with the mild cases, the severe cases had lower lymphocyte counts and higher plasma levels of Pt, APTT, D-dimer, LDH, PCT, ALB, CRP, and AST.**CONCLUSION:**In this study, the clinic features and therapies of 135 COVID-19 patients were demonstrated. Kaletra and traditional Chinese medicine played an important role in the treatment of the viral pneumonia. Further studies are required to explore the role of Kaletra and traditional Chinese medicine in the treatment of COVID-19. This article is protected by copyright. All rights reserved.This article is protected by copyright. All rights reserved. |
|  | PMID: 32198776  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32198776) |
|  | Icon for Wiley  |

|  |  |
| --- | --- |
| 2. | Anesthesiology. 2020 Mar 19. doi: 10.1097/ALN.0000000000003303. [Epub ahead of print][**COVID-19 Infection: Implications for Perioperative and Critical Care Physicians.**](https://www.ncbi.nlm.nih.gov/pubmed/32195698)[Greenland JR](https://www.ncbi.nlm.nih.gov/pubmed/?term=Greenland%20JR%5BAuthor%5D&cauthor=true&cauthor_uid=32195698)1, [Michelow MD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Michelow%20MD%5BAuthor%5D&cauthor=true&cauthor_uid=32195698), [Wang L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32195698), [London MJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=London%20MJ%5BAuthor%5D&cauthor=true&cauthor_uid=32195698).Author information: 1. From Pulmonary and Critical Care Medicine (J.R.G.) Anesthesia and Perioperative Care (M.D.M., M.J.L.) San Francisco Veterans Administration Health Care System, San Francisco, California Laboratory Medicine (L.W.) University of California, San Francisco, California (J.R.G., M.D.M., M.J.L.).**Abstract**Healthcare systems worldwide are responding to Coronavirus Disease 2019 (COVID-19), an emerging infectious syndrome caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus. Patients with COVID-19 can progress from asymptomatic or mild illness to hypoxemic respiratory failure or multisystem organ failure, necessitating intubation and intensive care management. Healthcare providers, and particularly anesthesiologists, are at the frontline of this epidemic, and they need to be aware of the best available evidence to guide therapeutic management of patients with COVID-19 and to keep themselves safe while doing so. Here, the authors review COVID-19 pathogenesis, presentation, diagnosis, and potential therapeutics, with a focus on management of COVID-19-associated respiratory failure. The authors draw on literature from other viral epidemics, treatment of acute respiratory distress syndrome, and recent publications on COVID-19, as well as guidelines from major health organizations. This review provides a comprehensive summary of the evidence currently available to guide management of critically ill patients with COVID-19. |
|  | PMID: 32195698  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32195698) |
|  |  |

|  |  |
| --- | --- |
| 3. | Anesthesiology. 2020 Mar 19. doi: 10.1097/ALN.0000000000003300. [Epub ahead of print][**Response of Chinese Anesthesiologists to the COVID-19 Outbreak.**](https://www.ncbi.nlm.nih.gov/pubmed/32195704)[Zhang HF](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20HF%5BAuthor%5D&cauthor=true&cauthor_uid=32195704)1, [Bo LL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Bo%20LL%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Lin Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lin%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Li FX](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20FX%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Sun SJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sun%20SJ%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Lin HB](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lin%20HB%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Xu SY](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xu%20SY%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Bian JJ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Bian%20JJ%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Yao SL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yao%20SL%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Chen XD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20XD%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Meng L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Meng%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32195704), [Deng XM](https://www.ncbi.nlm.nih.gov/pubmed/?term=Deng%20XM%5BAuthor%5D&cauthor=true&cauthor_uid=32195704).Author information: 1. From the Department of Anesthesiology, Zhujiang Hospital of Southern Medical University, Guangzhou, China (H.F.Z., F.X.L., H.B.L., S.Y.X.) Faculty of Anesthesiology, Changhai Hospital, Naval Medical University, Shanghai, China (L.L.B., J.J.B., X.M.D.) Institute of Anesthesiology and Critical Care Medicine, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China (Y.L., S.J.S.,X.D.C., S.L.Y.) Department of Anesthesiology, Yale University School of Medicine, New Haven, Connecticut (L.M.).**Abstract**The coronavirus disease 2019, named COVID-19 officially by the World Health Organization (Geneva, Switzerland) on February 12, 2020, has spread at unprecedented speed. After the first outbreak in Wuhan, China, Chinese anesthesiologists encountered increasing numbers of infected patients since December 2019. Because the main route of transmission is via respiratory droplets and close contact, anesthesia providers are at a high risk when responding to the devastating mass emergency. So far, actions have been taken including but not limited to nationwide actions and online education regarding special procedures of airway management, oxygen therapy, ventilation support, hemodynamic management, sedation, and analgesia. As the epidemic situation has lasted for months (thus far), special platforms have also been set up to provide free mental health care to all anesthesia providers participating in acute and critical caring for COVID-19 patients. The current article documents the actions taken, lesson learned, and future work needed. |
|  | PMID: 32195704  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32195704) |
|  |  |

|  |  |
| --- | --- |
| 4. | Anaesthesiol Intensive Ther. 2020 Mar 20. pii: 40133. doi: 10.5114/ait.2020.93756. [Epub ahead of print][**COVID-19 - what should anaethesiologists and intensivists know about it?**](https://www.ncbi.nlm.nih.gov/pubmed/32191830)[Wujtewicz M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wujtewicz%20M%5BAuthor%5D&cauthor=true&cauthor_uid=32191830), [Dylczyk-Sommer A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Dylczyk-Sommer%20A%5BAuthor%5D&cauthor=true&cauthor_uid=32191830), [Aszkiełowicz A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Aszkie%C5%82owicz%20A%5BAuthor%5D&cauthor=true&cauthor_uid=32191830), [Zdanowski S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zdanowski%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32191830), [Piwowarczyk S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Piwowarczyk%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32191830), [Owczuk R](https://www.ncbi.nlm.nih.gov/pubmed/?term=Owczuk%20R%5BAuthor%5D&cauthor=true&cauthor_uid=32191830).**Abstract**Over the past three months, the world has faced an unprecedented health hazard. The World Health Organization has announced a pandemic infection with an unknown species of coronavirus called SARS-CoV-2. Spreading mainly through the droplet route, the virus causes mild symptoms in the majority of cases, the most common being: fever (80%), dry cough (56%), fatigue (22%) and muscle pain (7%); less common symptoms include a sore throat, a runny nose, diarrhea, hemoptysis and chills. A life-threatening complication of SARS-CoV-2 infection is an acute respiratory distress syndrome (ARDS), which occurs more often in older adults, those with immune disorders and co-morbidities. Severe forms of the infection, being an indication for treatment in the intensive care unit, comprise acute lung inflammation, ARDS, sepsis and septic shock. The article presents basic information about etiology, pathogenesis and diagnostics (with particular emphasis on the importance of tomocomputer imaging), clinical picture, treatment and prevention of the infection. It goes on to emphasize the specific risks of providing anesthesiology and intensive care services. Due to the fact that effective causal treatment is not yet available and the number of infections and deaths increases day by day, infection prevention and strict adherence to recommendations of infection control organizations remain the basis for fighting the virus.**Free Article** |
|  | PMID: 32191830  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32191830) |
|  | Icon for Termedia Publishing House Ltd.  |

|  |  |
| --- | --- |
| 5. | N Engl J Med. 2020 Mar 18. doi: 10.1056/NEJMoa2001282. [Epub ahead of print][**A Trial of Lopinavir-Ritonavir in Adults Hospitalized with Severe Covid-19.**](https://www.ncbi.nlm.nih.gov/pubmed/32187464)[Cao B](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cao%20B%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wen D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wen%20D%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Liu W](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20W%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Fan G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Fan%20G%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Ruan L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ruan%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Song B](https://www.ncbi.nlm.nih.gov/pubmed/?term=Song%20B%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Cai Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cai%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wei M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wei%20M%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Li X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Xia J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xia%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Chen N](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20N%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Xiang J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xiang%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Yu T](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yu%20T%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Bai T](https://www.ncbi.nlm.nih.gov/pubmed/?term=Bai%20T%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Xie X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xie%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhang L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Li C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Yuan Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yuan%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Chen H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Li H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Huang H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Tu S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tu%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Gong F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Gong%20F%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Liu Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wei Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wei%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Dong C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Dong%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhou F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhou%20F%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Gu X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Gu%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Xu J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xu%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Liu Z](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20Z%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Li H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Shang L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shang%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang K](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20K%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Li K](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20K%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhou X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhou%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Dong X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Dong%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Qu Z](https://www.ncbi.nlm.nih.gov/pubmed/?term=Qu%20Z%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Lu S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lu%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Hu X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hu%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Ruan S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ruan%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Luo S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Luo%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wu J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Peng L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Peng%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Cheng F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cheng%20F%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Pan L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Pan%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zou J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zou%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Jia C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Jia%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Liu X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wu X](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wu%20X%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Ge Q](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ge%20Q%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [He J](https://www.ncbi.nlm.nih.gov/pubmed/?term=He%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhan H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhan%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Qiu F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Qiu%20F%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Guo L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Guo%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Huang C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Jaki T](https://www.ncbi.nlm.nih.gov/pubmed/?term=Jaki%20T%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Hayden FG](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hayden%20FG%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Horby PW](https://www.ncbi.nlm.nih.gov/pubmed/?term=Horby%20PW%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Zhang D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20D%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1, [Wang C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32187464)1.Author information: 1. From the Department of Pulmonary and Critical Care Medicine, Center of Respiratory Medicine, National Clinical Research Center for Respiratory Diseases (B.C., Yeming Wang, G.F., F.Z., X.G., Z.L., Y.Z., Hui Li, L.S., C.W.), and the Institute of Clinical Medical Sciences (G.F., X.G.), China-Japan Friendship Hospital, the Institute of Respiratory Medicine, Chinese Academy of Medical Sciences (B.C., Yeming Wang, F.Z., Z.L., Y.Z., Hui Li, C.W.), the Clinical and Research Center of Infectious Diseases, Beijing Ditan Hospital, Capital Medical University (Xingwang Li), Peking University Clinical Research Institute, Peking University First Hospital (C.D.), Tsinghua University School of Medicine (Jiuyang Xu), Beijing University of Chinese Medicine (L.S.), NHC Key Laboratory of Systems Biology of Pathogens and Christophe Merieux Laboratory, Institute of Pathogen Biology, Chinese Academy of Medical Sciences (L.G.), and Peking Union Medical College (L.G., C.W.), Beijing, and Jin Yin-tan Hospital, Wuhan (D.W., W.L., Jingli Wang, L.R., B.S., Y.C., M.W., Jiaan Xia, N.C., Jie Xiang, T.Y., T.B., X.X., L.Z., C.L., Y.Y., H.C., Huadong Li, H.H., S.T., F.G., Y.L., Yuan Wei, K.W., K.L., X.Z., X.D., Z.Q., Sixia Lu, X.H., S.R., Shanshan Luo, Jing Wu, Lu Peng, F.C., Lihong Pan, J.Z., C.J., Juan Wang, Xia Liu, S.W., X.W., Q.G., J.H., H.Z., F.Q., C.H., D.Z.) - all in China; Lancaster University, Lancaster (T.J.), and the University of Oxford, Oxford (P.W.H.) - both in the United Kingdom; and the University of Virginia School of Medicine, Charlottesville (F.G.H.).**Abstract****BACKGROUND:**No therapeutics have yet been proven effective for the treatment of severe illness caused by SARS-CoV-2.**METHODS:**We conducted a randomized, controlled, open-label trial involving hospitalized adult patients with confirmed SARS-CoV-2 infection, which causes the respiratory illness Covid-19, and an oxygen saturation (Sao2) of 94% or less while they were breathing ambient air or a ratio of the partial pressure of oxygen (Pao2) to the fraction of inspired oxygen (Fio2) of less than 300 mm Hg. Patients were randomly assigned in a 1:1 ratio to receive either lopinavir-ritonavir (400 mg and 100 mg, respectively) twice a day for 14 days, in addition to standard care, or standard care alone. The primary end point was the time to clinical improvement, defined as the time from randomization to either an improvement of two points on a seven-category ordinal scale or discharge from the hospital, whichever came first.**RESULTS:**A total of 199 patients with laboratory-confirmed SARS-CoV-2 infection underwent randomization; 99 were assigned to the lopinavir-ritonavir group, and 100 to the standard-care group. Treatment with lopinavir-ritonavir was not associated with a difference from standard care in the time to clinical improvement (hazard ratio for clinical improvement, 1.24; 95% confidence interval [CI], 0.90 to 1.72). Mortality at 28 days was similar in the lopinavir-ritonavir group and the standard-care group (19.2% vs. 25.0%; difference, -5.8 percentage points; 95% CI, -17.3 to 5.7). The percentages of patients with detectable viral RNA at various time points were similar. In a modified intention-to-treat analysis, lopinavir-ritonavir led to a median time to clinical improvement that was shorter by 1 day than that observed with standard care (hazard ratio, 1.39; 95% CI, 1.00 to 1.91). Gastrointestinal adverse events were more common in the lopinavir-ritonavir group, but serious adverse events were more common in the standard-care group. Lopinavir-ritonavir treatment was stopped early in 13 patients (13.8%) because of adverse events.**CONCLUSIONS:**In hospitalized adult patients with severe Covid-19, no benefit was observed with lopinavir-ritonavir treatment beyond standard care. Future trials in patients with severe illness may help to confirm or exclude the possibility of a treatment benefit. (Funded by Major Projects of National Science and Technology on New Drug Creation and Development and others; Chinese Clinical Trial Register number, ChiCTR2000029308.).Copyright © 2020 Massachusetts Medical Society. |
|  | PMID: 32187464  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32187464) |
|  | Icon for Atypon  |

|  |  |
| --- | --- |
| 6. | Can J Anaesth. 2020 Mar 16. doi: 10.1007/s12630-020-01630-7. [Epub ahead of print][**Safety and efficacy of different anesthetic regimens for parturients with COVID-19 undergoing Cesarean delivery: a case series of 17 patients.**](https://www.ncbi.nlm.nih.gov/pubmed/32180175)[Chen R](https://www.ncbi.nlm.nih.gov/pubmed/?term=Chen%20R%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)1,2, [Zhang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)1,2, [Huang L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huang%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)2, [Cheng BH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cheng%20BH%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)3, [Xia ZY](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xia%20ZY%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)1, [Meng QT](https://www.ncbi.nlm.nih.gov/pubmed/?term=Meng%20QT%5BAuthor%5D&cauthor=true&cauthor_uid=32180175)4,5.Author information: 1. Department of Anesthesiology, Renmin Hospital of Wuhan University, Wuhan, 430060, China.2. Department of Anesthesiology, East Hospital, Renmin Hospital of Wuhan University, Wuhan, China.3. Department of Obstetric, East Hospital, Renmin Hospital of Wuhan University, Wuhan, China.4. Department of Anesthesiology, Renmin Hospital of Wuhan University, Wuhan, 430060, China. mengqingtao2018@126.com.5. Department of Anesthesiology, East Hospital, Renmin Hospital of Wuhan University, Wuhan, China. mengqingtao2018@126.com.**Abstract****PURPOSE:**To assess the management and safety of epidural or general anesthesia for Cesarean delivery in parturients with coronavirus disease (COVID-19) and their newborns, and to evaluate the standardized procedures for protecting medical staff.**METHODS:**We retrospectively reviewed the cases of parturients diagnosed with severe acute respiratory syndrome coronavirus (SARS-CoV-2) infection disease (COVID-19). Their epidemiologic history, chest computed tomography scans, laboratory measurements, and SARS-CoV-2 nucleic acid positivity were evaluated. We also recorded the patients' demographic and clinical characteristics, anesthesia and surgery-related data, maternal and neonatal complications, as well as the health status of the involved medical staff.**RESULTS:**The clinical characteristics of 17 pregnant women infected with SARS-CoV-2 were similar to those previously reported in non-pregnant adult patients. All of the 17 patients underwent Cesarean delivery with anesthesia performed according to standardized anesthesia/surgery procedures. Fourteen of the patients underwent continuous epidural anesthesia with 12 experiencing significant intraoperative hypotension. Three patients received general anesthesia with tracheal intubation because emergency surgery was needed. Three of the parturients are still recovering from their Cesarean delivery and are receiving in-hospital treatment for COVID-19. Three neonates were born prematurely. There were no deaths or serious neonatal asphyxia events. All neonatal SARS-CoV-2 nucleic acid tests were negative. No medical staff were infected throughout the patient care period.**CONCLUSIONS:**Both epidural and general anesthesia were safely used for Cesarean delivery in the parturients with COVID-19. Nevertheless, the incidence of hypotension during epidural anesthesia appeared excessive. Proper patient transfer, medical staff access procedures, and effective biosafety precautions are important to protect medical staff from COVID-19. |
|  | PMID: 32180175  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32180175) |
|  | Icon for Springer  |

|  |  |
| --- | --- |
| 7. | Int J Antimicrob Agents. 2020 Mar 13:105944. doi: 10.1016/j.ijantimicag.2020.105944. [Epub ahead of print][**Teicoplanin: an alternative drug for the treatment of coronavirus COVID-19?**](https://www.ncbi.nlm.nih.gov/pubmed/32179150)[Baron SA](https://www.ncbi.nlm.nih.gov/pubmed/?term=Baron%20SA%5BAuthor%5D&cauthor=true&cauthor_uid=32179150)1, [Devaux C](https://www.ncbi.nlm.nih.gov/pubmed/?term=Devaux%20C%5BAuthor%5D&cauthor=true&cauthor_uid=32179150)2, [Colson P](https://www.ncbi.nlm.nih.gov/pubmed/?term=Colson%20P%5BAuthor%5D&cauthor=true&cauthor_uid=32179150)1, [Raoult D](https://www.ncbi.nlm.nih.gov/pubmed/?term=Raoult%20D%5BAuthor%5D&cauthor=true&cauthor_uid=32179150)3, [Rolain JM](https://www.ncbi.nlm.nih.gov/pubmed/?term=Rolain%20JM%5BAuthor%5D&cauthor=true&cauthor_uid=32179150)4.Author information: 1. Aix Marseille Univ, IRD, APHM, MEPHI, Faculté de Médecine et de Pharmacie, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France.2. Aix Marseille Univ, IRD, APHM, VITROME, Faculté de Médecine et de Pharmacie, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France.3. Aix Marseille Univ, IRD, APHM, MEPHI, Faculté de Médecine et de Pharmacie, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France; IHU Méditerranée Infection, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France.4. Aix Marseille Univ, IRD, APHM, MEPHI, Faculté de Médecine et de Pharmacie, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France; IHU Méditerranée Infection, 19-21 boulevard Jean Moulin, 13385 Marseille CEDEX 05, France. Electronic address: jean-marc.rolain@univ-amu.fr.**Abstract**In December 2019, a new coronavirus, named SARS-CoV-2, has emerged from China causing pneumonia outbreaks first in the Wuhan region and have now spread worldwide because of its probable high transmission efficiency. Due to the lack of efficient and specific treatments and the need to contain the epidemic, drug repurposing appears to be the best tool to find therapeutic solution. Chloroquine, remdesivir, lopinavir, ribavirin or ritonavir have shown efficacy to inhibit coronavirus in vitro. Teicoplanin, an antibiotic used to treat staphylococci infection, previously showed efficacy to inhibit the first stage of MERS-coronarivus viral cycle in human cells. This activity is conserved on the SARS-Cov-2, thus placing teicoplanin as a potential treatment for patients with this virus.Copyright © 2020. Published by Elsevier B.V. |
|  | PMID: 32179150  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32179150) |
|  | Icon for Elsevier Science  |
|  | **Conflict of interest statement**Declaration of Competing Interests The authors declare that they have no competing interests. |

|  |  |
| --- | --- |
| 8. | Int J Infect Dis. 2020 Mar 12. pii: S1201-9712(20)30132-6. doi: 10.1016/j.ijid.2020.03.013. [Epub ahead of print][**Patients of COVID-19 may benefit from sustained lopinavir-combined regimen and the increase of eosinophil may predict the outcome of COVID-19 progression.**](https://www.ncbi.nlm.nih.gov/pubmed/32173576)[Liu F](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20F%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)1, [Xu A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xu%20A%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)1, [Zhang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)2, [Xuan W](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xuan%20W%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)3, [Yan T](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yan%20T%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)3, [Pan K](https://www.ncbi.nlm.nih.gov/pubmed/?term=Pan%20K%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)1, [Yu W](https://www.ncbi.nlm.nih.gov/pubmed/?term=Yu%20W%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)1, [Zhang J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32173576)4.Author information: 1. Medical Laboratory, Xixi Hospital of Hangzhou, Hangzhou, China.2. Medical Laboratory, Xixi Hospital of Hangzhou, Hangzhou, China; Department of Clinical Laboratory, Sir Run Run Shaw Hospital, Zhejiang University School of Medicine, Hangzhou, China.3. Department of Radiology, Xixi Hospital of Hangzhou, Hangzhou, China.4. Department of Clinical Laboratory, Sir Run Run Shaw Hospital, Zhejiang University School of Medicine, Hangzhou, China. Electronic address: jameszhang2000@zju.edu.cn.**Abstract****OBJECTIVES:**To explore the epidemiological information, clinical characteristics, therapeutic outcomes and temporal progression of laboratory findings in 2019-coronavirus disease (COVID-19) patients exposed to lopinavir.**METHODS:**We collected data from ten COVID-19 patients admitted between January 22, 2020 and February 11, 2020 at Xixi hospital in Hangzhou, China.**RESULTS:**Of ten patients, secondary, tertiary and quartus patients emerged, the incubation period was 3-7 days. Mainly initial symptoms were cough and low fever (37.3-38.0 ℃). An asymptomatic case presented normal radiography, the others existed ground glass opacities. All cases (three transferred, seven discharged) exposed to lopinavir on initial hospitalization. Three patients stopped lopinavir using because of adverse effect, two of them deteriorated, one hospitalized longer than others who with sustained lopinavir using. Levels of potassium, albumin, lymphocyte were low, but increased persistently after treatment. Eosinophil values were low on initial hospitalization, then all returned to normal before discharge. Viral load of SARS-CoV-2, radiography and eosinophil improved continuously in 3-14, 6-8 and 7-9 days, respectively.**CONCLUSIONS:**Increasing eosinophils may be an indicator of COVID-19 improvement. The COVID-19 patients may benefit from sustained lopinavir using. More researches on a larger scale are needed to verify these points.Copyright © 2020. Published by Elsevier Ltd.**Free Article** |
|  | PMID: 32173576  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32173576) |
|  | Icon for Elsevier Science  |

|  |  |
| --- | --- |
| 9. | J Crit Care. 2020 Mar 10. pii: S0883-9441(20)30390-7. doi: 10.1016/j.jcrc.2020.03.005. [Epub ahead of print][**A systematic review on the efficacy and safety of chloroquine for the treatment of COVID-19.**](https://www.ncbi.nlm.nih.gov/pubmed/32173110)[Cortegiani A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cortegiani%20A%5BAuthor%5D&cauthor=true&cauthor_uid=32173110)1, [Ingoglia G](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ingoglia%20G%5BAuthor%5D&cauthor=true&cauthor_uid=32173110)2, [Ippolito M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Ippolito%20M%5BAuthor%5D&cauthor=true&cauthor_uid=32173110)2, [Giarratano A](https://www.ncbi.nlm.nih.gov/pubmed/?term=Giarratano%20A%5BAuthor%5D&cauthor=true&cauthor_uid=32173110)2, [Einav S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Einav%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32173110)3.Author information: 1. Department of Surgical, Oncological and Oral Science (Di.Chir.On.S.), Section of Anaesthesia, Analgesia, Intensive Care and Emergency, Policlinico Paolo Giaccone, University of Palermo, Italy. Electronic address: andrea.cortegiani@unipa.it.2. Department of Surgical, Oncological and Oral Science (Di.Chir.On.S.), Section of Anaesthesia, Analgesia, Intensive Care and Emergency, Policlinico Paolo Giaccone, University of Palermo, Italy.3. Intensive Care Unit of the Shaare Zedek Medical Medical Centre, Hebrew University Faculty of Medicine, Jerusalem, Israel.**Abstract****PURPOSE:**COVID-19 (coronavirus disease 2019) is a public health emergency of international concern. As of this time, there is no known effective pharmaceutical treatment, although it is much needed for patient contracting the severe form of the disease. The aim of this systematic review was to summarize the evidence regarding chloroquine for the treatment of COVID-19.**METHODS:**PubMed, EMBASE, and three trial Registries were searched for studies on the use of chloroquine in patients with COVID-19.**RESULTS:**We included six articles (one narrative letter, one in-vitro study, one editorial, expert consensus paper, two national guideline documents) and 23 ongoing clinical trials in China. Chloroquine seems to be effective in limiting the replication of SARS-CoV-2 (virus causing COVID-19) in vitro.**CONCLUSIONS:**There is rationale, pre-clinical evidence of effectiveness and evidence of safety from long-time clinical use for other indications to justify clinical research on chloroquine in patients with COVID-19. However, clinical use should either adhere to the Monitored Emergency Use of Unregistered Interventions (MEURI) framework or be ethically approved as a trial as stated by the World Health Organization. Safety data and data from high-quality clinical trials are urgently needed.Copyright © 2020 Elsevier Inc. All rights reserved. |
|  | PMID: 32173110  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32173110) |
|  | Icon for Elsevier Science  |
|  | **Conflict of interest statement**Declaration of Competing Interest AC, GI, MI, AG, SE declare to have no competing interests. |

|  |  |
| --- | --- |
| 10. | J Educ Eval Health Prof. 2020 Jan;17:10. doi: 10.3352/jeehp.2020.17.10. Epub 2020 Mar 7.[**How to train the health personnel for protecting themselves from novel coronavirus (COVID-19) infection during their patient or suspected case care.**](https://www.ncbi.nlm.nih.gov/pubmed/32150796)[Huh S](https://www.ncbi.nlm.nih.gov/pubmed/?term=Huh%20S%5BAuthor%5D&cauthor=true&cauthor_uid=32150796)1.Author information: 1. Department of Parasitology and Institute of Medical Education, College of Medicine, Hallym University, Chuncheon, Korea.**Free Article** |
|  | PMID: 32150796 [Indexed for MEDLINE] |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32150796) |
|  | Icon for Publishing M2Community  |

|  |  |
| --- | --- |
| 11. | Chin Med J (Engl). 2020 Mar 6. doi: 10.1097/CM9.0000000000000797. [Epub ahead of print][**Repurposing of clinically approved drugs for treatment of coronavirus disease 2019 in a 2019-novel coronavirus (2019-nCoV) related coronavirus model.**](https://www.ncbi.nlm.nih.gov/pubmed/32149769)[Fan HH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Fan%20HH%5BAuthor%5D&cauthor=true&cauthor_uid=32149769)1, [Wang LQ](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wang%20LQ%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [Liu WL](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20WL%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [An XP](https://www.ncbi.nlm.nih.gov/pubmed/?term=An%20XP%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [Liu ZD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Liu%20ZD%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [He XQ](https://www.ncbi.nlm.nih.gov/pubmed/?term=He%20XQ%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [Song LH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Song%20LH%5BAuthor%5D&cauthor=true&cauthor_uid=32149769), [Tong YG](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tong%20YG%5BAuthor%5D&cauthor=true&cauthor_uid=32149769).Author information: 1. Beijing Advanced Innovation Center for Soft Matter Science and Engineering, College of Life Science and Technology, Beijing University of Chemical Technology, Beijing 100029, China.**Abstract****BACKGROUND:**Medicines for the treatment of 2019-novel coronavirus (2019-nCoV) infections are urgently needed. However, drug screening using live 2019-nCoV requires high-level biosafety facilities, which imposes an obstacle for those without such facilities or 2019-novel coronavirus (2019-nCoV). This study aims to repurpose the clinically approved drugs for the treatment of coronavirus disease 2019 (COVID-19) in a 2019-nCoV related coronavirus model.**METHODS:**A 2019-nCoV related pangolin coronavirus GX\_P2V/pangolin/2017/ Guangxi was described. Whether GX\_P2X uses angiotensin-converting enzyme 2 (ACE2) as the cell receptor was investigated by using small interfering RNA (siRNA) -mediated silencing of ACE2. The pangolin coronavirus model was used to identify drug candidates for treating 2019-nCoV infection. Two libraries of 2406 clinically approved drugs were screened for their ability to inhibit cytopathic effects on Vero E6 cells by GX\_P2X infection. The antiviral activities and antiviral mechanisms of potential drugs were further investigated. Viral yields of RNAs and infectious particles were quantified by quantitative real-time polymerase chain reaction (qRT-PCR) and plaque assay, respectively.**RESULTS:**The spike protein of coronavirus GX\_P2V shares 92.2% amino acid identity with that of 2019-nCoV isolate Wuhan-hu-1, and uses ACE2 as the receptor for infection just like 2019-nCoV. Three drugs-cepharanthine (CEP), selamectin and mefloquine hydrochloride exhibited complete inhibition of cytopathic effects in cell culture at 10 μmol/L. CEP demonstrated the most potent inhibition of GX\_P2V infection, with a concentration for 50% of maximal effect [EC50] of 0.98 μmol/L. The viral RNA yield in cells treated with 10 μmol/L CEP was 15,393-fold lower than in cells without CEP treatment ([6.48 ± 0.02] × 10vs. 1.00 ± 0.12, t = 150.38, P < 0.001) at 72 h post-infection (p.i.). Plaque assays found no production of live viruses in media containing 10 μmol/L CEP at 48 h p.i. Furthermore, we found CEP has potent antiviral activities against both viral entry (1.00 ± 0.37 vs. 0.46 ± 0.12, t = 2.42, P < 0.05) and viral replication (1.00 ± 0.43 vs. [6.18 ± 0.95] × 10, t = 3.98, P < 0.05).**CONCLUSIONS:**Our pangolin coronavirus GX\_P2V is a workable model for 2019-nCoV research. CEP, selamectin and mefloquine hydrochloride are potential drugs for treating 2019-nCoV infection. Our results strongly suggest that CEP is a wide-spectrum inhibitor of pan-betacoronavirus, and clinical trial of CEP for treatment of 2019-nCoV infection is warranted. |
|  | PMID: 32149769  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32149769) |
|  | Icon for Wolters Kluwer  |

|  |  |
| --- | --- |
| 12. | Zhonghua Fu Chan Ke Za Zhi. 2020 Mar 7;55(0):E009. doi: 10.3760/cma.j.cn112141-20200218-00111. [Epub ahead of print][**[Analysis of the pregnancy outcomes in pregnant women with COVID-19 in Hubei Province].**](https://www.ncbi.nlm.nih.gov/pubmed/32145714)[Article in Chinese; Abstract available in Chinese from the publisher][Zhang L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhang%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Jiang Y](https://www.ncbi.nlm.nih.gov/pubmed/?term=Jiang%20Y%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Wei M](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wei%20M%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Cheng BH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Cheng%20BH%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Zhou XC](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhou%20XC%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)2, [Li J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Tian JH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Tian%20JH%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Dong L](https://www.ncbi.nlm.nih.gov/pubmed/?term=Dong%20L%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)1, [Hu RH](https://www.ncbi.nlm.nih.gov/pubmed/?term=Hu%20RH%5BAuthor%5D&cauthor=true&cauthor_uid=32145714)3.Author information: 1. Department of Obstetrics, Renmin Hospital of Wuhan University, Wuhan 430060, China.2. Department of Neonatology, Renmin Hospital of Wuhan University, Wuhan 430060, China.3. Department of Obstetrics, The Central Hospital of Qianjiang City, Qianjiang 433199, China.**Abstract****Objective:** To study the effect of COVID-19 on pregnancy outcomes and neonatal prognosis in Hubei Province. **Methods:** A retrospective comparison of the pregnancy outcomes was done between 16 women with COVID-19 and 45 women without COVID-19. Also, the results of laboratory tests, imaging examinations, and the 2019-nCoV nucleic acid test were performed in 10 cases of neonatal deliverd from women with COVID-19. **Results:** (1) Of the 16 pregnant women with COVID-19, 15 cases were ordinary type and 1 case was severe type. No one has progressed to critical pneumonia. The delivery method of the two groups was cesarean section, and the gestational age were (38.7±1.4) and (37.9±1.6) weeks, there was no significant difference between the two groups (*P*> 0.05). Also, there wee no significant differences in the intraoperative blood loss and birth weight of the newborn between the two groups (all *P*>0.05). (2) Ten cases of neonates delivered from pregnant women with COVID-19 were collected. The 2019-nCoV nucleic acid test were all negative. There were no significant differences in fetal distress, meconium-stained amniotic fluid, preterm birth, and neonatal asphyxia between the two groups (all *P*>0.05). (3) In the treatment of uterine contraction fatigue, carbetocin or carboprost tromethamine was used more in cesarean section for pregnant women with COVID-19 (1.3±0.6), compared with Non-COVID-19 group (0.5±0.7), the difference was statistically significant (*P*=0.001). **Conclusions:** If there is an indication for obstetric surgery or critical illness of COVID-19 in pregnant women, timely termination of pregnancy will not increase the risk of premature birth and asphyxia of the newborn, but it is beneficial to the treatment and rehabilitation of maternal pneumonia. Preventive use of long-acting uterotonic agents could reduce the incidence of postpartum hemorrhage during surgery. 2019-nCoV infection has not been found in neonates deliverd from pregnant women with COVID-19. |
|  | PMID: 32145714  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32145714) |
|  | Icon for Chinese Medical Association Publishing House Ltd.  |

|  |  |
| --- | --- |
| 13. | ACS Infect Dis. 2020 Mar 10. doi: 10.1021/acsinfecdis.0c00052. [Epub ahead of print][**Broad Spectrum Antiviral Agent Niclosamide and Its Therapeutic Potential.**](https://www.ncbi.nlm.nih.gov/pubmed/32125140)[Xu J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Xu%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32125140), [Shi PY](https://www.ncbi.nlm.nih.gov/pubmed/?term=Shi%20PY%5BAuthor%5D&cauthor=true&cauthor_uid=32125140), [Li H](https://www.ncbi.nlm.nih.gov/pubmed/?term=Li%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32125140)1, [Zhou J](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zhou%20J%5BAuthor%5D&cauthor=true&cauthor_uid=32125140).Author information: 1. Wadsworth Center, New York State Department of Health, 120 New Scotland Avenue, Albany, New York 12208, United States.**Abstract**The recent outbreak of coronavirus disease 2019 (COVID-19) highlights an urgent need for therapeutics. Through a series of drug repurposing screening campaigns, niclosamide, an FDA-approved anthelminthic drug, was found to be effective against various viral infections with nanomolar to micromolar potency such as SARS-CoV, MERS-CoV, ZIKV, HCV, and human adenovirus, indicating its potential as an antiviral agent. In this brief review, we summarize the broad antiviral activity of niclosamide and highlight its potential clinical use in the treatment of COVID-19. |
|  | PMID: 32125140  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32125140) |
|  | Icon for American Chemical Society  |

|  |  |
| --- | --- |
| 14. | Can J Anaesth. 2020 Feb 12. doi: 10.1007/s12630-020-01591-x. [Epub ahead of print][**Practical recommendations for critical care and anesthesiology teams caring for novel coronavirus (2019-nCoV) patients.**](https://www.ncbi.nlm.nih.gov/pubmed/32052373)[Wax RS](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wax%20RS%5BAuthor%5D&cauthor=true&cauthor_uid=32052373)1,2,3, [Christian MD](https://www.ncbi.nlm.nih.gov/pubmed/?term=Christian%20MD%5BAuthor%5D&cauthor=true&cauthor_uid=32052373)4.Author information: 1. Department of Critical Care Medicine, Faculty of Health Sciences, Queen's University, Kingston, ON, Canada. randy.wax@queensu.ca.2. Department of Medicine, Faculty of Medicine, University of Toronto, Toronto, ON, Canada. randy.wax@queensu.ca.3. Department of Critical Care Medicine, Lakeridge Health, 1 Hospital Court, Oshawa, ON, L1G 2B9, Canada. randy.wax@queensu.ca.4. London's Air Ambulance, Royal London Hospital, Barts Health NHS Trust, London, England, UK.**Abstract**A global health emergency has been declared by the World Health Organization as the 2019-nCoV outbreak spreads across the world, with confirmed patients in Canada. Patients infected with 2019-nCoV are at risk for developing respiratory failure and requiring admission to critical care units. While providing optimal treatment for these patients, careful execution of infection control measures is necessary to prevent nosocomial transmission to other patients and to healthcare workers providing care. Although the exact mechanisms of transmission are currently unclear, human-to-human transmission can occur, and the risk of airborne spread during aerosol-generating medical procedures remains a concern in specific circumstances. This paper summarizes important considerations regarding patient screening, environmental controls, personal protective equipment, resuscitation measures (including intubation), and critical care unit operations planning as we prepare for the possibility of new imported cases or local outbreaks of 2019-nCoV. Although understanding of the 2019-nCoV virus is evolving, lessons learned from prior infectious disease challenges such as Severe Acute Respiratory Syndrome will hopefully improve our state of readiness regardless of the number of cases we eventually manage in Canada. |
|  | PMID: 32052373  |
|  | [Similar articles](https://www.ncbi.nlm.nih.gov/pubmed?linkname=pubmed_pubmed&from_uid=32052373) |
|  | Icon for Springer  |