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To people affected
Their doctors and caretakers
To institutions, groups and parties
To Media

Zürich 16th May 2021

Covid-19: Particulate matter, mutations, vaccinations and reinfections. The dwindling effect of vaccinations in the fall

A good year ago we have clarified on the basis of recent studies that the severe course of Covid-19 mainly occurs in patients who are affected by diabetes, cardiovascular diseases, high blood pressure, thrombosis, chronic infections and obstructive lung diseases such as asthma, all of which occur under persistent air pollution more frequently.

[Is Air Pollution responsible for the severe course of Covid-19? PDF](#)

We therefore called for a staggered exit from the lockdown combined with a quick switch to public transport and means of transport such as bicycles, since with rapidly increasing passenger transport in personal cars, the pollutant values would rise again quickly, with the result that people already injured by long time air pollution could go through a severe course of Covid-19 over time. A well-founded fear, as the second wave showed in the autumn of last year. At that time, we also called for preventive immune system bolstering treatments and diets to be given to vulnerable population groups as well as for the installation of air purification devices in nursing homes, daycare centers, schools and workplaces to reduce the accumulation of particulate matter, which, as we were able to show more precisely, blocks the defense activity in the epithelial tissues of the lungs, nasopharynx and internal organs and serve SARS-Cov-2 particles as a means of transport and storage.

We had previously shown on the basis of articles from Italy, China, India, South Korea, the USA and some more countries that increased levels of particulate matter, nitrogen oxide, carbon dioxide, sulfur dioxide and ozone are closely linked to the incidence and the severe course of Covid-19. Government officials from European countries, the USA, South American and Asian countries, did not want to know any more about these interactions and concentrated their entire activities from the beginning to the development of vaccines, which have now been available for 6 months, and according to virologists, such as Dr. Christian Dorsten, solely can offer protection against the

virus, which is said to be alone responsible for Covid-19 and its severe course.

According to this theory, since December thousands of people have been vaccinated every day by medical institutions in an unprecedented, worldwide campaign whilst the virus continued to spread, and new mutants were continuously turning up in individual regions, as the current development in the USA, South Africa, Brazil and India shows, against which the vaccines available today do not work efficiently in many cases, which is particularly worrying for medical professionals in developing countries, who have been promised the end of the pandemic through the vaccines, which many of them have never received.

In autumn, when the vaccinations are likely to lose their effectiveness, as Dr. Christian Drosten announced recently, there should be a third vaccination to refresh the effect of the antibodies from the second vaccination. On May 7th, the European Union ordered 1.8 billion vaccine doses from Biontech-Pfizer to re-immunize 70% of the EU population if necessary. At the same time, children and adolescents aged 12 and over should also be vaccinated. This makes it clear that booster vaccinations should be at the order of the day in the future, as leading rulers are no longer believing in the scenario of a worldwide extermination of this virus through vaccination and in a worldwide herd immunity that was hammered into us through all possible channels for months, but only in a temporary immunity in individual population groups.

Those who have recovered without vaccination should have a vaccination after 6 months at the latest and should only be allowed to travel if they can prove an infection in the past by a PCR test and a corresponding quarantine order.

As it can be currently seen in India, which believed that it was largely immune to the virus, based on acquired antibodies, multiple mutations of the virus can occur under high chronic air pollution, which makes it resistant to the antibodies triggered by the new vaccines. This development is now fundamentally calling into question the much-touted strategy of the Gates Association and the WHO to achieve a worldwide effective herd immunity through mass vaccination.

Representatives of these institutions seem to have lost completely sight of the fact that the resilience of the general population to infections, which has slowly evolved in Europe since the 18th century, has been based on the improvement of nutrition through new farming and animal husbandry methods as well as on hygiene measures since the 19th century.

[The INDIA Mutations and B. 1.617 Variant: Is There a Global " Strategy" for Mutations and Evolution of Variants of The SARS-CoV2 Genome?](#)

[PDF] [preprints.org](#)

[Convergent evolution of SARS-CoV-2 spike mutations, L452R, E484Q and P681R, in the second wave of COVID-19 in Maharashtra, India](#)

[PDF] [biorxiv.org](#)

[\[HTML\] Pre-to-post lockdown impact on air quality and the role of environmental factors in spreading the COVID-19 cases-a study from a worst-hit state of India](#)

HTML] [springer.com](#)

[Emergence of blue sky over Delhi due to Coronavirus disease \(COVID-19\) lockdown implications](#)

[HTML] [nih.gov](#)

[\[HTML\] Of cross-immunity, herd immunity and country-specific plans: Experiences from COVID-19 in India](#)

[HTML] [nih.gov](#)

[The causal effects of long-term PM2. 5 exposure on COVID-19 in India](#)

[PDF] [worldbank.org](#)

[Exceedances and trends of particulate matter \(PM2. 5\) in five Indian megacities](#)

[HTML] [nih.gov](#)

[\[HTML\] Demystifying a possible relationship between COVID-19, air quality and meteorological factors: evidence from Kuala Lumpur, Malaysia](#)

HTML] [aaqr.org](#)

The new mutant of the virus in India (B.1617), like the British one (B.1.1.7), which causes the majority of infections today, could quickly spread to other regions. According to an article in Neue Zürcher Zeitung on May 8th the outbreak of the South African variant B.1.351 in Tyrol at the beginning of the year came quickly to an end, but another disturbing variant spread among the well-vaccinated population, the British B.1.1.7 with the additional mutation E484K, which appeared

also in England, but only led to 40 cases there, while it is a characteristic of the South African, Brazilian and Indian variants, in which the amino acid glutamine was replaced by lysine, why it was named E484Q

A second mutation (N501Y), which makes up the second half of the Indian double mutation (L452R), also occurs in a Californian mutant. Both mutations could make the virus more transmissible. However, the same mutations must not have the same effects in different virus lines. In an Israeli laboratory study, in which the spike protein was subjected to an artificial evolution with the aim of optimizing its binding to human cells, all nowadays known mutations occurred, as the author of the article, Stephanie Kusma, writes.

The mutation of the virus in India, that, as in China, the USA, Brazil and in European countries, has taken place under high levels of air pollution in individual regions, give rise to further studies on the role of particulate matter, nitrogen oxide, ozone, sulfur dioxide and carbon dioxide in the spread of SARS-CoV-2, and in the blocking of immune reactions in the epithelial tissues of the lungs, the cardiovascular system, the brain and the internal organs.

[\[HTML\] SARS-CoV-2 infection, COVID-19 pathogenesis, and exposure to air pollution: What is the connection?](#)

[\[HTML\] nih.gov](#)

[\[HTML\] The secretive liaison of particulate matter and SARS-CoV-2. A hypothesis and theory investigation](#)

[\[HTML\] nih.gov](#)

[Environmental impacts on the transmission and evolution of COVID-19 combing the knowledge of pathogenic respiratory coronaviruses](#)

[HTML\] nih.gov](#)

[SARS-CoV-2 in the environment: Modes of transmission, early detection and potential role of pollutions](#)

[\[PDF\] sciencedirect.com](#)

[The effect of environmental pollution on immune evasion checkpoints of SARS-CoV-2](#)

[\[HTML\] nih.gov](#)

[Could changes in the airborne pollutant particulate matter acting as a viral vector have exerted selective pressure to cause COVID-19 evolution?](#)

[\[HTML\] nih.gov](#)

[... COVID-19 Evolution and daily Viral Counts: Could Viral Natural Selection have occurred due to changes in the Airborne Pollutant PM2. 5 acting as a Vector for SARS ...](#)

[\[PDF\] medrxiv.org](#)

[\[HTML\] Air pollution by NO 2 and PM 2.5 explains COVID-19 infection severity by overexpression of angiotensin-converting enzyme 2 in respiratory cells: a review](#)

[HTML\] springer.com](#)

[\[HTML\] Estimation of airborne viral emission: Quanta emission rate of SARS-CoV-2 for infection risk assessment](#)

[\[HTML\] sciencedirect.com](#)

[\[PDF\] Exposure to air pollution and COVID-19 mortality in the United States](#)

[PDF\] medrxiv.org](#)

[\[HTML\] Long-term exposure to air-pollution and COVID-19 mortality in England: a hierarchical spatial analysis](#)

[HTML\] sciencedirect.com](#)

[Determination of SARS-CoV-2 RNA in different particulate matter size fractions of outdoor air samples in Madrid during the lockdown](#)

[\[HTML\] nih.gov](#)

[Evidence-based considerations exploring relations between SARS-CoV-2 pandemic and air pollution: involvement of PM2. 5-mediated up-regulation of the viral ...](#)

[\[PDF\] mdpi.com](#)

[Air pollution and its effects on the immune system](#)

[A global perspective of fine particulate matter pollution and its health effects](#)

[\[PDF\] researchgate.net](#)

[\[HTML\] Compound climate risks in the COVID-19 pandemic](#)

[HTML\] nature.com](#)

[Modeling vascular inflammation and atherogenicity after inhalation of ambient levels of ozone: exploratory lessons from transcriptomics](#)

[HTML] [nih.gov](#)

[Ambient and traffic-related air pollution exposures as novel risk factors for metabolic dysfunction and type 2 diabetes](#)

[HTML] [nih.gov](#)

[Children's exposure and dose assessment to particulate matter in Lisbon](#)

[PDF] [researchgate.net](#)

[Effect of particulate matter-bound metals exposure on prothrombotic biomarkers: a systematic review](#)

[PDF] [researchgate.net](#)

[Oxidative potential of particulate matter 2.5 as predictive indicator of cellular stress](#)

[PDF] [researchgate.net](#)

[HTML] [Morphological and chemical composition of particulate matter in buses exhaust](#)

[HTML] [sciencedirect.com](#)

[HTML] [Geochemical study of submicron particulate matter \(PM1\) in a metropolitan area](#)

[HTML] [sciencedirect.com](#)

[HTML] [The role of airborne particles and environmental considerations in the transmission of SARS-CoV-2](#)

[HTML] [sciencedirect.com](#)

[... IMPACT OF ATMOSPHERIC PARTICULATE MATTER AND INDOOR STAYING BEHAVIOUR IN WINTER ON SARS-COV-2 TRANSMISSION: AN EXPLORATORY ...](#)

[PDF] [iucp.net](#)

[Microplastic abundance in atmospheric deposition within the Metropolitan area of Hamburg, Germany](#)

[\[PDF\] researchgate.net](#)

[Particulate matter inhalation and the exacerbation of cardiopulmonary toxicity due to metabolic disease](#)

[PDF\] sagepub.comFull View](#)

[Metabolic syndrome and COVID-19: An update on the associated comorbidities and proposed therapies](#)

[HTML\] nih.gov](#)

[\[HTML\] The metabolic response to ozone](#)

[HTML\] frontiersin.org](#)

[Ozone-induced changes in the serum metabolome: Role of the microbiome](#)

[HTML\] plos.org](#)

[Nitric oxide and hydrogen sulfide: a nice pair in the respiratory system](#)

[\[PDF\] researchgate.net](#)

As the virus gets into sewage via excrements, where its amount is nowadays measured daily to determine the rate of infections in the population, and as it also gets into exposed waters and soils, from where it can get back into wild animals, and later continue to develop in farm animals that can pass it on to their owners, further mutations are preprogrammed from this side.

[Understanding air and water borne transmission and survival of coronavirus: Insights and way forward for SARS-CoV-2](#)

[HTML\] nih.gov](#)

[\[HTML\] Reactive species formed upon interaction of water with fine particulate matter from remote forest and polluted urban air](#)

[\[HTML\] copernicus.org](#)

[\[HTML\] The detection and stability of the SARS-CoV-2 RNA biomarkers in wastewater influent in Helsinki, Finland](#)

[\[HTML\] sciencedirect.com](#)

[SARS-CoV-2 in soils](#)

[\[HTML\] nih.gov](#)

[Analysis of the Chemical and Physical Environmental Aspects that Promoted the Spread of SARS-CoV-2 in the Lombard Area](#)

[PDF\] mdpi.com](#)

As studies that have been carried out recently show, the transmission of SARS Cov-2 mainly takes place indoors, where virus particles can accumulate on surfaces and in dust coming from internal emissions as well as by inflowing outside air. Although outdoor transmissions are practically impossible, government officials have closed outdoor terraces for months and imposed curfews in order to avoid human contacts, while until recently they did not take any measurements on particulate matter and virus-transmission at workplaces in industry, retail or government offices.

[Persistence of SARS-CoV-2 in the environment and COVID-19 transmission risk from environmental matrices and surfaces](#)

[\[HTML\] nih.gov](#)

[\[HTML\] Indoor versus outdoor transmission of SARS-COV-2: environmental factors in virus spread and underestimated sources of risk](#)

[\[HTML\] springer.com](#)

[Impact of building ventilation systems and habitual indoor incense burning on SARS-CoV-2 virus transmissions in Middle Eastern countries](#)

[\[HTML\] nih.gov](#)

[Particle mass concentrations and number size distributions in 40 homes in Germany: indoor-to-outdoor relationships, diurnal and seasonal variation](#)

[\[PDF\] helsinki.fi](#)

[Bioaerosol contribution to atmospheric particulate matter in indoor university environments](#)

[PDF\] mdpi.com](#)

[\[HTML\] Characterization of hospital airborne SARS-CoV-2](#)

[\[HTML\] springer.com](#)

As studies show, after a SARS-Cov-2 infection, long-term antibodies develop that remain effective in reinfections.

[SARS-CoV-2 re-infection risk in Austria](#)

[PDF] [wiley.com](#)

[\[HTML\] Pre-existing immunity to SARS-CoV-2: the knowns and unknowns](#)

[HTML] [nature.com](#)

[Durable SARS-CoV-2 B cell immunity after mild or severe disease](#)

[PDF] [jci.org](#)

[\[HTML\] Evolution of immune responses to SARS-CoV-2 in mild-moderate COVID-19](#)

[HTML] [nature.com](#)

[\[HTML\] Detection, prevalence, and duration of humoral responses to SARS-CoV-2 under conditions of limited population exposure](#)

[HTML] [nih.gov](#)

[\[HTML\] The potential significance of high avidity IgG for protective immunity towards SARS-CoV-2](#)

[HTML] [sciencedirect.com](#)

[Adaptive immunity to SARS-CoV-2 and COVID-19](#)

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[\[HTML\] T cell responses in patients with COVID-19](#)

[HTML] [nature.com](#)

[\[HTML\] Network analysis and transcriptome profiling identify autophagic and mitochondrial dysfunctions in SARS-CoV-2 infection](#)

[HTML] [nih.gov](#)Free from Publisher

[Oxidative stress-induced autophagy: role in pulmonary toxicity](#)

[HTML] [nih.gov](#)

[The epigenome and the mitochondrion: bioenergetics and the environment](#)

[PDF] [cshlp.org](#)Free from Publisher

Reinfections can occur both when the effectiveness of acquired antibodies decreases, which could happen due to an insufficiently development in the course of an infection, as also when the effectiveness of antibodies formed after vaccination decreases, which with continued use of medication after a short time may occur, or if new mutants appear against which antibodies, which have been formed after vaccination, are not effective. In order to monitor this, the extent to which vaccinated and convalescent patients can fight off current SARS-Cov-2 strains and its mutants by antibodies is continuously being investigated. In the case of those who have recovered, it was shown that the immune reactions that existed before the infection decides how good the immune system will work after an illness.

[HTML] Susceptibility of Circulating SARS-CoV-2 Variants to Neutralization

[HTML] [nejm.org](#)

Inferring the Association between the Risk of COVID-19 Case Fatality and N501Y Substitution in SARS-CoV-2

[PDF] [mdpi.com](#)

[HTML] Neutralization of SARS-CoV-2 Variants B. 1.429 and B. 1.351

[HTML] [nejm.org](#)

mRNA vaccination boosts cross-variant neutralizing antibodies elicited by SARS-CoV-2 infection

[PDF] [sciencemag.org](#)

[HTML] Antibody responses to the BNT162b2 mRNA vaccine in individuals previously infected with SARS-CoV-2

[HTML] [nature.com](#)

[HTML] Interim estimates of vaccine effectiveness of BNT162b2 and mRNA-1273 COVID-19 vaccines in preventing SARS-CoV-2 infection among health care ...

[HTML] [nih.gov](#)

[HTML] Antibody responses boosted in seropositive healthcare workers after single dose of SARS-CoV-2 mRNA vaccine

[HTML\] medrxiv.org](#)

[SARS-CoV-2 variant B. 1.1. 7 is susceptible to neutralizing antibodies elicited by ancestral Spike vaccines](#)

[PDF\] cell.com](#)

In view of the multiple mutations that are now occurring in Brazil, South Africa and India, the question is put up now whether repeated vaccinations allow to achieve the much-invoked herd immunity that should lead to the worldwide elimination of the virus.

[Reinfection with SARS-CoV-2 and Failure of Humoral Immunity: a case report.](#)

[HTML\] europepmc.org](#)

[The importance and challenges of identifying SARS-CoV-2 reinfections](#)

[PDF\] asm.org](#)

[Setting the criteria for SARS-CoV-2 reinfection—six possible cases](#)

[PDF\] journalofinfection.com](#)

[Organ system effects and reinfection of COVID-19: A Review](#)

[PDF\] tbzmed.ac.ir](#)

[Distinguishing SARS-CoV-2 bonafide re-infection from pre-existing minor variant reactivation](#)

[HTML\] nih.gov](#)

[Retest positive for SARS-CoV-2 RNA of “recovered” patients with COVID-19: Persistence, sampling issues, or re-infection?](#)

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[\[HTML\] Age and influenza-specific pre-vaccination antibodies strongly affect influenza vaccine responses in the icelandic population whereas disease and ...](#)

[HTML\] frontiersin.org](#)

[The great escape? SARS-CoV-2 variants evading neutralizing responses](#)

[PDF\] cell.com](#)

[HTML] [Endemic SARS-CoV-2 will maintain post-pandemic immunity](#)

[HTML] [nature.com](#)

[Will SARS-CoV-2 become endemic?](#)

[PDF] [blmboise.org](#)

[HTML] [Immunological considerations for COVID-19 vaccine strategies](#)

[HTML] [nature.com](#)

[HTML] [Assessing the human immune response to SARS-CoV-2 variants](#)

[HTML] [nature.com](#)

[PDF] [Re-infection with SARS-CoV-2: What Goes Around May Come Back Around](#)

[PDF] [semanticsscholar.org](#)

[HTML] [What reinfections mean for COVID-19](#)

[HTML] [thelancet.com](#)

[HTML] [Vaccine Breakthrough Infections with SARS-CoV-2 Variants](#)

[HTML] [nejm.org](#)

[HTML] [Pre-existing conditions are associated with COVID-19 patients' hospitalization, despite confirmed clearance of SARS-CoV-2 virus](#)

[HTML] [sciencedirect.com](#)

[HTML] [Changes in symptomatology, reinfection, and transmissibility associated with the SARS-CoV-2 variant B. 1.1. 7: an ecological study](#)

[HTML] [sciencedirect.com](#)

[HTML] [Spike E484K mutation in the first SARS-CoV-2 reinfection case confirmed in Brazil, 2020](#)

[HTML] [virological.org](#)

[HTML] [Resurgence of COVID-19 in Manaus, Brazil, despite high seroprevalence](#)

[HTML] [thelancet.com](#)

[HTML] [New SARS-CoV-2 variants—clinical, public health, and vaccine implications](#)

[\[HTML\] nejm.org](#)

[HTML] [Multiple SARS-CoV-2 variants escape neutralization by vaccine-induced humoral immunity](#)

[\[HTML\] sciencedirect.com](#)

[Assessment of protection against reinfection with SARS-CoV-2 among 4 million PCR-tested individuals in Denmark in 2020: a population-level observational study](#)

[\[HTML\] thelancet.com](#)

[Scenario Analysis of COVID-19 Transmission Dynamics in Malaysia with the Possibility of Reinfection and Limited Medical Resources Scenarios](#)

[HTML\] nih.gov](#)

In Covid-19 vaccines, too, there could be a rapid decrease in effectiveness, as it is known since long time from other vaccines, and a permanent weakening of defense reactions could turn up after time. The vaccination promoters request that people who have gone through an infection should have a one-time vaccination after 6 months in order to strengthen their defense reactions.

[HTML] [Endemic SARS-CoV-2 will maintain post-pandemic immunity](#)

[\[HTML\] nature.com](#)

As numerous studies have shown since the beginning of the pandemic, a severe course of Covid-19 occurs primarily in people with previous illnesses. Diabetes, obesity, high blood pressure, cardiovascular diseases, a tendency to thrombosis, obstructive pulmonary diseases and chronic infections are the pacemakers for a serious course of the disease, which the advisers of the governments attribute solely to the virus, which as they say affects all infected people equally and is able to trigger severe disease processes.

Although the overwhelming number of infected people only go through a short illness with weak symptoms and develop long-term effective antibodies against the virus, they should be vaccinated now, although the effect of the vaccines can

quickly wear off and long-term side effects of the vaccines 6 months after their approval cannot be known.

The alleged short-term decrease in the number of persons who could do a severe disease course was the key argument in favor of having everyone vaccinated in solidarity with viable population groups.

As new studies show, long-term PM-emissions play a central role in the development of the diseases that lead to the severe course of Covid-19, but this has not prompted governments to specifically improve the medical care of these patients or the air quality by filtering devices to reduce particulate matter emissions indoors.

The fact that the many drugs that elderly persons have to take against chronic diseases lead to a rapid decrease in the effectiveness of antibodies from vaccinations, as various studies have shown, has not led governments to rethink their thinking.

[HTML] [The negative impact of comorbidities on the disease course of COVID-19](#)

[HTML] [springer.com](#)

Predictors of COVID-19 severity: A literature review

[HTML] [nih.gov](#)

[HTML] [COVID-19 and comorbidities: Deleterious impact on infected patients](#)

[HTML] [sciencedirect.com](#)

[HTML] [What Factors Increase the Risk of Complications in SARS-CoV-2-Infected Patients? A Cohort Study in a Nationwide Israeli Health Organization](#)

[HTML] [jmir.org](#)

[HTML] [Comorbidity and its impact on 1590 patients with COVID-19 in China: a nationwide analysis](#)

[HTML] [ersjournals.com](#)

[HTML] [Comorbidity and its Impact on Patients with COVID-19](#)

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[HTML] [Epidemiological, comorbidity factors with severity and prognosis of COVID-19: a systematic review and meta-analysis](#)

[\[HTML\] nih.gov](#)

Unequal impact of structural health determinants and comorbidity on COVID-19 severity and lethality in older Mexican adults: Considerations beyond chronological ...

[HTML\] nih.gov](#)

Obesity is the comorbidity more strongly associated for Covid-19 in Mexico. A case-control study

[\[HTML\] nih.gov](#)

[HTML] [Neurological comorbidity is a predictor of death in Covid-19 disease: a cohort study on 576 patients](#)

[\[HTML\] frontiersin.org](#)

ACE2 expression is increased in the lungs of patients with comorbidities associated with severe COVID-19

[\[HTML\] nih.gov](#)

[HTML] [Age, comorbidity, frailty status: effects on disposition and resource allocation during the COVID-19 pandemic](#)

[HTML\] smw.ch](#)

[HTML] [Comorbidities in rheumatic diseases need special consideration during the COVID-19 pandemic](#)

[\[HTML\] springer.com](#)

Baseline chronic comorbidity and mortality in laboratory-confirmed COVID-19 cases: Results from the PRECOVID study in Spain

[\[PDF\] mdpi.com](#)

Age and multimorbidity predict death among COVID-19 patients: results of the SARS-RAS study of the Italian Society of Hypertension

[\[PDF\] researchgate.net](#)

The role of essential organ-based comorbidities in the prognosis of COVID-19 infection patients

[\[HTML\] nih.gov](#)

[Prevalence and severity of corona virus disease 2019 \(COVID-19\): A systematic review and meta-analysis](#)

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[COVID-19 susceptibility in bronchial asthma](#)

[HTML\] jaci-inpractice.org](#)

[\[HTML\] Impact of comorbidity burden on mortality in patients with COVID-19 using the Korean health insurance database](#)

[HTML\] nature.com](#)

[Demographics, comorbidities and outcomes in hospitalized Covid-19 patients in rural southwest Georgia](#)

[\[PDF\] tandfonline.comFull View](#)

[Age and multimorbidity predict death among COVID-19 patients: results of the SARS-RAS study of the Italian Society of Hypertension](#)

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[\[HTML\] Comorbidities might be a risk factor for the incidence of COVID-19: Evidence from a web-based survey](#)

[\[HTML\] sciencedirect.com](#)

[\[HTML\] Gender, age and comorbidities as the main prognostic factors in patients with COVID-19 pneumonia](#)

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[Predictive symptoms and comorbidities for severe COVID-19 and intensive care unit admission: a systematic review and meta-analysis](#)

[\[HTML\] nih.gov](#)

[Predictive symptoms and comorbidities for severe COVID-19 and intensive](#)

[\[HTML\] nih.gov](#)

[Age, frailty, and comorbidity as prognostic factors for short-term outcomes in patients with coronavirus disease 2019 in geriatric care](#)

[\[HTML\] sciencedirect.com](#)

[\[HTML\] Effects of Comorbidities on the Elderly Patients with COVID-19: Clinical Characteristics of Elderly Patients Infected with COVID-19 from Sichuan, China](#)

[\[HTML\] springer.com](#)

[Epidemiological characteristics of coronavirus disease 2019 \(COVID-19\) patients in IRAN: A single center study](#)

[\[HTML\] nih.gov](#)

[Comorbidities and the COVID-19 pandemic dynamics in Africa](#)

[\[PDF\] wiley.com](#)

[\[PDF\] Ethnicity and COVID-19 in children with comorbidities](#)

[PDF\] thelancet.com](#)

[\[PDF\] Comorbidities, cardiovascular therapies and COVID-19 Mortality: A Nationwide, Italian Observational Study \(ItaliCO\)](#)

[PDF\] frontiersin.org](#)

[Characteristics, comorbidities, and outcomes in a multicenter registry of patients with HIV and coronavirus disease-19](#)

[\[PDF\] semanticscholar.org](#)

[Risk factors for COVID-19 death in a population cohort study from the Western Cape Province, South Africa](#)

[\[HTML\] nih.gov](#)

[HTML\] Comorbidities, clinical signs and symptoms, laboratory findings, imaging features, treatment strategies, and outcomes in adult and pediatric patients with ...](#)

[HTML\] sciencedirect.com](#)

[COVID-19 in diabetic patients: Related risks and specifics of management](#)

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[\[HTML\] Causes of death and comorbidities in hospitalized patients with COVID-19](#)

[\[HTML\] nature.com](#)

[Laboratory markers associated with COVID-19 progression in patients with or without comorbidity: a retrospective study](#)

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[\[HTML\] Effect of underlying comorbidities on the infection and severity of COVID-19 in Korea: a nationwide case-control study](#)

[\[HTML\] nih.gov](#)

[\[HTML\] Older age, comorbidity, glucocorticoid use and disease activity are risk factors for COVID-19 hospitalisation in patients with inflammatory rheumatic and ...](#)

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[Cardiovascular comorbidities as predictors for severe COVID-19 infection or death](#)

[\[HTML\] oup.com](#)

[\[HTML\] Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study](#)

[\[HTML\] bmj.com](#)

[\[HTML\] Effect of underlying comorbidities on the infection and severity of COVID-19 in Korea: a nationwide case-control study](#)

[\[HTML\] nih.gov](#)

[Clinical characteristics of hospitalized Covid-19 patients in New York City](#)

[\[PDF\] medrxiv.org](#)

[Characteristics and outcomes of individuals with pre-existing kidney disease and COVID-19 admitted to intensive care units in the United States](#)

[\[HTML\] ajkd.org](#)

[Clinical course and risk factors for mortality of COVID-19 patients with pre-existing cirrhosis: a multicentre cohort study](#)

[PDF\] bmj.com](#)

[Implications of COVID-19 for patients with pre-existing digestive diseases](#)

[PDF] [thelancet.com](#)

[\[HTML\] Pre-existing traits associated with Covid-19 illness severity](#)

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[\[HTML\] COVID-19 and cardiovascular disease: from basic mechanisms to clinical perspectives](#)

HTML] [nature.com](#)

[SARS CoV-2 infection among patients using immunomodulatory therapies](#)

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[How is immunosuppressive status affecting children and adults in SARS-CoV-2 infection? A systematic review](#)

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[Gastrointestinal and hepatic abnormalities in patients with confirmed COVID-19: A systematic review and meta-analysis](#)

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[Association of diabetes mellitus with disease severity and prognosis in COVID-19: a retrospective cohort study](#)

HTML] [diabetesresearchclinicalpractice.com](#)

[\[HTML\] Neurological comorbidity and severity of COVID-19](#)

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[Mechanism of inflammatory response in associated comorbidities in COVID-19](#)

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[SARS-CoV-2 organising pneumonia: 'Has there been a widespread failure to identify and treat this prevalent condition in COVID-19?'](#)

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[\[HTML\] Does comorbidity increase the risk of patients with COVID-19: evidence from meta-analysis](#)

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[Deaths in SARS-Cov-2 positive patients in Italy: the influence of underlying health conditions on lethality](#)

[\[PDF\] mdpi.com](#)

[\[HTML\] SARS-CoV-2 COVID-19 susceptibility and lung inflammatory storm by smoking and vaping](#)

[\[HTML\] biomedcentral.com](#)

[Obesity and its implications for COVID-19 mortality](#)

[\[HTML\] wiley.com](#)

[Association of cardiovascular disease with coronavirus disease 2019 \(COVID-19\) severity: a meta-analysis](#)

[\[HTML\] nih.gov](#)

[Clinical characteristics of hospitalized individuals dying with COVID-19 by age group in Italy](#)

[HTML\] bvsalud.org](#)

Preventive therapies were hardly used for Covid-19 patients with previous existing illnesses. Their effects in the individual clinical pictures and their interaction with continuously taken medication were not investigated in more detail.

[PDF\] Patterns of COVID-19 mortality and vitamin D: an Indonesian study](#)

[PDF\] tekinvestor.no](#)

[\[PDF\] COVID-19 treatment in patients with comorbidities: Awareness of drug-drug interactions](#)

[PDF\] liverpool.ac.uk](#)

[Altered cytokine levels and immune responses in patients with SARS-CoV-2 infection and related conditions](#)

[\[HTML\] nih.gov](#)

[Mechanism of inflammatory response in associated comorbidities in COVID-19](#)

[HTML\] nih.gov](#)

[Association of blood glucose control and outcomes in patients with COVID-19 and pre-existing type 2 diabetes](#)

[PDF\] cell.com](#)

[Impaired glucose metabolism in patients with diabetes, prediabetes, and obesity is associated with severe COVID-19](#)

[HTML\] medrxiv.org](#)

[ACE2 imbalance as a key player for the poor outcomes in COVID-19 patients with age-related comorbidities–Role of gut microbiota dysbiosis](#)

[\[HTML\] nih.gov](#)

Preventive immune system supporting therapies against the development of the SARS-Cov-2 infection and persistent inflammatory reactions using plant substances, vitamins and other trace elements have hardly been investigated to date, nor was the role of nutrition and fitness in prevention or the administration of beta-interferon in acute illnesses states.

[Potential use of polyphenols in the battle against COVID-19](#)

[\[HTML\] nih.gov](#)

[\[HTML\] Prophetic medicine-Nigella Sativa \(Black cumin seeds\)–potential herb for COVID-19?](#)

[\[HTML\] nih.gov](#)

[\[HTML\] Role of vitamin D in preventing of COVID-19 infection, progression and severity](#)

[HTML\] sciencedirect.com](#)

[\[HTML\] Therapeutic opportunities of edible antiviral plants for COVID-19](#)

[\[HTML\] springer.com](#)

[\[HTML\] The Impact of Polyphenols-Based Diet on the Inflammatory Profile in COVID-19 Elderly and Obese Patients](#)

[\[HTML\] nih.gov](#)

[PDF] [Could polyphenols-based diet improve COVID-19 mediated inflammation through senescence regulation?](#)

[PDF] [frontiersin.org](https://www.frontiersin.org)

Flavonoids activation of the transcription factor Nrf2 as a hypothesis approach for the prevention and modulation of SARS-CoV-2 infection severity

[PDF] [mdpi.com](https://www.mdpi.com)

Resveratrol and pterostilbene potently inhibit SARS-CoV-2 infection in vitro

[PDF] [biorxiv.org](https://www.biorxiv.org)

ESPEN expert statements and practical guidance for nutritional management of individuals with SARS-CoV-2 infection

[HTML] [clinicalnutritionjournal.com](https://www.clinicalnutritionjournal.com)

Intermittent fasting, a possible priming tool for host defense against SARS-CoV-2 infection: crosstalk among calorie restriction, autophagy and immune response

[HTML] [nih.gov](https://www.nih.gov)

[HTML] [Survival factors and metabolic pathogenesis in elderly patients \(≥ 65\) with COVID-19: a multi-center study](#)

[HTML] [nih.gov](https://www.nih.gov)

[HTML] [Exploratory analysis of immunization records highlights decreased SARS-CoV-2 rates in individuals with recent non-COVID-19 vaccinations](#)

[HTML] [nature.com](https://www.nature.com)

Does high cardiorespiratory fitness confer some protection against proinflammatory responses after infection by SARS-CoV-2?

[PDF] [wiley.com](https://www.wiley.com)

Safety and efficacy of inhaled nebulised interferon beta-1a (SNG001) for treatment of SARS-CoV-2 infection: a randomised, double-blind, placebo-controlled, phase 2 ...

[HTML] [thelancet.com](https://www.thelancet.com)

[HTML\] Effect and safety of combination of interferon alpha-2b and gamma or interferon alpha-2b for negativization of SARS-CoV-2 viral RNA. Preliminary results of a ...](#)

[\[HTML\] medrxiv.org](#)

[HTML\] ... to date on COVID-19 hyperinflammatory syndrome: considerations for interventions to mitigate SARS-CoV-2 viral infection and detrimental hyperinflammation](#)

[HTML\] frontiersin.org](#)

After vaccinations were propagated on all possible channels as the only effective long-term prevention of infections and a severe disease course, which alone could enable the formation of herd immunity, being a prerequisite for a normal life after the pandemic, vaccinated people as opposed to unvaccinated people were rewarded with various freedoms, for example freedom of travel, by the political rulers. In full adherence to this message, the development of antiviral substances which, as it was said at the same time, should only be given to seriously ill people for whom vaccinations do not work, has been driven forward. In other words, these substances should be given to all those around the world in whom the existing vaccines no longer work optimally against the now emerging mutants. (Switzerland has already ordered for millions medicaments from the Roche company, which are intended to reduce symptoms in the severe disease course.)

In an all-encompassing concerted operation of all possible government institutions, parties and associations, with the help of the major media, we have been told without any interruption for about one year now that the severe course of Covid-19, which could affect everyone equally, was occurring solely due to SARS-Cov-2, which could only be contained by means of vaccines, that everyone should take so that this virus can be contained through a comprehensive herd immunity. For this we were restricted in our freedom of movement by laws and orders, we were transferred to the home-office, prevented in many cases from carrying out our professional activities, later refunded by billions of tax-money, whilst others had to work fully in risky jobs.

Emissions of nitrogen oxides, carbon dioxide, sulfur dioxide, ozone and particulate matter, which, as has been known since the beginning of the pandemic in Wuhan, play a crucial role in the severe course of Covid-19 and the transmission of virus particles, were not prevented by partial driving bans in inner cities or by installing air purification devices in nursing homes, daycare centers, schools, companies, offices or in

retail outlets. Nursing home inmates were locked in their rooms for many months to avoid any contact.

So although the attainment of herd immunity through vaccination is questioned all over the world and only a temporary immunity for individual population groups can be achieved, we are ultimately asked to vaccinate or through corresponding laws that lead to the loss of the freedom to travel for the unvaccinated. The vaccine lobby seconded by specialists and medical associations dictates increasingly, the health care system.

Dr. Angela Merkel, who, as the leading advocate of the car industry, has permitted excessive exhaust emissions for many years, which have led to permanent damage to thousands of people and subsequently to a severe course of Covid-19 in many of them, now points out that air pollution is now decreasing due to the reprogramming of the software in hybrid- and diesel vehicles and will continue to decrease in the future due to e-mobility.

Although no one can prove today that antibodies built after vaccinations are more effective than antibodies after a contact to the virus or after an infection, or antibodies formed against new mutants of SARS-Cov-2 at short notice as part of a flexible defense capacity, everyone should now take a vaccination that they should be refreshed with a new vaccination within six months.

The fact that the activity of eosinophils and other immune cells decreases after each vaccination, so that inflammatory reactions can occur more frequently in the case of local injuries and infections, obviously plays just as little role as the still unknown long-term side effects of this new vaccinations. Experts like Sucharit Bhakdi, who had stated early on that the advantages of a vaccination should be weighed against its possible disadvantages in every individual case, were disqualified as conspiracy theorists from the very beginning on.

The Federal Constitutional Court in Germany and the Federal Court in Switzerland are obliged to clarify in view of the current global situation on what legal bases the laws and regulations were implemented which mean travel bans for unvaccinated persons and accordingly a de-facto mandatory vaccination after corresponding complaints, that we should get under way as soon as possible.

The fact that SARS-Cov-2, which is said to have appeared for the first time in November 2019 in a wildlife market in Wuhan, could be the product of an artificial, simulated evolution in the laboratory, was immediately branded as a pure conspiracy theory. The patenting of a corona virus for research purposes was banned by the Obama administration (see Neue Zürcher

Zeitung of April 17, 2021), as was research with such a virus in the USA. Not forbidden was a corresponding research with the participation of American scientists in the China's leading research center in Wuhan.

The fact, that a genetically engineered virus, in which the possible further evolution in the environment was anticipated in order to develop effective drugs against a future corona viruses, as soon as it enters the environment via laboratory animals, can hardly be differentiated from a naturally evolved new corona virus even as experts have pointed out from the very beginning that the variant that appeared in Wuhan is unlikely to have developed through natural evolution and that the intermediate host for the spill over from bats to humans could not be clearly identified.

<https://patents.justia.com/patent/10130701>

<https://www.dw.com/de/mangelnde-sicherheit-bei-corona-forschung-in-china/a-56266516>

<https://science.sciencemag.org/content/369/6503/487>

[**Might SARS-CoV-2 have arisen via serial passage through an animal host or cell culture? A potential explanation for much of the novel coronavirus' distinctive ...**](#)

[HTML] [nih.gov](#)

[HTML] [**Tracing the origins of SARS-COV-2 in coronavirus phylogenies: a review**](#)

[HTML] [springer.com](#)

Study Group AIDS-therapy

Felix de Fries

Addendum:

What particulate matter particles play in the spread of the virus indoors, outdoors and in waters and how it affects the defensive activity in the epithelial tissues of the lungs, the cardiovascular system and the internal organs, and what it does in conjunction with nitric oxide, sulfur dioxide, ozone and carbon dioxide in individual organs were the subject of

intensive research, which we have brought together for discussion in various documents.

It was also about the role that particulate matter, nitrogen oxides, ozone, carbon dioxide and sulfur dioxide plays for the SARS-Cov-2 viral load and the formation of new mutants as well as the effect of vaccinations for immune reactions in local infections and injuries, which could be further intensified with re-vaccinations and on possible alternatives in the treatment of ill people in intensive care units.

[Particulate Matter and Covid-19](#) PDF

[Particulate matter as the main cause of Covid-19](#) PDF

[Particulate Matter and Covid-19 in Germany and elsewhere](#) PDF

[How particulate matter from woodfires, traffic and combustion augment the emergence of Covid-19](#) PDF

[Particulate matter in indoor and outdoor areas](#) PDF

[SARS-Cov-2 Spillover, particulate matter and mutation](#) PDF

[The emergence of Covid-19 and the measures prior to the mass vaccination](#) PDF

[Covid-19 vaccines and particulate matter](#) PDF

[SARS Cov-2 Mutations turn up](#) PDF

[Covid-19 Mutants](#) PDF

[The MRNA Vaccine and its effects on mutants](#) PDF

[Vaccination and eosinophils](#) PDF

[Azetylcystein and non-invasive ventilation in Covid-19 therapy](#) PDF