

Editorial

## Coronavirus Disease 2019 (COVID-19)

Mohamad Goldust 

Department of Dermatology, University Medical Center Mainz, 55131 Mainz, Germany; mgoldust@uni-mainz.de

The coronavirus disease 2019 (COVID-19) pandemic has affected almost all aspects of daily life. The economic and social disruption has been devastating. However, it has also opened many doors to the new development of novel technologies, such as telemedicine. In this context, the editors of the journal *Biology* decided at the very beginning of this worldwide dilemma to create a Special Issue, entitled “Coronavirus Disease 2019 (COVID-19).” This Special Issue encompasses thirty-one articles covering various aspects of the current pandemic [1–31]. With contributions from esteemed scientists from across the globe, this Special Issue sheds light on various aspects of the pandemic, including, but not limited to, epidemiology, pathophysiology, risk factors, and possible treatment options. In summary, the key published articles in this Special Issue addressed the following topics. Firstly, the virus and its complex pathophysiology were evaluated in some of the published articles [3–5,8,22,29]. In addition, the importance of face masks and related subjects were highlighted in other studies [6,7]. Klugar and colleagues asserted the importance of vaccines and different types of vaccines in combatting the pandemic [10]. Rodriguez-Cerdeira et al. [17] and Conforti and his colleagues [18] demonstrated the cutaneous manifestations of SARS-CoV-2 and their major role in determining a better diagnosis of the disease. Finally, the management of COVID-19 was also highlighted in some of other published articles [1,13,19,28,30].

Special thanks goes to the strong international team of editors, including Prof. Robert A. Schwartz from the USA, Prof. Dedee F. Murrell from Australia, and Prof. Torello Lotti from Italy, for their immeasurable dedication and support.

We hope for universal cooperation in the use of appropriate vaccines and efforts to identify new and effective medications, so that the world might be free of SARS-CoV-2 in the near future and normal life might be resumed.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The author declare no conflict of interest.



**Citation:** Goldust, M. Coronavirus Disease 2019 (COVID-19). *Biology* **2022**, *11*, 1250. <https://doi.org/10.3390/biology11081250>

Received: 4 August 2022

Accepted: 17 August 2022

Published: 22 August 2022

**Publisher’s Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## References

1. Hakami, A.R. Targeting the RBD of Omicron Variant (B.1.1.529) with Medicinal Phytochemicals to Abrogate the Binding of Spike Glycoprotein with the hACE2 Using Computational Molecular Search and Simulation Approach. *Biology* **2022**, *11*, 258. [[CrossRef](#)] [[PubMed](#)]
2. Marc, F.; Moldovan, C.; Hoza, A.; Restea, P.; Sachelarie, L.; Romila, L.E.; Suteu, C.; Farcas, D.M. Evaluation of Hepatic Biochemical Parameters during Antiviral Treatment in COVID-19 Patients. *Biology* **2021**, *11*, 13. [[CrossRef](#)] [[PubMed](#)]
3. Muhseen, Z.T.; Kadhim, S.; Yahiya, Y.I.; Alatawi, E.A.; Aba Alkhayl, F.F.; Almatroudi, A. Insights into the Binding of Receptor-Binding Domain (RBD) of SARS-CoV-2 Wild Type and B.1.620 Variant with hACE2 Using Molecular Docking and Simulation Approaches. *Biology* **2021**, *10*, 1310. [[CrossRef](#)]
4. Lobiuc, A.; Șterbuleac, D.; Sturdza, O.; Dimian, M.; Covasa, M. A Conservative Replacement in the Transmembrane Domain of SARS-CoV-2 ORF7a as a Putative Risk Factor in COVID-19. *Biology* **2021**, *10*, 1276. [[CrossRef](#)]
5. Lim, H.G.; Hsiao, S.H.; Lee, Y.G. Orchestrating an Optimized Next-Generation Sequencing-Based Cloud Workflow for Robust Viral Identification during Pandemics. *Biology* **2021**, *10*, 1023. [[CrossRef](#)]
6. Rojo-Tirado, M.A.; Benítez-Muñoz, J.A.; Alcocer-Ayuga, M.; Alfaro-Magallanes, V.M.; Romero-Parra, N.; Peinado, A.B.; Rael, B.; Castro, E.A.; Benito, P.J. Effect of Different Types of Face Masks on the Ventilatory and Cardiovascular Response to Maximal-Intensity Exercise. *Biology* **2021**, *10*, 969. [[CrossRef](#)] [[PubMed](#)]
7. Krajewski, P.K.; Matusiak, L.; Szepietowska, M.; Białynicki-Birula, R.; Szepietowski, J.C. Increased Prevalence of Face Mask-Induced Itch in Health Care Workers. *Biology* **2020**, *9*, 451. [[CrossRef](#)] [[PubMed](#)]
8. Celik, I.; Yadav, R.; Duzgun, Z.; Albogami, S.; El-Shehawi, A.M.; Idroes, R.; Tallei, T.E.; Emran, T.B. Interactions of the Receptor Binding Domain of SARS-CoV-2 Variants with hACE2: Insights from Molecular Docking Analysis and Molecular Dynamic Simulation. *Biology* **2021**, *10*, 880. [[CrossRef](#)]
9. Dutta, M.; Tareq, A.M.; Rakib, A.; Mahmud, S.; Sami, S.A.; Mallick, J.; Islam, M.N.; Majumder, M.; Uddin, M.; Alsubaie, A.; et al. Phytochemicals from *Leucas zeylanica* Targeting Main Protease of SARS-CoV-2: Chemical Profiles, Molecular Docking, and Molecular Dynamics Simulations. *Biology* **2021**, *10*, 789. [[CrossRef](#)]
10. Klugar, M.; Riad, A.; Mekhemar, M.; Conrad, J.; Buchbender, M.; Howaldt, H.P.; Attia, S. Side Effects of mRNA-Based and Viral Vector-Based COVID-19 Vaccines among German Healthcare Workers. *Biology* **2021**, *10*, 752. [[CrossRef](#)]
11. Manríquez, R.; Guerrero-Nancuante, C.; Taramasco, C. Protection Strategy against an Epidemic Disease on Edge-Weighted Graphs Applied to a COVID-19 Case. *Biology* **2021**, *10*, 667. [[CrossRef](#)] [[PubMed](#)]
12. Mekhemar, M.; Attia, S.; Dörfer, C.; Conrad, J. Dental Students in Germany throughout the COVID-19 Pandemic: A Psychological Assessment and Cross-Sectional Survey. *Biology* **2021**, *10*, 611. [[CrossRef](#)] [[PubMed](#)]
13. Mahmud, S.; Biswas, S.; Paul, G.K.; Mita, M.A.; Promi, M.M.; Afrose, S.; Hasan, M.R.; Zaman, S.; Uddin, M.S.; Dhama, K.; et al. Plant-Based Phytochemical Screening by Targeting Main Protease of SARS-CoV-2 to Design Effective Potent Inhibitors. *Biology* **2021**, *10*, 589. [[CrossRef](#)] [[PubMed](#)]
14. Tudoran, C.; Tudoran, M.; Pop, G.N.; Giurgi-Onocu, C.; Cut, T.G.; Lazureanu, V.E.; Oancea, C.; Parv, F.; Ciocarlie, T.; Bende, F. Associations between the Severity of the Post-Acute COVID-19 Syndrome and Echocardiographic Abnormalities in Previously Healthy Outpatients Following Infection with SARS-CoV-2. *Biology* **2021**, *10*, 469. [[CrossRef](#)]
15. Elhady, S.S.; Abdelhameed, R.F.A.; Malatani, R.T.; Alahdal, A.M.; Bogari, H.A.; Almalki, A.J.; Mohammad, K.A.; Ahmed, S.A.; Khedr, A.I.; Darwish, K.M. Molecular Docking and Dynamics Simulation Study of Hyrtios erectus Isolated Scalarane Sesterterpenes as Potential SARS-CoV-2 Dual Target Inhibitors. *Biology* **2021**, *10*, 389. [[CrossRef](#)]
16. Reginelli, A.; Grassi, R.; Feragalli, B.; Belfiore, M.P.; Montanelli, A.; Patelli, G.; La Porta, M.; Urraro, F.; Fusco, R.; Granata, V.; et al. Coronavirus Disease 2019 (COVID-19) in Italy: Double Reading of Chest CT Examination. *Biology* **2021**, *10*, 89. [[CrossRef](#)]
17. Rodriguez-Cerdeira, C.; Uribe-Camacho, B.I.; Silverio-Carrasco, L.; Méndez, W.; Mahesh, A.R.; Tejada, A.; Beirana, A.; Martinez-Herrera, E.; Alba, A.; Arenas, R.; et al. Cutaneous Manifestations in COVID-19: Report on 31 Cases from Five Countries. *Biology* **2021**, *10*, 54. [[CrossRef](#)]
18. Conforti, C.; Dianzani, C.; Agozzino, M.; Giuffrida, R.; Marangi, G.F.; Meo, N.D.; Morariu, S.H.; Persichetti, P.; Segreto, F.; Zalaudek, I.; et al. Cutaneous Manifestations in Confirmed COVID-19 Patients: A Systematic Review. *Biology* **2020**, *9*, 449. [[CrossRef](#)]
19. Chowdhury, K.H.; Chowdhury, M.R.; Mahmud, S.; Tareq, A.M.; Hanif, N.B.; Banu, N.; Reza, A.A.; Emran, T.B.; Simal-Gandara, J. Drug Repurposing Approach against Novel Coronavirus Disease (COVID-19) through Virtual Screening Targeting SARS-CoV-2 Main Protease. *Biology* **2020**, *10*, 2. [[CrossRef](#)]
20. Müller, S.M.; Mueller, G.F.; Navarini, A.A.; Brandt, O. National Publication Productivity during the COVID-19 Pandemic—A Preliminary Exploratory Analysis of the 30 Countries Most Affected. *Biology* **2020**, *9*, 271. [[CrossRef](#)]
21. Duffey, R.B.; Zio, E. COVID-19 Pandemic Trend Modeling and Analysis to Support Resilience Decision-Making. *Biology* **2020**, *9*, 156. [[CrossRef](#)] [[PubMed](#)]
22. Gaspersic, J.; Dolzan, V. Viral and Host Genetic and Epigenetic Biomarkers Related to SARS-CoV-2 Cell Entry, Infection Rate, and Disease Severity. *Biology* **2022**, *11*, 178. [[CrossRef](#)] [[PubMed](#)]
23. Nechipurenko, Y.D.; Semyonov, D.A.; Lavrinenko, I.A.; Lagutkin, D.A.; Generalov, E.A.; Zaitceva, A.Y.; Matveeva, O.V.; Yegorov, Y.E. The Role of Acidosis in the Pathogenesis of Severe Forms of COVID-19. *Biology* **2021**, *10*, 852. [[CrossRef](#)] [[PubMed](#)]
24. Kiseleva, I.; Ksenafontov, A. COVID-19 Shuts Doors to Flu but Keeps Them Open to Rhinoviruses. *Biology* **2021**, *10*, 733. [[CrossRef](#)]

25. Srivastava, K.C.; Shrivastava, D.; Hosni, H.A.; Khan, Z.A.; Al-Johani, K.; Alzoubi, I.A.; Sghaireen, M.G.; Alam, M.K. Recommendations, Practices and Infrastructural Model for the Dental Radiology Set-up in Clinical and Academic Institutions in the COVID-19 Era. *Biology* **2020**, *9*, 334.
26. Magdy Beshbishy, A.; Hetta, H.F.; Hussein, D.E.; Saati, A.A.; CUba, C.; Rivero-Perez, N.; Zaragoza-Bastida, A.; Shah, M.A.; Behl, T.; Batiha, G.E.S. Factors Associated with Increased Morbidity and Mortality of Obese and Overweight COVID-19 Patients. *Biology* **2020**, *9*, 280. [[CrossRef](#)]
27. Kothari, A.; Singh, V.; Nath, U.K.; Kumar, S.; Rai, V.; Kaushal, K.; Omar, B.J.; Pandey, A.; Jain, N. Immune Dysfunction and Multiple Treatment Modalities for the SARS-CoV-2 Pandemic: Races of Uncontrolled Running Sweat? *Biology* **2020**, *9*, 243. [[CrossRef](#)]
28. Glowacka, P.; Rudnicka, L.; Warszawik-Hendzel, O.; Sikora, M.; Goldust, M.; Gajda, P.; Stochmal, A.; Blicharz, L.; Rakowska, A.; Olszewska, M. The Antiviral Properties of Cyclosporine. Focus on Coronavirus, Hepatitis C Virus, Influenza Virus, and Human Immunodeficiency Virus Infections. *Biology* **2020**, *9*, 192. [[CrossRef](#)]
29. Mjokane, N.; Folorunso, O.S.; Ogundeji, A.O.; Sebolai, O.M. The Possible Role of Microbial Proteases in Facilitating SARS-CoV-2 Brain Invasion. *Biology* **2021**, *10*, 966. [[CrossRef](#)]
30. Sivaraman, V.; Richey, M.M.; Nasir, A. Alcohol, Cannabis and Crossfading: Concerns for COVID-19 Disease Severity. *Biology* **2021**, *10*, 779. [[CrossRef](#)]
31. Ghanemi, A.; Yoshioka, M.; St-Amand, J. Coronavirus Disease 2019 (COVID-19) Crisis: Losing Our Immunity When We Need It the Most. *Biology* **2021**, *10*, 545. [[CrossRef](#)] [[PubMed](#)]