Published Scientific studies showing a link between covid19 vaccinations and new more aggressive cancers called "turbo cancers" by medical doctors and scientists

Increased Age-Adjusted Cancer Mortality After the Third mRNA-Lipid Nanoparticle Vaccine Dose During the

COVID-19 Pandemic in Japan

Gibo et al. 2024

<u>https://www.cureus.com/articles/196275-increased-age-adjusted-cancer-mortality-after-the-third-</u> mrna-lipid-nanoparticle-vaccine-dose-during-the-covid-19-pandemic-in-japan#!/

The data showed significant increases in mortality from the following cancers:

- Ovarian cancer: increases of 2.5% in 2020, 7.6% in 2021 and 9.7% in 2022.
- Leukemia: a decrease of 0.2% in 2020 and increases of 1.7% in 2021 and 8.0% in 2022.
- Prostate cancer: increases of 1.2% in 2020, 5.3% in 2021 and 5.9% in 2022.
- Oral and pharyngeal cancers: a decrease of 0.6% in 2020 and increases of 1.3% in 2021 and 5.5% in 2022
- Skin cancer: increases of 0.6% in 2020, 0.1% in 2021 and 3.2% in 2022.
- Uterine cancer: decreases of 1.1% in 2020 and 1.3% in 2021, and a 2.5% increase in 2022

Japan has one of the lowest rates of cancer in the world so these increases are very significant.

Another important scientific paper about this link between mRNA covid19 vaccines and turbo cancers was published in 2024 and is cited below :

Oncogenesis and autoimmunity as a result of mRNA COVID-19 vaccination

Kyriakopoulos et al. 2024

https://www.authorea.com/users/455597/articles/737938-oncogenesis-and-autoimmunity-as-a-result-ofmrna-covid-19-vaccination

and <u>https://www.authorea.com/doi/pdf/10.22541/au.171387387.73158754/v1</u>

This was a thorough investigation into the response by regulatory T-cells after encountering repeated injections of foreign mRNA. I cite from this paper:

"An inappropriate homeostatic balance among T-effector, T-regulatory and memory T-regulatory cells can direct the immune system toward either cancer or autoimmunity. When cancer is present, Treg cells suppress anti-tumor immunity, and, when cancer is absent, Treg cells play the beneficial role of preventing the development of autoimmunity. In this review, we analyze Treg responses after SARS-CoV-2 mRNA vaccination and find distinct pathological responses under differing conditions. In cancer patients, the degree of disease progression depends on the cancer status at the time of vaccination and the type of cancer treatment they receive concurrently. We hypothesize that migration of circulating dendritic cells and mTreg cells back to the thymus accelerates thymic involution, a direct cause of immunosenescence. In summary, the Treg responses produced after mRNA vaccination and the subsequent mRNA-encoded SARS-CoV-2 spike protein expression may lead to a harmful influence on the immune system of vaccinees, and subsequent accelerated development of cancer and autoimmune disease. These mechanisms are consistent with both epidemiological findings and case reports."

In other words, repeated injections of mRNA COVID-19 vaccines are taking down immune surveillance for nascent malignant cells while at the same time inducing autoimmunity. This increases the risk of cancers and autoimmunty in covid vaccinated people.

This important scientific paper explains how the spike proteins weaken the immune system and leaves it more vulnerable to cancers :

Transfected SARS-CoV-2 spike DNA for mammalian cell expression inhibits p53 activation of p21(WAF1), TRAIL Death Receptor DR5 and MDM2 proteins in cancer cells and increases cancer cell viability after chemotherapy exposure

Zhang et al. 2024

https://www.oncotarget.com/article/28582/text/

"Our findings have implications for the... design of anti-COVID-19 vaccines that are administered repeatedly as booster shots... As loss of p53 function is a known driver of cancer development and confers chemoresistance, our study provides insight into cellular mechanisms by which SARS-CoV-2 spike may be involved in reducing barriers to tumorigenesis during and post SARS-CoV-2 infections."

Every cancer registry in the world is recording big increases in cancers since 2021 and documented rapid progression of disease aptly termed "turbo cancer." The trend line went up just after the rollout of COVID-19 vaccines in Spring 2021 and has remained up in 2024.

Source: Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. Bray et al.2024,

https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21834

The following is a list of a growing number of published scientific papers linking covid19 vaccines to turbo cancers

TURBO CANCER LITERATURE (15 papers):

(2024 Apr, Zhang and El-Deiry) - SARS-CoV-2 spike S2 subunit inhibits p53 activation of p21(WAF1), TRAIL Death Receptor DR5 and MDM2 proteins in cancer cells (2024 Apr, Rubio-Casillas et al) - Review: N1-methyl-pseudouridine (m1 Ψ): Friend or foe of cancer? (2024 Apr, Gibo et al) - Increased Age-Adjusted Cancer Mortality After the Third mRNA-Lipid Nanoparticle Vaccine Dose During the COVID-19 Pandemic in Japan (2023 Dec, Angues et al) - SARS-CoV-2 Vaccination and the Multi-Hit Hypothesis of Oncogenesis (2023 Nov, Patrick Chambers) - The CD147 Epitope on SARS CoV2 and the Spike in Cancer, Autoimmunity and **Organ Fibrosis** (2023 Oct, Speicher et al) - DNA fragments detected in monovalent and bivalent Pfizer/BioNTech and Moderna modRNA COVID-19 vaccines from Ontario, Canada: Exploratory dose response relationship with serious adverse events. (2023 Sep, McKernan et al) - Sequencing of bivalent Moderna and Pfizer mRNA vaccines reveals nanogram to microgram quantities of expression vector dsDNA per dose (2023 May, Uversky, Redwan, Makis, Rubio-Casillas) - IgG4 Antibodies Induced by Repeated Vaccination May Generate Immune Tolerance to the SARS-CoV-2 Spike Protein (2023 May, Eens et al) - B-cell lymphoblastic lymphoma following intravenous BNT162b2 mRNA booster in a BALB/c mouse: A case report (2023 Apr, Halma, Rose, Lawrie) - The Novelty of mRNA Viral Vaccines and Potential Harms: A Scoping Review (2023 March, Guetzkow et al) - National Academies Committee on Review of Relevant Literature Regarding Adverse Events Associated with Vaccines (2022 May, Jiang et al) - SARS–CoV–2 Spike Impairs DNA Damage Repair and Inhibits V(D)J Recombination In Vitro (Retracted) (2022 Apr, Seneff et al) - Innate immune suppression by SARS-CoV-2 mRNA vaccinations: The role of Gquadruplexes, exosomes, and MicroRNAs (2022 Feb, Alden et al) - Intracellular Reverse Transcription of Pfizer BioNTech COVID-19 mRNA Vaccine BNT162b2 In Vitro in Human Liver Cell Line (2020 Oct, Singh) - S2 Subunit of SARS-nCoV-2 Interacts with Tumor Suppressor Protein p53 and BRCA: an In

Silico Study

TURBO CANCER CASES (11 papers):

(2024 Apr, Abdurrahman et al) - Primary Cutaneous Adenoid Cystic Carcinoma in a Rare Location With an Immune Response to a BNT162b2 Vaccine

(2024 Apr, Ueda et al) - Fetal hemophagocytic lymphohistiocytosis with intravascular large B-cell lymphoma following coronavirus disease 2019 vaccination in a patient with systemic lupus erythematosus: an intertwined case

(2024 Apr, Gentilini et al) - A Case Report of Acute Lymphoblastic Leukaemia (ALL)/Lymphoblastic Lymphoma (LBL) Following the Second Dose of Comirnaty[®]: An Analysis of the Potential Pathogenic Mechanism Based on of the Existing Literature

(2023 Sep, Kyriakopoulos et al) - Bell's palsy or an aggressive infiltrating basaloid carcinoma post-mRNA vaccination for COVID-19? A case report and review of the literature

(2023 Apr, Tachita et al) - Newly diagnosed extranodal NK/T-cell lymphoma, nasal type, at the injected left arm after BNT162b2 mRNA COVID-19 vaccination

(2023 Jan, Cavanna et al) - Non-Hodgkin Lymphoma Developed Shortly after mRNA COVID-19 Vaccination:

Report of a Case and Review of the Literature

(2022 Sep, Revenga-Porcel et al) - 76M lymphoma after 3rd Moderna mRNA

(2022 Aug, Sekizawa et al) - 80F lymphoma after 2nd Pfizer mRNA

(2022 Jun, Zamfir et al) - 58F 2nd Pfizer, 53M 2nd Pfizer both lymphoma

(2022 Apr, Mitsui et al) - 67M 2nd Pfizer, 80F 2nd Pfizer both lymphoma

(2021 Nov, Goldman et al) - 66M lymphoma progression after 3rd Pfizer mRNA

Scientific analysis of many scientific papers on turbo cancers

https://news.rebekahbarnett.com.au/p/two-new-papers-suggest-mrna-vaccines?

utm_source=substack&utm_medium=email

The HART group is a group of top scientists and medical doctors in Britain. They have provided a public statement in May 2024 about the link between covid19 vaccination and cancers at https://www.hartgroup.org/cancer-concerns/

Dr. Peter McCullough a well known medical doctor in the USA cited '36 Case Reports of Cancers After Covid Vaccination' which provides the facts and evidence based on patient and doctor reports and hospital reports, showing the link between covid19 vaccinations and new more aggressive cancers. Sources : <u>https://ashmedai.substack.com/p/36-case-reports-of-cancers-after</u>

1. A Case of Chronic Myelomonocytic Leukemia Unmasked After Receiving J&J COVID-19 Vaccine (Veerballi et al)

https://pubmed.ncbi.nlm.nih.gov/35865440/

"Our case suggests the possibility of developing CMML associated with limited scleroderma after receiving the J&J COVID vaccine."

2. Anaplastic large cell lymphoma at the SARS-CoV2 vaccine injection site (Revenga-Porcel et al) https://pubmed.ncbi.nlm.nih.gov/36166359/

paywall

3. Bell's palsy or an aggressive infiltrating basaloid carcinoma post-mRNA vaccination for COVID-19? A case report and review of the literature (Kyriakopoulos AM et al)

https://pubmed.ncbi.nlm.nih.gov/37927346/

"Overall, the short time frame and extremely invasive characteristics of BCC metastases in our patient suggest that immune system disturbances by the mRNA anti-COVID-19 vaccination may have led to the accelerated progression of the disease."

"A serious limitation in the case we report is the refusal of the hospital that performed the biopsy to provide the histopathological images or perform immunohistochemical staining for the spike protein."

4. COVID-19 Vaccine-Induced Expansion of Pituitary Adenoma: A Case Report (Srimanan W & Panyakorn S) https://pubmed.ncbi.nlm.nih.gov/38229808/

"Pituitary gland tumors are slowly growing, primarily asymptomatic, with incidental findings. Early detection, reduced aggravating factors, and specific treatment are essential. The COVID-19 vaccine represents a novel potential contributor to the enlargement of the pituitary gland. Individuals with preexisting pituitary adenomas should be particularly vigilant regarding the possible side effects associated with this vaccine."

5. Development of High-Grade Sarcoma After Second Dose of Moderna Vaccine (Bae E et al)

https://pubmed.ncbi.nlm.nih.gov/37197108/

"Based on an extensive search, we describe the first case of rapidly progressive, high-grade undifferentiated sarcoma that seems to have a strong association with the Moderna vaccination."

[Bonus: "It is well-documented in the literature for over 20 years that high-grade sarcomas have been linked to vaccine administration in felines."]

6. Newly diagnosed extranodal NK/T-cell lymphoma, nasal type, at the injected left arm after BNT162b2 mRNA COVID-19 vaccination (Tachita et al)

https://pubmed.ncbi.nlm.nih.gov/37093551/

"Although the lymphoma lesions of previous reports were not observed at the vaccine injection sites, our case had a lymphoma lesion in the skin and muscle at the BNT162b2 mRNA-vaccine injection site. It is possible that our case is of different pathogenesis from previous reports, in that the disease occurred relatively late after vaccination and at the site of vaccine injection." "There was no evidence of causal relationship between BNT162b2 mRNA vaccination and ENKL in this case, but we speculated that vaccination might lead to the development of ENKL in a manner similar to severe mosquito bite allergy (SMBA)." **7.** Non-Hodgkin Lymphoma Developed Shortly after mRNA COVID-19 Vaccination: Report of a Case and Review of the Literature (Cavanna et al)

https://pubmed.ncbi.nlm.nih.gov/36676781/

8. Ph-Positive B-Cell Acute Lymphoblastic Leukemia Occurring after Receipt of Bivalent SARS-CoV-2 mRNA Vaccine Booster: A Case Report (Ang SY et al)

https://pubmed.ncbi.nlm.nih.gov/36984629/

"Therefore, this case report might present a possible correlation between the development of Ph–positive Bcell acute lymphoblastic leukemia and bivalent mRNA vaccinations."

9. Primary Cutaneous Adenoid Cystic Carcinoma in a Rare Location With an Immune Response to a

BNT162b2 Vaccine: A Case Report (Yilmaz A et al)

https://pubmed.ncbi.nlm.nih.gov/38608126/

"The BNT162b2 mRNA vaccine has been associated with a multisystem inflammatory syndrome (MIS-V). A comparable immune reaction could potentially enhance tumor growth rate." [paywall]

10. Rapid Progression of Angioimmunoblastic T Cell Lymphoma Following BNT162b2 mRNA Vaccine Booster Shot: A Case Report (Goldman S et al)

https://pubmed.ncbi.nlm.nih.gov/34901098/

"To the best of our knowledge, this is the first observation suggesting that administration of a SARS-CoV-2 vaccine might induce AITL progression. Several arguments support this possibility. First, the dramatic speed and magnitude of the progression manifested on two 18F-FDG PET-CT performed 22 days apart. Such a rapid evolution would be highly unexpected in the natural course in the disease. "

11. Rapid progression of marginal zone B-cell lymphoma after COVID-19 vaccination (BNT162b2): A case report (Sekizawa et al)

https://pubmed.ncbi.nlm.nih.gov/35979213/

"In our case, the same mechanism by which T-cell lymphomas are induced by the COVID-19 vaccine could be considered for the pathogenesis of MZL. mRNA COVID-19 vaccines are reported to induce T follicular helper cells with a Th1 functional profile, which is associated with selective generation of neutralizing antibodies, and stimulate germinal center B-cells, long-lived plasma cells, and memory B-cells. Therefore, these vaccines induce a stronger germinal center reaction than recombinant protein vaccines (11). However, the continuous stimulation of T- and B-cells by mRNA COVID-19 vaccines can trigger aberrant inflammatory responses, leading to lymphoma or accelerating its progression."

12. Recurrence of cutaneous T-cell lymphoma post viral vector COVID-19 vaccination (Panou et al) <u>https://pubmed.ncbi.nlm.nih.gov/34628691/</u>

"The question which is raised in these cases is whether and via which pathway the vaccine has caused the MF CD30+ LCT and the reappearance of primary cutaneous CD30+ lymphoprolipherative disorder.

According to the literature, the education of CD4+ T, CD8+ T and B cells against SARS-CoV-2 S protein appears

to be the most feasible way for COVID-19 vaccine production. Both cancers and coronavirus provide a persistent and chronic antigenic load, amongst which PD-1, resulting in T-cell exhaustion. Therefore, it is important to assure the vaccination would not cause a further T-cell exhaustion state which may have already been induced by tumour cells."

13. Recurrence of primary cutaneous CD30-positive lymphoproliferative disorder following COVID-19 vaccination (Brumfiel et al)

https://pubmed.ncbi.nlm.nih.gov/33974494/

paywall

14. Solitary Eruptive Keratoacanthoma Developing at Site of COVID-19 Vaccine Injection (Yumeen S et al) https://pubmed.ncbi.nlm.nih.gov/38015786/

"Our case report adds to the literature by describing development of a malignant lesion that may occur following COVID-19 vaccination, and warrants prompt recognition and treatment."

15. Two cases of axillary lymphadenopathy diagnosed as diffuse large B-cell lymphoma developed shortly after BNT162b2 COVID-19 vaccination (Mizutani et al)

https://europepmc.org/article/pmc/pmc9114986

"Thus, it might be conceivable that pre-existing or subclinical DLBCL may rapidly grow in a specific condition induced by BNT162b2 vaccination." "In conclusion, DLBCL may rapidly grow after BNT162b2 vaccination. Dermatologists should pay attention to enlarging LNs or mass near the injection site of BNT162b2 vaccine." **16.** Unilateral conjunctival Classic Kaposi Sarcoma following a COVID 19 booster (White E et al)

https://pubmed.ncbi.nlm.nih.gov/38601193/

"In that the vaccine booster preceded the cancer, it appears etiologic to the appearance of Kaposi's sarcoma. The patient's monocular vision and glaucoma complicated her treatment. This case expands on current concepts of cofactors needed for the development of Kaposi's sarcoma in that vaccine booster administration was relevant to tumor progression and both clinical and mechanistic evidence is presented to support this hypothesis." "In this particular case, it appears that COVID19 vaccination acted as one of the additional co-factors necessary to induce KS in that there was no other clear cause other than the temporal relationship between booster vaccine and development of KS."

17. A Case Report of Posttransplant Lymphoproliferative Disorder After AstraZeneca Coronavirus Disease 2019 Vaccine in a Heart Transplant Recipient (Tang WR et al)

https://pubmed.ncbi.nlm.nih.gov/34702598/

"In summary, we hypothesize that the vaccine may contribute to B lymphocyte tumorigenesis via the reactivation of latent EBV." "We report a case of PTLD after COVID-19 vaccination in a heart transplant recipient, which might show a possible pathogenic link. Although we are not able to exclude the coincidence of COVID-19 vaccination and the development of PTLD in this case, transplant surgeons should be aware of the immunomodulatory effect after COVID-19 vaccination and always think the worst until proven

otherwise."

18. Case report: A case of metastatic BRAFV600-mutated melanoma with heart failure treated with immune checkpoint inhibitors and BRAF/MEK inhibitors (Nishizawa A et al)

https://pubmed.ncbi.nlm.nih.gov/38529375/

"In the present case, the vaccine might have elicited a strong immune response, leading to the spontaneous resolution of the primary tumor while simultaneously promoting the axillary lymph node metastasis." **19.** Fatal hemophagocytic lymphohistiocytosis with intravascular large B-cell lymphoma following coronavirus disease 2019 vaccination in a patient with systemic lupus erythematosus: an intertwined case (Ueda Y et al) <u>https://pubmed.ncbi.nlm.nih.gov/38619098/</u>

"We speculate that the COVID-19 vaccination and our patient's autoimmune condition, which predisposes her to develop lymphoma, may have contributed to IVLBCL development. The activation of the B cell activating factor belonging to the tumor necrosis factor family (BAFF) pathway was seen in aggressive B cell lymphoma"

20. Hematologic Malignancies Diagnosed in the Context of the mRNA COVID-19 Vaccination Campaign: A Report of Two Cases (Zamfir et al)

https://www.mdpi.com/1648-9144/58/7/874

"To our knowledge, this is the first report of a severe post-vaccination oral manifestation, immunohistochemically confirmed as T/NK-cell non-Hodgkin lymphoma, emerging within days after mRNA COVID-19 vaccination."

21. Hematopoietic Adverse Events Associated with BNT162b2 mRNA Covid-19 Vaccine (Erdogdu B et al) <u>https://avesis.hacettepe.edu.tr/yayin/64667112-eb73-4bd3-b8c5-d5df96cc4e09/hematopoietic-adverse-</u> <u>events-associated-with-bnt162b2-mrna-covid-19-vaccine</u>

22. Indolent cutaneous lymphoma with gamma/delta expression after COVID-19 vaccination (Hobayan CG & Chung CG)

https://pubmed.ncbi.nlm.nih.gov/36530557/

"Our patient's presentation is unusual as it arose at the site of a COVID-19 vaccination several days after vaccination." "Since this presentation and course are not typical of PCGDTCL, it is unclear if his lesions represent an indolent variant of PCGDTCL or other lymphoma with gamma/delta expression. It is unknown if the COVID-19 vaccine directly contributed to his presentation or disease course. One additional case report shows an atypical lymphoproliferative lesion with features mimicking lymphoma following the vaccine booster, monotypic proliferation of B-cells was found histologically."

23. Primary cardiac mesothelioma presenting with fulminant recurrent pericarditis: a case report (Schwartzenberg et al)

https://pubmed.ncbi.nlm.nih.gov/36937239/

"To the best of our knowledge, this is the only second case of pathologically confirmed pericarditis that

transformed into mesothelioma,17 in this case within only 4 months. It is unlikely that an earlier correct diagnosis would have made a clinical difference in this case in view of the accelerated disease course."
24. Sporadic Kaposi Sarcoma Following a COVID-19 Vaccine: Mere Coincidence or Something More? (Martínez-Ortega JI et al)

https://pubmed.ncbi.nlm.nih.gov/38465101/

"KSHV is an absolute requirement of oncogenesis and is a direct carcinogen, so when we are looking into the relationship between the AstraZeneca vaccine and Kaposi sarcoma, we may focus on the reactivation of KSHV [1].

Studies have shown that spike proteins of SARS-CoV-2 can reactivate the lytic phase of KSHV. The ChAdOx1 nCoV-19 vaccine contains DNA eDNA-encoding proteins. If these spike proteins encounter HHV8-infected cells, it could potentially trigger the reactivation of the virus, leading to the lytic phase." "While more research is needed to establish a definitive connection, the evidence discussed in this report points to potential mechanisms involving KSHV reactivation, the influence of adenovirus-induced inflammation, and spike protein-related effects."

25. Subcutaneous panniculitis-like T-cell lymphoma after COVID-19 vaccination (Kreher et al) https://pubmed.ncbi.nlm.nih.gov/35966352/

"In this manuscript, we present a case of SPTCL that developed following the Ad26 viral vector-based COVID-19 vaccine (Janssen Pharmaceuticals). Although causation cannot be established in this single case, this case supports the understanding that certain immunologic triggers, such as a modified adenovirus vaccine, may contribute to the development or exacerbation of SPTCL. Aberrant immune function or lymphocyte hyperstimulation may also be responsible. For example, an association has been established between SPTCL and systemic lupus erythematosus, Sjögren's syndrome, type 1 diabetes mellitus, and juvenile idiopathic arthritis."

26. Subcutaneous panniculitis-like T-cell lymphoma post-mRNA-1273 COVID-19 vaccination (Ukishima et al) https://pubmed.ncbi.nlm.nih.gov/37035606/

"Overall, more research is needed to examine possible associations between COVID-19 vaccination and SPTCL. In this case, COVID-19 vaccines may cause SPTCL, and skin biopsy at an early stage may help in the diagnosis of erythema nodosum."

27. The case of T-ALL presenting with NK phenotype after COVID-19 vaccination (Yanagida E et al) https://pubmed.ncbi.nlm.nih.gov/36706586/

"Although the presence of a direct causal relationship between T-ALL and COVID-19 vaccination is unclear, the immunization could be directly related to the immune response of the host." "Although the relationship between vaccination and the onset of this case is unclear, we have reported that careful observation of similar cases is required in order to elucidate the pathophysiology."

28. The first autopsy case of Epstein-Barr virus-positive marginal zone lymphoma that deteriorated after

COVID-19 vaccination (Wang Z et al)

https://pubmed.ncbi.nlm.nih.gov/38116849/

paywall

29. Unusual Clinical Presentation of Clear Cell Sarcoma in a Young Woman (Asif S et al)

https://pubmed.ncbi.nlm.nih.gov/37877807/

Documented as Incidental/Background in the Case Report

30. Axillary lymphadenopathy in a high-risk breast screening patient following the COVID-19 vaccine: a

diagnostic conundrum (Musaddaq et al)

https://pubmed.ncbi.nlm.nih.gov/35300233/

31. Breast Cancer Screening and Axillary Adenopathy in the Era of COVID-19 Vaccination (Wolfson & Kim)

https://pubmed.ncbi.nlm.nih.gov/36219117/

32. Hypermetabolic lymphadenopathy following the administration of COVID-19 vaccine and immunotherapy

in a lung cancer patient: a case report (Tripathy et al)

https://pubmed.ncbi.nlm.nih.gov/36434709/

33. Lymphedema of the Arm after COVID-19 Vaccination in a Patient with Hidden Breast Cancer and

Paraneoplastic Dermatomyositis (Aimo et al)

https://pubmed.ncbi.nlm.nih.gov/36016107/

34. Metastatic melanoma in the breast and axilla: A case report (Barnett C et al)

https://pubmed.ncbi.nlm.nih.gov/35255441/

35. Metastatic prostatic adenocarcinoma presenting as generalized lymphadenopathy unmasked by a COVID

booster vaccine (Bharathidasan K et al)

https://pubmed.ncbi.nlm.nih.gov/38033690/

36. Progressive multifocal leukoencephalopathy in a patient with B-cell chronic lymphocytic leukemia after COVID-19 vaccination, complicated with COVID-19 and mucormycosis: a case report (Amirifard H et al) https://pubmed.ncbi.nlm.nih.gov/38704555/