Scientific Reports of the Milan Shool of Medicine-Scuola Medica di Milano- November 26-2021

Summary

Scientific evidence of anti COVID-19 mRNA and vectorial vaccines genotoxicity inducing tumors and psycho-neuro-behavioral disorders.

doi 10.5281/zenodo.5763850

Giuseppe R.Brera[1]

Summary

. Micro-RNAs (miR) are non-coding RNA filaments that control mRNA transcription. Micro-RNAs have been studied in cancer pathogenesis, metastasization, cancer therapy, the structuring of the central nervous system, diabetes, and heart disease. Mir-134-138 regulate the development of dendritic spines needed for synapses. Their silencing can lead to autistic spectrum disorders and mental retardation and damage to brains in evolution such as childhood and adolescence, producing learning problems and mood problems, and in adults for alterations of receptors for neurotransmission. It has been shown that N1-methyl pseudouridine binds to miR and induces silencing processes, increasing cell methylome at the origin of cancer. The production of mRNA vaccines replaces Uridine with N1-methyl-pseudouridine to escape innate immunity and implement rapid translation. N1-methyl-pseudouridine binding with mi-RNA alters the epigenetic transcription of oncosuppressor that, with the increase in cell methylation, could result in the induction of tumors and relapses, natural immunity inhibition, and neuro-behavioral disorders transmissible to progeny. Vectorial vaccines hybridize the host DNA with adenoviruses and induce tumors at the experimental level. Clinical reports and long-term epidemiological investigations are necessary to verify the impact of mRNA vaccines on health.

The SARS-COV 2 pandemic developed in China most likely for a probable laboratory induction linked to the attempt to create a hybrid virus "SARS-COV-HIV"

for a vaccine or other purposes; the pandemic beginning determined a race to the vaccine by "Big-pharma in opposition to the SARS-COV 1(2002) and MERS pandemics. (2009)" disappeared without mass vaccinations. Since 2002 until 2019, BIG-Pharma omitted to invest in anti-SARS-COV vaccines aware that the speed of mutations of SARS-COV like HIV would have made research unuseful. World countries public health assessors, instead of determining a secondary prevention strategy to protect o people with comorbidities at risk of lethality (92%) based on a careful study of the literature on SARS-COV 1 for preventive purposes, wholly omitted the person-centered indeterministic approach to medicine inspired to Person-Centered Medicine, the medical science paradigm revolution[2 3 4 5 6 7] The omissions of the WHO and national governments, based on an illiterate epistemological error leading to an approach to pandemics with a mechanistic, linear model: "*virus-infection- disease-death risk and not virus-allostasis-natural immunity-vulnerability risk-disease risk- death risk"* oriented only to a mechanistic adaptive immunity induced by experimental genetic vaccines not tested for long-term adverse effects with insufficient and criticized trials.[8 9] This illiteracy-based error in promoting global health has resulted in a preventive strategy failure affecting human rights and the economy, leading to 5 million deaths and in Italy to about 150,000 (at the date). In Italy, legislation induced vaccination with blackmail, such as the loss of work which showed only for older than 39 a preventive efficacy in intensive care admissions rate and lethality.[10]

Epidemiological elaboration of data from the Italian "EPICENTRO Istituto Superiore di Sanita'" (October 9-November 10) shows in oldest people > 80 after two doses of vaccines < 6 months an increase of lethality risk compared with unvaccinated (OR 1.59-IC q.1.2356 to 2.0587 P=0.0003 and a non-significant increase of lethality in the vaccinated range 12-39: OR 1.2-CI 0.1691-8-8229

Table 1

Odds ratio	1.5949
95 % CI:	1.2356 to 2.0587
z statistic	3.584
Significance level	P = 0.0003

In oldest people > 80, there is a higher mortality rate (OR = 1.5949, p < .001) for the full vaccinated (two doses) within 6 months compared to unvaccinated and a tendency in 12-39.

There is a tendency to increase risk of lethality in the vaccinated compared to unvaccinated in the range 60-79 close to 0,5 significance: OR 1.23 (CI 0.5686 to 2.6962- P =0,5904) present in 60-79 people.
In > 80, the lethality risk of vaccinated people is less than the full cycle of vaccination. (OR = 1.07 ,CI 0.5397 to 2.1330P = 0.5904. In other ages, first doses and full cycle of vaccination appear to be a protective factor from lethality, < 6 months from the first dose.
To date, the vaccines' failure to determine a durable immunity longer than 3-4 months for vectorial vaccines and six months for mRNA vaccines induced public health assessors to induce a third dose boosting without any consideration of adverse effects and possible alternative preventive measures.[11]

The Italian population has been inundated with statements by the central health government and regional governments driven media inducing vaccination or by mediatic virologists also based on false public statements. It occurred with a vaccination campaign for children, adolescents, and young people, not at risk of COVID-19, that if rarely infected, they are asymptomatic and with a ratio of cases/fatality to zero or almost. Roberto Speranza, the Italian Health Minister, declared "The full agreement of all scientists" about the need for vaccination in all ages." Franco Locatelli, the director of the Anti SARS-COV Italian Technical, stated on August 20 the inexistence of adverse effects for adolescents to induce parents' authorization after the news of healthy adolescents' deaths after vaccination from Italy and USA and signalization of adverse effects by USA CDC, also in contrast with health policy of countries like the UK.

Lethality from COVID-19 concerns 92,8% of people with comorbidities [12] characterized by atherosclerosis which leads to an auto-immune phenotype and immune anergy after the 7th day of the disease, the actual cause of lethality [13] confirming the theories of the relativity of the infection to cholesterol concentration in lipid rafts and the caveolar lipid rafts number and the probability of severe clinical syndrome relative to the LDL/HDL ratio and phospholipase concentration in the cell membrane, one factor altering the immune signal transduction. [14]

Recently, Maurizio Federico, with a significant review[15] in a very profound and straightforward way, highlighted that the mRNA vaccines have hard limits in immunogenicity. Vaccines have limited usefulness in time and are restricted to RBD of viral S-proteins of the original viral strain, losing effectiveness with variants because of the "Original antigenic sin. Vaccines do not stop contagions because they do not produce neutralizing antibodies (IGA) in mucous membranes of the pharynx and upper

respiratory ways, so laws that lead to the obligation to vaccination certificates appear without any scientific reason. They do not induce resident memory B-cells in lungs, not preventing the first cause of lethality, but only IGG in the bloodstream. Moreover, they select variants whose viral allostasis completely escape any previously vaccine-induced immunity. Moreover, restrictions hamper the asymptomatics-and healed-induced herd immunity, while there is the possibility to treat the infection early with efficacy,[16] identifying people at risk with the probability theory of the COVID-19 severity. [17]

In the light of the only IGG stimulation and the lack of activation of resident memory B-cells in the lung, the antiviral effectiveness of mRNA vaccines is a conundrum.

Viruses lead to asymptomatic infections, depending on innate and adaptive immunity, as happens for most people every week with different species of virus and that for SARS_COV 2 is due to the immunization from other non-dangerous coronaviruses, such as corona-adenoviruses which target at least 50% of people who reach a partial immunity also to SARS-COV 2, because of common antigens. On the other hand, infections depend on the protective factors that stimulate natural immunity, eliminating the virus before it reaches the epithelial and endothelial cells. Infection *is only possible on the condition of degeneration of the cell membranes due to cholesterol and LDL, inducing the formation of lipid rafts whose caveolae are the obligatory gates to the infection*.[18] The oldest people with atherosclerosis–based comorbidities are more at risk of lethality because of immune anergy. Conversely, infections are rare and almost asymptomatic, with a low infectivity index in children and young people with healthy cell membranes. It has been computed that corona-adenoviruses immunize at least 50% of people. Antibodies against these neutralize vectorial vaccines adenoviruses vectors. Vaccinations with viral vectors are dangerous for children and adolescents closer to infections for the intensity of immunity reactions leading to the risk of disease from immunocomplexes and an increased thrombophilia.[19] [20] In Italy and adolescents died of thrombosis after the boosting dose of AstraZeneca.

The vaccines authorized by the Italian AIFA are genetic because they use genetic mechanisms to induce an artificial immunity against a particular "Spike-protein" defined by a messenger RNA code of the Huwan strain that allows the activation of adaptive cell immunity through activated lymphocytes T and B that with their proliferation assure a minimal immunity over time, not inhibiting the contagion. [21]

The mRNA vaccines are constructed with a sequence of bases homologous to RBD of the viral spike protein. The code is then transcribed by the RNA transfert, which allows the viral protein synthesis in the cytoplasm and in the organelles (endoplasmic reticulum and Golgi apparatus) to form the new virus. The mRNA vaccine is conveyed by lipid nano-particles that favor its entry into the cell membrane. The infected caveolae of the lipid rafts alter the transduction of immunity signals inhibiting proliferation and activation of lymphocytes T and B, but this is undoubtedly related to the alteration of the cell membrane and the flooding of macrophages with cholesterol and PH. Immunosenescence and the previous immune-atherosclerosis phenotype inhibit adaptive immunity and memory-t and b cells production. [22] The virus dissemination is relative to a previous immunosuppressive phenotype and "inflammaging" induced by atherosclerosis inducing a lethality risk for the oldest people with comorbidities associated with atherosclerosis, like diabetes, obesity, hypertension, cardiovascular diseases. It explains the higher rate of mortality of the immunosenescent oldest people. The SARS-COV 2 Immunity hijacking appears mediated by MTTL3, which blocks the RIG-1 receptors recognition.[23]

The mRNA vaccines induce a high IFN gamma reaction and stimulate CD4 TH1 cells in local lymph nodes, but neither induce the antiviral CD8+ mediated immunity[24] because they do not stimulate synthesis nor interact with the lung B-cell memory-resident cells, not activating these. The immunity induction of mRNA vaccines is a "conundrum." [25]

The heterologous "mRNA" inoculated with the vaccine "infects" all the immune, epithelial, endothelial cells, neurons in every anatomical structure, from the brain to the heart, the endocrine organs, and the toe.

The problem that viro-immunologists[26] had to face was to prevent the inoculated heterologous m-RNA from being recognized by Toll-like receptors (TLR). [27] For this purpose, in m-RNA, they replaced a base: Uridine with n1-methyl pseudouridine, which escapes immune control of the inoculated host and increases translation speed. *In 2019 J. Lockhart, J Canfield J, Mong EF et al.*[28] *demonstrated that the replacement of the Uridine of the Spike Protein mRNA with the n1methyl-pseudouridine that is necessary for the mRNA production alters the silencing of micro-RNA switches leading to a decrease in the activity of these molecular switches, called "the dark matter" of the cell (about 50% of RNA) and thus altering the processes of silencing.* What happens if the repressor of an oncogenesis inhibitor is not silenced?

N1-methyl-pseudouridine binds to miR, altering their action to silencing miRNAs, possibly harming the organism's life. Micro-RNAs are filaments of non-coding RNA that, thanks to the "Argonaut" proteins after joining the "RISC (RNA-induced silencing complex, RNA-induced silencing complex), interact internally with the target RNA, preventing transcription by preventing the synthesis of the protein with the specific mRNA silencing. After their discovery in 1993 by Victor Ambros, Rosalind Lee, and Rhonda Feinbaum, the role of particular microRNAs was studied in pathogenesis and cancer therapy, in the structuring of the central nervous system, in diabetes, in heart disease. For example, if mi-RNA 205 is inhibited in the pathogenesis of breast cancer, carcinogenicity and metastasisation are encouraged. The same occurs for mi-RNA 21 for liver cancer. In 2009 G. Schratt, with a great contribution, illustrated some fundamental actions of miR in neurons. Mir-134-138 regulate the development of dendritic spines needed for synapses.[29] Their alteration can lead to autistic spectrum disorders and mental retardation and in brains in development as in childhood and adolescence, to learning and mood problems, as well as in adults to neuro-transmission receptor alterations such as CAMKII and CREB. Regulation of innate immunity involves mi-RNA 155-146 -132 as illustrated by J. Raisch, A.Darfeuille-Michaud, HT. Nguyen in their elegant review of 2013. Mir-155 regulates the suppression of the cytokine signaller (SOCS)-1, which negatively regulates the capacity of the "Antigen Presenting Cells " APC to present antigen and activate lymphocytes.[30 31] Cells with the lack of mir-155-show a defective presentation of antigen and therefore cannot activate T cells to promote the TH1-induced inflammation [32]: this could be the epigenetic pathogenesis of anergia and immunosenescence. Another study has shown that the elimination of mir-155 expression significantly increases the expression of the pro-inflammatory IL1. These observations depict how mRNA vaccines could induce paradoxical inhibition of innate immunity, increasing people's vulnerability to infection and cancer. In atherosclerotic M2 immune phenotype, present in comorbidities at risk of COVID-19 severity,[33] it could induce anergy when there are other infections with SARS-COV 2 variants escaping previous and waning adaptive immunity in short-time, exposing oldest immunosenescent people to a clinical syndrome severity up to lethality. Moreover, the induced methylation by mRNA vaccines, resulting in an MTTL3 cellular increase, supports the viral hijacking of immunity by SARS-COV 2 variants, and reducing natural immunity. It means that more mRNA vaccines are inoculated, more natural immunity is reduced, making easier variants' immunity hijacking.

Numerous studies document how dysregulation of mi- RNA is associated with cancer development and metastasis processes, as documented by the splendid review of

G. Sotiropoulou, G. Pamplakis, E.Lianidou Pampalakis, Lianidou, Z. Mourelatos. Cancer pathogenesis is associated with several bio-molecular processes such as genomic alterations, transcription of oncogenic factors, and inhibition of repressors transcription, such as P53 and hypoxia.

Epigenetic changes are regulated by micro-RNAs which are the arbiters of cell health as on/of molecular switches of mRNAs.

Viral mRNAs such as mRNA vaccines act by altering microRNAs. The mRNA vaccines act like a virus at the epigenetic level.

Recently E Karimi, H. Azari Yari, M, Tahmasebi, et al. identified 39 mi-RNA derived by Sars-COV 2 inducing a viral allostasis inhibiting the innate immunity, altering Vit. D and the lung cells metabolism through the transcription alteration.[34]

The silencing of miR-223 appears to be caused by an epitranscryptomic alteration of pre-micro-RNA, which produces an oncogenic factor that binds to its site, producing its "switching off." This is associated with leukemia pathogenesis. An epidemiological study on the incidence of post-vaccine leukemia and other cancers is needed. The direct induction of miR dysregulation produced by mRNA vaccines can have dramatic consequences for millions of young people and children by inducing the pathogenesis of tumors or relapses and diseases of the central nervous system. What will be the effect of mRNA vaccines on the brain of the ruling class since their action determines alterations of the miRNA that control neuronal nuclei biological substrate of the cognitive and subcortical sphere. What will happen with the impairment of the activity of the cerebral cortex and the subcortical nuclei?

There is a pandemic of illiterate criminality in people who want to induce the vaccination of adolescents and children who are not at risk of COVID-19. If rarely infected, children are asymptomatic[35] thanks to their solid innate immunity and rapidly reduce the viral load in the oral and nasal mucous membranes. Children and adolescents and asymptomatic people could act as "living vaccines" contributing to the" herd immunity" as often occurs with other viruses. It has been well highlighted that asymptomatic people relatively contribute to the virus diffusion. Vaccination exposes children and adolescents to epigenetic and genetic damages whose impact must be studied with epidemiological investigations but is sure.

Two meta-analyses show the reduced infectivity of asymptomatic people (AIC). Transmission rates of AIC ranged from 0–2.2% compared to 0.8–15.4% for symptomatic (SIC)[36] and in the household from 0–4.9% compared to 18.0% of SIC. [37] .

The infectivity reduction of asymptomatic people is probably due to the presence of neutralizing IGA in mucous membranes, absent in vaccinated people.

A study that monitored 455 contacts exposed to the asymptomatic COVID-19 virus carrier showed that nobody was infected.[38]

The reduced viral load transmission by the upper respiratory and its disappearance in a shorter time can explain this evidence and reverses the common belief that asymptomatic people induce the pandemic. Conversely, a reduced transmissible viral load to healthy people could activate the people's innate immunity and the progressive loss of virulence by activating the tissue-resident memory T cells that block the virus diffusion in the organism.

The right strategy to accelerate herd immunity is a health education campaign to educate to assume immunogenic molecules (e.g., beta-glucans in bakers yeast) and inhale vapors of powerful common natural antiviral substances at the first signals of infection of upper respiratory ways.[39]

The SARS-COV 1(2002-2003) and MERS (2009-2010) disappeared without vaccines.

What will happen in millions of adolescents and young people not at risk of COVID-19 that the Italian health management and other countries led to vaccination with a legalized blackmail, because of the alteration of the regulation of mir-223, whose alteration is linked to the pathogenesis of leukemia? In the USA, the FDA recently approved mRNA vaccines in children based on a small Pfizer trial, which used children as experimental animals and that did not monitor the adverse effects at the epigenetic level and their manifestation after a long time.

The other process induced by mRNA vaccines is the cell's methylation induced by n1-methylpseudouridine. The n1-methylpseudouridine (ϕ) stabilizes the RNA. It is naturally present more in the RNAt, with implicit natural finalism to favor the coding probably. In synthesizing the mRNA vaccines, the Uridine has been replaced with ϕ to increase the translation speed and evade the natural immunity. However, introducing ϕ in each cell produces cellular stress that could be equivalent to "heat stress" that produces an 'increase of cell methylome by methylating all the bases through the synthesis induction of METTL3 (methyltransferase like 3) with the finalism to ensure an allostasis for survival. The METTL3 binds to microRNA, causing the down-regulation of some and up-regulation of others. The action of miR like that of antisense RNA could produce the silencing of the P15 gene, which encodes a dependent cycline kinase involved as a

repressor of malignant leukemic degeneration. W Yu, D Gius, P. Onyango, et al. in 2008 saw an inverse relationship between P15 and leukemia, highlighting the risk of its repression. Antisense RNA also interacts directly or indirectly with DNA-methyltransferase leading to DNA methylation and its consequences in the repression of gene transcription and the recruitment of "histone-modifying enzymes" by modifying chromatin.

This evidence means that in opposition to an illiterate bio-medical culture, mRNA vaccines also induce genetic alteration that, in addition to induction or suppression of miR, lead to DNA methylation and modification of chromatin.

Moreover, the increase in cell methylome could be caused by the lack of repression of the MTTL3 synthesis by silencing its mRNA induced by a specific micro-RNA. The MTTL 3 increase induces the general methylation of nucleotidic bases with catastrophic effects, a sort of earthquake in the organism's life, with dramatic effects on the pathogenesis of tumors.

In the tissues of patients with "Non-small cell lung cancer (NSCLC) (small cell lung cancer) "N6-methyladenosine (m6A) methyltransferase-like 3 (METTL3)" regulates microRNA-1246 (mir-1246) which is a well-documented tumor's progression and metastases. More METTL3 and mir-1246 were found in these tissues in inverse ratio to PEG-3 (Paternally expressed gene-3).[40]

The alteration of micro-RNA is, therefore, very dangerous. This confirms the aversion of Luc Montagnier, Nobel Prize, against the use of genetic vaccines before knowing in depth their effects with long-term epidemiological investigations.

Several deaths and adverse effects on mRNA vaccines have already been reported worldwide, [41] such as the high incidence of pericarditis and myocarditis in young people, which in some countries like the UK, has blocked any other vaccination in adolescents and young people, not at risk of COVID-19. In Italy, a teenager died a few hours after the second vaccination by m-RNA, another from the vectorial Astra-Zeneca. In the USA, the CDC reported the deaths of 14 teenagers. The actual extent of these events is entirely unknown because public health, organizations such as AIFA, the Ministry of Health, the Italian Higher Institute of Health, to our knowledge, have not organized epidemiologic research to study the adverse effects of these vaccines over time.

Undoubtedly the fear of COVID-19, induced by a virus quickly and destroyable and neutralizable with natural antiviral remedies also immunogenic and drugs already in use,

[42] that prevents contact with epithelial and endothelial cells is derived from the lack of public health orientation towards "Person Centered Prevention"[43] , and to failure in primary and secondary prevention. This omission is due to ignorance and the non-adoption in public health of the multi-factorial, multi-dimensional paradigm of "Person-centered medicine," the paradigm change of medical science, that could have saved only in Italy 150.000 and in the world millions of people. As Luc Montagnier claims, we need analysis over a long time to control the existence of adverse effects, even fatal at a short time. The only answer to the pandemic beginning and permanence has been the adoption of "genetic" vaccines, which have been inadequately tested and limited in time, with the scientific evidence of their danger. The adverse effects of these vaccines and the induction of variants endanger the health of millions of people and must be prevented or blocked in time to avoid a global health disaster, primarily protecting children and adolescents whose health is to date menaced by mRNA vaccines.

The mRNA vaccines' dangers, as highlighted above, are shared by the viral vector vaccines. These induce a modification of human DNA because of the recombination of the animal or human *DNA vector adenovirus with the host's DNA. This hybridization could lead to auto-immune reactions and, at the experimental level, to an impressive induction of tumors.* [44]

Scientific evidence of the anti SARS_COV 2 vaccines- induced genetic damages must be studied with clinical and epidemiological investigations. However, before it is necessary a total change of public health administration resulting in the withdrawal of the authorizations to mRNA vaccines distribution and the constitution of a metabolic and immune shield for the population by adopting the "Antiviral allostasis, and immuno-stimulation"[45] *strategy launched in Italy by the National Health Committee and in the world by the World Health Committee.*

Unfortunately, the prudence towards vaccines that led to their rejection only by a minority of the population and health care workers has a sound scientific basis. The dramatic suspension of health care workers who refused vaccination by a surprising (in the negative sense) physician's council and discrimination of workers paradoxically supported by unions - but unions should not defend workers? -that do not want to vaccinate is without any scientific basis.

What can also happen to the brain, mind, and behavior of the national leadership, institutional public or business, teachers, and in any context with the genes of the adenovirus of chimpanzees integrated into the genome of cortical neurons or sub-cortical brain (Astra-Zeneca vaccine) that, if in age, communicate to the progeny? Will the COVID-19 contribute to human evolution?

Clinical reports and long-term epidemiological investigations are necessary to verify the impact of mRNA vaccines on health.

[1]

[1] Milan School of Medicine/ Scuola Medica di Milano , World Health Committee,

[2] Brera G.R. The manifesto of Person-Centered Medicine. Medicine, Mind Adolescence,1999; Vol. XIV, n. 1-2:3-7 Internet: www.unambro.it

[3] WHO Person-centered Medicine and Medical Education. (internet) Geneva: WHO Symposium; 4 May 2011. WHO A Internet http://www.unambro.it/html/pdf/All_Symposium_Education_People_Centred_4May2011.pdf

[4] Brera G.R. Person-centered Medicine: Theory, Teaching, Research. Int.J.Pers. Cent.Med 2011; 1 (1):69-79

[5] Università Ambrosiana. Medical Science and Health Paradigm Change . G.R Brera ed: Proceedings from the Conference: Medical Science and Health Paradigm Change. Milan 13-14-15 October 2017. Internet: www.healthparadigmchange.it

[6] Brera G.R. The Person-centered Health Paradigm and its impact on health sciences.(Internet) Research Gate 2015 DOI:10.13140/RG 2.1.2594.1925 2015-05-21 T 15:42:05 UTC. Available from https://www.researchgate.net/publication/277010325

[7] Brera, G.R Person-Centered Medicine, and Person-Centered Clinical Method. Milano: Università Ambrosiana ed.: 2021 ISBN: 9798726465432

[8] Doshi P. Will covid-19 vaccines save lives? Current trials aren't designed to tell us. BMJ 2020;371:m4037 http://dx.doi.org/10.1136/bmj.m4037 Published: 21 October 2020

[9] Topol EJ. Paul Offit's biggest concern about covid vaccines. 2020. https://www.medscape. com/viewarticle/936937

[10] Italian health Institute-Epicentro Pandemic COVID-19 Updating August 18 2021 Internet https://www.epicentro.iss.it/coronavirus/bollettino/Bollettino-sorveglianza-integrata-COVID-19_18-agosto- 2021.pdf

[11] Eliakim-Raz N, Leibovici-Weisman Y, Stemmer A, et al. Antibody Titers Before and After a Third Dose of the SARS-CoV-2 BNT162b2 Vaccine in Adults Aged ≥60 Years. JAMA. Published online November 05, 2021. doi:10.1001/jama.2021.19885

[12] Antos A, Kwong ML, Balmorez T, Villanueva A, Murakami S. Unusually High Risks of COVID-19 Mortality with Age-Related Comorbidities: An Adjusted Meta-Analysis Method to Improve the Risk Assessment of Mortality Using the Comorbid Mortality Data. Infect Dis Rep. 2021;13(3):700-711. Published 2021 Aug 8. doi:10.3390/idr13030065

[13] Brera G.R . SARS-COV 2- allostasis and the people and person-centered prevention. Part 2 The sars-cov 2- induced immunosuppression and covid-19 anergy . Part 3 The antiviral metabolic allostasis and preventive immunostimulation - How to induce zero risk for covid-19. Milan: Ambrosiana University: 2021 ISBN 9798547583520

[14] Brera G.R Sars-Cov-2 allostasis and the people and person-centered prevention. A new prevention strategy based on a people metabolic and immune shield for the pandemic shutdown. Part 1 The Sars-Cov 2 entry and COVID-19. Milan. Università Ambrosiana , 2021. ISBN: 9798530093906

[1]

[15] Federico M Biological and immune responses to current anti-SARS- CoV-2 mRNA vaccines beyond anti-Spike antibody production . Proceedings of the Conference Person-Centered Medcine,prventiona and adolescene; III° Session: Person-centered prevention,risks from genetic vaccines ,early therapy of COVID-19; 2021 Nov.20 ; Milan, University Ambrosiana. 2021.p 44-45.

[16] Suter F, Consolaro E, Pedroni S, Moroni C, Pastò E, Paganini MV, Pravettoni G, Cantarelli U, Rubis N, Perico N, Perna A, Peracchi T, Ruggenenti P, Remuzzi G. A simple, home-therapy algorithm to prevent hospitalisation for COVID-19 patients: A retrospective observational matched-cohort study. EClinicalMedicine. 2021 Jul;37:100941. doi: 10.1016/j.eclinm.2021.100941. Epub 2021 Jun 9. PMID: 34127959; PMCID: PMC8189543.

[17] Brera G.R Sars-Cov-2 allostasis and the people and person-centered prevention. A new prevention strategy based on a people metabolic and immune shield for the pandemic shutdown. Part 1 The Sars-Cov 2 entry and COVID-19. Milan. Università Ambrosiana , 2021. ISBN: 9798530093906

[18] Ibidem 15

[19] Federico M The conundrum of current anti-SARS-CoV-2 vaccines. Cytokine & Growth Factor Reviews.2021;60:45-61.

[20] Doerfler W. Adenoviral Vector DNA- and SARS-CoV-2 mRNA-Based Covid-19 Vaccines: Possible Integration into the Human Genome - Are Adenoviral Genes Expressed in Vector-based Vaccines? Virus Res. 2021 Sep;302:198466. doi: 10.1016/j.virusres.2021.198466. Epub 2021 Jun 1. PMID: 34087261; PMCID: PMC8168329.

[21] Ibidem 13

[22] Ibidem 3

[23] Li N, Hui H, Bray B, et al. METTL3 regulates viral m6A RNA modification and host cell innate immune responses during SARS-CoV-2 infection. Cell Rep. 2021;35(6):109091. doi:10.1016/j.celrep.2021.109091

[24] Cagigi, A.; Loré, K. Immune Responses Induced by mRNA Vaccination in Mice, Monkeys and Humans. Vaccines 2021, 9, 61. https://doi.org/10.3390/vaccines9010061

[25] Federico M The conundrum of current anti-SARS-CoV-2 vaccines. Cytokine & Growth Factor Reviews.2021;60:45-61.

[26] Lee RC, Feinbaum RL, Ambros V. The C. elegans heterochronic gene lin-4 encodes small RNAs with antisense complementarity to lin-14. Cell. 1993;75:843-854.

[27] Lu LF, Thai TH, Calado DP, Chaudhry A, Kubo M, Tanaka K, Loeb GB, Lee H, Yoshimura A, Rajewsky K, et al. Foxp3-dependent microRNA155 confers competitive fitness to Regulatory T cells by targeting SOCS1 protein. Immunity. 2009;30:80-91.

[28] Lockhart J, Canfield J, Mong EF, Vanwye J, Totary-Jain H. Nucleotide Modification Alters MicroRNA-Dependent Silencing of MicroRNA Switches. Mol Ther Nucleic Acids. 2019;14:339-350. doi:10.1016/j.omtn.2018.12.00

[29] Schratt G. microRNAs at the synapse. Nat Rev Neurosci. 2009 Dec;10(12):842-9. doi: 10.1038/nrn2763. Epub 2009 Nov 4. PMID: 19888283.

[30] Raisch J, Darfeuille-Michaud A, Nguyen HT. Role of microRNAs in the immune system, inflammation and cancer. World J Gastroenterol. 2013;19(20):2985-2996. doi:10.3748/wjg.v19.i20.2985

[32] Strains M, Pereira PM, Dunand-Sauthier I, Barras E, Reith W, Santos MA, Pierre P. MicroRNA-155 modulates the interleukin-1 signaling pathway in activated human monocyte-derived dendritic cells. Proc Natl Acad Sci USA. 2009;106:2735-2740

[33] Brera G.R . SARS-COV 2- allostasis and the people and person-centered prevention. Part 2 The sars-cov 2- induced immunosuppression and covid-19 anergy . Part 3 The antiviral metabolic allostasis and preventive immunostimulation - How to induce zero risk for covid-19. Milan: Ambrosian University: 2021 ISBN 9798547583520

[34] Karimi E, Azari H, Yari M, Tahmasebi A, Hassani Azad M, Mousavi P. Interplay between SARS-CoV-2-derived miRNAs, immune system, vitamin D pathway and respiratory system. J Cell Mol Med. 2021;25(16):7825-7839. doi:10.1111/jcmm.16694

[35] Erika Molteni, H. Sudre, Liane S. Canas, Sunil S. Bhopal, et al. Illness duration and symptom profile in a large cohort of symptomatic UK school-aged children tested for SARS-CoV-2. Lancet; 2021 internet file:///C:/Users/Utente/Documents/UA/ricerca/Corona%202/Illness%20duration%20and%20symptom%20profile%20in%20symptomatic%20UK%20school-aged%20children%20tested%20for%20SARS-CoV-2%20-%20The%20Lancet%20Child%20&%20Adolescent%20Health.html

[36] Byambasuren O.Cardona M.Bell K.et al. Estimating the extent of asymptomatic COVID-19 and its potential for community transmission: systematic review and meta-analysis.J Assoc Med Microbiol Infect Disease Canada (JAMMI). 2020; 4: 223-234

[37] Madewell ZJ, Yang Y, Longini IM, et al. Household Transmission of SARS-CoV-2. A systematic review and meta-analysis. JAMA Netw Open 2020;3(12):e2031756.doi: 10.1001/jamanetworkopen.2020.31756. 12.18.2

[38] Gao M, Yang L, Chen X, et al. A study on infectivity of asymptomatic SARS-CoV-2 carriers. Respir Med. 2020;169:106026. doi:10.1016/j.rmed.2020.106026

[39] Brera G.R . SARS-COV 2- allostasis and the people and person-centered prevention. Part 2 The sars-cov 2- induced vimmunosuppression and covid-19 anergy . Part 3 The antiviral metabolic allostasis and preventive immunostimulation - How to induce zero risk for covid-19. Milan: Ambrosian University: 2021 ISBN 9798547583520

[40] ShaohongHuang,ShaoningLuo,ChulianGong,LiminLiang,YiXiao MinganL,JinyuanHe MTTL3 upregulates microRNA-1246 to promote occurrence and progression of NSCLC via targeting pateRNAlly expressed gene 3 Datamolecular Therapy - Nucleic Acids, ISSN: 2162-2531, Vol: 24, Page: 542-553 Publication Year2021

[41] Klein NP, Lewis N, Goddard K, et al. Surveillance for Adverse Events After COVID-19 mRNA Vaccination. JAMA. 2021;326(14):1390–1399. doi:10.1001/jama.2021.15072

[42] Ibidem 13

[43]

[44] Doerfler W. Adenoviral Vector DNA- and SARS-CoV-2 mRNA-Based Covid-19 Vaccines: Possible Integration into the Human Genome - Are Adenoviral Genes Expressed in Vector-based Vaccines? Virus Res. 2021 Sep;302:198466. doi: 10.1016/j.virusres.2021.198466. Epub 2021 Jun 1. PMID: 34087261; PMCID: PMC8168329

[45] Brera G.R . SARS-COV 2- allostasis and the people and person-centered prevention. Part 2 The sars-cov 2- induced vimmunosuppression and covid-19 anergy . Part 3 The antiviral metabolic allostasis and preventive

immunostimulation - How to induce zero risk for covid-19. Milan: Ambrosian University: 2021 ISBN 9798547583520