



WHITE PAPER Covid-19: the pandemic is history. And now?

Carolina Diamandis, Lucas Smith, David Seideman, Jonathan Feldman, Adrian Tudor, Marianne Kaufmann, Alexander Davis, Olga Ivanova

Corresponding Author

LCG Research Dr. Olga Ivanova Team of Dr. Diamandis 16 Kifissias Avenue 115 26 Athens, Hellenic Republic www.your-doctor.com

Abstract

According to our assessment, the Sars-CoV-2 pandemic has already reached an endemic stage and the pandemic has ended. This white paper published by our small research group briefly documents the situation at the end of January 2022, without claiming to be exhaustive.

The pandemic broke out under peculiar circumstances

The virus was exceptionally well adapted to humans from the beginning, which is by no means normal.²⁷ Some scientists believe this is strong evidence of a human-modified virus released by a laboratory accident in the city of Wuhan, Mainland-China. Our team does not share this view uniformly, but the majority does. Retrospectively, there were already first

cases and human-to-human transmissions in the fall of 2019. In northern Italy, Covid-19 was mistakenly considered to be just an unusual cluster of complicated respiratory infections in December 2019 and early January 2020.²³ No one there thought of the possibility that the reason could be a novel virus. The Republic of China on Taiwan tried in vain to warn the WHO with Mainland-China using its power to undermine this communication. When the situation in Wuhan escalated, we were surprised that the communist leadership of Mainland-China did not lock down the city of Wuhan until about half of the residents and all migrant workers and visitors had already left due to the Chinese new year celebrations and because of rumors about a deadly epidemic in the city.²² No one could escape the images of people collapsing on the streets of Wuhan and clips like straight out of a cheap Hollywood movie. They were aimed directly at elemental fears and very likely set in motion psychological cascades to which even politicians worldwide were not immune. The human factor in political decisions is often underestimated. The question is: what happened to these people, what happened really in Wuhan? Common sense rules out the assumption that all of the people who left the city before lockdown did not come into contact with the virus. So why were there no more nests of the epidemic with the Wuhan virus in Mainland-China with its far more than a billion citizens? This question remains unanswered to this day. The only statement from the government in Beijing is that "communism has triumphed over the virus".²⁴ We consider this to be absurd. In our opinion, medical historians will most likely need years to decades to find out what really happened in Wuhan and the Chinese communist mainland in those crucial days and weeks.

Unusual measures

The rapid and efficient spread of the Wuhan-Virus did indeed surprise us, as did the adoption of totalitarian communist Chinese infection control measures. We therefore assume that the global handling of the pandemic would have been very different if the pathogen had already been identified during the local epidemic in northern Italy at the end of 2019 and a liberal society would have served as a reference. We assume a priming of the world population and its politicians by the apocalyptic TV and internet footage from Wuhan.²⁵ The measures applied until today are by no means without alternatives. In this respect, there was also a "mental infection" from the communist 'People's Republic of China', a psychological pandemic. In addition, communist mainland China transmitted incorrect treatment protocols, which may explain the high CFR (case fatality rates) in Italy at the beginning of the pandemic. Early ventilation with high pressures, failure to recognize the risk of multiple thromboembolisms, and the true character of the Covid-19 disease (endotheliitis with bradykinin storm instead of a normal viral pneumonia) are all due to incorrect or withheld information from Mainland China during the first weeks of the pandemic. On the other hand, this does not excuse the disregard outside the communist empire of basic findings on most coronaviruses, such as the very effective transmission of infection via aerosols.²⁸ Only the alert mind of a group of New York physicians publicly broke with these false recommendations, saving thousands of lives in the New York metropolitan area alone, maybe hundreds of thousands worldwide.

Surprisingly quick mutations

The appearance of the alpha and delta variants also occurred remarkably quickly. The appearance of the alpha and delta variants also occurred remarkably quickly. One gets the impression that this was a big surprise even for the top researchers in this field²⁹, because

coronaviruses are generally believed to evolve more slowly than, say, influenza viruses. The virus has adapted even more to humans and has optimized its transmissibility. This was also unexpected, because the virus had already started with a suspiciously good transmissibility in late 2019, which hardly changed in 2020. It was only shortly before Christmas 2020 that information came from England that the Alpha variant was spreading rapidly, followed by the highly concerning Delta variant. In addition, in some regions extremely dangerous local mutations occurred. Omicron is the first global immune escape variant that evades protection by vaccination or infection with other Sars-CoV-2 variants, but causes little more than a cold in the recovered and vaccinated. We expected this to happen eventually, simply because it is consistent with medical historical experience regarding the behavior of coronavirus epidemics. However, Omicron is such a quantum leap that one does wonder how it was possible. Positive astonishment is adequate at this point. Its extremely high R0 of ~10 and relatively mild symptoms were an unexpected game changer which led the world into endemicity within weeks in late 2021 and early 2022.^{1,2,3,14,15,16}

Wrong drugs

We were and are amazed that well-established drugs were demonized while relatively less effective and quite toxic agents were practically imposed on practicing physicians and even more so on hospitals. In our work at the bedside, we too have felt pressure from the United States and some western European countries to use particular drugs and certain vaccines, even though it was clearly not a good idea to use them and alternatives existed. Promising off-patent drugs were identified, but no funders were forthcoming to systematically study existing drugs in the fight against the pandemic. Neither states nor companies invested in this area.

The Omicron enigma

Currently, the more conservative rationale is that Omicron had a selection advantage in a certain population (Republic of South Africa) that was already largely (cross-)immune. However, the potential for change in coronaviruses is relatively limited, and Omicron is quite different from all other post-Wuhan variants. Years from now, when the issue has become less political, we may learn of new, astonishing findings. For now, we can only note that exactly the "right" variant suddenly appeared at the right time. A variant with an R0 of up to 10.14,15,16 This is not only theoretically but also in practice unbeatable and will thus inevitably lead to the end of the pandemic phase. Anyone who doubts this lacks basic medical knowledge or might have a personal agenda. On top of that, such a coronavirus cannot change its indispensable spike protein so massively that it becomes unrecognizable. At least that is a commonly held doctrine. There is a limited mutation space that the virus can use and this is clearly limited in coronaviruses. In this respect, the jump to Omicron is all the more surprising. As we have described before (Ivanova et al. 2022), with this jump to Omicron and its extreme infectivity, we see no more room for new variants to become widespread or even global. Omicron will probably branch into sub-variants, but this is quite unlikely to change its relatively mild course. Anything else would be a novelty in medical history. Therefore hypotheses regarding an evolution to a more dangerous Omicron variant are scientifically not justifiable. There may be other coronavirus pandemics in the future, hopefully not due to a MERS mutation, but with Omicron the Sars-CoV-2 pandemic is history.

The way forward

What is most likely coming up now is that Omicron will become the fifth known seasonal human coronavirus (hCoV). It is here to stay, as is the case with the presumed earlier pandemic coronavirus hCoV-OC43. "Herd immunity" as so often and incorrectly talked about will never happen.¹⁻¹² However, a bold relative population immunity through repeated exposures to the virus or its components (3x vaccinations or repeated infections with any of the circulating human coronaviruses). There are a countries that have already reached an endemic state with the tragic collateral damage of many infections and deaths, in other regions it has been achieved due to vaccination campaigns. Now, one can debate lengthily at what percentage of recovered or vaccinated the endemic phase begins with Omicron being the dominant variant. Endemicity is something that we see as having already occurred, based on the clinical courses in a variety of countries, as well as through the impressive decoupling of infections from hospitalizations and deaths. In this regard, we as practicing physicians certainly have a somewhat different, more robust perspective than that which research-based physicians or biologists must adhere to. In general, a further increase in contact between humans and Omicron or three vaccines is desirable to boost specific aspects of the adaptive immune response against hCoV-Sars-2-Omicron. However, exact percentages of when the pandemic ends due to endemicity are irrelevant from the clinician's perspective. Once a sustained decoupling of infection numbers, illnesses, and hospitalizations becomes statistically evident, the pandemic is over. That's already the case in all the countries we studied. In the coming winters, as with the other hCoVs, we expect seasonally higher incidences. Anything less would be an anomaly. Whether and to what extent vulnerable groups then require special protection (adapted vaccines) should be decided in summer, coordinated internationally.

Zero Covid and herd immunity

Strategies such as "herd immunity", "zero covid" and similar nonsense have actually proved to be predictable fiascos with Australia and New Zealand being the most prominent and absurd examples. These goals are simply not achievable with such an infectious coronavirus, and every epidemiologist or virologist should have known that. The "Zero Covid" ideology is against the laws of nature and all serious scientific evidence of the last fifty years.^{8-11 et al.} Why countries like Australia and New Zealand have gone astray in this way remains a mystery. Likewise, medical historians will surely one day pursue the question of whether the entire handling of Sars-CoV-2 would have been different had the world not seen the television reports and YouTube footage from Wuhan, and if the Mainland-Chinese would have shared more correct data with the world. If they had, it certainly wouldn't have taken New York clinicians, months after the pandemic began, to make it clear to the world for the first time that Sars-CoV-2 was not a respiratory disease until Omicron showed up, but a three-phase systemic disease, primarily an endotheliitis, an inflammation of the blood vessels with people rather dying from a bradykinin storm, a reactive pneumonia and blood clots.

Will the mRNA and vector vaccines make Covid vanish?

In an amazingly short period of time, we were able to see how - what was previously considered impossible - was created: vaccines against a coronavirus without the ADE effect, at least hopefully so. However, it must also be noted that the expectations in the vaccines

were set way too high and an alliance of manufacturers and politicians placed too much emphasis only on communist-Chinese style brute force policies and vaccinations. It is clear that we can never maintain the immune protection of an entire population every few months by means of a booster vaccination. The virus must do this job for us now through an attenuated infection based on three times vaccination or an infection and a vaccination. In addition, serious and honest evaluation is desperately needed to determine whether the riskbenefit ratio of first-generation nRNA and vector vaccines is still within reasonable limits after the Omicron variant has established itself as an endemic virus. Building up protection against the most severe courses of Covid-19 could be achieved thanks to the vaccines; however, maintaining immunity has to be done by the virus itself. Whether further mRNA and vector booster vaccinations for all people are reasonable is an open question from our point of view, especially since these vaccines only protect the vaccinated to some extent, however, they don't protect those parts of the population that are not vaccinated (no sterilizing immunity).^{30,31,32} There is a lot of scientific evidence for this which is ignored by politicians and large parts of the scientific community. Many still argue even in the opposite direction ('get vaccinated to protect grandma') and it is not clear why this is happening since the facts have been available for months now. The reason for this refusal to accept reality remains a mystery. Of course, there is also the burning question of deaths caused by some vaccines.²⁶ Only an open-minded evaluation of all that happened in this regard will strengthen the public's trust in future vaccination programs. Chinese-style brutality only leads to tensions in free societies and harms the compliance of citizens there, which is so desperately needed.

Conclusion

Now is the time to move from crisis mode to a highly vigilant normal state, to motivate unvaccinated seniors to perhaps get vaccinated after all, and otherwise to slowly but surely discard the fear of over two years.

Sars-CoV-2 type Omicron will never leave us, but the pandemic is over.

Conflicts of interest

none

References

- 1. Burki TK. Omicron variant and booster COVID-19 vaccines. Lancet Respir Med. 2021 Dec 17:S2213-2600(21)00559-2. doi: 10.1016/S2213-2600(21)00559-2. Epub ahead of print. PMID: 34929158; PMCID: PMC8683118.
- Venkatakrishnan, A., Anand, P., Lenehan, P., Suratekar, R., Raghunathan, B., Niesen, M. J., & Soundararajan, V. (2021, December 3). Omicron variant of SARS-CoV-2 harbors a unique insertion mutation of putative viral or human genomic origin. https://doi.org/ 10.31219/osf.io/f7txy
- Khan K, Karim F, Cele S, San JE, Lustig G, Tegally H, Bernstein M, Ganga Y, Jule Z, Reedoy K, Ngcobo N, Mazibuko M, Mthabela N, Mhlane Z, Mbatha N, Giandhari J, Ramphal Y, Naidoo T, Manickchund N, Magula N, Abdool Karim SS, Gray G, Hanekom W, von Gottberg A; COMMIT-KZN Team, Gosnell BI, Lessells RJ, Moore PL, de Oliveira T,

Moosa MS, Sigal A. Omicron infection enhances neutralizing immunity against the Delta variant. medRxiv [Preprint]. 2021 Dec 27:2021.12.27.21268439. doi: 10.1101/2021.12.27.21268439. PMID: 34981076; PMCID: PMC8722619.

- Christie Aschwanden (2021) Five reasons why COVID herd immunity is probably impossible. Nature 591, 520-522 doi: https://doi.org/10.1038/d41586-021-00728-2
- 5. Fung TS, Liu DX. Similarities and Dissimilarities of COVID-19 and Other Coronavirus Diseases. Annu Rev Microbiol. 2021 Oct 8;75:19-47. doi: 10.1146/annurev-micro-110520-023212. Epub 2021 Jan 25. PMID: 33492978.
- 6. Henning G et al. (2021) Preprint, mRNA booster immunization elicits potent neutralizing serum activity against the SARS-CoV-2 Omicron variant. doi: https://doi.org/ 10.1101/2021.12.14.21267769
- 7. Yin Y, Wunderink RG. MERS, SARS and other coronaviruses as causes of pneumonia. Respirology. 2018 Feb;23(2):130-137. doi: 10.1111/resp.13196. Epub 2017 Oct 20. PMID: 29052924; PMCID: PMC7169239.
- Patrick DM, Petric M, Skowronski DM, Guasparini R, Booth TF, Krajden M, McGeer P, Bastien N, Gustafson L, Dubord J, Macdonald D, David ST, Srour LF, Parker R, Andonov A, Isaac-Renton J, Loewen N, McNabb G, McNabb A, Goh SH, Henwick S, Astell C, Guo JP, Drebot M, Tellier R, Plummer F, Brunham RC. An Outbreak of Human Coronavirus OC43 Infection and Serological Cross-reactivity with SARS Coronavirus. Can J Infect Dis Med Microbiol. 2006 Nov;17(6):330-6. doi: 10.1155/2006/152612. PMID: 18382647; PMCID: PMC2095096.
- 9. Choi, WI., Kim, I.B., Park, S.J. et al. Comparison of the clinical characteristics and mortality of adults infected with human coronaviruses 229E and OC43. Sci Rep 11, 4499 (2021). https://doi.org/10.1038/s41598-021-83987-3
- 10. Eskild Petersen, Marion Koopmans, Mad Unyeong, Davidson H. Hamer, Nicola Petrosillo, Francesco Castelli, Merete Storgaard, Sulien Al Khalili, Lone Simonsen (2020) Comparing SARS-CoV-2 with SARS-CoV and influenza pandemics. In: The Lancet Infectious Diseases. Vol 20.
- Leen Vijgen, Els Keyaerts, Elien Moës, Inge Thoelen, Elke Wollants, Philippe Lemey, Anne-Mieke Vandamme, and Marc Van Ranst (2005) Complete Genomic Sequence of Human Coronavirus OC43: Molecular Clock Analysis Suggests a Relatively Recent Zoonotic Coronavirus Transmission Event. American Society for Microbiology. Journal of VirologyVolume 79, Issue 3, 1 February 2005, Pages 1595-1604. doi.org/10.1128/ JVI.79.3.1595-1604.2005
- 12. Brüssow H, Brüssow L. Clinical evidence that the pandemic from 1889 to 1891 commonly called the Russian flu might have been an earlier coronavirus pandemic. Microb Biotechnol. 2021 Sep;14(5):1860-1870. doi: 10.1111/1751-7915.13889. Epub 2021 Jul 13. PMID: 34254725; PMCID: PMC8441924.
- 13. Gruber MF on behalf of the Food and Drug Administration, FDA, 2021, Pfizer-BioNTech COVID-19 Vaccine Emergency Use Authorization Review Memorandum. https://www.fda.gov/media/144416/download
- 14. Torjesen I. Covid-19: Omicron may be more transmissible than other variants and partly resistant to existing vaccines, scientists fear. BMJ. 2021 Nov 29;375:n2943. doi: 10.1136/ bmj.n2943. PMID: 34845008.
- 15. Khan Burki T (2021) Omicron variant and booster COVID-19 vaccines. Lancet Respir. doi.org/10.1016/ S2213-2600(21)00559-2
- 16. Tang S, Mao Y, Jones RM, Tan Q, Ji JS, Li N, Shen J, Lv Y, Pan L, Ding P, Wang X, Wang Y, MacIntyre CR, Shi X. Aerosol transmission of SARS-CoV-2? Evidence, prevention and control. Environ Int. 2020 Nov;144:106039. doi: 10.1016/j.envint.2020.106039. Epub 2020 Aug 7. PMID: 32822927; PMCID: PMC7413047
- 17. Klein O (2022) Wie oft die Impfung auffrischen? EMA warnt vor zu häufigem Boostern. Public German television channel 2 (ZDF), news department. https://www.zdf.de/

nachrichten/politik/corona-booster-impfungen-warnung-ema-100.html (in German). Archive: https://archive.ph/2022.01.13-191611/https://www.zdf.de/nachrichten/politik/ corona-booster-impfungen-warnung-ema-100.html

- 18. Irina Anghel (2022) Frequent Boosters Spur Warning on Immune Response. 11 January 2022, 18:10h MET, corrected 12 January 2022, 18:27h MET. In: Bloomberg Online
- 19. Tishler M, Shoenfeld Y. Vaccination may be associated with autoimmune diseases. Isr Med Assoc J. 2004 Jul;6(7):430-2. PMID: 15274537
- 20. Molina V, Shoenfeld Y. Infection, vaccines and other environmental triggers of autoimmunity. Autoimmunity. 2005 May;38(3):235-45. doi: 10.1080/08916930500050277. PMID: 16126512
- 21. Aron-Maor A, Shoenfeld Y. Vaccination and systemic lupus erythematosus: the bidirectional dilemmas. Lupus. 2001;10(3):237-40. doi: 10.1191/096120301673085478. PMID: 11315360
- 22. Sharri-Markson (2021) What Really Happened In Wuhan: A Virus Like No Other, Countless Infections, Millions of Deaths. Harper Collins Publishers.
- 23. Gragnani L, Monti M, Santini SA, Marri S, Madia F, Lorini S, Petraccia L, Stasi C, Basile U, Luti V, Pagliai F, Saccardi R, Zignego AL. SARS-CoV-2 was already circulating in Italy, in early December 2019. Eur Rev Med Pharmacol Sci. 2021 Apr;25(8):3342-3349. doi: 10.26355/eurrev_202104_25746. PMID: 33928622.
- 24. CCTV, state controlled television of the People's Republic of Mainland China (May 23, 2020)
- 25. Kirchgaessner, Stephanie; Graham-Harrison, Emma; Kuo, Lily (11 April 2020). "China clamping down on coronavirus research, deleted pages suggest". *The Observer*. ISSN 0029-7712
- 26. United Kingdom, Office for National Statistics: Deaths caused by the COVID-19 vaccination. FOI Ref: FOI/2021/2583
- 27. Sakshi Piplani et al. (2021) In silico comparison of SARS-CoV-2 spike protein-ACE2 binding affinities across species and implications for virus origin. In: Nature Scientific Reports 11:13063. doi: 10.1038/s41598-021-92388-5
- 28. Morawska L, Cao J. Airborne transmission of SARS-CoV-2: The world should face the reality. Environ Int. 2020 Jun;139:105730. doi: 10.1016/j.envint.2020.105730. Epub 2020 Apr 10. PMID: 32294574; PMCID: PMC7151430.
- 29. Direct correspondences
- 30. Hansen T, Titze U, Kulamadayil-Heidenreich NSA, Glombitza S, Tebbe JJ, Röcken C, Schulz B, Weise M, Wilkens L. First case of postmortem study in a patient vaccinated against SARS-CoV-2. Int J Infect Dis. 2021 Jun;107:172-175. doi: 10.1016/ j.ijid.2021.04.053. Epub 2021 Apr 16. PMID: 33872783; PMCID: PMC8051011.
- 31. Yewdell JW (2021) Individuals cannot rely on COVID-19 herd immunity: Durable immunity to viral disease is limited to viruses with obligate viremic spread. PLoS Pathog 17(4): e1009509. https://doi.org/10.1371/journal.ppat.1009509
- 32. Wu KJ (2021) We're Asking the Impossible of Vaccines. Complete protection against infection has long been hailed as the holy grail of vaccination. It might simply be unachievable. In: The Atlantic. September 10, 2021



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